



Consumer Behavior in the Digital Era: A Bibliometric Analysis

Arum Wahyuni Purbohastuti^{1*}, Muhammad Johan Widikusyanto¹, Widya Nur Bhakti Pertiwi¹, Lina Affifatusholihah¹, Fadhilah¹

^{1*} Faculty of Economics and Business, Universitas Sultan Ageng Tirtayasa, Indonesia

Corresponding Author: arum_wp@untirta.ac.id^{1*)}

Keywords: *Bibliometrics, Consumer Behavior, The Digital Era.*

Abstract: *The development of digitalization influences consumer behavior, which in turn impacts the development of management and business sciences, which require study. This study aims to identify research themes on consumer behavior in the digital era, as discussed by researchers over ten years, from 2016 to 2025. The qualitative research method utilizes data from the Scopus website. Data are differentiated based on the number of articles per year, author, number of citations, and subject matter. Data analysis results from 31 articles in the fields of management, business, and accounting reveal that 12 articles, all of which closely discuss consumer behavior related to current digital applications.*

Introduction

Technological developments over the past few decades have brought significant changes in the way consumers interact, conduct transactions, and obtain information. Changes in digital platforms such as e-commerce, social media, mobile applications, and AI-based recommendation systems have not only facilitated access but also influenced preferences, purchasing behavior, and customer loyalty (Singh et al., 2024). These changes have given rise to numerous innovations in digital marketing, personalization strategies, and new challenges related to consumer privacy and trust (Sharma, P. et al, 2023). With the rise in digital transactions and the adoption of electronic payments, this phenomenon is increasingly visible in Indonesia. Consumers have identified digital payment systems, competitive prices, convenience, and promotions through social media as the primary factors influencing their purchasing decisions (Kurniawan & Proyowidodo, 2023). Furthermore, digital consumption patterns exhibited by younger generations, such as Gen Z and millennials, are evolving. These patterns include preferences for transaction convenience, brand experience, and awareness of a product's social and moral value.

According to Abbas et al., (2022), there has been a fundamental shift in consumer behavior due to the digital transformation. This shift has not only affected marketing practices but also led to the publication of literature in various academic disciplines, including



marketing management, information systems, consumer psychology, and communication studies. Every year, a large number of articles are published in international databases such as Scopus and Web of Science, covering topics such as e-loyalty, omnichannel experience, AI-based personalization, social media impact, ethics, and data privacy (Sharma, P., Ueno, A., Dennis, C., & Turan, 2023). At the national level, Indonesia also shows a significant increase in research on digital consumer behavior due to the growth of e-commerce and digital payment systems (Kurniawan & Proyowidodo, 2023); (Murti et al., 2024).

However, this publication simply highlights a new, ironic phenomenon: the more articles there are, the harder it is for researchers to see the big picture of this development. Researchers frequently have to respond to questions like these: Is the author the most influential, what country or organization is the most productive and collaborative, what topic has already been well studied, and what topic is still a developing gap, how does a topic evolve from one generation to the next (Tanwar et al., 2022).

This phenomenon highlights the need for bibliometric analysis as a systematic approach to assess knowledge. Not only can bibliometrics serve as a tool for retrospective analysis, but it also serves as a predictive tool for identifying past research findings (Tanwar et al., 2022). Digital consumer behaviour in Indonesia has evolved rapidly. Recent studies indicate that factors influencing consumer purchasing decisions in the digital era include convenience, price, social media promotions, and digital payment systems (Murti et al., 2024). However, local data management remains under-documented (Lardo et al., 2022). This includes research trends such as who conducts the most research, which institutions are dominant, frequently discussed versus rarely discussed themes, and collaborations between countries or institutions (Effah et al., 2022). This is crucial for further research to be more focused and relevant to the market and society (Tanwar et al., 2022).

The theories underlying this research can be explained through the Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM). The TPB emphasizes the role of attitudes, subjective norms, and perceived behavioral control in shaping purchase intentions (Ajzen I, 1991), while the TAM highlights how perceived ease of use and usefulness of technology influence the adoption of digital platforms (Davis, 1989). In the digital context, these two theories help understand why factors such as ease of access and digital payment systems are determinants of consumer decisions.

Even though research on digital consumer behaviour has advanced significantly, there are still significant gaps. First, local data collection and documentation in Indonesia have not been done in a comprehensive manner (Lardo et al., 2022). According to Effah et al., (2022), there aren't many studies that follow a methodical approach to research in this field, such as the most productive writers, the dominant institutions, the topics that are frequently discussed versus those that are not, and the cooperation between nations or institutions. According to Kurniawan & Proyowidodo, (2023), specific topics such as content marketing, influencer marketing, recommendation systems, personalization, omnichannel strategy, ethics, and data protection have not yet been thoroughly investigated. According to Tanwar et al., (2022), in the absence of systematic research, subsequent studies may become less focused and less relevant to the needs of the Indonesian market and populace.

In order to address the aforementioned gap, this study aims to provide the following contributions: (1) conduct comprehensive bibliometric research on the development of consumer research in the digital age, both globally and locally in Indonesia; (2) identify key trends, key factors (authors, institution, country), and unexplored themes; and (3) provide future researchers with a roadmap so they can concentrate on issues such as personalization,

data ethics, and omnichannel strategy. According to the bibliometrics approach (Abbas et al., 2022), it is anticipated that this study will enhance literature and provide useful information for researchers and policymakers in developing more effective and sustainable digital strategies in Indonesia.

Bibliometrics as a research approach is essential for mapping the development of scientific disciplines, key trends, actors (authors, institutions, and countries), and under-researched gaps. Bibliometric analysis allows researchers to track the development of consumer research in the digital era, both globally and locally (Abbas et al., 2022). It also enables them to identify issues such as content marketing, the influence of influencers, the use of recommendation systems, personalization, omnichannel, and ethical and data protection issues (Kurniawan & Proyowidodo, 2023).

Research Method

This study uses the bibliometric method, a method that has been used in various scientific fields such as management and business (Kumar et al., 2019). Bibliometrics is a data analysis study that examines the subject of research that has been conducted and evaluates knowledge on a particular subject, assesses scientific quality, and the influence of certain articles and sources (Merigó et al., 2015). Techniques used in bibliometric research include citation analysis, document co-citation analysis, author citation analysis, word citation analysis, and textual analysis (Glänzel, 2003). Figure 1 below shows the bibliometric stages used by the researcher as follows:



Figure 1. Bibliometric Analysis Stage

Result and Discussion

A search on the Scopus website using the keywords "consumer behavior AND digital era" from 2016-2025 yielded 31 documents. The number of articles per year in Scopus increased significantly from 2016-2025, but decreased in 2018 and began to increase in 2019. Table 1 shows the annual flow of articles from the Scopus database, with 2025 being the peak year for discussions on the theme of consumer behavior and the digital era.

Table 1. Number of Articles Per Year

No	Year of Publication	Number of Publication
1	2016	1
2	2017	1
3	2018	0
4	2019	1
5	2020	1
6	2021	3
7	2022	3
8	2023	3

No	Year of Publication	Number of Publication
9	2024	8
10	2025	10

Source: Scopus data

In addition to the data above, documents based on the author's country of origin can be seen in Figure 2 below.

Documents by country or territory

Compare the document counts for up to 15 countries/territories.

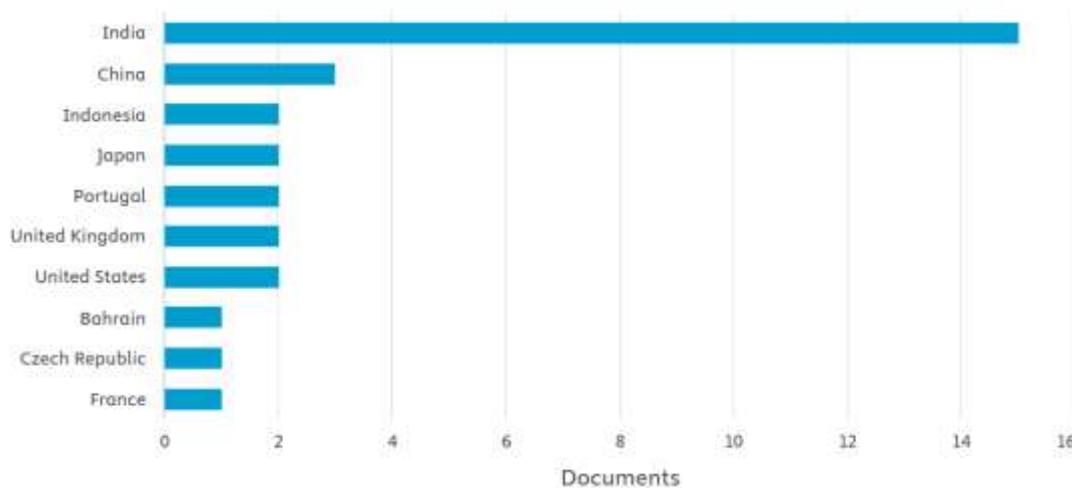


Figure 2. Documents by author country

Based on Figure 2, where researchers entered the keywords "consumer behavior" and "digital era" for the period 2016-2025, 31 documents were obtained and analyzed based on the author's country of origin. Authors from India ranked the highest with 15, followed by China with 3 documents, and Indonesia with 2 documents in third place. The researchers analyzed the documents written by Indonesians, as can be seen in Table 2 below.

Table 2. Documents with Authors from Indonesia

No	Title	Publication Type	Authors	Source	Year	Citation
1	Innovative Trends Shaping Food Marketing and Consumption: Culinary Marketing in the Digital Age - Latest Trends and Innovations	Book Chapter	Suryani, W., Sari, W.P., Ginting, S.M.B.	Innovative Trends Shaping Food Marketing and Consumption	2025	1
2	The Impact of Digital Payment on Customer Purchasing Satisfaction in Online Market Transaction	Conference Paper	Halim, E., Orleans, B.	International Conference on Digital Business and Technology Management Icondbtm	2023	

Source: Scopus data

Of the 31 articles spread across various disciplines that discuss consumer behavior and the digital era, among others, these can be seen in Table 3 as follows.

Table 3. Number of Articles Per Year

No	Subject Area	Article
1	Computer Science	22
2	Business, Management and Accounting	12
3	Economics, Econometrics and Finance	9
4	Engineering	8
5	Decision Sciences	7
6	Mathematics	6
7	Social Sciences	4
8	Arts and Humanities	1
9	Chemical Engineering	1
10	Materials Science	1
11	Medicine	1
12	Neuroscience	1
13	Psychology	1

Source: Scopus data

Based on the data above, it can be summarized that the document types are divided into four, namely conference papers (14 documents), book chapters (8 documents), articles (6 documents), and books (3 documents). The data presentation can be explained in Figure 3, document by type below.

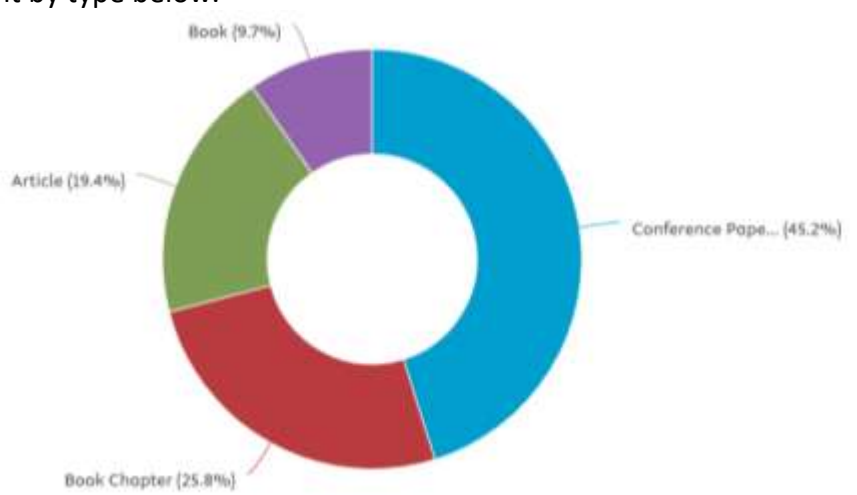


Figure 3. Documents by type

This research analysis focuses on six articles discussed over the past ten years. This data can be seen in Table 4.

Table 4. Analysis of Six Articles

No	Title	Authors	Source	Year	Citation
1	Navigating the Online Travel Landscape: Factors Influencing Tourists' Choice of OTAs in Delhi and NCR Region in India	Sharma, A.K., Sharma, R.	Journal of Tourism and Development	2025	0
2	Cross-border e-commerce marketing strategy based on consumer behavior in the era of big data Consumer privacy	Li, B.	Journal of Computational Methods in Sciences and Engineering	2025	0
3	decision-making in digital era: an integrative review and taxonomy Antecedents of E-Marketing of Agriculture	Sun, Z., Pan, G., Yang, R., Zang, G., Zhou, J.	Aslib Journal of Information Management	2024	4
4	Products in This Digital Era: An Empirical Study	Srivastava, G.	International Journal of Technology and Human Interaction	2022	6
5	OMO Solutions that Provide a Unique Shopping Experience for Only Now, Only Here and Only Me	Tasuku, Y., Hideo, U., Sakie, M., Yuto, N., Kei, S.	NEC Technical Journal	2021	0
6	Digital era: From mass media towards a mass of media Skaitmeninė era: Nuo masinių medijų link medijų masės	Pečiulis, Ž.	Filosofija Sociologija	2016	7

Source: Scopus data

The six articles above can be analyzed based on the objectives, methodology and results, as seen in Table 5.

Table 5. Analysis Based on Objectives, Methods, and Results

No	Title	Research purpose	Research Methods	Results
1	Navigating the Online Travel Landscape: Factors Influencing Tourists' Choice of OTAs in Delhi and NCR	Identifying factors influencing travelers' choice of OTAs in the Delhi and NCR region (India). Contributing to the literature on digital consumer behavior and managerial strategies for OTAs.	<ul style="list-style-type: none"> Using a quantitative approach with purposive sampling. Sample: 552 respondents who used OTAs in the past 12 months. 	<ul style="list-style-type: none"> Ease of use and access to information Motivation to obtain comprehensive travel information Personalization and customization of travel packages Reviews and social proof from other travelers

No	Title	Research purpose	Research Methods	Results
	Region in India		<ul style="list-style-type: none"> • Data analysis: Exploratory Factor Analysis (EFA) with SPSS 	<ul style="list-style-type: none"> • Availability of discounts and special offers • Desire to get the best travel package
2	Cross-border e-commerce marketing strategy based on consumer behavior in the era of big data	to explore how consumer behavior influences the development and implementation of cross-border e-commerce marketing strategies in the context of big data.	Quantitative research is used to collect and pre-process selected sample data.	The results show that big data analytics can effectively predict consumer behavior and provide support for cross-border e-commerce marketing strategies.
3	Consumer privacy decision-making in digital era: an integrative review and taxonomy	to offer a comprehensive review of the fragmented literature on consumer privacy decision-making and to identify key issues worthy of future research.	Developed the Theory of Planned Behavior to combine consumer privacy decision-making.	The results show that consumer privacy decision-making is not an isolated behavior or a single choice, but rather a complex, multi-level, dynamic process. Factors influencing consumer privacy decisions primarily encompass five aspects.
4	Antecedents of E-Marketing of Agriculture Products in This Digital Era: An Empirical Study	This study demonstrates the role of workforce in the digital era of e-marketing agricultural products. E-marketing platforms (e.g., search engine optimization, affiliate marketing, social media marketing, and email marketing) help digital marketers track and analyze dynamic and complex consumer purchasing behavior.	Structural equation modeling (SEM) was used to test the framework of e-marketing of agricultural products.	The developed model can improve the capabilities of the workforce in this digital era in developing effective electronic marketing strategies for agricultural products.
5	OMO Solutions that Provide a Unique Shopping Experience for Only Now, Only Here and Only Me	Testing the concept of offline touchpoints for consumers in physical stores and their purchasing behavior is always connected to the online world, the online and offline worlds are integrated and considered as one unit.	Qualitative by combining online and offline concepts	The concept of Online Merges with Offline (OMO). OMO is considered a competitive strategy and mechanism in the e-commerce market. In the OMO era, it is crucial to connect diverse data, both online and offline, and then visualize it to integrate it under a single control.
6		uncovers the following relevant issues in the	Qualitative by comparing	the replacement of the vertical mass

No	Title	Research purpose	Research Methods	Results	
	Digital era: From mass media towards a mass of media Skaitmeninė era: Nuo masinių medijų link medijų masės	information creation, economic changes in behavior of content.	space: dissemination, models, and changes in consumer information	theories and current issues on consumer behavior	communication model with horizontal social networks, and the declining influence of traditional media

Source: Scopus data

Conclusion

The results of this bibliometric study can be concluded that based on the keywords consumer behavior and digital era on the Scopus website, 31 documents were found, the most of which were in 2025, amounting to 10 documents. Of the 31 documents, the authors are spread across several countries. The top three countries are India, China, and Indonesia. Based on Indonesia, there are two authors who write documents in the form of book chapters and conferences. The number of articles per year can be seen based on the largest field of science, namely computer science with 22 documents. The distribution of document types is divided into four: articles, books, book papers, and conference papers. Documents based on article type totaled six documents discussing consumer behavior and the digital era.

References

- Abbas, A. F., Jusoh, A., Mas, A., Alsharif, A. H., Ali, J., Abbas, A. F., Jusoh, A., Mas, A., Alsharif, A. H., Abbas, A. F., Jusoh, A., Mas, A., Alsharif, A. H., & Ali, J. (2022). Cogent Business & Management Bibliometrix analysis of information sharing in social media Bibliometrix analysis of information sharing in social media. *Cogent Business & Management*, 9(1). <https://doi.org/10.1080/23311975.2021.2016556>
- Ajzen I. (1991). The Theory of Planed behavior. *Organizational Behavior and Human Decision Processes*.
- Davis. (1989). "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology". *MIS Quarterly*, Vol 13, No, pp319-339.
- Effah, N. A. A., Asiedu, M., & Otchere, O. A. S. (2022). Improvements or deteriorations? A bibliometric analysis of corporate governance and disclosure research (1990–2020). *Journal of Business and Socio-Economic Development*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/JBSED-10-2021-0142>

- Glänzel, W. (2003). Bibliometrics as a research field: A course on Theory and Application of Bibliometric Indicators. *Researchgate*, (January 2003), 115.
https://www.researchgate.net/publication/242406991_Bibliometrics_as_a_research_field_A_course_on_theory_and_application_of_bibliometric_indicators
- Kumar, P., Sharma, A., & Salo, J. (2019). A bibliometric analysis of extended key account management literature. *Industrial Marketing Management*, 82(January), 276–292.
<https://doi.org/10.1016/j.indmarman.2019.01.006>
- Kurniawan, G., & Proyowidodo, A. (2023). Prosiding : Ekonomi Dan Bisnis Pengaruh Harga , Sistem Pembayaran E-Money , dan Kualitas Produk Terhadap Keputusan Pembelian Pada Produk Gadget Pengguna Marketplace Tokopedia. *Prosiding: Ekonomi Dan Bisnis*, 3(2).
- Lardo, A., Corsi, K., Varma, A., & Mancini, D. (2022). Exploring blockchain in the accounting domain: a bibliometric analysis. *Accounting, Auditing & Accountability Journal, ahead-of-p*(ahead-of-print). <https://doi.org/10.1108/AAAJ-10-2020-4995>
- Merigó, J. M., Gil-Lafuente, A. M., & Yager, R. R. (2015). An overview of fuzzy research with bibliometric indicators. *Applied Soft Computing Journal*, 27, 420–433.
<https://doi.org/10.1016/j.asoc.2014.10.035>
- Murti, L. I., Maharani, A., & Pujiwati, A. (2024). Investigating Consumer Purchasing Decisions Of Convenience Products Nowadays: The Effect Of Customer’s Character, Pricing, And Digital Marketing. *Jurnal Ekonomi LLDikti Wilayah*, 4(2), 23.
<https://doi.org/10.54076/juket.v3i2.463>
- Sharma, P., Ueno, A., Dennis, C., & Turan, C. P. (2023). Emerging digital technologies and consumer decision-making in retail sector: Towards an integrative conceptual framework. *Computers in Human Behavior*, 148, 107–913.
- Singh, P., Khoshaim, L., Nuwisher, B., & Alhassan, I. (2024). How Information Technology (IT) Is Shaping Consumer Behavior in the Digital Age: A Systematic Review and Future Research Directions. *Sustainability (Switzerland)*, 16(4).
<https://doi.org/10.3390/su16041556>
- Tanwar, A. S., Chaudhry, H., & Srivastava, M. K. (2022). Trends in Influencer Marketing: A Review and Bibliometric Analysis. *Journal of Interactive Advertising*, 22(1), 1–27.
<https://doi.org/10.1080/15252019.2021.2007822>