

PHYGITAL PATHWAY IN RETAIL INDUSTRY: A SYSTEMATIC LITERATURE REVIEW AND BIBLIOMETRIC ANALYSIS ON KEY DRIVERS OF CONSUMER PURCHASING BEHAVIOUR

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Abstract

This research presents a systematic literature review and bibliometric analysis of the flow of physical marketing (physical+digital) from 2018 to 2025. This article presents the results of an analysis of 38 peer-reviewed articles using the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) to investigate what are the key drivers that affect consumer purchasing behaviour through phygital services and what are the main topics and trends in this research area. The analysis indicates rapid research production, especially after an upsurge in COVID-19, and the most prominent areas of focus are the study of customer experience, digital transformation, omnichannel approaches, and the use of technology. The research results show that developed markets are the most physically deployed, and emerging economies are struggling with infrastructure-related deployment and adoption. Examples of new trends include the use of AI to incorporate personalisation, sustainability, and the metaverse. The review provides insight into the concept of retail transformation and hybrid consumer experiences and has theoretical implications as well as practical implications for researchers, marketers, and practitioners in developed and emerging markets.

Keywords: Phygital marketing, digital channels, retail transformation, emerging markets, hybrid consumer experience

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Introduction

Phygital is an emerging concept in the marketing world that highlights the innovation of digital touch point technologies. Phygital marketing encompasses both the physical and digital experiences of a consumer. The field is still in its infancy, and it creates space for customers to experience innovative customer experiences without interruption. Although phygital marketing applies to several different sectors, it is particularly prominent in the retail industry (Jacob et al., 2021). Under phygital systems, consumers can easily connect with physical and virtual environments without any complexity, taking advantage of the simplicity and personalisation of digital technology and providing a better customer experience. Effective marketing, innovation, consumer engagement and consumer behaviour depend on awareness and intention to purchase phygital products. Augmented reality (AR), virtual reality (VR), and the Internet of Things (IoT) assist in making the transition to physical goods possible, as they allow businesses to create more interactive and engaging experiences (Anwar et al., 2025).

According to Jacob et al. (2021) that the correctly managed phygital experience requires the appearance of new marketing potential, such as journey design, touchpoint prioritisation, and strategic resource allocation. They present a six-step approach, which was based on Design Science Research Methodology (DSRM), and provided a structured approach to managing customer interactions in hybrid environments, which can address an important gap in the modern approaches to marketing. Furthermore, managing customer experiences across physical and digital channels has become a challenge facing marketers and businesses today. To address this challenge, many companies, including Allianz and Walmart, have allocated significant resources to strategically manage customer experiences across the three dimensions of channel stage, channel type, and channel agent (Jacob et al., 2021).

Although the literature on the topic of physical marketing and digital transformation is growing, the majority of research is focused on single tools, luxury brands, or developed markets, and their understanding of consumer experience and technology use is fragmented. However, there is little evidence to synthesise the key drivers that guide consumer purchasing behaviour across physical settings, and especially in emerging economies. Moreover, existing research has failed to integrate behavioural constructs, including perceived usefulness, ease of use, trust, engagement, and satisfaction. This is a research gap that limits theoretical progress in retail transformation as well as managerial decision-making. Thus, the proposed study will help address these gaps by using a systematic literature review (SLR) and bibliometric analysis of 38 peer-reviewed articles published in 2018-2025 to determine the most important consumer drivers, emerging technologies, and research trends in physical marketing. Accordingly, it intends to answer the following research questions by verifying them step by step through the literature.

RQ1: What are the key factors that impact consumer purchasing behaviour in phygital service?

RQ2: What are the emerging technologies in consumers' purchasing behaviour?

RQ3: What are the key trends in publications periodically?

Literature Review

The consumer experiences are changing as phygital services fuse physical and digital interactions to provide people with smooth, exciting, and curated journeys. Taking advantage of tools like augmented reality, virtual reality, and automatic pay technologies improves convenience, trust, and perceived value, thus affecting purchasing behaviour (Anwar et al., 2025; Johnson & Barlow, 2021). In this paper, we will consider five components, including Perceived Usefulness, Perceived Ease of Use, Consumer Trust and Security Concerns, Consumer Engagement, and Consumer Satisfaction, regarding how these elements will influence Consumer Purchasing Behaviour. Other possible factors of social influence and cultural context notwithstanding, the chosen variables take precedence due to the immediate connection with technology adoption and the value of experience in phygital terms (Anwar et al., 2025; Johnson & Barlow, 2021).

The study design is based on the developed technology and consumer behavioural theories that characterise how consumers embrace and react towards phygital services. The variables that indicate the important drivers of technology adoption in hybrid retailing settings, based on the Technology Acceptance Model (TAM) (Davis, 1989), and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), include perceived usefulness, ease of use, trust, satisfaction, and engagement. Moreover, there is a behavioural basis of phygital stimuli (AR, VR, AI experiences) to emotional and cognitive responses of consumers, which eventually influence satisfaction and purchase behaviour, explained in the Stimulus Organism Response (SOR) model (Mehrabian & Russell, 1974).

Consumer purchasing behaviour

Consumer purchasing behaviour, as such an important dependent variable, also depends on the integration of physical and digital components in phygital services (Massi et al., 2025). This behaviour is built on better customer engagement and personalisation, which are quite essential in creating intent toward patronisation by a consumer. Ultimately, the cohesion of technology and real-life experiences might eventually be able to enhance customer satisfaction and affect buying decisions positively (Massi et al., 2025).

Perceived usefulness of phygital services

Perceived usefulness of phygital services is determined by their ability to flawlessly combine real-world interactions with high-tech digital tools, which in turn improves the product experience of the consumer and products. Phygital services enhance the attachment to products employed through the combination of the physical experiences of the products or skilled simulations thereof and, through simplifying the use of digital means of payment, lessen the pain of payment, raising the intentions to purchase and satisfaction with the purchase (Johnson & Barlow, 2021).

Perceived ease of use of phygital services

Perceived Ease of Use of Phygital Services implies the achievement of a problem-free integration of the digital and physical channels, with a unified customer experience (Hyun et al., 2024). It is a technology-based strategy that merges with the digital and real worlds and offers a more engaging and enjoyable experience (Mikheev et al., 2021). An emphasis on this variable will make the convenience of online services a part of the physical interaction advantages. An effective phygital environment enhances customer experience by enabling access to information with reduced perceived risk for a consumer (Hyun et al., 2024).

Customer trust

Consumer trust is paramount in the development of phygital services. Such negative practices as the lack of qualifications of a product manager and false advertising can cause a trust crisis, and customers will be much more suspicious and unwilling to purchase something (Chen, 2024). The lack of inspection and control of the new shopping mode can also foster an unfavourable environment among the consumers and reduce the level of trust to the corresponding extent, and subsequently influence the purchasing behaviours (Chen, 2024).

Consumer engagement

Consumer engagement is the conscious attention, emotional involvement, and active participation of consumers in a brand's services or products, which is the fundamental basis for their behavioural intentions and their loyalty (Anwar et al., 2025). It strengthens consumer interactions in phygital retail environments by strengthening emotional and cognitive connections between consumers and brands (Anwar et al., 2025).

Consumer satisfaction

In the retail industry, customer satisfaction is the overall evaluation of a customer's shopping experience, achieved through the integration of digital and physical. It acts as an antecedent variable that determines customer loyalty and repurchase intentions. Customer satisfaction strongly influences customers' repurchase decisions (R et al., 2025).

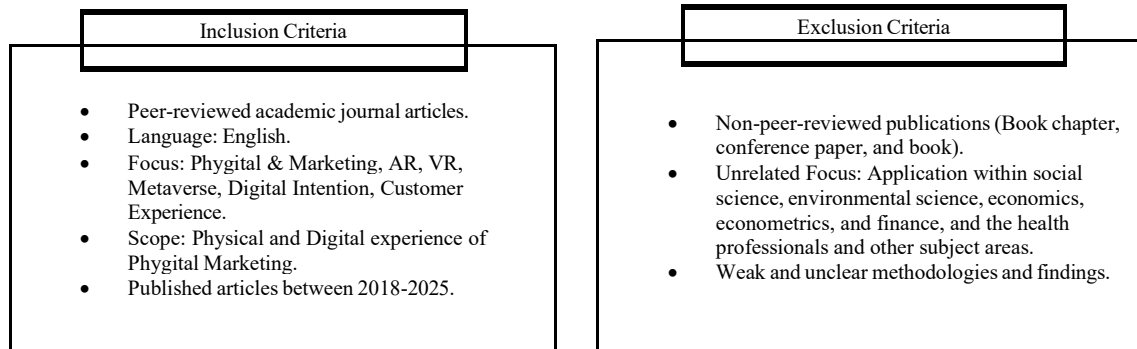
Methodology

The research under this study was structured using a stepwise approach to literature review (SLR) according to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) (Page et al., 2021). The SLR methodology provides transparent, replicable, and complete coverage of the literature on digital marketing with minimal selection bias and high-quality results (Tranfield et al., 2003). The authors analysed the literature from Scopus (2018-2025) on various aspects of phygital marketing, such as phygital marketing strategies, business improvement, new trends, customer experience, AR, VR, Metaverse, and digital intention of consumers. (38 peer-reviewed articles) The search terms focused on the keywords "Phygital and Marketing", "Digital Transformation", and "Phygital Trends" using Boolean operators (AND/OR) to help businesses and marketers identify marketing strategies and make decisions about new trends.

Bibliometric analysis was performed to complement the systematic review using tools such as VOSviewer to create keyword correlations, network analysis, and thematic cluster maps that directly show the drivers behind the action a consumer takes to purchase a product. Bibliometric clusters constructed with the VOSviewer were examined considering parameters like minimum co-occurrence balances and transparently correlated to the five

constructs, usefulness, ease of use, trust, engagement and satisfaction, to provide rigorous conformity to the research aims. A combination of PRISMA and bibliometrics was chosen to ensure that the study selection was rigorous, repeatable, and quantifiable in terms of identifying research trends and relationships. The narrow dataset of 38 articles was determined by strict inclusion/exclusion criteria, and recent, high-quality studies (2018-2025) were emphasized to remain reliable and relevant. The frequency parameter has been considered in all bibliometric parameters, such as the frequency limits of the keyword analysis, and the network mapping parameters have been appropriately taken for this study to highlight the most influential concepts without overemphasizing the less useful studies. This study is based entirely on secondary published data; no human participants were involved, and ethical approval was not required.

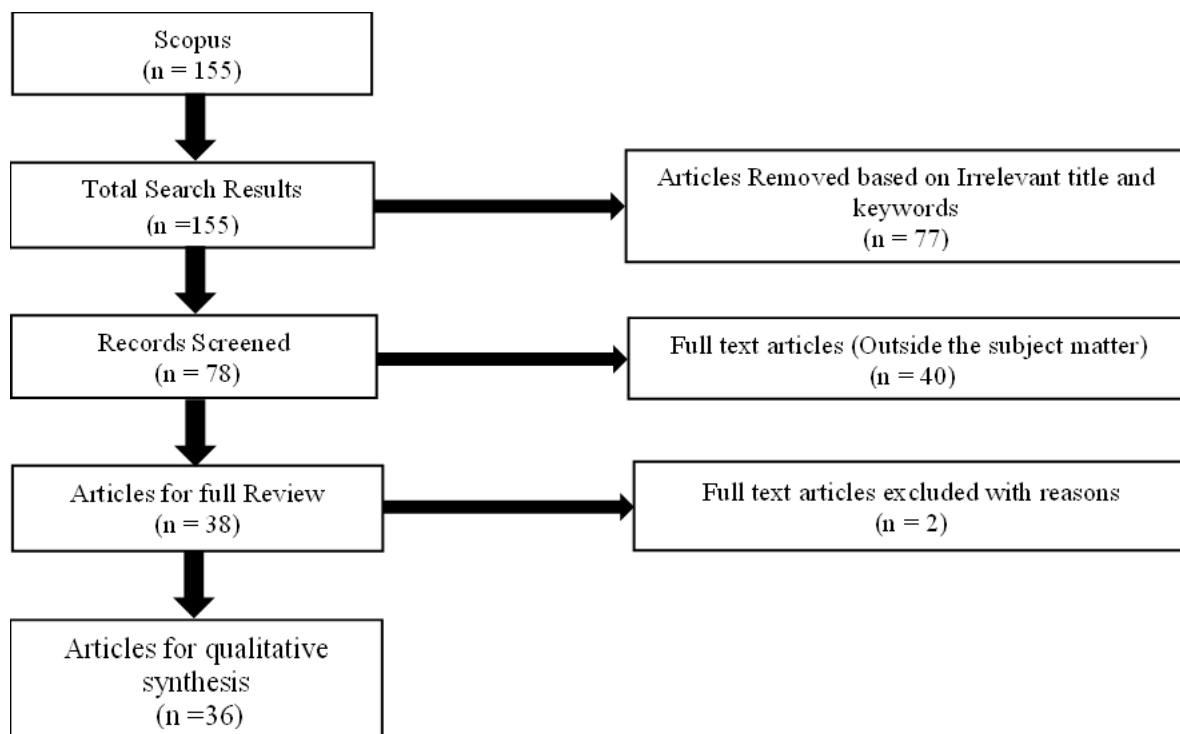
Figure 1
Inclusion and exclusion criteria for study selection



(Source: Authors' Compilation)

Using the PRISMA guidelines, we first abstracted 78 articles (36 journal articles and 2 reviews) relevant to our study in a transparent and easily searchable manner, and then further studied them, selecting 38 articles relevant to our topic and excluding the rest. The flow chart is shown in Figure 2.

Figure 2
PRISMA flow chart



(Source: Authors' Compilation)

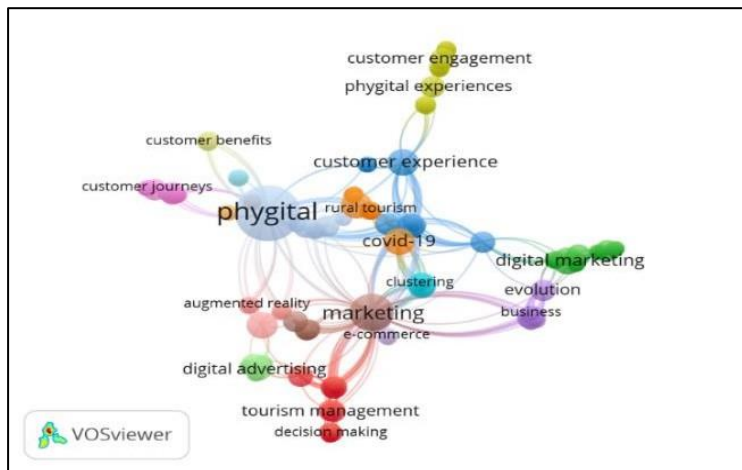
Findings and Discussion

A systematic review of 38 peer-reviewed articles on Phygital Marketing reveals key strategies, customer experience, and new dimensions that play a role in marketers’ decision-making and the direction of phygital marketing. Other sections include author analysis, publication year analysis, and co-occurrence analysis. Figures 3 to 5 are presented for clarity.

Figure 3 shows a co-occurrence analysis of all 232 keywords, highlighting the various sub-factors associated with phygital and marketing. In addition, the top 5 citations related to this analysis are listed in Table 1. The largest and most interconnected keyword is phygital, and it serves as the conceptual centre uniting several streams of research. There is a range of interrelated themes that surround this core and cover operating, strategic, and experiential aspects of the phygital paradigm. Indicatively, based on clusters involving customer experience (Batat, 2022; Massi et al., 2025), customer engagement, and customer journeys (Jacob et al., 2021), the research field associated with a human-centred approach to the customer is demonstrated, with an emphasis on how hybrid physical-digital experiences supersede consumer behaviours and service provision. The other clusters of connections grasp the technological and strategic bases of phygital marketing, such as digital marketing, e-commerce, digital advertising, and augmented reality (Faruk et al., 2025), which helps prove the incorporation of the new technologies into the marketing approaches.

Figure 3

Co-occurrence analysis



(Source: Authors’ Compilation)

Table 1

Core documents identified through bibliometric analysis

	Documents	Citation	Total Link Strength
1	S., Monaco, Salvatore; G., Sacchi, Giovanna (2023) Travelling the Metaverse: Potential Benefits and Main Challenges for Tourism Sectors and Research Applications Vol. 15	89	15
2	A., Pangarkar, Aniruddha; V., Arora, Vibha; Y.S., Shukla, Yupal Sanatkumar (2022) Exploring phygital omnichannel luxury retailing for immersive customer experience: The role of rapport and social engagement Vol.68	59	68
3	P., Del Vecchio, Pasquale; G., Secundo, Giustina; A., Garzoni, Antonello (2023) Phygital technologies and environments for breakthrough innovation in customers' and citizens' journey. A critical literature review and future agenda Vol.189	46	189
4	X., Liu, Xuerui; D., Wang, Dan; U., Gretzel, Ulrike (2022) On-site decision-making in smartphone-mediated contexts, Vol.88	42	88
5	W., Batat, Wided (2024) What does phygital really mean? A conceptual introduction to the phygital customer experience (PH-CX) framework, Vol 32, pp.1220 - 1243	40	32

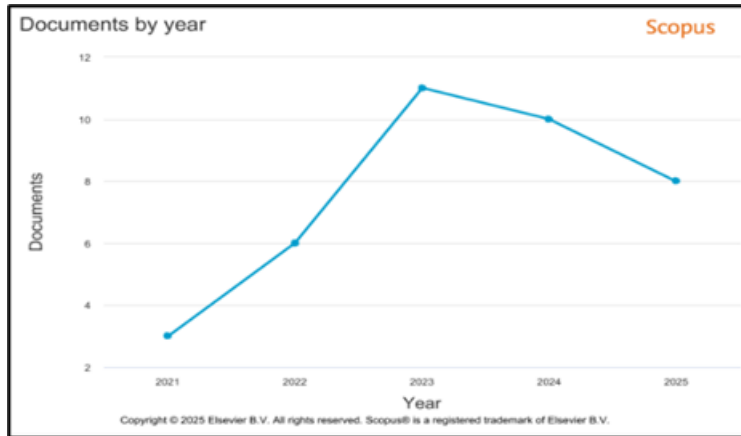
(Source: Authors’ Compilation)

As shown in Figure 4, we use the 38 articles to illustrate how they have been published per year. According to this diagram, we can conclude that the phygital marketing concept has gained wider adoption globally following the COVID-19 pandemic. According to our study, researchers have started to investigate the phygital marketing concept since 2018. According to this analysis, approximately 10 articles are published annually on this topic. Of our 38 articles, 3 were published in 2021, 6 in 2022, 11 in 2023, 10 in 2024, and 8 in 2025. This reveals that the

study of this phygital marketing concept is likely to become an emerging trend in the coming years. This trend of growth corresponds to the results of Massi et al., (2025), who also noted that the adoption of phygital has increased faster after the pandemic, as the population of the target audience is more attached to combining retail experiences. Our discussion supports the fact that COVID-19 served as a game-changer in terms of digital transformation, which is also emphasized by (Batat, 2024).

Figure 4

Year analysis

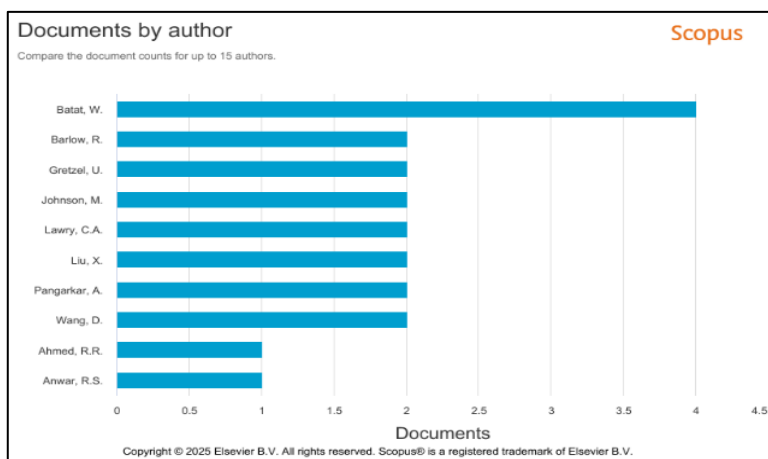


(Source: Authors' Compilation)

This includes an analysis of the authors to determine the most influential contributors to the field of physical marketing. Considering Figure 5, the most prolific faculty was Batat, W., who selected four papers, and therefore, a strong academic focus on phygital-related topics, including customer experience and hybrid branding approaches. The above authors, Ahmed, R.R., and Anwar, R.S., also show that each article has increased the research work done by third-world countries and other marketing-related researchers. The fact that the contributions are relatively evenly distributed and that only Batat's output is dominant suggests that the field remains open and needs to be further developed, with more opportunities for scholars to explore and create further theory. The focus of publications by Batat (2024) is consistent with the first steps, the Phygital Customer Experience (PH-CX) framework, but researchers' findings indicate the spread of contributions by developing regions, which indicates the diversification and upcoming research outside of Europe.

Figure 5

Authors' analysis



(Source: Authors' Compilation)

Conclusion

This study reviewed 38 articles (2018-2025) on the key factors affecting phygital services, new technologies, and new trends affecting phygital marketing, and the research periods conducted on phygital marketing. Our analysis shows that each of these key variables affects consumer purchasing behaviour, as well as the development of phygital marketing, such as AI, VR, kiosks, Metaverse. Our analysis can emphasise that there has been a wide growth in phygital marketing, especially after the COVID-19 pandemic. These results provide theoretical insight into how phygital technologies shape hybrid consumer experiences and extend the Phygital Customer Experience framework. Practically, marketers can leverage AI, AR, VR, and Metaverse tools to enhance engagement, satisfaction, and brand loyalty. Limitations include the small sample of 38 articles, reliance on the Scopus database, and a focus on research from developed regions. Researchers recommend that future research expand the practical use of emerging technologies such as AR, VR, Metaverse in the retail industry using mixed methods and conduct studies on the reuse intention of phygital service.

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