MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 2, 2026, Pages 123-128

Charting the Digital Retail Evolution: A Bibliometric Analysis of E-Commerce and Consumer Behaviour Insights

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Abstract
The rapid evolution of digital retailing, driven by innovations in artificial intelligence, mobile applications, social commerce, and personalisation algorithms, has fundamentally transformed consumer behaviour and reshaped the global e-commerce landscape. This study conducts a comprehensive bibliometric review of 419 peer-reviewed publications retrieved from the Scopus database for the period 2015 to 2025, offering a systematic and quantitative mapping of academic discourse on digital retail and consumer behaviour. Employing analytical tools including VOSviewer, Biblioshiny (R-Studio), and BiblioMagika, the study maps publication trends, identifies key contributors, delineates thematic clusters, and highlights future research directions. Six major thematic clusters emerge from the analysis: core constructs of digital commerce, trust and security concerns, technology acceptance models, social influence and digital interaction, customer experience and satisfaction, and contextual and environmental factors including the influence of COVID-19. The findings reveal a substantial acceleration in research productivity after 2020, largely attributable to the pandemic-driven digitalisation surge. The field is dominated by influential scholars and institutions from India, China, the United States, and Europe, with foundational theoretical models such as TAM, TPB, and UTAUT continuing to underpin much of the scholarship. Concurrently, a growing interdisciplinary focus on ethics, artificial intelligence, and personalised technologies signals the emergence of more nuanced research agendas. Key gaps identified include limited academic-industry collaboration and insufficient examination of the ethical consequences of algorithmic decision-making. Future research should address immersive technologies, cross-cultural consumer dynamics, and longitudinal trend analyses to deepen understanding of the evolving digital retail ecosystem.

Keywords: e-commerce; consumer behaviour; bibliometric analysis; digital retail; technology acceptance; online shopping

1. Introduction

The retail sector has undergone a profound transformation since the early 2000s, fundamentally altering how consumers discover, evaluate, and purchase products and services (Pantano et al., 2020). The integration of technologies such as artificial intelligence (AI), live-streaming platforms, recommendation systems, and mobile applications has evolved e-commerce into an interactive, data-driven digital environment (Huang &Benyoucef, 2013). Consequently, scholars from marketing, information systems, consumer psychology, and business strategy have devoted increasing attention to understanding the relationship between consumers and digital technology (Lemon &Verhoef, 2016). Contemporary e-commerce extends far beyond transactional buying and selling. It now encompasses personalised product recommendations, virtual try-on experiences, gamified loyalty programmes, and AI-powered customer service (Lemon &Verhoef, 2016). These developments have propelled scholarly interest in digital consumer behaviour, prompting researchers to incorporate constructs such as algorithmic fairness, trust in automation, and digital hedonic motivation. Despite this growing body of literature, the field remains fragmented across disciplines, theories, and empirical contexts (Dwivedi et al., 2021). The globalisation of digital markets has further intensified this complexity, as culturally diverse consumer bases respond differently to technological stimuli, platform designs, and digital trust cues. The proliferation of smartphones, increased internet penetration in emerging economies, and the growing reliance on data-driven commerce have collectively broadened the scope of digital retail scholarship, creating an urgent need for systematic synthesis.

The COVID-19 pandemic acted as a watershed moment for digital retail globally. As physical stores closed and movement restrictions were imposed, both consumers and businesses were compelled to migrate to digital platforms, generating unprecedented levels of online shopping activity. This rapid transition injected new urgency into academic debates surrounding digital trust, platform usability, last-mile delivery, and the psychology of pandemic-induced purchasing. Retail revolution through digital platform in India is a speedy transformation because of widespread smartphone usage, applicability of UPI payments and e-commerce business is expected to grow more than $ 300 billion by 2030. This projected growth is pushed in majority of the areas with quick delivery system. Direct-to-Consumer (D2C) model is increasing along with an anticipated 40% CAGR accomplishing $60 billion valuation by the next year. India's escalating prosperity is generating a huge consumer segment with disposable income to spend online. This buying nature is further supported by the accessibility of affordable data packages. Building online business is not just expedient but it is more cost-effective. These few underlying issues have propelled India to the spot of second-largest e- market of the world. The scale and speed of this shift created a natural experiment for researchers, resulting in a surge of publications that have substantially enriched the field's empirical base and theoretical frameworks.

Bibliometric analysis provides an effective mechanism for synthesising such fragmented knowledge by quantifying publication output, citation patterns, collaborative networks, and keyword trends (Donthu et al., 2021). This study draws on data extracted from the Scopus database, covering a ten-year period from 2015 to 2025. It examines recent developments in online shopping behaviour and the technological forces shaping consumer decision-making. VOSviewer and R-Studio (Biblioshiny) are employed to visualise authorship networks, co-citation clusters, keyword co-occurrence patterns, and emerging research fronts (Van Eck &Waltman, 2010; Aria & Cuccurullo, 2017).

The study is guided by three core research questions:

RQ1: What are the main thematic areas and current intellectual structure of literature on digital retail and consumer behaviour?
RQ2: Who are the most influential authors, institutions, and countries contributing to this domain?
RQ3: What are the emerging topics, prominent keywords, and future research directions in the e-commerce landscape?

The remainder of this paper is structured as follows: Section 2 reviews the theoretical and empirical literature underpinning the field. Section 3 describes the bibliometric methodology. Section 4 presents the results and analysis. Section 5 discusses the key findings, and Section 6 concludes with implications and future research directions.

2. Literature Review

Over the past two decades, research on e-commerce and consumer behaviour has matured considerably, drawing upon concepts from marketing, psychology, information systems, behavioural economics, and sociology. As online retail has become increasingly customer-centric and technologically sophisticated, scholars have examined a diverse set of themes encompassing technology adoption, trust, experience design, social influence, and ethical concerns.

Among the most widely cited theoretical frameworks are the Technology Acceptance Model (TAM), the Theory of Planned Behaviour (TPB), the Unified Theory of Acceptance and Use of Technology (UTAUT), and the Diffusion of Innovations (DOI) theory. TAM, originally developed by Davis (1989), posits that perceived usefulness and ease of use are the primary determinants of technology adoption. TPB (Ajzen, 1991) extends this by incorporating subjective norms and perceived behavioural control, thereby capturing social influences on behavioural intent. UTAUT (Venkatesh et al., 2003) synthesises multiple adoption theories by incorporating performance expectancy, effort expectancy, social influence, and facilitating conditions into a unified framework. The DOI theory (Roger, 2003) further explains adoption through attributes such as compatibility, trialability, and observability. These models have been extensively applied and adapted to study consumer adoption of websites, mobile applications, social media platforms, and AI-based retail tools (Venkatesh et al., 2012), frequently augmented with constructs such as trust, perceived enjoyment, and hedonic motivation.

Trust and perceived risk are particularly salient in digital retail contexts, where physical inspection and personal recommendations are absent. Gefen et al. (2003) demonstrated that institutional-based trust significantly reduces uncertainty in online transactions. Empirical research has consistently shown that trust serves as a critical antecedent to purchase intention (Kim et al., 2008), while security concerns and perceived risks—especially in cross-border e-commerce—constitute significant barriers to adoption (Beldad et al., 2010). The constructs of privacy, data security, and informational transparency have become especially prominent in recent years as consumer awareness of data exploitation has grown. Studies examining the General Data Protection Regulation (GDPR) and its impact on consumer trust and e-commerce adoption patterns represent an important emerging strand of this literature.

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 2, 2026, Pages 123-128

Service quality and usability have also attracted considerable scholarly attention. The accessibility and convenience afforded by digital platforms, combined with the design quality of websites and applications, significantly influence consumer satisfaction and loyalty (Flavian et al., 2006; Ha &Stoel, 2009; Zhou et al., 2009). The hedonic-utilitarian value dichotomy represents another influential strand of inquiry: while utilitarian value captures functional benefits such as convenience and efficiency, hedonic value encompasses affective dimensions of enjoyment and entertainment (Childers et al., 2001). The incorporation of gamification, augmented reality, and immersive interfaces in retail further underscores the growing centrality of experiential value in e-commerce (Poushneh& Vasquez-Parraga, 2017). The emergence of social commerce has extended the research frontier into peer influence and community dynamics. Studies have demonstrated that social presence, community engagement, and peer reviews significantly affect consumer trust and purchasing decisions in social retail environments (Hajli, 2015). Similarly, the proliferation of mobile commerce has introduced new dimensions such as locational services, biometric authentication, and seamless in-app purchasing, all of which influence user satisfaction and engagement (Kang et al., 2015; Zhang et al., 2017). The integration of influencer marketing, live-stream commerce, and social media-driven purchasing journeys has created new theoretical challenges, requiring frameworks that can account for parasocial relationships, social proof dynamics, and the blurring of content and commerce. Artificial intelligence has become an increasingly central theme in digital retail research. Recommendation engines, predictive analytics, chatbots, and computer vision technologies have transformed the personalisation of shopping experiences at scale (Huang & Rust, 2021; Grewal et al., 2020). However, AI integration also raises significant ethical concerns. Issues of algorithmic bias, opacity in recommendation logic, data privacy violations, and manipulative personalisation have been identified as growing challenges (Haggart, 2019). Researchers have begun to examine how consumers respond to perceived algorithmic unfairness, and how data governance frameworks can promote ethical AI deployment in retail. This emerging discourse positions digital ethics at the intersection of consumer behaviour, technology policy, and business strategy. Methodologically, the field has evolved from predominantly survey-based, quantitative approaches to more sophisticated techniques, including structural equation modelling (SEM), partial least squares (PLS-SEM), machine learning algorithms, eye-tracking, and electroencephalography (EEG), enabling richer insights into subconscious consumer responses (Zhang et al., 2017). Natural language processing and big data analytics have further expanded the scope of consumer sentiment analysis. Omnichannel retail—the seamless integration of online and offline touchpoints—has also emerged as a key research area, with scholars examining how unified commerce experiences shape consumer journeys and loyalty (Verhoef et al., 2015). In sum, digital retail and consumer behaviour research is characterised by rapid interdisciplinary evolution, with technology, psychology, and ethics increasingly converging as the defining axes of the field.

3. Methodology

This study adopts a bibliometric research design as proposed by Donthu et al. (2021), combining performance analysis and science mapping to investigate the intellectual structure and developmental trajectory of digital retail and consumer behaviour research. Bibliometric analysis enables researchers to systematically quantify scholarly output, identify leading contributors, map collaborative networks, and uncover dominant and emerging thematic clusters within a given field (Aria &Cuccurullo, 2017). The Scopus database was selected as the primary data source owing to its extensive and rigorously curated coverage of peer-reviewed literature in business, marketing, and technology (Falagas et al., 2008). A structured keyword search was conducted using terms including 'e-commerce', 'online shopping', 'digital retail', 'consumer behaviour', and related variants, applied across title, abstract, and keyword fields. Boolean operators and truncation strategies were employed to maximise retrieval precision. The search was restricted to English-language, peer-reviewed journal articles published between January 2015 and December 2025. Following the application of predefined inclusion and exclusion criteria, a final dataset of 419 articles was retained for analysis. Only articles directly addressing digital retail and consumer behaviour in peer-reviewed journals were included; conference proceedings, book chapters, duplicate records, and non-English publications were systematically excluded to ensure data validity and comparability (Moher et al., 2010). The article selection process followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol. The exported data were cleaned using Microsoft Excel, involving standardisation of author names, consolidation of variant keyword forms, and removal of incomplete records. Four complementary analytical procedures were applied: (1) performance analysis to identify high-output authors, institutions, and countries; (2) citation analysis to identify seminal works and high-impact publications; (3) co-authorship network analysis to map collaborative relationships; and (4) keyword co-occurrence analysis to identify thematic clusters and research trends. VOSviewer was employed for network visualisation and cluster mapping (Van Eck &Waltman, 2010), while Biblioshiny (R-Studio) and BiblioMagika provided supplementary performance metrics and mapping outputs. To ensure the robustness and replicability of findings, all analytical procedures were conducted systematically and documented at each stage. The minimum co-occurrence threshold for keyword mapping was set at five occurrences, yielding a final network of 66 keywords from a universe of 1,775 unique terms. Network metrics including total link strength and cluster membership were computed using VOSviewer's default VOS (Visualisation of Similarities) layout algorithm, which minimises the weighted sum of squared Euclidean distances between items. As this study relies exclusively on publicly available, previously published data, no ethical clearance was required; however, all sources have been appropriately cited in accordance with academic integrity standards.

4. Results and Analysis

The bibliometric analysis is organised into four sub-sections: publication trends, citation and impact analysis, authorship and collaboration networks, and keyword co-occurrence with thematic mapping. All analyses were conducted using VOSviewer, R-Studio (Biblioshiny), BiblioMagika, and Microsoft Excel.

4.1 Publication Trend and Research Output :The dataset comprises 419 Scopus-indexed, peer-reviewed articles published between 2015 and 2025. A consistent annual growth rate of 12.3% was observed, with a particularly sharp increase in output from 2020 onwards, attributable to the COVID-19 pandemic and its consequent acceleration of digital commerce adoption worldwide. The pandemic prompted widespread transitions to online retail among both consumers and businesses, generating substantial scholarly interest in the behavioural, technological, and economic dimensions of this shift.

The pre-pandemic period (2015–2019) demonstrated a steady, incremental increase in publications, growing from approximately 18 articles in 2015 to 47 in 2019. The year 2020 marked a decisive inflection point, with publications rising to 68, followed by 85 in 2021 and 92 in 2022. This exponential growth reflects both the real-world disruption caused by the pandemic and the academic community's responsiveness to urgent, policy-relevant questions about digital commerce. The years 2023 to 2025 show a modest consolidation, suggesting that the field is transitioning from a reactive surge toward more theoretically grounded and methodologically sophisticated inquiries. Key journals contributing to this domain include the Journal of Retailing and Consumer Services, Electronic Commerce Research and Applications, and the Journal of Business Research, all of which have published influential work at the intersection of technology and consumer studies.

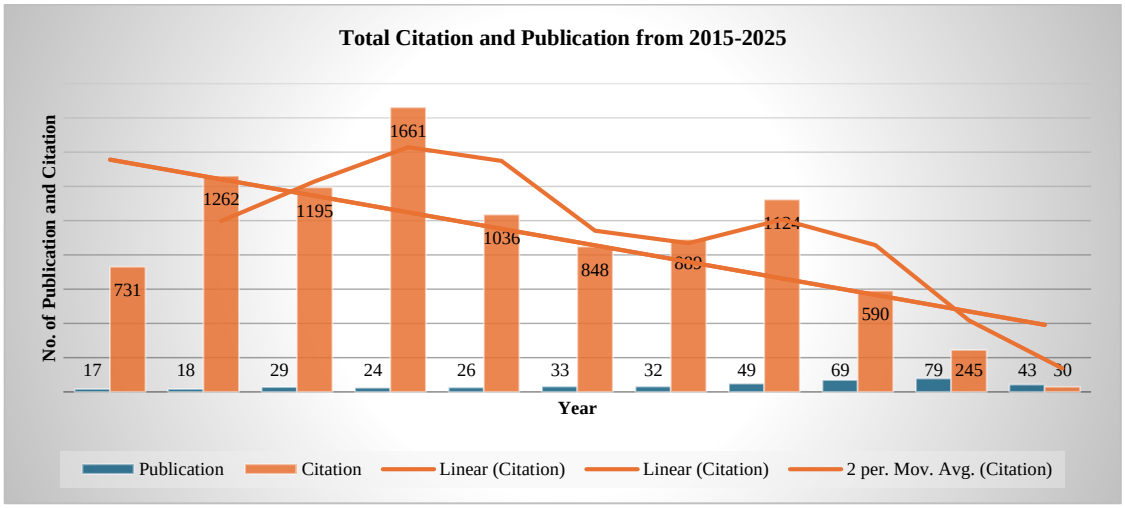


Figure 1: Total citations and publications by year, 2015-2025.
Source: Generated by authors via Microsoft Excel.

4.2 Citation and Impact Analysis;The most highly cited articles in the dataset are predominantly conceptual or empirical studies grounded in established theoretical models, particularly TAM, UTAUT, and TPB. Foundational works by Venkatesh et al. (2003), Davis (1989), and Ajzen (1991) registered the highest citation frequencies, reaffirming their sustained centrality to the field. The mean citation rate per publication in the dataset is 22.6, reflecting considerable academic

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 2, 2026, Pages 123-128

engagement with the literature. High-impact thematic areas include online trust and perceived risk (Gefen et al., 2003), mobile commerce adoption (Kang et al., 2015), and AI-driven personalisation in retail (Grewal et al., 2020; Huang & Rust, 2021). Publications addressing COVID-19 and digital retail were also among the most frequently cited, demonstrating the field's responsiveness to real-world disruptions. Notably, single-authored or narrowly focused papers originating from emerging economies registered disproportionately high per-article citation rates, suggesting that highly specific empirical contributions from rapidly digitalising contexts—such as India, Indonesia, and Vietnam—carry significant academic interest and are rapidly integrated into the broader theoretical canon. The h-index of the overall dataset is 28, indicating a healthy balance between research volume and sustained scholarly impact.

4.3 Authorship and Collaboration Networks: Approximately 60% of articles in the dataset were authored by no more than two individuals, indicating a predominance of single- or dual-authored contributions. Among the most prolific scholars are Dwivedi, Yogesh K., Li H., and Fedorko, R., each of whom has made sustained contributions to the field. While individual-level collaboration is relatively limited, institutional-level co-authorship networks reveal growing partnerships between India, the United States, and China. VOSviewer network maps identify distinct regional research clusters, with notable institutional contributions from Cardiff University (United Kingdom), Zhejiang University (China), and the Indian Institute of Management.

4.3.1 Publication by Author: Table 1 presents the ten most prolific authors in the dataset, based on total publications (TP) extracted via BiblioMagika. Out of 1,355 contributing authors, Dwivedi, Yogesh K. (King Fahd University of Petroleum and Minerals, Saudi Arabia) leads with three publications and the highest total citation count of 536, yielding an average of 178.67 citations per publication. Wagner, Gerhard, and Schramm-Klein, Hanna (both of the University of Siegen, Germany) also contributed three publications each, with 151 total citations. These metrics, alongside h-index, g-index, and m-index values, reflect both the volume and sustained scholarly impact of these contributors.

Table 1: Top Ten Most Productive Authors

Full Name	Current Affiliation	Country	TP	NCP	TC	C/P	C/CP	h	g	m
Dwivedi, Yogesh K.	King Fahd Univ. of Petroleum & Minerals	Saudi Arabia	3	3	536	178.67	178.67	3	3	0.25
Wagner, Gerhard	University of Siegen	Germany	3	2	151	50.33	75.5	2	3	0.167
Schramm-Klein, Hanna	University of Siegen	Germany	3	2	151	50.33	75.5	2	3	0.167
Fedorko, Richard	University of Presov	Slovakia	3	3	55	18.33	18.33	2	3	0.167
Scheinbaum, Angeline	University of Richmond	United States	2	2	91	45.5	45.5	2	2	0.167
Fota, Anne	University of Siegen	Germany	2	1	3	1.5	3	1	1	0.083
Al-Debei, Mutaz M.	Al-Ahliyya Amman University	Jordan	2	2	197	98.5	98.5	2	2	0.167
Wu, Chia-Huei	Minghsin Univ. of Science & Technology	United Kingdom	2	2	32	16	16	2	2	0.167
Beckers, Joris	University of Antwerp	Belgium	2	2	213	106.5	106.5	2	2	0.167
Mani, La	Bina Nusantara University	Indonesia	2	1	5	2.5	5	1	2	0.083

Note: TP = Total Publications; NCP = Number of Cited Publications; TC = Total Citations; C/P = Average Citations per Publication; C/CP = Average Citations per Cited Publication; h = h-index; g = g-index; m = m-index. Source: Generated by authors via BiblioMagika®.

Table 2 identifies the most influential authors by total citation count. Dwivedi, Yogesh K. again leads with 536 citations across three publications. Pappas, Ilias O. (University of Agder/NTNU, Norway) and Rana, Nripendra P. (Queen's University Belfast, United Kingdom) follow with 532 and 457 citations respectively, both with two publications. Notably, Kourouthanassis, Panos E., Giannakos, Michail N., and ChrissiKopoulos, Vassilios each achieved 377 citations from a single publication, suggesting high per-article research impact. A group of authors affiliated with the University of Zaragoza (Spain)—Irani, Seda; Saumya, Sunil; and Kumar Roy, Pradeep—each recorded 349 citations from single publications.

Table 2: Top Ten Most Influential Authors by Total Citations

Author's Name	Current Affiliation	Country	TP	NCP	TC	C/P	C/CP	h	g	m
Dwivedi, Yogesh K.	King Fahd Univ. of Petroleum & Minerals	Saudi Arabia	3	3	536	178.67	178.67	3	3	1.0
Pappas, Ilias O.	University of Agder / NTNU	Norway	2	2	532	266	266	2	2	1.0
Rana, Nripendra P.	Queen's University Belfast	United Kingdom	2	2	457	228.5	228.5	2	2	1.0
Kourouthanassis, Panos E.	Ionian University	Greece	1	1	377	377.0	377.0	1	1	1.0
Giannakos, Michail N.	NTNU	Norway	1	1	377	377.0	377.0	1	1	1.0
ChrissiKopoulos, Vassilios	University of East Anglia	United Kingdom	1	1	377	377.0	377.0	1	1	1.0
Singh, JyotiPrakash	University of East Anglia	United Kingdom	1	1	349	349.0	349.0	1	1	1.0
Irani, Seda	University of Zaragoza	Spain	1	1	349	349.0	349.0	1	1	1.0
Saumya, Sunil	University of Zaragoza	Spain	1	1	349	349.0	349.0	1	1	1.0
Kumar Roy, Pradeep	University of Zaragoza	Spain	1	1	349	349.0	349.0	1	1	1.0

Note: TP = Total Publications; NCP = Number of Cited Publications; TC = Total Citations; C/P = Average Citations per Publication; C/CP = Average Citations per Cited Publication; h = h-index; g = g-index; m = m-index. Source: Generated by authors via BiblioMagika®.

4.3.2 Publications by Institution: Table 3 presents the ten most productive institutions contributing to e-commerce research in the dataset. Multimedia University leads with 13 publications (3.10%), followed by Bina Nusantara University and Foreign Trade University, each with 11 publications (2.62%). Bucharest University of Economic Studies contributes 10 publications (2.38%), while Hefei University of Technology and Shenzhen University each account for 8 publications (1.90%). Al-Ahliyya Amman University, Tampere University, and the University of Antwerp each contribute 7 publications (1.67%), with Amity University rounding off the list at 6 publications (1.43%). This distribution reflects broad geographic participation across Asia, Europe, and the Middle East, indicating a globally distributed scholarly interest in digital retail and consumer behaviour research.

Table 3: Top Ten Most Productive Institutions

Institution	Total Publications (TP)	Percentage (%)
Multimedia University	13	3.10
Bina Nusantara University	11	2.62
Foreign Trade University	11	2.62
Bucharest University of Economic Studies	10	2.38
Hefei University of Technology	8	1.90
Shenzhen University	8	1.90
Al-Ahliyya Amman University	7	1.67
Tampere University	7	1.67
University of Antwerp	7	1.67
Amity University	6	1.43

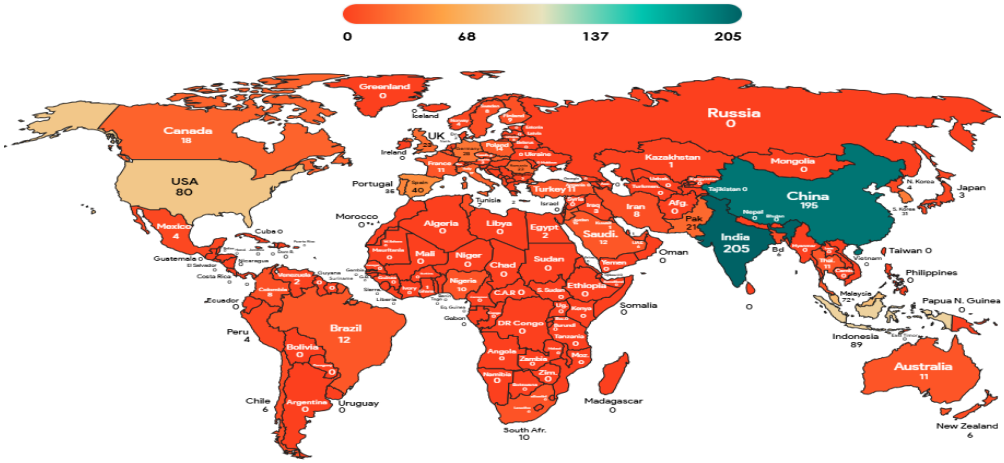
Source: Generated by authors via BiblioMagika®.

4.3.3 Publications by Country

Figure 2 illustrates the geographic distribution of publications. India leads with 205 publications, followed by China with 195. Indonesia (89), the United States (80), and Malaysia (72) constitute the next tier of contributors. Spain (40), Portugal (35), and South Korea (31) also feature prominently, alongside Germany (28) and Romania (23). The dominance of Asian nations—particularly India and China—reflects the rapid growth of digital retail markets in these regions, as well as the strength of academic output in business and information systems disciplines within these countries. The significant output from Southeast Asian nations such as Indonesia and Malaysia signals the growing importance of these emerging digital markets as research contexts, particularly in mobile commerce, digital payments, and social commerce.

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 2, 2026, Pages 123-128

Figure 2: Worldwide scientific production on e-commerce and consumer behaviour.
Source: Generated by authors via iipmaps.com.



4.4 Thematic Analysis of E-Commerce Research

This section addresses RQ3 by examining the emerging topics, prominent keywords, and future research directions in the e-commerce landscape. Using VOSviewer's network visualisation function on author keywords from the Scopus dataset, a minimum keyword frequency threshold of five occurrences was applied. Out of 1,775 unique keywords across 419 documents, 66 met this threshold and were retained for cluster analysis.

4.4.1 Keyword Co-Occurrence and Thematic Mapping

The keyword co-occurrence network produced six distinct thematic clusters, as visualised in Figure 3 and detailed in Table 4. These clusters represent the primary intellectual themes structuring the field. Cluster 1 — Core Constructs of Digital Commerce — encompasses the foundational vocabulary of the field, including 'e-commerce' (166 occurrences), 'online shopping' (136), 'purchase intention' (24), and 'consumer behaviour' (25). Cluster 2 — Trust, Risk, and Security Concerns — groups keywords such as 'trust' (38), 'perceived risk' (17), and 'privacy' (6), reflecting sustained scholarly attention to transactional confidence in digital environments. Cluster 3 — Technology Acceptance and Behavioural Models — covers TAM-related constructs including 'perceived usefulness' (6), 'attitude' (8), and 'repurchase intention' (9). Cluster 4 — Social Influence and Digital Interaction — captures the social dimensions of e-commerce, including 'social media' (11), 'social commerce' (9), and 'electronic word of mouth' (6). Cluster 5 — Customer Experience and Satisfaction — focuses on post-adoption outcomes such as 'customer satisfaction' (24), 'e-loyalty' (9), and 'service quality' (7). Cluster 6 — Contextual and Environmental Factors — includes temporal and situational variables, notably 'COVID-19' (25), 'India' (11), and 'augmented reality' (5).

[Figure 3: VOSviewer map of network visualisation with author keywords. Source: Generated by authors via VOSviewer.]

Overlay visualisation in VOSviewer further illuminates the temporal evolution of keyword prominence. In Phase 1 (2015-2020), dominant terms include 'electronic commerce', 'purchase intention', 'trust', and 'customer satisfaction'. In Phase 2 (2020-2025), a discernible shift is observed toward 'COVID-19', 'consumer behaviour', and 'trust', reflecting the pandemic's influence on the research agenda. The transition also signals an increasing preoccupation with technology acceptance in novel contexts—such as contactless payments, voice commerce, and AI-driven retail—as well as growing scholarly interest in post-pandemic recovery and resilience in digital markets.

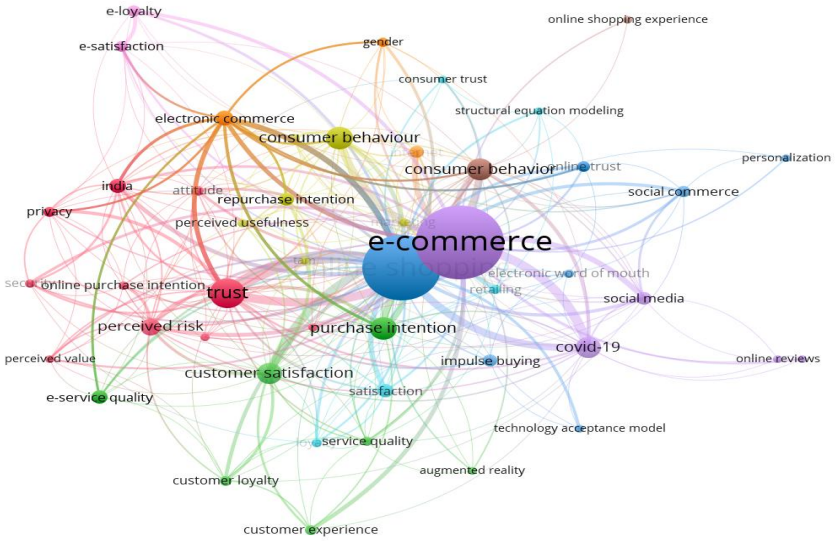


Figure 3: VOSviewer map of overlay visualisation with author keywords — Phase I (2015-2020).
Source: Generated by authors via VOSviewer.

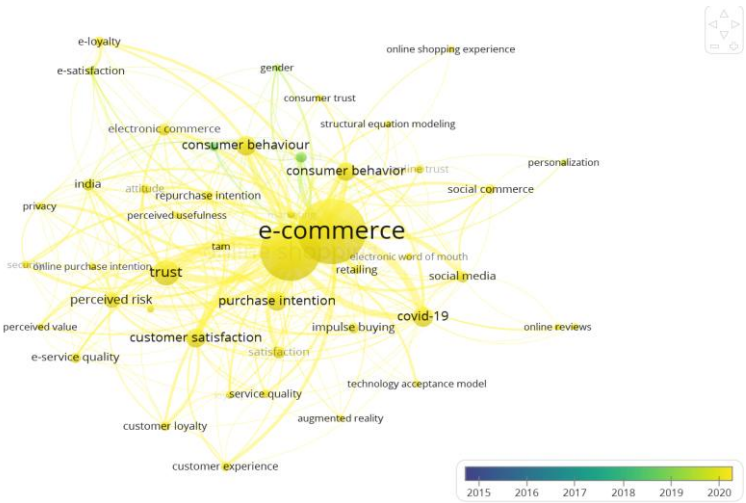


Figure 4: VOSviewer map of overlay visualisation with author keywords — Phase II (2020-2025).
Source: Generated by authors via VOSviewer.

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 2, 2026, Pages 123-128

Table 4: Thematic Clusters and Author Keyword Co-Occurrences

Theme	Keyword	Occurrences	Total Link Strength	Cluster
Core Construct of Digital Commerce	e-commerce	166	242	1
	Online shopping	136	217	
	Purchase intention	24	44	
	Consumer behavior	23	46	
	Consumer behaviour	25	47	
	Marketing	6	18	
	Internet	10	22	
Trust, Risk & Security Concerns	Trust	38	90	2
	Perceived risk	17	41	
	Privacy	6	20	
	Security	6	20	
	Perceived value	5	16	
	Consumer trust	5	8	
	Online trust	7	12	
	Website quality	5	11	
Technology Acceptance &Behavioural Models	TAM	5	13	3
	Technology acceptance model	5	7	
	Perceived usefulness	6	12	
	Attitude	8	22	
	Repurchase intention	9	25	
	Structural equation modeling	5	9	
Social Influence & Digital Interaction	Social media	11	31	4
	Social commerce	9	21	
	Electronic word of mouth	6	9	
	Online reviews	5	4	
	Personalization	5	4	
Customer Experience & Satisfaction	Customer satisfaction	24	50	5
	Customer experience	8	16	
	E-satisfaction	7	17	
	E-loyalty	9	18	
	Service quality	7	21	
	Customer loyalty	8	21	
Contextual & Environmental Factors	India	11	35	6
	COVID-19	25	54	
	Retailing	7	17	
	Augmented reality	5	7	
	Gender	5	14	

Source: Generated by authors via VOSviewer and BiblioMagika®.

5. Discussion

The bibliometric analysis reveals a dynamic and evolving scholarly ecosystem in digital retail and consumer behaviour, characterised by growing thematic complexity, expanding global collaboration, and heightened engagement with emerging technologies. The marked surge in research output after 2020 aligns with the accelerated pace of digital transformation catalysed by the COVID-19 pandemic, which compelled consumers, retailers, and policymakers to adapt rapidly to online environments (Donthu&Gustafsson, 2020). The academic community's responsiveness to this disruption reflects the field's relevance and adaptability. The continued dominance of behavioural intention models such as TAM and TPB highlights their robustness in explaining technology adoption across contexts (Venkatesh et al., 2003; Ajzen, 1991). These frameworks effectively capture the role of perceived usefulness, ease of use, social norms, and individual agency in shaping online consumer behaviour. However, as AI becomes embedded in retail interactions, there is a compelling need for hybrid models that integrate both cognitive and affective dimensions of consumer experience (Lemon &Verhoef, 2016). Incorporating constructs from affective computing, hedonic motivation, and perceived algorithmic control alongside traditional TAM variables could yield more comprehensive accounts of consumer behaviour in AI-mediated retail environments. The thematic cluster analysis reveals a notable evolution in the field's intellectual concerns. While early scholarship was largely preoccupied with foundational questions of technology adoption and transactional trust, more recent contributions have expanded the scope to include algorithmic transparency, consumer empowerment, emotional engagement, and sustainability. The prominence of the COVID-19 cluster underscores how crisis events can rapidly reshape research priorities and open new empirical windows. The pandemic not only accelerated the adoption of digital commerce but also revealed structural vulnerabilities in supply chains, intensified concerns about platform monopolisation, and highlighted the digital divide that persists across income groups and geographic regions.

Despite the field's growth, several significant gaps persist. The predominance of quantitative, survey-based methodologies limits the depth of understanding achievable regarding lived consumer experiences, particularly across diverse cultural contexts (Guba& Lincoln, 1994). Qualitative and mixed-methods approaches could illuminate how constructs such as identity, trust, and personalisation are subjectively experienced and negotiated within algorithmic retail spaces. Furthermore, academic-industry collaboration remains limited, constraining the practical applicability of research insights. Greater engagement between universities and retail practitioners could bridge the theory-practice divide and generate findings with direct policy and managerial relevance. The geographic concentration of high-output institutions in Asia, Europe, and North America also warrants critical reflection. Emerging economies in Sub-Saharan Africa, Latin America, and parts of the Middle East remain significantly under-represented in the bibliometric corpus, despite hosting rapidly expanding digital retail markets. Addressing this geographic imbalance will require dedicated funding, capacity-building initiatives, and editorial commitments from leading journals to amplify voices from the Global South.The growing prominence of ethical themes in the keyword analysis signals an important shift in the field's concerns. Issues of data privacy, algorithmic discrimination, manipulative nudging, and consent present substantive threats to consumer autonomy and welfare (Martin & Murphy, 2017). Future scholarship must integrate robust ethical frameworks into consumer behaviour models to ensure that technological innovations in retail are developed and deployed responsibly. Addressing these challenges will not only enhance the academic legitimacy of the field but also contribute to a fairer and more transparent digital marketplace.

6. Conclusion

This bibliometric study provides a comprehensive mapping of academic research on digital retail and consumer behaviour published between 2015 and 2025. Grounded in 419 Scopus-indexed, peer-reviewed publications and employing VOSviewer, R-Studio (Biblioshiny), BiblioMagika, and iipmaps.com, the study traces publication trends, citation networks, institutional contributions, and thematic evolution across a decade of scholarship.

The analysis confirms a steady and accelerating growth in research output, with a particularly pronounced increase after 2020 driven by pandemic-induced digitalisation. Six distinct thematic clusters were identified, reflecting the field's progression from foundational usability and purchase-intention constructs toward more complex concerns surrounding AI ethics, algorithmic transparency, omnichannel integration, and personalised consumer experience. The geographic distribution of contributions is dominated by India, China, and the United States, though cross-national collaboration is gradually expanding. Foundational theoretical models—particularly TAM, TPB, and UTAUT—continue to anchor the field, even as interdisciplinary perspectives from ethics, neuroscience, and design science gain traction.

6.1 Implications

The findings of this study carry significant implications for theory, practice, and policy across multiple stakeholder domains. From a theoretical standpoint, the analysis highlights the enduring influence of technology acceptance frameworks while simultaneously pointing to the limitations of these models in capturing the complexity of contemporary digital retail interactions. Scholars are encouraged to develop richer, integrative frameworks that accommodate the role of AI-driven personalisation, algorithmic trust, and affective consumer responses. The identification of six distinct thematic clusters provides a structured foundation for future theoretical synthesis, suggesting opportunities to bridge, for instance, the trust-risk literature with emerging constructs around algorithmic transparency and data ethics.

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 2, 2026, Pages 123-128

For retail practitioners and platform managers, the findings offer clear strategic signals. The persistent centrality of trust and perceived risk suggests that investments in transparent data governance, secure payment infrastructure, and clear privacy communication remain paramount for driving consumer adoption and loyalty. The growing salience of customer experience and satisfaction as a thematic cluster underscores the commercial importance of seamless, personalised, and aesthetically coherent digital environments. Retailers should leverage insights from the service quality and e-loyalty literature to design post-purchase journeys that foster long-term engagement rather than one-time transactions.

The prominence of social commerce and electronic word of mouth in the dataset signals that consumer decision-making is increasingly embedded in peer networks and user-generated content ecosystems. Practitioners should develop robust strategies for influencer engagement, user review management, and community building—recognising that social proof functions as a primary trust mechanism in digital retail. Furthermore, the substantial output from emerging markets, particularly India, Indonesia, and Malaysia, suggests that retail strategies must be culturally adaptive, accounting for differences in payment preferences, mobile usage patterns, and social commerce norms across diverse consumer populations.

From a policy perspective, the study's emphasis on ethical and privacy-related themes reinforces the need for comprehensive regulatory frameworks governing data collection, algorithmic decision-making, and targeted advertising in digital commerce. Policymakers should draw on the academic evidence base to design regulations that protect consumer rights without stifling innovation. Collaborative initiatives between academic researchers, government bodies, and industry associations could facilitate evidence-based policy development and help establish standards for ethical AI deployment in retail contexts. International harmonisation of data protection and digital commerce regulations would further reduce barriers to cross-border e-commerce and enhance consumer confidence in global digital markets.

6.2 Future Research Directions

Several promising avenues for future research emerge from this study. First, the influence of immersive technologies—including virtual reality (VR), augmented reality (AR), blockchain, and metaverse-based retail environments—on consumer trust, decision-making, and brand engagement warrants systematic empirical investigation. Second, cross-cultural studies examining how regional and cultural contexts shape online purchasing behaviour represent a critical gap, particularly in the Global South, where digital retail is expanding rapidly but remains under-researched. Third, future studies should embed ethical constructs—such as algorithmic fairness, AI trust, and data sovereignty—within mainstream consumer behaviour models to address growing concerns about digital manipulation and privacy. Fourth, longitudinal and mixed-methods research designs are needed to track how consumer expectations and preferences evolve over time in response to technological change. Finally, closer academic-industry partnerships should be cultivated to ensure that research insights are translated into evidence-based retail strategies and responsible technological innovation.

References

Aria, M., &Cuccurullo, C. (2017).bibliometrix: An R-tool for comprehensive science mapping analysis. Journal of Informetrics, 11(4), 959-975. https://doi.org/10.1016/j.joi.2017.08.007
Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T
Beldad, A., De Jong, M., &Steehouder, M. (2010). How shall I trust the faceless and the intangible? A literature review on the antecedents of online trust. Computers in Human Behavior, 26(5), 857-869. https://doi.org/10.1016/j.chb.2010.03.013
Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. Journal of Retailing, 77(4), 511-535. https://doi.org/10.1016/S0022-4359(01)00056-2
Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, *13*(3), 319-340.https://doi.org/10.2307/249008
Donthu, N., &Gustafsson, A. (2020).Effects of COVID-19 on business and research. Journal of Business Research, 117, 284-289. https://doi.org/10.1016/j.jbusres.2020.06.008
Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. Journal of Business Research, 133, 285-296. https://doi.org/10.1016/j.jbusres.2021.04.070
Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions.International Journal of Information Management, 59, 102168.https://doi.org/10.1016/j.ijinfomgt.2020.102168
Falagas, M. E., Pitsouni, E. I., Malietzis, G. A., & Pappas, G. (2008). Comparison of PubMed, Scopus, Web of Science, and Google Scholar: Strengths and weaknesses. The FASEB Journal, 22(2), 338-342. https://doi.org/10.1096/fj.07-9492LSF
Flavian, C., Guinaliu, M., &Gurrea, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. Information & Management, 43(1), 1-14. https://doi.org/10.1016/j.im.2005.01.002
Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. MIS Quarterly, 27(1), 51-90. https://doi.org/10.2307/30036519
Grewal, D., Hulland, J., Kopalle, P. K., &Karahanna, E. (2020). The future of technology and marketing: A multidisciplinary perspective. Journal of the Academy of Marketing Science, 48(1), 1-8. https://doi.org/10.1007/s11747-019-00711-4
Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research.Handbook of Qualitative Research, 2(163-194), 105.
Ha, S., &Stoel, L. (2009). Consumer e-shopping acceptance: Antecedents in a technology acceptance model. Journal of Business Research, 62(5), 565-571. https://doi.org/10.1016/j.jbusres.2008.06.016
Haggart, B. (2019). The Age of Surveillance Capitalism. Journal of Digital Media & Policy, 10(2), 229-243. https://doi.org/10.1386/jdmp.10.2.229_5
Hajli, N. (2015). Social commerce constructs and consumer's intention to buy. International Journal of Information Management, 35(2), 183-191. https://doi.org/10.1016/j.ijinfomgt.2014.12.005
Huang, M.-H., & Rust, R. T. (2021).A strategic framework for artificial intelligence in marketing. Journal of the Academy of Marketing Science, 49(1), 30-50. https://doi.org/10.1007/s11747-020-00749-9
Huang, Z., &Benyoucef, M. (2013). From e-commerce to social commerce: A close look at design features. Electronic Commerce Research and Applications, 12(4), 246-259. https://doi.org/10.1016/j.elerap.2012.12.003
Kang, J.-Y.M., Mun, J. M., & Johnson, K. K. P. (2015). In-store mobile usage: Downloading and usage intention toward mobile location-based retail apps. Computers in Human Behavior, 46, 210-217. https://doi.org/10.1016/j.chb.2015.01.012
Kim, D. J., Ferrin, D. L., &Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. Decision Support Systems, 44(2), 544-564. https://doi.org/10.1016/j.dss.2007.07.001
Lemon, K. N., &Verhoef, P. C. (2016).Understanding customer experience throughout the customer journey. Journal of Marketing, 80(6), 69-96. https://doi.org/10.1509/jm.15.0420
Martin, K. D., & Murphy, P. E. (2017).The role of data privacy in marketing. Journal of the Academy of Marketing Science, 45(2), 135-155. https://doi.org/10.1007/s11747-016-0495-4
Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2010).Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. International Journal of Surgery, 8(5), 336-341. https://doi.org/10.1016/j.ijsu.2010.02.007
Pantano, E., Pizzi, G., Scarpi, D., & Dennis, C. (2020). Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak. Journal of Business Research, 116, 209-213. https://doi.org/10.1016/j.jbusres.2020.05.036
Poushneh, A., & Vasquez-Parraga, A. Z. (2017).Discernible impact of augmented reality on retail customer's experience, satisfaction and willingness to buy. Journal of Retailing and Consumer Services, 34, 229-234. https://doi.org/10.1016/j.jretconser.2016.10.005
Roger, E. M., (2003), Diffusion of Innovations, Fifth edition, New York: Free Press.
Van Eck, N. J., &Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. Scientometrics, 84(2), 523-538. https://doi.org/10.1007/s11192-009-0146-3
Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425-478. https://doi.org/10.2307/30036540
Venkatesh, V., Thong, J. Y. L., &Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. MIS Quarterly, 36(1), 157-178. https://doi.org/10.2307/41410412
Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015).From multi-channel retailing to omni-channel retailing. Journal of Retailing, 91(2), 174-181. https://doi.org/10.1016/j.jretai.2015.02.005
Zhang, M., Guo, L., Hu, M., & Liu, W. (2017). Influence of customer engagement with company social networks on stickiness: Mediating effect of customer value creation. International Journal of Information Management, 37(3), 229-240. https://doi.org/10.1016/j.ijinfomgt.2016.04.010
Zhou, T., Lu, Y., & Wang, B. (2009). The relative importance of website design quality and service quality in determining consumers' online repurchase behavior. Information Systems Management, 26(4), 327-337. https://doi.org/10.1080/10580530903245663