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## A Bibliometric Analysis of Omnichannel and Customer Satisfaction

Siti Farahhani Ismail, Abdul Rahman Zahari, Elinda Esa, Nor Hazlin Nor Asshidin\*,  
Khairul Nizam Surbaini, Azmer Ezwan Abdullah

\* Corresponding Author

College of Business Management & Accounting, Universiti Tenaga Nasional, Sultan Haji Ahmad Shah Campus, 26700 Bandar  
Muadzam Shah, Pahang, Malaysia

farahhanismail@gmail.com; Rahman@uniten.edu.my; Elinda@uniten.edu.my; Hazlin@uniten.edu.my; NizamK@uniten.edu.my; Azmer@uniten.edu.my  
Tel: 01110984879

### Abstract

Many firms have adopted Omnichannel to increase engagement between companies and their customers. As a result, it facilitates the firms to create better customer experience and satisfaction, which also affects a company's earnings. The main aim of this study is to guide the researchers in developing a conceptual framework for omnichannel and customer satisfaction. Thus, this study has employed a bibliometric analysis using articles extracted from the Scopus database between the years 2015 to 2023 to determine the term co-occurrence in research titles and abstracts and the top ten highly cited journals on omnichannel and customer satisfaction.

Keywords: Omnichannel; customer satisfaction; bibliometric analysis

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### 1.0 Introduction

Nowadays, service providers have been forced to work hard to attract customers and keep them loyal because intense economic pressures, escalating consumer demands, and increasingly complex technologies are raising the stakes (Hidayat et al., 2022). As e-commerce gains popularity, the number of channels through which consumers can purchase products multiplies, and the shopper journey opens up numerous new routes and opportunities (Barnes, 2016). Hence, to adapt to these environments, many companies use an omnichannel approach to encourage customers to interact with the company using a channel or platform of their choice. The concept of omnichannel refers to the synergetic management of numerous channels and customer touchpoints so that the customer experience across channels and the performance over channels are optimized (Verhoef et al., 2015). Shen et al. (2018) added that the omnichannel perspective requires the company to use data across channels effectively. Thus, the firms must ensure the data is seamless to produce an effective omnichannel.

A study by Suthongwan and Kuntonbutr (2023) proved that the engagement rate significantly increased when firms use the omnichannel. For example, 75% of utility customers interact with their utility firms using more than one channel (Deepak et al., 2019). From a customer standpoint, omnichannel has enabled customers to purchase products on the e-commerce website and check the physical store's available stock and highlight their concerns (Hiraishi et al., 2016). These efforts to integrate multiple channels have received increased attention because they are customer-oriented activities expected to increase customer satisfaction and provide a better customer experience (Lee, 2019). Customer satisfaction is critical for a firm's long-term viability and profitability. Many world-class companies strive to meet and exceed customer expectations to boost customer satisfaction (Ng et al., 2021). On top of that, many touchpoints or omnichannel also positively impact the brand (Suthongwan & Kuntonbutr, 2023). These outcomes have motivated most companies to utilize the role of omnichannel effectively.

In today's marketplace, many firms generally acknowledge customer experience as important in sustaining competitive advantage, as customers now have more power than ever (Stein & Ramaseshan, 2015). According to Ilieska (2013), good customer satisfaction

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affects the profitability of nearly every business as when they perceive a good product or service, each of them will typically tell nine to ten people through “word-of-mouth” communication. Although the omnichannel approach is becoming an inherent feature of the firms, its role in creating customer satisfaction has not yet been thoroughly understood (Komulainen & Makkonen, 2018). Also, past studies have recorded more work on omnichannel and customer satisfaction concentrated in the retail and banking sectors (Derhami et al., 2021; Iyer et al., 2018; Ma, 2017). Therefore, this study aims to identify the factors that are linked to customer satisfaction using omnichannel. In view to this, the findings from a systematic literature search can be used to develop a conceptual framework for omnichannel and customer satisfaction that can be applied in other sectors.

## 2.0 Literature Review

In recent years, the concept of omni-channel has emerged as a pivotal strategy to enhance customer satisfaction. Researchers have extensively explored the impact of omni-channel, particularly in the retailing sector, on customer satisfaction, and the findings consistently underscore its significance. Omnipresent digital technologies have blurred the lines between physical and online channels, enabling customers to transition between them during their shopping journey seamlessly. This convenience empowers consumers with many choices and heightens their expectations for a consistent and personalized shopping experience across all touchpoints. Scholars like Hidayat et al. (2022) have shown that organizations that successfully implement omnichannel strategies, integrating their physical stores, websites, mobile apps, and social media platforms, tend to achieve higher levels of customer satisfaction. Importantly, the multiple channels of touchpoints can also improve the communication between the customers and companies, improving customer satisfaction and loyalty (Abdullah et al. 2023). According to Moliner and Tortosa-Edo (2023), omnichannel customer journey design and online customer experience are very critical to create customer satisfaction. Thus, it is important to identify the overall factors influencing customer satisfaction using the omnichannel.

## 3.0 Methodology

This study employed a bibliometric analysis approach to synthesize the existing body of literature in a field and go through several processes, such as identification, evaluation, and interpretation of all available and relevant research that can answer questions related to topic areas or phenomena of interest (Ismail et al., 2021). The premier sources of research papers for the present study to execute the literature review were accessed from the Scopus database. This study preferred to use the Scopus database because it is a multidisciplinary database with more articles in social scientific journals, education-related journals, and management journals (Sweileh, 2022). Scopus is the world's largest abstract and citation database of peer-reviewed literature, with articles from the world's leading publishers and one of the primary sources of pertinent information (Abdullah et al., 2023; Wahid et al., 2020).

Firstly, the search term 'omnichannel or omni-channel and customer and satisfaction' is used when querying the Scopus database for information on article titles published in any language related to the research topic. The search was conducted on February 22, 2023. Articles published between 2015 and 2023 were included within the search's parameters. The downloaded publication lists returned 97 document results. The next step is eliminating duplicate papers using conditional formatting and red cell highlighting in Microsoft Excel. This study identified one similar paper in the raw datasets and deleted them, so the list of publications was 96. The subsequent step is inclusion and exclusion criteria in selecting the articles for review. The present study included only empirical articles published in peer-reviewed journals, available in English, and articles that could answer the research question. Among the selected journals are the Journal of the Academy of Marketing Science, the Journal of Retailing and Consumer Services, the Journal of Enterprise Information Management, the Journal of Retailing, and the International Journal of Retail and Distribution Management. This study excluded articles published as conference papers, conference reviews, book chapters, and non-English language articles. Hence, the final list of publications was 46. The current study uses Microsoft Excel to calculate the published materials' frequencies and generate the relevant graphs and VOSviewer (version 1.6.19) to create and visualize the bibliometric networks.

## 4.0 Findings

The bibliometric findings in this study are as follows:

### 4.1 Classification by publication year

Table 1 depicts the distribution of articles from 2015 to February 2023 and indicates that the omnichannel and customer satisfaction study increased from 2019 to 2021 and showed a small decline in 2022. There is zero publication in 2016 and two published papers in 2017 and 2018.

Table 1. Distribution of articles from year 2015 to February 2023

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
No of publication	1	0	2	2	7	9	14	10	1	46

### 4.2 Text data mapping



One of the methods for determining the importance of a piece of literature is to count the number of times other people's studies have referred to it as a source, and the greater the number of times an article has been cited, the more significant the article is to the field of study it belongs to (Abdullah et al., 2023). Therefore, this study has analyzed the top ten highly cited research articles on omnichannel and customer satisfaction. Table 2 shows the top ten highly cited research papers, in which the majority of the articles discussed omnichannel and customer satisfaction were published in 2019 and 2021. In addition, the papers are published in a variety of journals, such as the Journal of the Academy of Marketing Science, the Journal of Retailing and Consumer Services, the Journal of Enterprise Information Management, the Journal of Retailing, and the International Journal of Retail and Distribution Management. The highest cited paper is from work by Kumar et al. (2019), with 190 citations, followed by a paper established by Herhausen et al. (2019), Iyer et al. (2018), and Ma (2017), with 93, 57, and 51 citations, respectively.

Table 2. Top 10 highly cited research articles

Rank	Author	Title	Journal Title	Citation
1	Kumar et al. (2019)	Customer engagement in service	Journal of the Academy of Marketing Science	190
2	Herhausen et al. (2019)	Loyalty formation for different customer journey segments	Journal of Retailing	93
3	Iyer et al. (2018)	Investigating the effectiveness of retailers' mobile applications in determining customer satisfaction and repatronage intentions? A congruency perspective	Journal of Retailing and Consumer Services	57
4	Ma (2017)	Fast or free shipping options in online & omni-channel retail? The mediating role of uncertainty on satisfaction & purchase intentions	International Journal of Logistics Management	51
5	Omar et al. (2021)	M-commerce: The nexus between mobile shopping service quality and loyalty	Journal of Retailing and Consumer Services	44
6	Hamouda (2019)	Omni-channel banking integration quality and perceived value as drivers of consumers' satisfaction and loyalty	Journal of Enterprise Information Management	41
7	Sun et al. (2020)	When digitalized customers meet digitalized services: A digitalized social cognitive perspective of omnichannel service usage	International Journal of Information Management	34
8	Sorkun et al. (2020)	Omni-channel capability and customer satisfaction: mediating roles of flexibility and operational logistics service quality	International Journal of Retail and Distribution Management	25
9	Derhami et al. (2021)	Assessing product availability in omnichannel retail networks in the presence of on-demand inventory transshipment and product substitution	Omega (United Kingdom)	24
10	Tueanrat (2021)	A conceptual framework of the antecedents of customer journey satisfaction in omnichannel retailing	Journal of Retailing and Consumer Services	23

### 5.0 Discussion

Tueanrat (2021) mentioned that omnichannel customers were the most complicated and sensitive compared to others customer segments. In addition, their omnichannel journey satisfaction was influenced by many factors (Tueanrat, 2021). For instance, Kumar et al. (2019) stated that customer engagement can be created through a good service experience, which influences customer satisfaction and makes customers emotionally connected with the firm. According to them, customers are likely to use multiple channels during a single purchase. Therefore, when firms employ an omnichannel strategy, it helps them deliver a better service experience and enables easy and seamless communication between firms and customers. Kumar et al. (2019) also identified the factors that moderated the effect of service experience from the customer perspective, such as offering-related (referred to the services provided or offered by the firm), value-related (relation to the trade-off between what the customer gets and what they give up in experiencing the services), enabler-related (on how certain variables enable the consumption of the services offered), and market-related (about developed market vs. emerging market). Table 3 summarizes the factors that moderate the relationship between omnichannel and service experience that led to customer satisfaction.

Table 3. Moderating factor

Offering-related	Value-related	Enabler-related	Market-related
Perceived offering complexity	Customer participation in loyalty program	Technology adoption	Developed market vs emerging market
Trust in firm	Customer effort	Social media usage	

Source from Kumar et al. (2019)

Customers who use multiple touchpoints may also be more concerned with decision-making because they seem to spend a lot of time and effort gathering information throughout the customer journey (Herhausen et al., 2019). Suppose customers spend more time interacting with the firm and seeking information about the offering. In that case, these situations can heighten the level of involvement in understanding a complex offering that can lead customers to make sub-optimal decisions, or even wrong decisions, which could result in negative experiences (Kumar et al., 2019). While for trust in a firm, trust can be developed by determining customers' confidence in the quality and reliability of the firms' offerings, where a higher level of trust in firms can enhance customer experience and satisfaction (Kumar et al., 2019). For example, customers who make an online purchase do not receive the product immediately and must wait for it to be delivered. As a result, they may perceive uncertainty (perceived ambiguity and riskiness) throughout the product delivery process (Ma, 2017). Therefore, firms can provide alternatives like free shipping and lengthy delivery time to maintain customer satisfaction (Ma, 2017). Besides, firms that provide incentives (e.g., store credit cards, rewards, accumulation and redemption of points) to make customers buy more, often and intensively through customers, participation in loyalty programs can influence customer satisfaction and

then lead to customer loyalty to the firms (Kumar et al., 2019). In terms of customer effort, customer experience and satisfaction can increase when customers think they can easily and effortlessly switch between channels without interruptions in the service interaction (Kumar et al., 2019).

Other than that, the adoption of technology by customers will also impact customer satisfaction (Herhausen et al., 2019; Iyer et al., 2018; Omar et al., 2021; Sun et al., 2019). According to Sun et al. (2020), the more customers attach themselves to mobile technologies, the more likely they will be satisfied with their omnichannel experiences. Herhausen et al. (2019) and Iyer et al. (2018) stated that the rise of mobile devices seemed like potential game changers for existing segments as they found that mobile device usage is associated with the number of alternatives searched. It indicates that mobile devices indeed facilitate information search. Iyer et al. (2018) found that the levels of brand-app congruency (the extent to which a retail store's app and retailer have a commonality in terms of achieving objectives), functional value (the degree to which product/retail attributes meet customer expectations in terms of the utilitarian aspects), and hedonic value (the extent of pleasure, fun, and enjoyment that can be derived from an activity) are positively associated with the satisfaction of firm apps. Also, past work by Omar et al. (2021) confirmed that mobile shopping service quality, which consists of four dimensions (efficiency, fulfillment, responsiveness, and contact), strongly impacts customer satisfaction. Additionally, social media usage by the customer also enhances the impact of omnichannel on customer satisfaction (Kumar et al., 2019; Sorkun et al., 2020). In both online and offline formats, social networks are primarily used for business and social functions such as idea exchange, networking, content sharing, location services, product promotions, providing user feedback, and conducting opinion polls (Kumar et al., 2019). Further, regarding the market type, the positive relationship between omnichannel and service experience is enhanced in emerging markets more than in developed markets. This is because emerging markets are largely characterized by limited access to the markets, and this results in the existence of many nonusers. Therefore, creating first-time users in emerging markets is essential to creating access to the offerings and providing the information needed to understand them (Kumar et al., 2019).

In addition, Sorkun et al. (2020) stated that omnichannel capability does not directly affect customer satisfaction but effect through double mediation of flexibility and operational logistic service quality. Flexibility, which is the ability to deal with, solve, and adapt to unanticipated, new, or changing needs, is important in omnichannel retailing because there are so many different options offered during the order fulfillment process (Sorkun et al., 2020). The elements of operational logistic service quality, such as timeliness, availability, order condition, on-time and damage-free delivery, short-order lead time inventory availability, return management and information accuracy, are considered significant factors in enhancing customer satisfaction in the context of e-commerce (Sorkun et al., 2020). Derhami et al. (2020) consider such on-demand transshipments for the offline retail channel when the desired product is not in stock. However, the customer's willingness to wait, the presence of the transhipped product's features in the dealer's showroom, and the increased level of customer satisfaction attained by considering longer-distance alternatives all play a role in whether or not a customer will accept potentially available alternatives.

Channel integration quality also impacts customer satisfaction (Hamouda, 2019; Sun et al., 2020). Hamouda, (2019) conducted research in the context of banking omnichannel and found that customer perceives a higher level of integration between the channels when their satisfaction with their bank is greater. Users of multiple channels tend to perceive the quality of all channels used and incorporate it into an overall perception of service quality (Hamouda, 2019). Channel integration quality refers to channel integration that provides customers with a seamless service experience across multiple channels (Hamouda, 2019). In conclusion, firms dealing with omnichannel customers must ensure frictionless transfer between channels, facilitate customer participation, and not to overlook the importance of a seamless aftersales experience (Tueanrat, 2021).

## 6.0 Conclusion & Recommendations

In times of disruption, such as the COVID-19 pandemic, omnichannel is a trend that has emerged as a potential solution, and it has the potential to raise a company's profits by expanding the number of marketing channels that are not dependent on a single channel. Besides, omnichannel can offer consistency and seamless experience, leading to higher customer satisfaction. Higher customer satisfaction leads to greater customer retention, loyalty, stronger brand reputation, and company sustainability. Based on past research, factors like perceived offering complexity, trust in the firm, loyalty program, customer effort, technology adoption, social media usage, market type, product availability, efficiency, consistency, uncertainty, and integration service quality play an important role in influencing customer satisfaction toward omnichannel strategy. The findings from this study will generate the idea for the researchers to develop a conceptual framework for omnichannel and customer satisfaction. Since the majority of the published papers are focused on the retail and banking sectors, thus, it will also give insight for the researchers to concentrate on the least mentioned sectors like energy.

This study employed a bibliometric analysis that only extracted data from the Scopus database. Therefore, it is recommended that future research extract data or articles from other databases like the Web of Sciences or Google Scholar to get a holistic view of this topic. The future study also can set the lengthy time boundary of past research to review the article. Furthermore, since this study did not delve into the specifics of each variable, future research is anticipated to test empirically proven and more integrated variables, sub-variables, and dimensions in greater depth to produce much more accurate results.

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## Paper Contribution to Related Field of Study

The present paper makes a significant contribution to omnichannel literature by reviewing the role of omnichannel on customer satisfaction based on the articles from the Scopus database between 2015 and 2023. Further, this study also provides knowledge for managers that want to implement or have already employed omnichannel the right strategy to improve customer satisfaction.

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