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Trends and Trajectories: Mapping the Evolution of Consumer Switching Intentions through the Push-Pull Mooring Framework

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Abstract

This study aims to provide valuable insights into publication trends and potential future research directions in the field of consumer switching intentions within the context of the Push-Pull Mooring (PPM) framework. Employing a theoretical framework rooted in the PPM model, the research conducts a comprehensive bibliometric analysis and utilizes Latent Dirichlet Allocation (LDA) for topic modeling on a dataset of 201 documents from the Scopus database spanning from 2005 to June 2023. The study examines publication patterns, influential authors, countries, and journals, and employs keyword co-occurrence analysis to uncover research themes and perform cluster analysis. The findings reveal changing publication trends, highlight prominent contributors, and provide insights into the research landscape. Additionally, the study applies LDA to identify ten major research themes within this domain. The implications of this research include identifying gaps in the existing literature and emphasizing the need for further investigation, concluding with recommendations for future studies to advance the understanding of consumer switching intention within the PPM framework.

Keywords: Switching intention, Push-Pull Mooring framework, Bibliometric analysis, Publication trends, Cluster analysis

1.Introduction

"Change is inevitable" and so is the response. Change in behavior is studied from time to time across various demography. However, a change in behavior leads to switching intentions of consumers. Change in the intention of consumers is to considered crucial in marketing research. (Amani, 2022; Wu et al., 2022) Therefore, this study tries to explore the application of push-pull mooring (PPM) framework on switching intention. The Push-Pull-Mooring (PPM) framework was initially developed to understand the phenomenon of human migration, specifically focusing on the factors that contribute to individuals moving from one place to another(P. J. Hsieh, 2021; Lee, 1966; Moon, 1995; Yoon & Lim, 2021) This framework combines two key components: the Push-Pull framework (Bogue, 1977; Nayak et al., 2022) and mooring factors (Dogra, 2023; Lee, 1966; Moon, 1995) Push factors refer to the negative circumstances or conditions that exist in a person's current location, motivating them to leave. On the other hand, pull factors are the positive aspects or attractions of a new destination that draw individuals towards it. In addition to push and pull factors, the PPM framework incorporates mooring factors, which were originally proposed by Lee in 1966 and further developed by Moon in 1995. Mooring factors are psychological or social factors that influence people's decisions to either stay in their current location or move to a new one. These factors can include a sense of belonging, attachment to family or community, emotional ties, or personal connections (Chang et al., 2014) While the PPM framework was initially applied to the study of human migration, it has also found relevance in the field of marketing. This is because there are similarities between human migration and consumer behavior, particularly in terms of customer switching (J. K. Hsieh et al., 2012; Ye & Potter, 2011). Authors (Bansal et al., 2005) examined the



applicability of the PPM framework in the hairdressing industry, specifically looking at consumer switching intentions. Other researchers have applied the framework in various contexts such internet browsing (Ye & Potter, 2011) Online service switching from blogs to Facebook (J. K. Hsieh et al., 2012) cloud health care services(Lai & Wang, 2015) Airline passenger switching intention (Jung et al., 2017)Food traceability system (Lin & Wu, 2021) M-Payments (Yusfiarto et al., 2023) E-Grocery shopping (Monoarfa et al., 2023)These previous studies have demonstrated the effectiveness of the PPM framework in explaining consumer switching intentions across different industries and domains. However, merely examining the existing literature on the PPM framework may not be adequate. Hence, the authors of this study propose a bibliometric analysis that specifically focuses on the application of the PPM framework within the context of switching intentions. This analysis aims to offer a thorough and comprehensive overview of the current research landscape, shedding light on the insights derived from applying the PPM framework to comprehend consumer switching intentions. By employing bibliometric methods, the study intends to provide valuable insights into the trends, patterns, and contributions within this area of research.

1.1 Bibliometric analysis

Bibliometrics is a research discipline that involves using mathematical and statistical techniques to examine patterns in how information is disseminated through publications. It is a distinct field of research in its own right and provides researchers with a set of tools to analyze published data (Danvila-del-Valle et al., 2019; Katherine W. McCain, 1996). Specifically, bibliometric analysis focuses on understanding global research patterns within a specific subject area by analyzing academic publications and their outputs. By doing so, it enables researchers to gain insights into the prevailing trends and characteristics of research conducted in that particular field. Some of the techniques used in bibliometric analysis include examining publication trends, identifying influential authors, journals, and sources, and exploring the co-occurrence of keywords(Alsharif & Baharun, 2020) While bibliometric analysis has been widely applied in various fields of research, there has been no previous study specifically focusing on the application of bibliometrics to analyze the Push-Pull Mooring (PPM) framework and switching intention. As a result, the current study represents the first-ever attempt to conduct a bibliometric analysis of the PPM framework and switching intention. The researchers employ a range of bibliometric techniques to achieve this, including analyzing the productivity of different countries, identifying influential journals, examining publication trends over time, highlighting influential authors, and exploring the co-occurrence of keywords. In addition to identifying gaps in current research, the analysis also suggests potential areas for future investigation. The study makes significant contributions in two key ways:

- It conducts a bibliometric evaluation of published works related to the application of the PPM framework on switching intention, thereby highlighting important and under-researched topics within this domain. This can help guide future research efforts.
- The study provides a comprehensive viewpoint on the level of understanding and knowledge achieved in different areas related to the PPM framework and switching intention.

By employing these bibliometric techniques, the researchers aim to gain a comprehensive understanding of the research landscape surrounding the PPM framework and switching intention. They seek to shed light on key contributors, influential sources, and emerging trends within the field. To guide their analysis, the study poses three research questions:

- 1) What is the publication trend regarding the application of the PPM framework on switching intention?
- 2) What information can be obtained from this bibliometric analysis?
- 3) How will research in this area develop in the future?

To address these research questions, the study sets three specific research objectives. Firstly, it aims to examine the frequency and distribution of scholarly articles focused on the application of the PPM framework on switching intention over a specific period. Secondly, it seeks to identify the key authors, journals, and sources that have contributed to the literature on the application of the PPM

framework on switching intention. Finally, it aims to determine the growth and evolution of research in the application of the PPM framework on switching intention over time. By achieving these research objectives, the researchers hope to provide valuable insights into the application of the PPM framework on switching intention and pave the way for future research in this domain.

2. Methodology

The researcher established three objectives for the study and identified specific keywords for extracting relevant data from the SCOPUS database. The keywords used were "Push Pull Mooring Framework" or "PPM framework" and "Switching Intention". SCOPUS is widely recognized as a comprehensive database encompassing a broad range of subjects, making it an extensive collection of abstracts and citations. In fact, the database has been continuously expanding its scope include additional topics.(Alsharif & Baharun, 2020) To conduct the search, the researcher applied certain limitations. They focused the search pattern on the keywords "Push Pull Mooring Framework" or "PPM framework" and "Switching Intention". Additionally, they limited the search to article titles, keywords, and abstracts, specifically in English-language and journals. As a result, the SCOPUS database retrieved 201 documents from 2005 to 2023 relevant to the study. To further analyze and explore the acquired results, the researcher saved the data in CSV format. This format allows for convenient processing and utilization in various tools and software. In this case, the researcher intended to employ VOSviewer, an open-source bibliometric tool, for analyzing the data. VOSviewer is specifically designed for bibliometric mapping, which involves visualizing and examining bibliometric data and outcomes (van Eck & Waltman, 2010) By utilizing VOSviewer, the researcher can effectively visualize and explore trends in the bibliometric format. The Latent Dirichlet Allocation (LDA) (Blei et al., 2003) is applied to understand the are and relevant topics. LDA (Latent Dirichlet Allocation) is a technique for topic modeling that helps identify the probable topics that could generate a given set of keywords. In our study, we employed the LDA algorithm from the Gensim package(McCallum, 2002) further analysis.

3. Results and Discussion

3.1 Publication by years

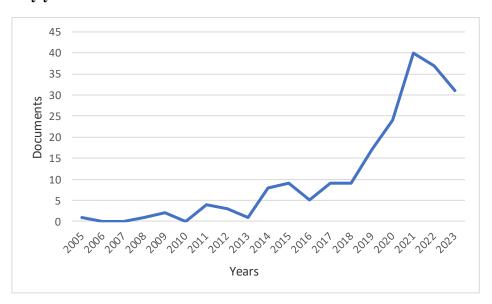


Figure 1: Trends in Publication

Figure 1 provides valuable insights into the trends observed in the publication of articles throughout different years. One particular focus of interest is the utilization of the Push-Pull-Mooring (PPM) framework and its relationship to switching intention. The data reveals that over the years, there has been a gradual rise in the number of articles published on this topic. Notably, it is evident that the PPM framework experienced a temporary decline in certain years. Specifically, in 2006, 2007,

and 2010, no articles were produced that employed the PPM framework. However, it is worth highlighting that from 2019 to the middle of 2023, there has been a substantial increase in the publication of articles related to the PPM framework. A total of 149 articles were published during this period, signifying a noteworthy surge in the adoption and utilization of the PPM framework in recent times. These findings affirm the growing recognition and acceptance of the Push-Pull-Mooring framework as an effective conceptual model in the academic community. Researchers and scholars have increasingly recognized its relevance and applicability, leading to a higher number of publications exploring its concepts, applications, and implications. Overall, the data suggests that the PPM framework has gained significant traction and is becoming increasingly influential in the field of study, as reflected by the rising number of articles published in recent years.

3.2 Most Productive Journal

S.No Source Publisher **Documents** Citations H index Sustainability (Switzerland) **MDPI** 136 1 13 88 2 684 226 Computers In Human Behavior Emerald 8 3 Information Technology And People Elsevier 75 6 71 4 Journal Of Retailing And Consumer Elsevier 5 75 120 Services 5 Frontiers In Psychology **Frontiers** 4 68 157 6 International Journal Of Environmental MDPI 4 44 167 Research And Public Health 7 Internet Research 4 127 101 **Emerald** 8 Journal Of Islamic Marketing Emerald 4 49 12 9 International Journal Of Human-Taylor & 3 10 83 Francis Computer Interaction 10 Journal Of Theoretical And Applied **MDPI** 3 28 39 Electronic Commerce Research

Table 2: Top Contributing Journal

The provided table 2 highlights the top contributing journals in a specific field. The majority of 13 documents were published by Sustainability (Switzerland) from MDPI publisher, making it the leading journal in terms of publications. Following closely is Computers in Human Behaviour from Emerald publisher, which has published 8 documents. Information Technology and People have contributed 6 documents, while Journal of Retailing and Consumer Services have published 5 papers. Several journals, including Frontiers in Psychology, International Journal of Environmental Research and Public Health, Internet Research, and Journal of Islamic Marketing, have each published 4 documents. Additionally, International Journal of Human-Computer Interaction and Journal of Theoretical and Applied Electronic Commerce have published 3 documents each. These journals primarily cover subject areas within the domain of behavioral studies and technology, suggesting a focus on the intersection between human behavior and technological advancements. Notably, Computers in Human Behavior stands out with the highest citation count of 684, indicating its significant impact and influence within the academic community. Moreover, it is worth mentioning that Computers in Human Behavior has been ranked as an "A" journal in the Australian Business Dean Council (ABDC) 2023 Journal Quality List, further establishing its reputation and scholarly standing.

3.3 Most Productive Countries

The provided table 3 presents the top ten contributing countries in terms of publications and citations related to the PPM framework and switching intention. China leads the rankings, with 71 publications and the highest citation count of 1719. This indicates that China has made significant contributions to the field and has garnered substantial attention and recognition for its research

outputs. Following closely is Taiwan, which has contributed 52 publications and received a total of 1566 citations. Taiwan's strong presence in terms of publications and citations highlights its active involvement in studying the PPM framework and switching intention. South Korea secures the third position with 23 publications. However, in terms of citations, it ranks fourth with a count of 366. This suggests that while South Korea has made a notable number of contributions, the impact and visibility of its research may be comparatively lower. The United States ranks fourth in terms of publications, with 22 articles. However, it rises to the third position in terms of citations, accumulating a count of 863. This indicates that the research output from the United States, although relatively lower in quantity, has received substantial recognition and impact within the academic community. The table underscores the active participation and contributions of these countries in studying the PPM framework and switching intention. China and Taiwan, in particular, have emerged as leading contributors, both in terms of publication volume and citation impact. South Korea and the United States also make significant contributions, albeit with a slightly different balance between publications and citations. Overall, these rankings provide insights into the global distribution of research efforts and highlight the countries that have made notable advancements in studying the PPM framework and switching intention.

S.No	Country	Documents	Citations	S.No	Country	Documents	Citations
1	China	71	1719	6	India	14	77
2	Taiwan	52	1566	7	Hong Kong	10	303
3	South Korea	23	366	8	Malaysia	9	187
4	United states	22	863	9	Australia	8	223
5	Indonesia	19	92	10	United Kingdom	8	114

Table 3: Top Contributing Countries

3.4 Most Influential Authors

The presented table 4 showcases the most productive and influential authors in the field of the PPM framework and switching intention. In terms of publication productivity, Som Sekhar Bhattacharya stands out as the most productive author with 5 publications to their name. Following closely behind are Muhammad Azfar Anwar, Sijing Chen, and Yu Sheng Su, each having contributed 4 publications. These authors have demonstrated a consistent output of research in the field, contributing significantly to the body of knowledge related to the PPM framework and switching intention. In terms of citation impact, Wang Y emerges as the most influential author with 225 citations, indicating that their work has garnered considerable attention and recognition within the academic community. Chia Ying Li follows closely behind with 165 citations, reflecting their substantial impact in the field. These authors have made substantial contributions to the study of the PPM framework and switching intention through their publications and have gained recognition for their influential research. Their work has helped shape and advance the understanding of this domain. Overall, the table highlights the productivity and influence of these authors in the field, providing valuable insights into the individuals who have made notable contributions to the research on the PPM framework and switching intention.

Table 4: Most influential authors

S.No	Author	TP	Institution	Country	TC
1	Som Sekhar	5	Indian Instittute of	India	26
	Bhattacharya		Management		

2	Muhammad Azfar Anwar	4	COMSATS University	Islamabad	66
3	Sijing Chen	4	Central China Normal University	China	160
4	Yu Sheng Su	4	National Taiwan Ocean University	Taiwan	102
5	Avus C Y Hou	3	Oreintal Institute of technology	Taiwan	147
6	Wang Y	3	Shandong Agriculture University	China	225
7	Chia Ying Li	3	National Taichung University of Science and Technology	Taiwan	165
8	Yang Li	3	University of science & Technology	China	163
9	Yongqiang Sun	3	Wuhan University	China	150
10	ZHAO Q	3	Ningbo University, Cixi, Zhejiang	China	98

3.5 Most Influential Articles

The table 5 provided showcases the top cited articles in the field of the PPM framework and switching intention, highlighting their impact and influence. (Bansal et al., 2005) is the most impactful and influential article, with the highest SCOPUS citation count of 484, is a paper titled "Migrating to new service providers: Toward a unifying framework of consumer switching behaviors" authored by Bansal, Taylor, and James in 2005. This article laid the foundation for the PPM framework and empirically investigated its application to service switching. The study revealed that push, pull, and mooring variables significantly influenced the switching process, along with certain moderating effects. This article has been widely recognized and cited, reflecting its substantial impact on the field. (Hazen et al., 2017) is the second-highest number of SCOPUS citations, with a count of 216, is attributed to the paper titled "Remanufacturing for the Circular Economy: An Examination of Consumer Switching Behavior" by Hazen et al. in 2017. This article provides insights into the complex behaviors of individuals concerning remanufacturing and the circular economy. Its citation count signifies its significant influence and contribution to the understanding of consumer switching behavior within the context of the circular economy. These highly cited articles have made substantial contributions to the field of the PPM framework and switching intention, providing valuable insights and shaping the research landscape. They have garnered considerable attention and recognition within the academic community, demonstrating their impact and influence on subsequent studies and the development of the field. Overall, the table highlights the importance of these articles and their role in advancing knowledge and understanding within the realm of the PPM framework and switching intention.

Table 5: Most Cited Articles

S.No	Title	Author	TC	
1	""Migrating" to new service providers: Toward a unifying	(Bansal et al.,	484	
	framework of consumers' switching behaviors"	2005)		
2	"Remanufacturing for the Circular Economy: An	(Hazen et al.,	216	
	Examination of Consumer Switching Behavior"	2017)		
3	"Post-adoption switching behavior for online service	tion switching behavior for online service (J. K. Hsieh et al.,		
	substitutes: A perspective of the push-pull-mooring	2012)		

	framework"		
4	"The push, pull and mooring effects in virtual migration for social networking sites"	(Chang et al., 2014)	153
5	"Customer's reaction to cross-channel integration in omnichannel retailing: The mediating roles of retailer uncertainty, identity attractiveness, and switching costs"	(Y. Li et al., 2018)	150
6	"Understanding users' switching behavior of mobile instant messaging applications: An empirical study from the perspective of push-pull-mooring framework"	(Sun et al., 2017)	140
7	"Travelers' switching behavior in the airline industry from the perspective of the push-pull-mooring framework"	(Jung et al., 2017)	119
8	"Retaining and attracting users in social networking services: An empirical investigation of cyber migration"	(Xu et al., 2014)	118
9	"'Migrating to a new virtual world': Exploring MMORPG switching through human migration theory"	(Hou et al., 2011)	111
10	"The power of a thumbs-up: Will e-commerce switch to social commerce?"	(C. Y. Li & Ku, 2018)	106

3.6 Co Occurrence Keyword network visualization

The Figure 2 provided in the study showcase the visual representation of a network and the clusters formed based on the co-occurrence of keywords. The network visualization reveals the existence of five distinct clusters, each characterized by different variables and themes. Consumer Experience, denoted by the colour red, focuses on variables associated with the Push Pull Mooring (PPM) and switching intention. These variables include Alternative attractiveness, Habit, regret, satisfaction, switching barriers, and the study context of consumer behavior and sustainable development. Sustainable Decision Making, represented in green, highlights the theories employed in the study, namely the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT). Additionally, this cluster emphasizes the significant factors of the PPM framework, such as push factor and pull factor. It also addresses variables like attitude, inertia, switching cost, and sustainability. E-Commerce intention, indicated by the colour blue, draws attention to variables like E-commerce, Habits, Network Externalities, Social commerce, and trust. Notably, one theory, namely User and gratification, stands out in this cluster. Digital Engagement, depicted in yellow, canter's around the study context of Mobile payment, social networking sites, Facebook switching, and Investment behavior. It explores the relationships and patterns within these areas. Lastly, Digital transformation and learning resilience, shown in orange, focuses on the study context of fintech, Online learning, and the theory of Task technology fit. This cluster examines the connections and associations related to these topics. Overall, the Figure and Table provide a comprehensive overview of the network visualization and the distinct clusters formed based on the cooccurrence of keywords, shedding light on the various variables, theories, and study contexts explored in the study.

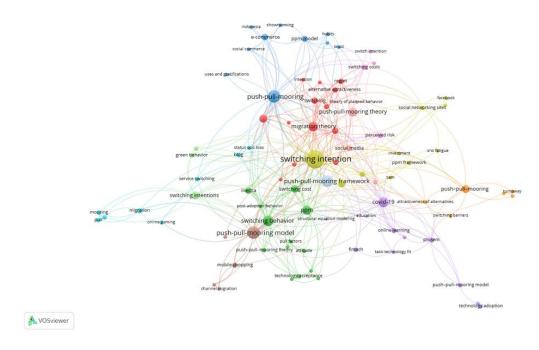


Figure 2: Co Occurrence Keyword network visualization

3.7 Topic Modelling

As a result of LDA topic modelling analysis 10 topics were discovered. Topic were named by the researchers and each topic is interpretated and future direction of each topic is given. The first major theme green intention study focuses on the strategies consumers employ when switching between different options and remaining loyal to specific choices. Factors such as pull and push factors, theoretical frameworks, and institutional support all play a role in shaping consumer decisionmaking. The term "green" signifies the consideration of sustainability and environmentally friendly alternatives. The second major theme is about consumer switching analysis which focuses on the impact of push and pull factors on consumer switching and mooring strategies. It explores consumer intentions, service frameworks, and social influences that contribute to switching behavior. The Push-Pull-Mooring (PPM) model is suggested as an inclusive approach to understanding consumer behavior. The third major theme online commerce behaviour encompasses the concepts of consumer switching, migration, and learning. It investigates consumer behavior in online and rural commerce through the application of relevant theories. It explores the influence of social aspects on consumer decision-making. The fourth theme sustainable technology revolves around the study of consumer behavior and intentions when it comes to adopting technology, with a specific focus on electric technology. Factors such as push and pull factors, anchoring methods, and goals play a role in shaping customer decisions related to switching and adopting technology. The adoption of electric technologies by consumers is influenced by distinct push and pull variables. The major theme five technology adoption behaviour delves into the examination of switching behavior, consumer loyalty (mooring), and the adoption of technology. It explores models and theories that shed light on consumer behavior, intention formation, and the influence of technology on migration. Investigating consumer technology adoption and migration involves analyzing a range of push and pull variables.

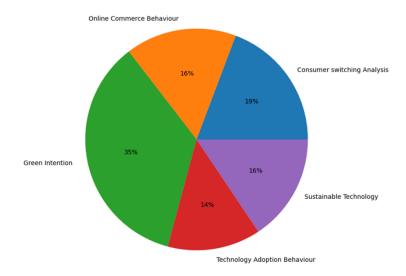


Figure 3: Major themes in application of PPM framework on switching intention

The analysis conducted in this study utilized bibliometric methods to examine publication trends, journals, countries, authors, articles, and co-occurring keywords, providing valuable insights into the application of the PPM framework to switching intentions. By analyzing a wide range of research materials sourced from the Scopus database, the study ensured both quality and quantity in the data. The findings of the bibliometric analysis revealed a substantial growth in the number of publications on the application of the PPM framework to switching intentions since 2005, with a particularly significant increase in the past five years. This indicates a growing interest in understanding the relationship between the PPM framework and switching intentions. The analysis also revealed key contributors in terms of countries, with China emerging as the leading contributor, followed by Taiwan and South Korea. This highlights the global nature of research in this field and the importance of cross-cultural perspectives. Moreover, the analysis identified the most highly cited article, "Migrating to new service providers: Towards a unifying framework of consumer switching behaviour" by Bansal et al. (2005). This article has made a significant impact on the field and has served as a foundation for further research. The author's contribution to the PPM framework, initially used in the study of human migration, has been pivotal in expanding its application to a customer's perspective and switching intentions.

The analysis also shed light on the productivity of authors, with Som Sekhar Bhattacharya identified as the most productive author in this area. This recognition highlights their influential contributions to the research on the PPM framework and switching intentions. Furthermore, the analysis revealed interesting insights regarding publication trends. The journal "Sustainability" (Switzerland) accounted for the highest number of articles in this research domain, indicating its significance as a platform for disseminating research on the application of the PPM framework to switching intentions. This information can guide researchers in journal selection, literature review, and paper submission processes. The co-occurrence keyword analysis provided additional valuable insights. It revealed that the majority of research in this field has focused on the application of the Technology Acceptance Model (TAM) within established contexts such as online learning and mobile shopping. This suggests that the TAM has been widely adopted as a theoretical framework for understanding switching intentions. However, the analysis also highlighted a relatively limited exploration of qualitative research using the PPM framework. This presents an opportunity for future investigations to explore the subjective experiences, motivations, and emotions involved in switching intentions, providing a more comprehensive understanding of this phenomenon.

The discussion emphasizes the significant growth in publications on the application of the PPM framework on switching intentions, identifies influential articles, authors, and journals, and provides insights into the research landscape. It also highlights the opportunity for future research to explore qualitative methodologies and delve deeper into the context of switching intentions. The findings of this analysis contribute to the existing knowledge in this field, guide future research directions, and enhance the understanding of the PPM framework's application to switching intentions.

4. Limitation and Future Research

The analysis was limited to the Scopus database, potentially narrowing the scope and coverage of the literature reviewed. To address this limitation, future research should consider incorporating additional databases such as Google Scholar and Web of Science. This will broaden the literature search, enabling a more comprehensive analysis and a more robust understanding of the topic. In addition to utilizing multiple databases, researchers can further enhance their analysis by employing advanced bibliometric tools. These tools offer a range of features, including thematic mapping, global citation analysis, and local citation analysis. Integrating these tools into the research methodology can provide valuable insights and facilitate a deeper exploration of literature trends within the chosen research area. Furthermore, conducting systematic literature reviews and meta-analyses can contribute to a better understanding of the subject. These approaches involve a rigorous examination of existing literature, enabling a comprehensive synthesis of findings and identification of patterns, trends, and knowledge gaps. Implementing these methodologies will establish a stronger foundation for future research and advance knowledge in the field. The utilization of the PPM framework in examining switching intention has uncovered five significant themes via LDA topic modelling. Drawing from these themes, we propose two potential research inquiries that can be further explored in future investigations

Future Research Question: How does the role of trust and credibility influence consumer switching behavior and intention formation in the context of green alternatives or sustainable choices?

Future Research Question: How does the adoption and usage of emerging technologies, such as artificial intelligence, blockchain, or virtual reality, impact consumer switching behavior?

This research question examines how trust and credibility influence consumer decision-making when considering a switch to environmentally friendly alternatives. It explores the impact of factors like trust in product claims, brand reputation, certifications, and transparency on consumer intentions to switch and subsequent behavior. Understanding the role of trust and credibility provides valuable insights for businesses and policymakers to enhance the credibility of sustainable products and services. Additionally, exploring the influence of emerging technologies like AI, blockchain, and virtual reality on consumer behavior and switching can shed light on evolving dynamics and help optimize their adoption in line with consumer preferences.

5.Conclusion

The findings of this study represent a significant milestone in the field, as it is the first comprehensive bibliometric analysis of the application of the PPM framework to switching intentions. By analyzing a wide range of relevant publications, this research not only strengthens our understanding of the relationship between the PPM framework and switching intentions but also sheds light on unexplored areas for further investigation. One notable outcome of the analysis is the recognition of interdisciplinarity as a key factor in studying human behavior. This finding serves as both an encouragement and an inspiration for researchers from diverse fields to approach the study of switching intentions from various perspectives. The integration of knowledge and methodologies from different disciplines can lead to fresh insights and a more holistic understanding of the subject matter. The quantitative analysis of source journals conducted in this study offers practical benefits for researchers. It can assist them in selecting appropriate journals for their own research, conducting

thorough literature reviews, and streamlining the paper submission process. This analysis provides valuable insights into the landscape of existing literature and can guide researchers in navigating the vast body of knowledge on the application of the PPM framework to switching intentions.

Furthermore, this study significantly contributes to the existing knowledge in this field. It fills gaps in our understanding and provides a valuable contribution by synthesizing and analyzing a substantial amount of research. By summarizing and organizing the existing body of literature, this study acts as a comprehensive resource for researchers, particularly academicians, seeking to comprehend the state of research on the application of the PPM framework to switching intentions. It is worth noting that a considerable amount of research has already been conducted in this specific area. To gain insights into different publication trends and identify potential future directions, the author conducted a thorough bibliometric analysis. This analysis revealed significant trends that can guide academic researchers in conducting further investigations in this field. It serves as a roadmap for future research endeavors, enabling researchers to build upon existing knowledge and explore new avenues within the application of the PPM framework to switching intentions. In addition, this research provides insightful information on various aspects, including the application of the PPM framework to switching intentions, publication trends, productive authors and institutions, as well as emerging themes. Such detailed analysis enriches our understanding of the research landscape and facilitates targeted research efforts in specific areas.

In summary, through comprehensive bibliometric analysis, this study not only highlights research gaps and identifies opportunities but also offers a profound understanding of the application of the PPM framework to switching intentions. It contributes to the existing knowledge by providing valuable insights and paves the way for future research endeavors in these areas. Researchers can leverage this study as a guiding tool to advance knowledge, address specific research gaps, and explore new frontiers within the realms of the PPM framework and switching intentions.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper

References

- Alsharif, A. H., & Baharun, R. (2020). RESEARCH TRENDS OF NEUROMARKETING: A BIBLIOMETRIC ANALYSIS. Journal of Theoretical and Applied Information Technology, 15, 15. www.jatit.org
- Amani, D. (2022). Circumventing customers' switching behavior in telecommunication industry in Tanzania: Insight from Sternberg's Triangular Theory of Love. Cogent Social Sciences, 8(1). https://doi.org/10.1080/23311886.2022.2042078
- Bansal, H. S., Taylor, S. F., & James, Y. S. (2005). "Migrating" to new service providers: Toward a unifying framework of consumers' switching behaviors. In Journal of the Academy of Marketing Science (Vol. 33, Issue 1, pp. 96–115). https://doi.org/10.1177/0092070304267928
- Blei, D. M., Ng, A. Y., & Edu, J. B. (2003). Latent Dirichlet Allocation Michael I. Jordan. In Journal of Machine Learning Research (Vol. 3).
- Bogue, D. J. (1977). A Migrant's-Eye View of the Costs and Benefits of Migration to a Metropolis. Internal Migration, 167–182. https://doi.org/10.1016/B978-0-12-137350-4.50016-0
- Chang, I. C., Liu, C. C., & Chen, K. (2014). The push, pull and mooring effects in virtual migration for social networking sites. Information Systems Journal, 24(4), 323–346. https://doi.org/10.1111/isj.12030
- Danvila-del-Valle, I., Estévez-Mendoza, C., & Lara, F. J. (2019). Human resources training: A bibliometric analysis. Journal of Business Research, 101, 627–636. https://doi.org/10.1016/j.jbusres.2019.02.026
- Dogra, N. S. B. and A. Gupta. (2023). Exploring the switching intention of patients to e-health consultations platforms: Blending inertia with push–pull–mooring framework. Journal of Asia Business Studies, 15–37.
- Hazen, B. T., Mollenkopf, D. A., & Wang, Y. (2017). Remanufacturing for the Circular Economy: An Examination of Consumer Switching Behavior. Business Strategy and the Environment, 26(4), 451–464. https://doi.org/10.1002/bse.1929

- Hou, A. C. Y., Chern, C. C., Chen, H. G., & Chen, Y. C. (2011). "Migrating to a new virtual world": Exploring MMORPG switching through human migration theory. Computers in Human Behavior, 27(5), 1892–1903. https://doi.org/10.1016/j.chb.2011.04.013
- Hsieh, J. K., Hsieh, Y. C., Chiu, H. C., & Feng, Y. C. (2012). Post-adoption switching behavior for online service substitutes: A perspective of the push-pull-mooring framework. Computers in Human Behavior, 28(5), 1912–1920. https://doi.org/10.1016/j.chb.2012.05.010
- Hsieh, P. J. (2021). Understanding medical consumers' intentions to switch from cash payment to medical mobile payment: A perspective of technology migration. Technological Forecasting and Social Change, 173. https://doi.org/10.1016/j.techfore.2021.121074
- Jung, J., Han, H., & Oh, M. (2017). Travelers' switching behavior in the airline industry from the perspective of the push-pull-mooring framework. Tourism Management, 59, 139–153. https://doi.org/10.1016/j.tourman.2016.07.018
- Katherine W. McCain. (1996). Dictionary of bibliometrics. Journal of the American Society for Information Science,.
- Lai, J. Y., & Wang, J. (2015). Switching attitudes of Taiwanese middle-aged and elderly patients toward cloud healthcare services: An exploratory study. Technological Forecasting and Social Change, 92, 155–167. https://doi.org/10.1016/j.techfore.2014.06.004
- Lee, E. S. (1966). A Theory of Migration. In Demography (Vol. 3, Issue 1).
- Li, C. Y., & Ku, Y. C. (2018). The power of a thumbs-up: Will e-commerce switch to social commerce? Information and Management, 55(3), 340–357. https://doi.org/10.1016/j.im.2017.09.001
- Li, Y., Liu, H., Lim, E. T. K., Goh, J. M., Yang, F., & Lee, M. K. O. (2018). Customer's reaction to cross-channel integration in omnichannel retailing: The mediating roles of retailer uncertainty, identity attractiveness, and switching costs. Decision Support Systems, 109, 50–60. https://doi.org/10.1016/j.dss.2017.12.010
- Lin, X., & Wu, R. Z. (2021). An Empirical Study on the Dairy Product Consumers' Intention to Adopt the Food Traceability's Technology: Push-Pull-Mooring Model Integrated by D&M ISS Model and TPB With ITM. Frontiers in Psychology, 11(April 2020). https://doi.org/10.3389/fpsyg.2020.612889
- McCallum, A. K. (2002). Mallet: A machine learning for language toolkit.
- Monoarfa, T. A., Sumarwan, U., Suroso, A. I., & Wulandari, R. (2023). Switch or Stay? Applying a Push–Pull–Mooring Framework to Evaluate Behavior in E-Grocery Shopping. Sustainability (Switzerland), 15(7). https://doi.org/10.3390/su15076018
- Moon, B. (1995). Paradigms in migration research: exploring "moorings" as a schema. Progress in Human Geography, 504–524. https://doi.org/doi:10.1177/030913259501900404
- Nayak, B., Bhattacharyya, S. S., Goswami, S., & Thakre, S. (2022). Adoption of online education channel during the COVID-19 pandemic and associated economic lockdown: an empirical study from push–pull-mooring framework. Journal of Computers in Education, 9(1). https://doi.org/10.1007/s40692-021-00193-w
- Sun, Y., Liu, D., Chen, S., Wu, X., Shen, X. L., & Zhang, X. (2017). Understanding users' switching behavior of mobile instant messaging applications: An empirical study from the perspective of push-pull-mooring framework. Computers in Human Behavior, 75, 727–738. https://doi.org/10.1016/j.chb.2017.06.014
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. Scientometrics, 84(2), 523–538. https://doi.org/10.1007/s11192-009-0146-3
- Wu, Y. W., Liao, T. H., Yeh, S. P., & Huang, H. C. (2022). Switching Intention and Behaviors to Wetland Ecotourism after the COVID-19 Pandemic: The Perspective of Push-Pull-Mooring Model. Sustainability (Switzerland), 14(10). https://doi.org/10.3390/su14106198
- Xu, Y. C., Yang, Y., Cheng, Z., & Lim, J. (2014). Retaining and attracting users in social networking services: An empirical investigation of cyber migration. Journal of Strategic Information Systems, 23(3), 239–253. https://doi.org/10.1016/j.jsis.2014.03.002
- Ye, C., & Potter, R. (2011). The role of habit in post-adoption switching of personal information technologies: An empirical investigation. Communications of the Association for Information Systems, 28(1), 585–610. https://doi.org/10.17705/1cais.02835
- Yoon, C., & Lim, D. (2021). Customers' intentions to switch to internet-only banks: Perspective of the push-pull-mooring model. Sustainability (Switzerland), 13(14). https://doi.org/10.3390/su13148062
- Yusfiarto, R., Sunarsih, S., & Darmawan, D. (2023). Understanding Muslim's switching from cash to m-payments: based on push-pull-mooring framework. Journal of Islamic Marketing, 14(2), 342–365. https://doi.org/10.1108/JIMA-05-2021-0135