Omnichannel in the Business World: A Bibliometric Study of its History and Trends

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Abstract

The proliferation of digital technologies and changes in consumer behavior have driven the emergence of omnichannel businesses that, through integrated processes, seek to offer uniform experiences across various channels. This approach encompasses diverse conceptual currents and is analyzed from different perspectives. Salvietti et al. [1], point out that omnichannel arises from four fundamental dimensions: consumer behavior, business strategy, effective management, and the cohesive integration of sales channels. This broad scope highlights the complexity and multidimensionality of omnichannel as a constantly evolving phenomenon in academic research. Co-citation network analysis reveals a multifaceted structure in marketing and management research, with four well-defined thematic clusters: marketing and retail, management and decision sciences, logistics and operations management, and market research.

Keywords

Omnichannel, Business world, Trends, Strategy

1. Introduction

In recent decades, retail has faced the challenges of digital transformation, driven by the internet, disrupting business models. This change has impacted consumer behavior, influenced by the experiences offered by new channels. Therefore, many retailers are embracing flexibility as a way to meet consumer expectations, whether through online platforms or physical environments [2, 3]. These studies suggest that these touchpoints are key in planning loyalty and brand awareness strategies.

A key strategy related to channel and price integration is the implementation of the "buy online, collect in store" (BOPS) model, which requires additional investment [4]. This approach generates synergy between channels, optimizing the customer shopping experience (Kim et al., [5] and improving profitability through more competitive prices and efficient delivery times [6]. Although questions have been raised about the feasibility of applying this strategy to all products, given its potential negative impact on profit margins in certain contexts, it is imperative to carefully evaluate its relevance and applicability in each specific case [7, 8].

It's crucial to keep in mind that customer preferences are constantly evolving. One example of this is the food sector, where companies must adjust their logistics networks [9]. This dynamic is also observed in sectors such as banking, where customers seek a personalized, Komulainen & Makkonen [10], seamless, real-time experience [11]; online stores [12], where customers want to find discount coupons or compare prices; and financial services, Kou et al., [13] where mobile payments, transaction speed, and perceived risk are integrated [14].

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The adoption of omnichannel strategies has generated a significant transformation in the retail sector, especially regarding the customer experience, according to Riaz et al. [15]. In this context, Natarajan & Raghavan [16], highlight the crucial role played by the omnichannel customer experience in mediating the relationship between service quality and customer identification. This process positively activates participatory behaviors, such as writing reviews on social media. Furthermore, to increase satisfaction levels, especially among women and young people, it is essential to consider the omnichannel design of the consumer journey, according to Moliner & Tortosa-Edo.

Within the framework of this bibliometric research, the following objectives are established:

1. Identify the predominant keywords used by various authors.
2. Determine the leading countries in research in this field of knowledge.
3. Identify the academic journals that host the majority of relevant publications.
4. Identify the most prolific authors in the field of omnichannel.

This article is divided into a literature review section on omnichannel, a second section presents the methodology used for data collection and processing, a third section presents the analysis of the results focused on the objectives set, and a fourth section presents a discussion proposing future research topics. Finally, the main conclusions, their limitations, and possible lines of research are presented.

The transition to an omnichannel environment has blurred the lines between offline, online and digital channels, so the urgent need to integrate customer data and service attributes can increase costs and dissatisfaction. Once focused on physical stores, consumers now combine online and mobile experiences, reshaping the purchasing process with multiple sources of information. The term omnichannel retailing appeared in 2011 in an article by Darrell Rigby, which indicated that retailers could interact with their customers through various channels [17]. This article indicated that the consumer experience would have to be entertaining, emotionally appealing, both in physical and digital stores. After a couple of years, another study concluded that omnichannel retailing is redefining the industry, driving demand for personalized products and collaboration between manufacturers and retailers [18].

This concept of omnichannel is endorsed by Shankar [19], but he calls it "shopper marketing 2.0" and indicates that one must have a complete understanding of one's customers to integrate online and mobile marketing strategies. The emergence of new technologies means that research is beginning to focus on key issues such as the integration and redesign of supply channels [20], the impact of mobile technologies, social media, the role of physical stores, and the balance between personalization and privacy.

The adoption of new technologies has led to the emergence of novel purchasing patterns, among which the online purchase and pick-up-in-store modality, known as BOPS (Buy-online, Pick-up-in-store), stands out [7]. One of the first published studies addresses the implementation of this strategy in a retail environment, with the purpose of evaluating its impact on cross-selling and inventory decisions [21]. The findings of this study indicate that in a market characterized by perfect competition, companies show a clear incentive to implement BOPS services, especially in the context of centralized supply chains, where retailers can transfer costs to the manufacturer[22]. More recent research supports these results by confirming that the adoption of BOPS services benefits retailers by increasing their profits and decreasing returns, especially when effective coordination is achieved [23].

The intersection between Augmented Reality (AR) and omnichannel has represented a considerable milestone in its implementation within marketing strategies and practices [24]. In this context, AR stands as a disruptive technology that goes beyond the mere integration of digital elements into the physical world, offering unprecedented opportunities for the creation of immersive user experiences and omnichannel beyond traditional boundaries [25]. The work presented by Lee & Leona [26] indicates that virtual technology, when effectively implemented in retail environments, enhances the shopping experience by providing entertainment, convenience, and significantly improving the consumer experience in retail. The use of smartphones in retail settings is transforming the customer experience and is emerging as a crucial factor in the omnichannel landscape [27]. Currently, experts and some innovation researchers position smart retailing as the key to creating a holistic experience that benefits

both customers and retailers. Contrary to common assumptions about smartphone purchasing intent among millennials and non-millennials, evidence reveals that the distinction between them lies in the effects of intent and behavioral patterns on smartphone usage [27].

In today's omnichannel retail context, product recommendations have acquired a crucial role in retailers' strategies and this is where big data applications together with algorithms help suggest complementary products but not only improve customer service but also contribute to increased profitability Balakrishnan et al.[28], improves the shopping experience in physical stores, especially in mobile payment scenarios, where customers show a remarkable tolerance for validation. In tourism, omnichannel faces the challenge of maintaining consistency and updating of travel data across various platforms, and the use of big data facilitates information fluidity through personalization, contextual management, scaling, and efficient sharing of travel data.

Today, businesses are looking to do more than simply collect reams of customer data; they are also exploring how artificial intelligence can enhance the customer experience in an omnichannel environment [29]. Contrary to what one might assume, omnichannel and artificial intelligence have found applications in other areas, such as blood supply chain management [30], healthcare supply chains [31], logistics in the apparel industry [32], and restaurant supply chains [33]. However, the combination of AI and omnichannel does not always yield the best results. For example, some chatbots on restaurant ordering platforms lack sophisticated AI, forcing them to ask the customer multiple questions before offering reliable suggestions [34].

Digital transformation has diversified retail channels, altering shopping habits. In supermarkets, this highlights the complexity of marketing processes, underscoring the crucial importance of customer loyalty. Regarding loyalty, research conducted by Xie, et al. [35] indicates that omnichannel customers experience greater satisfaction thanks to omnichannel fulfillment and trust. Furthermore, it highlights that the type of return channel influences customer loyalty. One study revealed that offline customer satisfaction has a positive impact on online loyalty, while online customer satisfaction does not [36]. Gao, et al. [37] explored the influence of the quality of omnichannel integration on customer loyalty, examining customer engagement and relationship program receptivity. They found that a consistent and reassuring environment facilitates customer engagement, generating loyalty.

2. Methodology

Bibliometrics is a type of literature review that allows the analysis of a particular field of research, where the large volume of information does not represent an obstacle to its study, unlike other types of existing literature reviews [38]. It presents an innovative methodology of a rigorous and transparent approach in which quantitative and qualitative statistical techniques are applied to bibliographic data [39]. The purpose of bibliometric analysis is to broadly understand this particular field as a structure, in which its characteristics, development, and trends can be studied, through its performance and mapping [40, 41]. In recent years, bibliometrics has experienced growing interest from the academic world, due to its wide application in various areas of knowledge, such as Science Earth, Biology, or Tourism [42, 43], as well as in Management [44].

This research is made up of three phases: i) Search criteria, ii) Database selection and data extraction, iii) Data processing and selection of the software, and iv) Analysis of the Results.

1. Search criteria: The bibliographic data were downloaded in August 2023, considering the terms "Omnichannel" and "Omni-channel" as the most representative that identify this field of study [45, 1].
2. Database selection and data extraction: The primary data used in this study came from the Web of Science Core Collection database, which is widely used by academics and includes high-quality journals. The bibliographic data were downloaded in August 2023, using the aforementioned terms along with the search parameter "Topic," which includes Title, Abstract, Author Keywords, and Keywords Plus from the database. This yielded the topic search TS=(Topic ("omnichannel*") OR Topic ("omni-channel*")), yielding 1,008 records.

3. Data processing and software selection: These records were subjected to inclusion and exclusion criteria for data refinement. Scientific articles were selected for being considered of quality after being evaluated by academic reviewers [46]. Additionally, all languages were considered to be included to ensure broad coverage of the subject [47]. Incomplete or erroneous records were excluded when reviewing the downloaded information, ensuring the quality of the information [48]. These criteria allowed obtaining a final database of 927 records. In this study, two software programs were used to analyze the intellectual structure of this field of study: i) Microsoft Excel: This software allows the review, organization and analysis of the obtained information, the latter establishes the performance of the knowledge structure based on documents, countries and journals; ii) VOSviewer: Software that allows the construction and visualization of bibliographic networks known as bibliometric maps. These maps are based on distance analysis, where two elements that are closer together are more related to each other.
4. Analysis of Results: In bibliometric studies, it is essential to explore their intellectual structure through the mapping of scientific output and its performance [49]. The first involves studying output and impact based on documents, countries, and journals. The second corresponds to the representation of the structure of the field of study through clustered networks, allowing for the observation of its evolution and trends.

3. Results

3.1. Contributions by country

This section contains information on the 10 countries that have produced the most research on omnichannel. Table 1 shows the number of citations and publications for each country. The order is based on the number of citations. The United States is in first place, with the highest number of citations (8,688) and 223 published documents; followed by China in second place, with 3,678 citations and 243 documents; the United Kingdom in third place, with 2,228 citations and 85 documents; Germany in fourth place, with 2,052 citations and 51 documents; the Netherlands in fifth place, with 2,009 citations and 21 documents; Australia in sixth place, with 1,209 citations and 39 documents; France in seventh place, with 914 citations and 50 documents; Spain in eighth place, with 773 citations and 60 documents; In ninth place, Canada, with 754 citations and 20 documents; in tenth place; in tenth place, India, with 664 citations and 65 documents.

Table 1
The most productive countries

Rank	Country	Citations	Documents
1	United State	8,688	223
2	China	3 678	243
3	United Kingdom	2 228	85
4	Germany	2 052	51
5	Netherlands	2 009	21
6	Australia	1 209	39
7	France	914	50
8	Spain	773	60
9	Canada	754	20
10	India	664	65

Table 2 organizes the continents according to the number of citations in the field of omnichannel, revealing that Europe holds the first place with 45.71%, followed by Asia with 34.29% and America with 10%. In this context, the preeminent role of the United Kingdom stands out, as the European leader with the maximum number of citations (2,228) and publications (85). Its notable contributions include research on the evaluation of the omnichannel customer experience in retail environments [50], how they provide metrics that can be used by retailers who want to implement successful omnichannel

strategies [51], but not only metrics but also implementation dimensions such as stages, type and channel agent [52], as well as solving last mile deliveries through collaborative logistics [53].

In Asia, China stands out as the country with the largest number of citations (3,678) and research (243). Its main contributions to omnichannel research focus on trust, satisfaction, and purchase influence [54]. Other works aim to evaluate the quality of channel integration and how this affects perceived fluidity, repurchase intention, and positive word of mouth [26]. Likewise, a tool is presented to measure customer experience in an omnichannel system, which can serve as part of a retail strategy [26].

In the Americas, the United States is the country with the highest number of citations (8,688) worldwide, and second in scientific production (223). The main citations come from research on the various options that retailers offer customers for online purchase and in-store pickup [7], for searching for the product in a physical store and purchasing it online [55]. Other, slightly older research studies maintain that omnichannel strategies are important for brand building [55], and that the online and offline information provided by the retailer reduces uncertainty about product value and availability [7].

Table 2
Collaboration by continent

Continent	Countries	%
Europe	32	45.71%
Asia	24	34.29%
America	7	10.00%
Oceania	2	2.86%
Africa	5	7.14%
Total	**70**	

Taken together, these findings underscore the richness and diversity of omnichannel research worldwide, highlighting the need for international collaboration to address the evolving challenges and opportunities in this field.

3.2. Journal performance

Table 3 shows the top 10 journals that have published articles related to omnichannel. It should be noted that 310 journals were analyzed for this research. This table shows the names of the scientific journals and their corresponding statistical data on their impact, such as the number of published articles (TP), the contribution percentage (%), the H-index (H), SCImago Journal Rank (SJR), and the CiteScore (CS).

Table 3
Journal Production

Rank	Journals Name	TP	%	H	SJR	CS
1	International Journal of Retail and Distribution Management	60	6.40%	94	0.986	7.29%
2	Journal of Retailing and Consumer Services	54	5.76%	120	2,543	8.59%
3	Sustainability	44	4.70%	136	0.664	1.40%
4	European Journal of Operational Research	26	2.77%	288	2,371	2.95%
5	Journal of Business Research	26	2.77%	236	2,895	2.80%
6	International Journal of Physical Distribution and Logistics Management	19	2.03%	128	1,795	5.74%
7	International Journal of Production Economics	17	1.81%	214	3,028	2.38%
8	Electronic Commerce Research and Applications	15	1.60%	91	1,307	1.93%
9	Management Science	15	1.60%	145	7,593	5.70%
10	Computers and Industrial Engineering	14	1.49%	148	1.76	0.59%

First, it can be observed that the International Journal of Retail and Distribution Management and the Journal of Retailing and Consumer Services lead in terms of the number of articles and percentage of contribution, indicating a strong presence in omnichannel research. Second, the journal Sustainability shows a significant contribution in terms of published articles, although its impact, as measured by SJR and CiteScore, is relatively low compared to the first two. Finally, the journals Management Science

and European Journal of Operational Research have high SJR and CiteScore, indicating a considerable impact on the scientific community.

The diversity of the journals highlights the breadth of focus, from logistics to broader sustainability and operational issues.

Overall, the table reveals a diversity of journals with significant contributions to the field of omnichannel, highlighting the importance of evaluating not only the quantity of articles but also the quality and impact of journals on the scientific community.

"This section examines the contribution of researchers with a notable influence in the field of omnichannel. Table 4 shows 10 of the 563 selected authors, classified according to the number of citations they have received. As can be seen, most of the authors are American (5), and the rest belong to the European continent. The main author that stands out is Peter Verhoef from the University of Groningen, whose main works related to omnichannel address the study of behavior in multichannel purchases [56, 57], the transition from multi to omnichannel [58, 59], understanding the customer experience in an omnichannel environment [60], webrooming and showrooming [58, 61]. Second place is occupied by Fei Gao from Indiana University Bloomington, whose main works focus on studying the impact of the buy online, pick up in store (BOPS) strategy on store operations [7, 37], the effects of applying multichannel or omnichannel strategies for a physical store [37]. Thirdly, there is David R. Bell, whose main research refers to the demand and benefits of offline showrooms [55], and the implementation of omnichannel strategies for online and offline stores [55].

Table 4
Top ten contributions by author

Rank	Author	AT	Citations	Countries	Institute/University	HI
1	Verhoef, PC	121	647	Norwegian	University of Groningen	53
2	Gao, F.	11	373	USA	Indiana University	8
3	Bell, DR	88	336	Northern Ireland	Queens University Belfast	13
4	Brynjolfsson, E.	42	298	USA	Massachusetts Institute of Technology (MIT)	42
5	Gallino, S.	18	275	USA	University of Pennsylvania	12
6	Hubner, A.	68	227	Germany	Technical University of Munich	26
7	Cao, LL	14	215	France	NEOMA Business School	10
8	Neslin, SA	64	212	USA	Dartmouth College	38
9	Herhausen, D.	24	172	Netherlands	Vrije Universiteit Amsterdam	13
10	Grewal, D.	25	170	USA	Babson College	7

As can be seen from the table above, the authors' contributions not only illustrate the quality and depth of omnichannel research but also the need for multidisciplinary and collaborative perspectives to address the ever-evolving challenges in this dynamic field.

3.3. Authors Keyword Co-Occurrence Analysis

Figure 1 shows the main keywords used by the authors to summarize and describe the study's approach in a very concise manner. The most frequently used keywords, as can be seen, are omnichannel management, omnichannel retailing, multi-channel management, buy online and pick up in store, consumer behavior, and online retailing. The graph presents 108 nodes and 10 groups, grouped in different colors. This section shows the relationships among the aforementioned keywords, with at least five frequencies of occurrence within a structure of 2,662 existing keywords. Finally, 8 keyword groups were extracted, which are explained below.

Group 1: "Distribution Channel Integration" is represented by the color red and contains 27 items. The most relevant words are "channel integration quality" (41 repeated), "multi-channel management" (37), and "consumer behavior" (32). The main research on distribution channel integration refers to the integration of artificial intelligence and omnichannel in the healthcare sector [31], the knowledge of the moderating role of the number of channels and gender [16], the exploration of the commitment-trust theory within customer perception, the use of the Technology Acceptance Mode within the buy online, pick up in store (BOPS) strategy [62], the integration of channels and logistics services with customer

repurchase intention [63].

Group 2: “Buy online and pick up in store” is represented by the color green and has 19 items. The main keywords in this group are: “buy online and pick up in store” (34), “pricing” (28), and “supply chains” (17). Among the main articles dealing with buy online and pick up in store is one that implements a theoretical shipping model for both customers and casual consumers within a pre-established area [64]. Another work aims to evaluate the Stackelberg game model together with a pricing strategy to understand the impact of market factors on the equilibrium outcome [4].

Group 3: “omnichannel retailing” is represented by the color blue and has 16 items. The keywords that stand out are “omnichannel retailing” (208), “e-shopping” (87), and “online retailing” (30). Although omnichannel is often associated with retailing, it has also been investigated in the banking sector, where work is presented that analyzes the potential effects of omnichannel retail properties on customer experience and brand loyalty [65]. Other research shows that adopting the “buy online, return in store” model makes customers react when there is a return penalty, attracting more customers when there is no such penalty.

Group 4: “Customer Engagement” is represented by the color yellow and has 12 items. The most frequently used keywords in this group are: “customer engagement” (10), “omnichannel integration” (9), and “distribution channel” (8). In the context of customer engagement, a study introduced an omnichannel integration model with the purpose of enhancing the customer experience. It was determined that certain interactive touchpoints, especially through emails, have the capacity to forge a loyalty loop, especially among receptive customers [66]. Continuing this line of research, Chen et al. [67] employ the stimulus-organism-response (SOR) theoretical framework to examine a relationship model between omnichannel integration and customer engagement in the fresh food sector. The results of this study demonstrate that omnichannel integration is attributed to the synergy between information integration, commercial integration, and service and distribution integration.

Group 5: “Artificial Intelligence and Omnichannel” is represented by the color purple and has 11 items. The most used keywords are: “omni channel management” (292), “supply chain management” (20) and “artificial intelligence” (11). In one of the investigations, an artificial intelligence-based blood supply chain model has been developed, the purpose of which is to balance supply and demand, promoting health and well-being. This approach is aligned with the UN Sustainable Development Goals, marking a significant contribution in the field of omnichannel [30]. Another important contribution comes from a study that addresses the discrepancy between online food representation and reality in the context of omnichannel retail. Using artificial intelligence and expectancy theories, the integration of these technologies to improve the customer experience is explored [33]. A third study, which focuses on the application of supply chain finance to omnichannel logistics, specifically in fashion companies, employs artificial intelligence as a strategic tool [32].

Group 6: "Customer Experience Management" and highlighted by the cyan color, comprises 9 key elements. The most recurrent expressions are "customer experience management" (45), "cross-channel" (24), and "customer satisfaction" (16). In this context, retailers, aware of the importance of maintaining inventories in both their physical and online operations, are the subject of study in a specific research. This study implements a mental model to simplify omnichannel inventory management, providing recommendations to mitigate customer confusion and reduce lost sales [68]. Furthermore, in the tourism sector, there is research that focuses on multi-channel consumer behavior. This research analyzes key psychographic and demographic factors to differentiate multi-channel buyer segments, designing strategies that improve the customer experience [69].

Cluster 7: "Digital Transformation" is presented in orange and consists of 5 items. Prominent words include "showrooming" (26), "covid-19" (23), and "webrooming" (14). Liu et al. [70] focus on understanding how COVID-19 has impacted consumers’ fears and self-protection motivations on their intentions to use omnichannel retailing. The findings indicate that fear, self-efficacy, and response efficacy influence protection motivation and intention to use omnichannel retailing. On the other hand, the growing popularity of omnichannel was strongly influenced by the COVID-19 crisis, which has transformed consumer behavior, revealing that the crisis has significantly boosted the development of the omnichannel model in retail.

Groups 8 (5 items), 9 (3 items), and 10 (1 item) are small and do not contain relevant information for this research.

Taken together, this analysis highlights the richness and diversity of omnichannel research, with topics such as channel integration, customer experience, artificial intelligence, and digital transformation emerging as crucial areas for exploration. This overview provides valuable guidance for future omnichannel research and development.

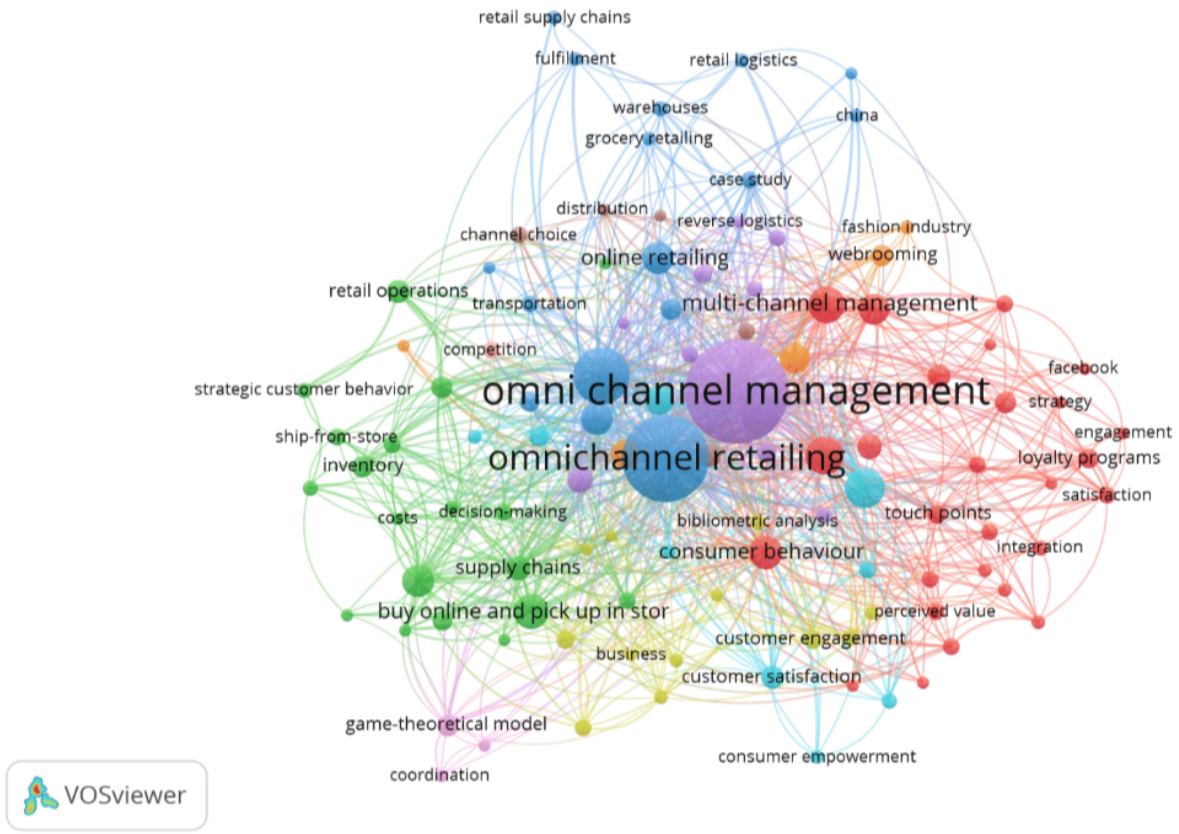

Figure 1: Authors' Keyword Co-Occurrence Analysis

3.4. Journal Co-Citation Network

To compile Figure 2, VOSViewer 1.6.19 software was used, and a threshold of at least 20 citations was established for data selection. Based on this criterion, of the 11,501 journals initially considered, only 261 were selected and grouped into four clusters, which will be analyzed in detail in the following paragraph.

Cluster 1, identified in red, groups 137 journals (52.49%). Notable influential journals include the Journal of Retailing (UK), with 2,415 citations, ranked in Q1 for Marketing; the Journal of Retail Consumer Services (UK), with 2,121 citations, ranked in Q1 for Marketing; the Journal of Business Research (USA), with 1,487 citations, ranked in Q1 for Marketing; the Journal of Marketing (USA), ranked in Q1 for Marketing, Business, and Economics; and the International Journal of Retail & Distribution Management (UK), with 1,255 citations, ranked in Q1 for Business, Tourism, and Q2 for Marketing.

Cluster 2, identified by the green color, groups 78 journals (29.89%). The most cited journals include: Management Science (United States), with 1,805 citations, ranked in Q1 in Administrative Sciences and Strategy and Administration; European Journal of Operational Research (Netherlands), with 1,436 citations, ranked in Q1 in Computer Science, Industrial Engineering, Information Systems Management, and Administrative Sciences; International Journal of Production Economics (Netherlands), with 1,082 citations, ranked in Q1 in Business, Economics, Industrial Engineering, and Administrative Sciences;

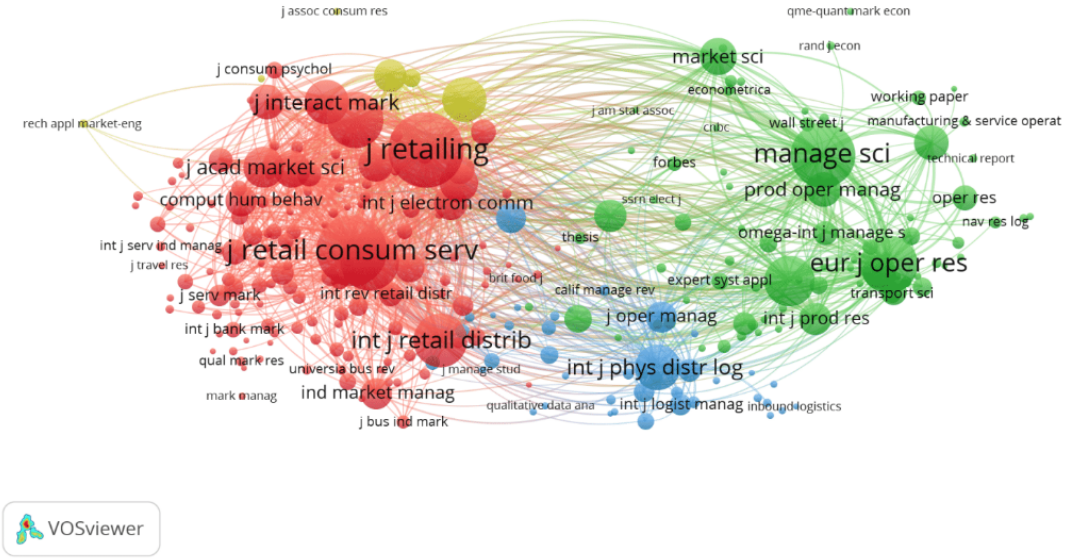

Figure 2: Journal Co-Citation Network

and finally, Marketing Science (United States), with 588 citations, ranked in Q1 in Business, Economics, and Marketing.

Cluster 3, represented in blue, includes 40 journals (15.33%). Prominent among these are the International Journal of Physical Distribution & Logistics Management (United Kingdom), with 883 citations, ranked in Q1 for Technology and Innovation Management and Transportation; the Journal of Operations Management (Netherlands), with 415 citations, ranked in Q1 for Applied Computer Science, Industrial Engineering, Administrative Sciences, and Management and Strategy; and the Harvard Business Review (United States), with 406 citations, ranked in Q2 for Business Administration, Technology and Innovation Management, and in Q3 for Strategy and Management.

Cluster 4, identified by the yellow color, consists of six journals (2.30%). Among the most cited are: Journal of Marketing Research (United States), with 836 citations, in Q1 in Business Administration, Economics, and Marketing; International Journal of Research in Marketing (Netherlands), with 445 citations, in Q1 in Marketing; and Marketing Letters (United States), with 145 citations, located in Q1 in Business Administration, Economics, and Marketing.

4. Conclusion

Omnichannel has emerged as a fundamental concept in marketing and customer experience management over the last decade. In an increasingly digitalized world, companies face the challenge of offering a consistent and seamless experience to their customers across multiple channels. This section will discuss the key findings related to the main research conducted by country, the main contributions of authors, the main emerging trends in the omnichannel literature, the role of AI and its main challenges, and finally, the co-citation network.

The compilation of data from research conducted in 70 countries on omnichannel offers an in-depth and comprehensive view of the scientific contribution in this field. Bibliometric data has revealed a dynamic and constantly evolving landscape of omnichannel research. The United States, China, and the United Kingdom emerge as the undisputed leaders in knowledge production on this topic, accounting for a significant proportion of publications and citations. These countries have demonstrated a strong interest in exploring the implications of omnichannel for businesses, consumers, and society at large.

Recurring themes in the literature include distribution channel integration, customer experience, artificial intelligence, and buy online, pick up in store. However, our results also highlighted emerging

trends, such as the growing interest in sustainability, the ethics of omnichannel, and the impact of the COVID-19 pandemic on consumption patterns.

A particularly interesting finding is the growing importance of artificial intelligence in omnichannel management. Companies are increasingly using technologies such as machine learning and data analytics to personalize the customer experience and optimize their operations. Furthermore, the pandemic has accelerated the adoption of omnichannel strategies, creating new research opportunities and highlighting the need for more flexible and resilient business models.

Co-citation network analysis reveals a multifaceted structure in marketing and management research, with four well-defined thematic clusters: marketing and retail, management and decision sciences, logistics and operations management, and market research. Each cluster represents a research area with specific characteristics and focuses. The findings of this study contribute to a better understanding of the intellectual structure of the field, can serve as a guide for future research, and can help future researchers understand what types of journals are interested in publishing on omnichannel.

5. Research Limitations

Limitations of current omnichannel research include a lack of longitudinal studies analyzing the long-term effects of omnichannel strategies on consumer behavior and business performance. Furthermore, research is geographically concentrated in developed countries, particularly the United States, China, and European countries, limiting the generalizability of findings to emerging market contexts. Another limitation is the need for more robust methodologies that integrate qualitative and quantitative analyses to provide a more complete view of how omnichannel impacts different business dimensions. Finally, greater attention is needed to address ethical issues related to the collection and use of consumer data in omnichannel strategies.

Declaration on Generative AI

The authors have not employed any Generative AI tools.

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