

Changing Patterns of Consumer Behavior in the Evolving Indian Economy: Omnichannel Retailing, from the Focus on Consumer Behavior through Organizational and Retailer Impact

Ms. Priya Wagh, Ms. Diksha Telmore, MR. Mayur Kamble

Dept. of M.B.A Digital Marketing,
Dr. D. Y. Patil Institute of Management and Research,
Savitribai Phule Pune University, Pune (India)

Abstract- In an increasingly digital world characterized by the rise of web 5.0, mobile internet, and broadband, companies find themselves in a process of profound adaptation. The different modes of interaction with customers also undergo systematic transformations due to the revolution that technology, especially the Internet is imposing on the market. So, this work aims to understand the complexity of Omnichannel retailing using bibliometrics and a systematic review of methodological strategies. This study also presents an investigation of the aforementioned theme considering the marketing lens as the main approach. The research was conducted in seven databases to list the main articles on the topic. The search terms were "Omnichannel" and its main variant "omnichannel". The databases used were: Google Scholar, Web Science, Scopus, and Ebsco Host. The main results indicate that marketing researchers are addressing omnichannel from the consumer's perspective (consumer experiences and the importance of the customer journey in omnichannel retailing), the business strategies adopted by companies to act in this retail format (investments in technology to integrate performance across different channels), and the interaction of marketing with other organizational domains (integration of the marketing domain with other domains to act in this retailing context). In conclusion, we suggest the following research perspectives: a) themes for understanding the customer's journey; b) stages covered and how consumer experiences can impact new purchases; c) understanding how companies are preparing to deal with this omnichannel scenario.

Index Terms- Omnichannel; Retail; Consumer behavior; Marketing; Strategy.

I. INTRODUCTION

Understanding consumer behavior is a big issue for companies, it has become a theme of greater attention in the organizational context. Based on this principle, companies are trying to understand which path consumers to take to get the best buying experience since they use several channels to get information about products until the purchase. To that end, companies offer different channels to access products, whether it is mobile applications, online stores, physical stores, etc. Companies are also looking to differentiate themselves in the market by indicating their performance strategy. Thus, they can use only one channel or several. When they choose to offer more than one channel, they act within the framework of a multi-channel strategy, which is "the set of activities related to selling goods or services to customers through more than one channel" (Zhang et al.,

2010). However, this strategy does not tackle the issue of interaction and integration between channels.

Instead, when the concern becomes the integration of these channels, i.e., a way to make the consumer experience unique, the consumer will be surrounded by the same buying characteristics across channels, the approach is referred to as omnichannel. According to Verhoef, Kannan, and Inman (2015), omnichannel is the retail strategy that applies synergistic management of many channels and touch points available to the customer to optimize the customer experience and channel performance.

Therefore, it becomes necessary to better understand this retail strategy, which is one of the aims of this study. According to Benmoussa and Knidiri, (2019), studies in the retail field need to focus on understanding the issues related to customer behavior, as they become omnichannel in their behaviors and perspectives. Galipoglu et al. (2018), indicate in their findings

on omnichannel that the intellectual orientation is incorporated in the field of marketing, although it still lacks a solid theoretical basis which still requires further research. To confirm this statement, the topic in question is one of the research indications in the field of marketing according to the MSI research priorities for the 2018-2020 biennium. In addition, concerning the managerial aspect, the study indicates the points on which companies must focus especially in understanding consumer behavior, and also to send information on the business strategies adopted to adopt in the omnichannel retail format.

Thus, to better understand this context, this research aims to contribute with an update on the topic, placing the main approaches that surround it through a bibliometric study complemented by a systematic review. To this end, a sample of 58 articles from four different databases was selected to analyze and understand the most relevant research on the topic. In this way, the study provides an understanding of the concept of omnichannel retailing, a visualization of the context in which studies on this topic are embedded, and the main approaches researched. The methodological aspects focus on how the articles were identified and selected. The results are summarized in a table indicating the theoretical and empirical gaps extracted from the 58 articles analyzed in this study. However, the study is limited by the fact that it addresses the topic only from the marketing perspective, as well as by the sample studied since other studies on the topic are not considered here. The number of bases studied is also a limiting factor of the study.

II. METHODOLOGICAL

Extensive study has been conducted by Cui et al. (2018) [14,15,16] for EV charging system. Battery swapping stations, charging stations, and wireless charging lanes are essential for electric vehicles due to their limited range. Their low adoption can be attributed to issues with standardization and the high expenses associated with developing them. Because charging stations may be configured to fit the demands of a wide range of network clients, they are becoming popular. The wide range of battery electric car sizes and types has not always been taken into account when planning the placement of charging stations. Charging stations of varying sizes and designs are required to meet the needs of network customers. In order to minimize the sum of all agents' travel times within a given capacitated network, we cast the model as a 0–1 mixed integer linear program (MILP).

According to Atmaja et al. (2015) [19,20], if a fixed charging station (FCS) is already in use at a certain location, the EV operator can bring a mobile charging station (MCS) and install a second pole. The MCS class of EVs includes vehicles with either a high charging station requirement or a limited energy storage capacity. There were two strains of MCS that

spread: nES and wES. An MCS unit with many charging poles is nonetheless an MCS nES, even though it cannot store energy. This device can begin charging in on-grid mode [45] by connecting its input to the grid, reducing system strain. When used for EV charging outside of FCS, a device that combines MCS and energy storage is referred to as an MCS wES. Requesting a CS location is the first phase, followed by registering the EV once it arrives, starting the MCS, stopping the MCS, and finally finishing the charge. The CS server, EV, MCS, and FCS can all benefit from improved connectivity enabled by a web-based information management system. Even when the FCS is at full capacity, the waiting time for EVs is reduced using this strategy.

It is to note that the little temporal change in BEV incentives across our sample may explain why state income tax credits were not found to have a statistically significant influence on BEV adoptions by Clinton et al. (2019) [13]. The rebate offers for Teslas and other auto brands are as well received by consumers. We combine our results with earlier estimates of the marginal environmental costs associated with charging electric vehicles [15] to analyze the positive and negative externalities of BEV subsidy packages. Our research suggests that the benefits of these regulations may be exaggerated if the benefits of reduced emissions are ignored. The net utility may look very different depending on the relative importance of factors like market growth over the long term, production cost savings, network externalities, and quick innovation.

How long it takes to charge an electric vehicle was investigated by Yang et al. in 2013 [17,21,22]. Since EVs sometimes have to wait in line for a long time at a stationary CS, we propose a Mobile CS (MCS) management system to aid in charging pole mobility. The MCS service's operational data is stored in a Mobile Charging Information Management System. The simulation assesses how well the proposed system handles delays. Based on our findings, the MCS-based MC-IMS is superior to competing systems in its ability to fast charge EVs.

Atmaja et al. (2015) argue that stable funding for charging stations is crucial to launching a new age of ecologically responsible transportation. The power for a charging station could come from either an individual's house or a public building. A single centralized SCS or a network of individual charging stations can both serve as components of a public charging infrastructure. The MCS unit is portable, so you can charge your devices anywhere, inside or outside the FCS zone. Charging operations located outside the FCS region would be powered by energy stored in the MCS. There are more energy storage options for EVs than batteries and ultracapacitors. When compared to lithium-iron phosphate (LiFePO₄) batteries, electric double-layer capacitors (EDLCs) perform better in MCS settings. Rapid charging is achievable

when a battery is connected to an ultracapacitor, as their combined current and voltage can be maximized.

Decker et al.'s (2012) prototype technique for finding the most secure and easily accessible EV charging station was validated. Intelligent transportation systems (ITSs) and vehicle adhoc networks (VANETs) collect data on traffic conditions throughout the early stages of the Smart Grid [17]. Since hosting IT systems on the "cloud" allows for more easily transferable data, we choose to do so for this application as well.

Sun et al. (2016) [18] took use of limits on distribution transformer capacity to generate a valley-filling aggregate load profile and other desirable load distributions in the distribution grid. It is easy to convert this problem into a linear equivalent program because it is separable and totally unimodular. The second problem, with charging electric vehicles, is a direct result of people's efforts to resolve the first. The second issue is proven to be NP-hard, and an iterative solution is offered. Presently, the most comprehensive study of V2V power transfer between electric cars was conducted by Tiago et al. (2018). The conventional V2V mode can tap into an energy aggregator such as the electrical power grid by combining the V2G and G2V modes of operation. Two power converters (dc-dc and dc-ac) per battery bank are needed for on-board EV charging using the common V2V method. In the past, ac V2V has been prioritized above dc V2V, but this study expands our knowledge of the latter. The necessity for a central energy supply is mitigated by this technology, which allows electric vehicles to charge one other directly.

III. DATA ANALYSIS

1. Quantitative Data Analysis

This topic will present the statistical results of the sample studied. According to the temporal evolution, the articles occurred in 2014 with 8 articles. The years 2015 and 2016 present 7 articles each. With an increase in the number of articles, 2017 presents 10 articles. 2018 on the other knew a more increasing number with 20 articles, pointing to the current relevance of omnichannel studies. It is still possible to extract that, although the present work considers only 5 months of 2019, there are already 6 articles dealing with the theme, which indicates that the theme remains at the center of the study. By analyzing the keyword relationship of the sample articles, the main words related to the theme were identified.

2. Qualitative Data Analysis

Through their purposes, the articles were classified into six categories. After reading the articles, they were assigned a category based on their purpose. At the end, the categories

were listed and through a synthesis, six categories were arrived at which will be presented in Table.

Category by topic	Number of articles	% Of articles
1) Omnichannel consumer behavior (experiences and journeys)	25	43.10
2) Omnichannel retail marketing strategies	16	27.59
3) Literature reviews and future directions for omnichannel	8	13.79
4) Differences between multi-, cross- and omnichannel channels	4	6.9
5) Interdisciplinary relationships between marketing and other management disciplines	4	6.9
6) Security in the omnichannel context	1	1.72
Total	58	100

IV. LITERATURE REVIEWS

This section will present the main definitions regarding the topic at hand. The articles with the conceptual theme seek, through the existing literature, to present how the theme is treated conceptually. The articles in this section are classified in Table.

Author(s)	Type of research	Key findings.
(Mirsch, Lehrer, & Jung, 2016)	Theoretical	The omnichannel approach is an appropriate measure to meet contemporary needs; Consumers are highly informed and demand the best price and quality of experience ;
(Morais, Sarquis, Cittadin, & Hawerth, 2015)	Theoretical	The main research areas in the omnichannel environment are: Consumer behavior, technology, logistics, channel integration, and shopping experience; Value creation/competitive advantage.
(Verhoef, Kannan, & Inman, 2015)	Theoretical	Businesses and customers use mobile devices in stores; In an omnichannel environment, it is important to provide a seamless experience across touch points.
(Lazaris & Vrechopoulos, 2014)	Theoretical	Technology-based omnichannel retail strategy strongly affects consumers and businesses; Technology affects the stages of the consumer's purchase decision process.

(Chen, Cheung, & Tan, 2018)	Theoretical	Omnichannel retailing accentuates the interaction between channels and consumers; It provides a seamless shopping experience; Supply chain management is a critical component of omnichannel business.
(Frazer & Stiehler, 2014)	Theoretical	The goal of omnichannel retailing is to create a seamless experience; retailers should be able to improve the shopping experience by approaching their omnichannel strategies from an experiential marketing perspective.
(Briel, 2018)	Empirical	Future competition in the retail industry will be based on the holistic consumer experience; Consumers will increasingly determine when and how they want to interact with retailers; Retailers will need to reinvent stores using digital technologies...;
(Beck and Rygl, 2015) (Guissoni, 2017)	Theoretical	Consumers want a consistent experience across multiple touch points in their interactions with businesses.

According to the results found in this section, it is possible to note that the issue of technology related to the omnichannel retail aspect is one of the most discussed topics. Channel integration has an impact on technology investments. Aspects related to the consumer shopping experience and consumer behavior in this retail format are very present in the studies on the subject.

It should be noted that due to the complexity of the topic, operating in omnichannel retail is not simple, because in addition to understanding how best to interact with consumers in this strategy, organizations must also invest resources to deliver the experience demanded by the consumer.

Therefore, research on the topic must focus on the need to understand the best way to integrate the company's channels and which channels are really necessary and more effective. Understanding the actual needs and demands of omnichannel consumers should also be a focus of future research.

V. RESEARCH LIMITATIONS AND PERSPECTIVES

After the analysis of quantitative and qualitative data, this study proposes a table that offers research limitations and perspectives for each category, aiming to contribute to future research related to the theme, presented in table.

Category	Research limitations and perspectives
1) Consumer Behavior and Omnichannel Retail (Experiences and Journeys)	Research to understand how consumer empowerment in omnichannel retail and its impact on its relationship with the retailer. Are consumers using this to their advantage when negotiating their purchases? When consumer impulsivity is more evident in their journey, they already have this characteristic before the purchase decision, which can be used by the company in their favor, or does this factor only work at the time of purchase?
2) Marketing strategies and omnichannel retailing	Research to reveal how companies use data from the interaction between them and the consumer in their strategies. Is the data generated by this interaction being used to generate competitive differentiation? If so, how are companies doing it? Do the features offered on digital channels to attract the consumer to the physical store have an impact on the company's new sales? Which features are most used by consumers and in which channels are they used?
3) Literature Reviews and Future Directions for Omnichannel Retail	With consumer experience being extremely relevant to the study of omnichannel retail, it is important to understand what factors are having the most impact on this consumer demand. If the consumer now demands experiences, what can companies do to deliver the best experience? Identifying the key factors that make this possible must be central to the study of this retail strategy.
4) Differences between Multi, Cross, and Omnichannel	The study identified that the key differentiator in retail strategy is interactivity between channels. Future research should explore other characteristics in order to form a central theory for these concepts, since, despite being a great approach, it does not present a central author that their concepts are used as a basis for this theory. Further research on the subject can identify these other characteristics and thus differentiate in other ways these concepts.
5) Interdisciplinary Marketing and Relationship to Other Management Disciplines	How is the integration of the company to operate in this retail format? Are companies prepared for the concept of omnichannel? Research to identify the technologies needed to operate in this retail format can reveal important information with managerial contributions to the market. For example, how are companies exploring the data generated by Big Data?
6) Security in the omnichannel context	Research has focused on consumers to see if companies are conveying information about the security of their data in the interaction with the company. Research can verify if the retailer has a security infrastructure in place, in order to build trust with the consumer, resulting in a more lasting relationship.

V. CONCLUSION

This research aimed to address, through a bibliometric study, supplemented by a systematic review, the topic of omnichannel retailing from a marketing perspective. It is important to understand that the study is limited to the fact that it explored the theme only in the context of articles related to the field of marketing since omnichannel strategy also influences other organizational domains more specifically. Despite the importance of the other domains to the operation of this strategy, the study did not delve into the performance of each of these other domains. It is also limited by the number of databases used in the sample article survey, as the selected sample does not exhaust the total field of publications. Regarding the main findings, the researchers' concern to understand the consumer's behavior in this retail practice, seeking to decipher, throughout the customer's journey, his behavior at the different available touch points, appears as the most relevant point. At this point, the study makes a theoretical contribution by pointing out the gaps in consumer behavior research, such as understanding how personal empowerment and impulsivity factors act in the consumer's interaction with the company. Determining which are the main channels that the omnichannel consumer uses throughout their journey should also be a source of research, as this will guide companies with the main technologies used by consumers. In this sense, in the future, it will be possible to develop a map of the omnichannel consumer journey, which will serve as a basis for studies.

From a managerial point of view, the study contributes to companies in the sense that it demonstrates the main strategies used by companies in the context of omnichannel retailing. Companies that are not yet operating in this format can use this study to better understand organizational actions when the intention is to improve interaction with consumers. In this sense, the study presents issues related to the performance of companies in the channels and what to present to the consumer to attract them. Understanding how transparency, message cohesion, and consistency of channel content interfere with consumer behavior are examples of important factors that must be considered in the relationship with the consumer. The study also indicates how companies are using the physical store to interact with consumers through strategies such as: buy online and pick up in-store, or even, buy online and send to the most convenient store to pick up (relay points). These examples show how companies can fit into the omnichannel environment.

REFERENCES

1. Beck, N., & Rygl, D. (2015). Categorization of multiple channel retailing in Multi-, Cross-, and Omni-Channel Retailing for retailers and retailing. *Journal of retailing and consumer services*, 27, 170-178.
2. Bell, D. R., Gallino, S., & Moreno, A. (2014). How to win in an omnichannel world. *MIT Sloan Management Review*, 56(1), 45.
3. Bell, D. R., Gallino, S., & Moreno, A. (2018). Off-line Experiences and Value Creation in Omnichannel Retail. *SSRN Electronic Journal*, p. 1–13. <https://doi.org/10.2139/ssrn.3260742>
4. Berman, B., & Thelen, S. (2018). Planning and implementing an effective omnichannel marketing program. *International Journal of Retail & Distribution Management*, 46(7), 598–614.
5. Bhalla, R. (2014). The omni-channel customer experience: Driving engagement. *Journal of Digital & Social Media Marketing*, 1(4), p. 365–372.
6. Cao, L., & Li, L. (2018). Determinants of Retailers' Cross-channel Integration: An Innovation Diffusion Perspective on Omni-channel Retailing. *Journal of Interactive Marketing*, 44, 1–16.
7. Carvalho, J. L. G. de, & Campomar, M. C. (2014). Multichannel at retail and omni-channel: Challenges for Marketing and Logistics. *Business and Management Review*, 100(8643), 1703–1755. [doi=10.1.1.663.4708&rep=rep1&type=pdf](https://doi.org/10.1.1.663.4708&rep=rep1&type=pdf)
8. Chen, Y., Cheung, C. M. K., & Tan, C. W. (2018). Omnichannel business research: Opportunities and challenges. *Decision Support Systems*, 109, 1–4. <https://doi.org/10.1016/j.dss.2018.03.007>