

The Impact of Buy Now Pay Later on Consumer Behavior: A Systematic Literature Review and Bibliometric Analysis

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ABSTRACT- *This study explores the academic landscape of Buy Now Pay Later services via a systematic literature review and bibliometric analysis. Fifty peer-reviewed articles from Scopus and Web of Science were analyzed to identify key contributors, conceptual trends, and research gaps. The results reveal a growing interest in BNPL, particularly in fintech-driven economies, following the onset of the pandemic. Topic modeling with Latent Dirichlet Allocation (LDA) revealed two main themes: (1) the integration of BNPL into the financial ecosystem and (2) the behavioral factors that influence adoption. The findings suggest that Buy Now Pay Later reshapes consumption habits by decoupling purchases from payments, thereby increasing impulsivity and financial vulnerability. This study contributes to financial behavior theory by integrating technological, psychological, and sociodemographic factors. From a practical perspective, the study highlights the need for regulation, ethical digital marketing, and financial education to mitigate associated risks. The methodology provides a replicable framework for analyzing emerging fintech innovations and their societal implications.*

Keywords: *Buy Now Pay Later; BNPL; FinTech; Consumer Behavior*

I. INTRODUCTION

A recent purchasing method, Buy Now Pay Later (BNPL), is becoming an attractive option for consumers. BNPL enables consumers to make payments in installments and without interest for a good or service at its original price [1]. This novel purchasing method is promoted as a technological innovation that offers its users significant convenience for their e-commerce purchases [2]. The BNPL service is a recent proposal advanced by financial technology (FinTech) companies. These companies argue that this model poses a reduced risk compared to conventional services, a claim that is further supported by its economic efficiency and practicality. They emphasize that installment payment options are automated and that they furnish customized solutions to address particular financial challenges [3]. BNPL derives its profits from trading activities rather than from interest or fees imposed on customers [4]. Its popularity has increased rapidly due to the presence of various platforms, including Klarna, Clearpay, and others [5]. However, a significant portion of this increase can be attributed to recent developments that have impacted the global economy [6], including the economic crisis triggered by the pandemic in 2020. Feng et al. (2023) posit that BNPL payments experienced a surge in popularity during the pandemic in 2021, particularly in the context of online shopping. Consequently, the substantial

expansion of BNPL has prompted numerous countries to assess the necessity of formulating regulatory frameworks for its utilization [7]. For instance, the implementation of credit legislation aimed at fortifying the safeguards for credit users while concurrently fostering the expansion of demand for BNPL services has been demonstrated to be a salient factor [8]. A paucity of regulatory oversight has the potential to engender BNPL consumers who exceed their financial capacities, thereby heightening the likelihood of payment delinquency and the subsequent accrual of debt [9]. BNPL has been promoted as an affordable and user-friendly financial option. However, individuals with limited knowledge of the subject are more susceptible to errors due to their insufficient understanding, which can have adverse effects on their mental well-being [10]. Confronted with this predicament, various authors have proffered a range of recommendations to BNPL users, with the aim of mitigating the potential risks and disadvantages that this method may pose to individuals' well-being [11], [12]. Financial socialization is a critical factor in the rationale behind the use of BNPL, as it encompasses the deliberate or inadvertent transmission of financial knowledge from parents to their children [13]. This phenomenon underscores the necessity for comprehensive financial education and awareness programs, designed to enlighten consumers about the potential pitfalls associated with BNPL [14]. Concerns have been expressed by regulators regarding the potential impact of BNPL installment payments on consumers' purchasing decisions. However, there is a paucity of studies that provide sufficient information on the effects that BNPL may have [15]. The objective of this research is to analyze the extant scientific production concerning the impact of BNPL on consumer behavior, as well as the subjects investigated and prospective future lines of research. The present research is of great importance to identify the predominant trends in BNPL users, as well as to analyze existing research in different countries and how it has impacted consumer actions and knowledge. Given this, the following research questions are posed:

- RQ1: Which authors, institutions, and countries are most prominent in terms of their role as drivers of scientific production on BNPL?
- RQ2: What are the primary research topics, conceptual currents, and works of greatest impact in the literature on BNPL?
- RQ3: What knowledge gaps and future lines of research emerge from this analysis?

This study employs a systematic literature review (SLR) and bibliometric analysis. Ref.[16] , point out, this approach allows for the quantitative evaluation of scientific communication. This method is key for identifying dissemination patterns in scientific and technological knowledge [17] . Topic modeling further supports the detection of underexplored areas in the literature, thereby guiding future research [18]. The article is structured as follows: an introduction to the research; a literature review examining the theoretical foundations, consumer impact, and user profiles of BNPL; the research methodology; the results, which employ analytical techniques; and the final discussion and conclusions.

II. LITERATURE REVIEW

A. *The Context Of BNPL Within The Fintech Ecosystem*

The financial technology sector, known as FinTech, has undergone substantial growth and innovation, giving rise to new products and services that challenge traditional financial structures[3] . Among these innovations, BNPL services have rapidly emerged as a disruptive short-term debt option [19]. BNPL represents an evolution of traditional credit, adapting it to the digital environment. It focuses on online consumption and mobile payments, as opposed to the classic use of credit card [1]. Ref [10] posit that the BNPL concept has been developed as an innovative financial instrument by FinTechs, which enables consumers to make purchases and pay for them in interest-free installments. This functions as a direct agreement between the customer and the merchant to facilitate financing at the point of sale. Its popularity can be attributed to its capacity to address the demand for immediate gratification at the point of sale, a phenomenon facilitated by advancements in financial technology that often enable the concurrent processes of application, approval, and utilization [9]. This form of consumer credit enables users to procure goods or services while postponing payment, typically without accruing interest, through a series of installments to be remitted over a designated period, frequently limited to four or fewer installments[1], [7], [20].

B. *Impact Of BNPL On Consumer Behavior And Profile*

Digital platforms (apps and websites) of BNPL services function not only as transactional tools but also play a crucial role in shaping consumer perceptions and behavior [4]. Ref. [21] posit that the findings indicate a high probability of users replacing traditional cards with BNPL, attributable to the perceived convenience of this method. The adoption of BNPL is ubiquitous in both physical and e-commerce [22]. In this context, the high use of social networks has been shown to increase interest in BNPL, due to the ease of access, use, and the influence of what other people do or recommend on these platforms. This makes social networks a key factor motivating their use [2]. The BNPL system enables the dissociation of the purchase from the payment, a process that is characterized by its convenience and ease of use [5]. A substantial proportion of consumers regard BNPL services not as a form of credit but rather as a method of deferring payments over time. This perspective has the potential to mitigate feelings of guilt associated with immediate consumption, as evidenced by

research conducted by Cook et al. [4]. In a similar vein, Powell et al. [12] have found that this heightened accessibility has prompted individuals with a propensity for impulsive purchasing to disclose the utilization of BNPL for acquiring goods and services that exceed their financial capacities, or to attain emotional gratification. Consequently, consumers who opt for BNPL tend to exhibit a higher propensity for spending in comparison to those who utilize alternative payment methods [23]. Ref. [24] have observed, the most frequent users of BNPL tend to be individuals with a higher educational level, higher income, from younger generations such as Y and Z, and with a high degree of familiarity with digital technologies, such as technological services for lending. Conversely, other authors posit that individuals with limited educational attainment and financial literacy frequently resort to this form of financing, which may be attributable to a deficiency in awareness regarding its associated risks [14], [25]. Likewise, Loomis y Cockayne [26] have noted that BNPL providers strategically leverage digital marketing to target female consumers and those with lower incomes, with the aim of maximizing their financial gain from these demographic groups. Similarly, BNPL has concentrated on young demographics, particularly those residing in areas with limited economic resources[27], [28], who are often not eligible for traditional loans due to the stringent credit evaluation criteria [29]. Adolescents, particularly those initiating their first loan, are frequently linked to a substandard credit history [13]. The recurrent utilization of BNPL is also correlated with individuals who receive regular income, possess student loans, and seldom possess mortgages [30]. Furthermore, additional prevalent profiles of BNPL users have been identified, including materialists, who utilize this purchasing method to procure items that augment their social perception[20].

C. *Financial Inclusion, Risks, And Current Landscape Of The BNPL Market*

The BNPL model enables FinTechs to promote financial inclusion by offering more accessible financing options to a broader range of consumers [31]. The adoption of BNPL by different types of users is facilitated by the fact that it allows access to credit without strict credit checks, thus facilitating purchases for people with cash constraints or without access to traditional financing [5], [32], [33]. However, while BNPL contributes to financial inclusion, it also raises concerns about its suitability and risks for vulnerable populations [5], [19]. Despite the financial obligations associated with BNPL, many consumers do not perceive this payment method as equivalent to credit [33]. This deficiency in perception can result in excessive debt and unanticipated financial obligations, underscoring the necessity for an examination of how the perception of credit and indebtedness has evolved in the digital landscape [34]. There are minimal indications that this trend is decelerating [35]. In this context,[30] observe that, despite the uncertainty surrounding its future expansion, BNPL has the potential to become a significant component of household debt. Furthermore, market dynamics are influenced by factors such

as customer expectations, technological advancements, and the development of new products and services[24] .

III. METHODOLOGY

The objective of this research was to conduct a systematic literature review (SLR) to examine the most significant scientific output related to the BNPL model. SLR is a pivotal research method that enables the meticulous compilation and synthesis of extant studies, thereby providing a robust foundation for the advancement of knowledge [20]. Furthermore, the research is accompanied by a bibliometric analysis that aims to identify the most influential authors, key academic sources, and main lines of research. Additionally, the research utilizes Topic Modeling to identify emerging trends in the context and performs an analysis with Orange Data Mining using Latent Dirichlet Allocation (LDA). LDA identifies the primary topics of a long text by analyzing the frequency with which specific words co-occur, repeatedly adjusting the associations between words and topics to find the optimal representation of the content [36]. Bibliometric analysis (BA) is presented as a quantitative and systematic technique for the study of scientific publications [37]. The application of BA facilitates the identification of predominant research subjects, the revelation of the structural and dynamic characteristics of scientific domains, and the emphasis of the conceptual pillars that underpin a particular body of literature [38], [39]. The standard BA process is comprised of five sequential steps: study design, data collection, data analysis, data visualization, and interpretation. [40], [41].

A. Research Strategy

The research was developed in two main stages. First, the study was designed by defining its objectives and thematic focus on the BNPL phenomenon, as well as its inclusion and exclusion criteria. The second stage involved collecting bibliographic metadata (e.g., authors, countries, citations, and references) from two recognized databases: Scopus and Web of Science (WoS). Scopus, developed by Elsevier, collects peer-reviewed academic articles [39], while WoS is a widely used tool for accessing quality scientific literature [36]. Using these databases together made it possible to identify relevant, high-impact studies on BNPL. This improved the coverage, representativeness, and accuracy of the bibliometric analysis by integrating updated, diverse data [17]. Search strings were designed to include only peer-reviewed articles published in specialized scientific journals to ensure the study's rigor (see table 1).

TABLE I
DATABASE SEARCH CRITERIO

Measure	Data Base	Total
WoS		
Search using the main keyword, "buy now, pay later" or "BNPL."	"buy now pay later" (Topic) OR "bnpl" (Topic)	160
Search using a complex and unique query	"buy now pay later" (All Fields) OR bnpl (All Fields) and Article	54

(Document Types) and Business or Economics or Business Finance or Management or Law or Social Sciences Interdisciplinary or Computer Science Artificial Intelligence or Computer Science Cybernetics or Computer Science Interdisciplinary Applications or Computer Science Theory Methods (Web of Science Categories) and English (Languages)

SLR application	Scopus	35
Search using the main keyword, "buy now, pay later" or "BNPL."	(TITLE-ABS-KEY ("buy now pay later") OR TITLE-ABS-KEY ("bnpl")) (TITLE-ABS-KEY("buy now pay later") OR TITLE-ABS-KEY(bnpl)) AND (LIMIT-TO (SUBJAREA,"BUSI") OR LIMIT-TO (SUBJAREA,"ECON") OR LIMIT-TO (SUBJAREA,"SOCI")) AND (LIMIT-TO (DOCTYPE,"ar")) AND (LIMIT-TO (LANGUAGE,"English")) AND (LIMIT-TO (SRCTYPE,"j"))	121
Search using a complex and unique query		67
SLR application		15

In this phase, 54 articles were identified in the Web of Science (WoS) database and 67 articles were identified in Scopus using the previously defined search criteria. To consolidate these sets and eliminate duplicates, the merge function of the Bibliometrix package [42], was used to integrate the BibTeX files and perform automatic debugging. As a result, a total of 77 unique documents were obtained. Next, an SLR was performed to refine the sample based on thematic relevance and citation level criteria. Articles that were not directly related to the study's objectives or had limited academic impact, according to the available citation indicators in both databases, were excluded at this stage. Data cleaning is a fundamental pillar of bibliometric analysis because it ensures the quality, reliability, and robustness of the results [17]. This process yielded a final sample of 50 articles, forming the corpus analyzed. The third stage, which corresponds to data analysis, is a crucial component of the process because it transforms the collected data into meaningful information [43]. To this end, the Bibliometrix package was used to calculate key indicators, such as productivity per author and the impact of publications. Additionally, the most cited sources were identified, and co-citation, co-authorship, and keyword co-occurrence networks

were mapped. Data visualization was carried out using scientometric methodology through the Bibliometrix software and its web interface, Biblioshiny, [42], which was selected for offering the most complete and robust set of bibliometric techniques. [43], [44]. Additionally, topic modeling, a frequently used text mining technique, was employed [45]. The Orange topic modeling widget was used with the Latent Dirichlet Allocation option. [46]. The results were visualized using LDAvis, an interactive system that employs the "relevance" metric to more effectively rank terms in a topic for human interpretation than simple term probability generated with LDA [47]. The final step was interpreting the findings. This involved thoroughly and reflectively reading the key documents identified by the analysis to draw valid and relevant conclusions based on the research questions [16], [41].

IV. ANALYSIS OF RESULTS

A. Summary

Table 2 summarizes the main bibliometric indicators extracted from the analysis of scientific publications on the subject studied from 1997 to 2025. A total of 50 documents were identified and published in 44 sources, primarily scientific journals. In terms of thematic content, 126 "Keywords Plus" were identified — that is, keywords derived from titles of frequently cited references — and 138 keywords were provided directly by the authors, reflecting considerable thematic diversity. The average number of citations per paper was 9.48.

TABLE II
GENERAL INFORMATION

Description	Results
Period	1997–2025
Sources (Journals, Books, etc.)	44
Documents	50
Keywords Plus (ID)	126
Author Keywords (DE)	138
Average citations per document	9,48
Authors	135
Author appearances	164
Authors of Single-Author Documents	9
Documents per author	0,37 (50 / 135)
Authors per document	2,7 (135 / 50)
Co-authors per document	3,28
Collaboration index	2,84

C. Annual Academic Production

Between 1997 and 2018, scientific output on the topic was minimal, with only three publications over two decades. A gradual increase in publications began in 2019, marking a turning point in academic interest. This growth became more pronounced after 2022, reaching twelve publications in 2023 and peaking at nineteen in 2024. As of June 2025, four new

contributions had already been documented, indicating continued research momentum (see Figure 1).

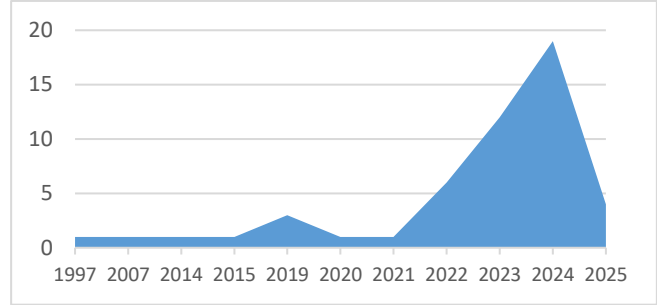


Fig.1 Historical production

B. Author Productivity and Contribution

As illustrated in Table 3, a select group of authors—including Coffey J., Cook J., and Davies K.—exhibited the highest number of publications, with three articles each. However, their fractional authorship indices reveal lower individual contribution per publication, suggesting a collaborative authorship dynamic within larger research teams. In contrast, authors such as Jasrotia S. S., Rai S. S. and Raj V. A. have each published three scholarly articles, but their fractional VA is not known.

TABLE III
MOST RELEVANT AUTHORS

Author	Articles	Fractionalized Articles
COFFEY J	3	0,34
COOK J	3	0,34
DAVIES K	3	0,34
FARRUGIA D	3	0,34
HARO A	3	0,34
JASROTIA S S	3	1
RAI S S	3	1
RAJ V A	3	1
SHANNON B	3	0,34
THREADGOLD S	3	0,34

Figure 2 reveals stable authorship groups with recurring collaborations. Over three consecutive years, Coffey, Cook, Davies, Farrugia, Haro, Shannon, and Threadgold co-authored publications in various combinations, indicating a consolidated co-authorship network. Similarly, Raj V.A., Jasrotia S.S., and Rai S. , and Rai S. consistently collaborate on studies about materialism and the perceived risks and benefits of BNPL. Additionally, Raj V. A. engages in research on trust and privacy with other co-authors.

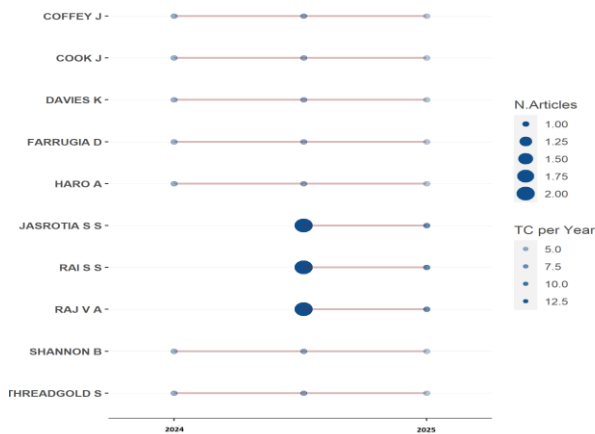


Fig. 2 Authors' production over time

According to Lotka's law [48], most researchers contribute minimally, while a few account for the majority of academic output. As shown in Table 4, 85.9% of authors (116) published one article; 6.7% (nine authors) published two; and 7.4% (10 authors) published three. This reflects a highly unequal distribution of scientific production.

TABLE IV

PRODUCTIVITY OF AUTHORS ACCORDING TO LOTKA'S LAW

Written documents	N° of authors	Proportion of authors
1	116	0,859
2	9	0,067
3	10	0,074

Table 5 highlights the most cited and influential articles in the field. Ah Fook y McNeill (2020), top-cited work, with 46 citations, addresses global overconsumption and its negative impacts on individual well-being and environmental sustainability. Schomburgk y Hoffmann (2023), examine how mindfulness reduces BNPL use and its relation to overall well-being, earning 39 citations. Gerrans et al. (2022) analyze the impact of BNPL on financial system dynamics, emphasizing that revenue mainly stems from merchant fees. Thorson y Kranstuber Horstman (2014) examine how family communication patterns influence young adults' willingness to discuss credit card use. Lastly, Guttman-Kenney et al. (2023) examine whether consumers use credit cards to fund BNPL purchases, identifying behavioral differences across user profiles.

TABLE V

MOST CITED ARTICLES GLOBALLY

Article	Author	DOI	Total	Per year
Click to Buy: The Impact of Retail Credit on Over-Consumption in the Online Environment.	[37]	10.3390/SU12187322	46	7,67

How mindfulness reduces BNPL usage and how that relates to overall well-being	[38]	10.1108/EJM-11-2021-0923	39	13
Fintech and responsibility: Buy-now-pay-later arrangements	[39]	10.1177/03128962211032448	29	7,25
Buy Now, Pay Later: Family Communication Patterns Theory, Parental Financial Support, and Emerging Adults' Openness about Credit Card Behaviors	[40]	10.1080/15267431.2013.857324	29	2,42
Buy now, pay later (BNPL) ...on your credit card	[41]	10.1016/j.jbef.2023.100788	23	7,67

Figure 3 illustrates BNPL-related scientific output by country. Australia leads with 34 publications and 118 citations (11.80 citations per article), followed by India (21 publications, 45 citations; 7.50 per article), the United States (16 articles, 66 citations; 9.40 per article), China (8 publications, 3 citations; 3.00 per article), and the United Kingdom (8 articles, 4 citations; 2.00 per article).

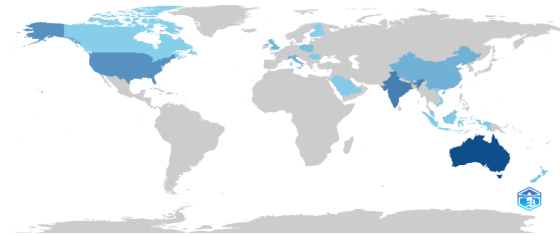


Fig. 3 Scientific production by country

D. Keyword Analysis

Figure 4 compares the most frequent keywords in BNPL studies across four categories: keywords, authors' keywords, words in abstracts, and words in titles. Prominent terms include "BNPL," "consumer," "fintech," and "credit." The origin of the keywords shows different thematic focuses. The analysis reflects interest in consumer behavior, financial risk, and payment technologies.

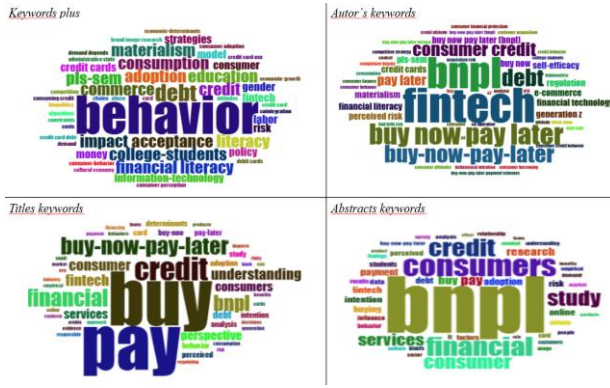


Fig 4 Comparison of Word Clouds

E. Thematic Analysis: Knowledge Axes Identification

Thematic maps divided into four quadrants offer an intuitive visualization of the evolution and relevance of topics in the literature [37], [49]. The bottom-right quadrant includes basic themes with high centrality and low density, indicating fundamental yet underdeveloped areas. Cluster 1 contains terms such as "behavior," "debt," "college students," and "materialism" and relates to consumer behavior and attitudes toward consumption. The top-right quadrant contains mature, well-established research themes that are both central and dense. Examples include Cluster 2, which includes terms such as acceptance, adoption, commerce, information technology, and model, and relates to technological adoption in finance; and Cluster 4, which includes terms such as credit, gender, labor, and money, and relates to the socioeconomic dimensions of credit. The top left quadrant contains niche themes, which are highly dense but low in centrality. These themes are well developed but limited to specific communities. Cluster 7, with terms such as "literacy," "credit cards," and "risk," highlights financial education and risk. The bottom left quadrant shows emerging or declining themes with low density and centrality. One example is Cluster 8 (PLS-SEM), which is related to statistical modeling in financial research (see Figure 5).

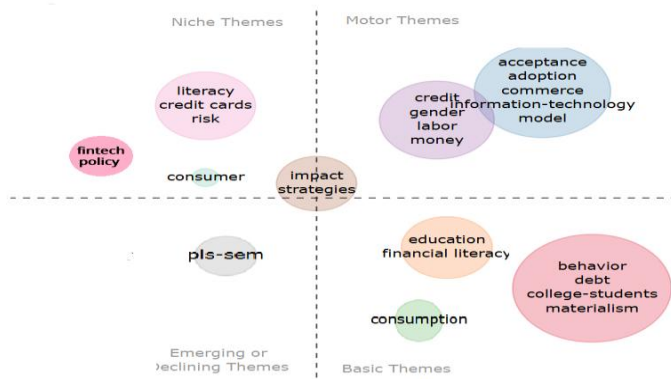


Fig.5 Thematic map

G. Topic modeling

The number of topics was selected based on the combination of low logarithmic perplexity and high thematic coherence that was deemed best [50]. Two topics were ultimately chosen.

F. Financial Ecosystem and Market

This topic encompasses various studies that analyze key dimensions of the BNPL phenomenon, as detailed in Table 6. For example, Cervellati et al.[14] examine how the pandemic shifted consumer preferences in Italy from traditional credit cards to BNPL, which has regulatory implications. Hogan [3] explores the normalization of fintech-based educational financing in Australia. Lupşa-Tătaru et al. [10] identify structural factors, such as logistics and ease of doing business, that drive BNPL adoption among Millennials and Gen Z in 23 countries. Ah Fook y McNeill [1] caution about the role of BNPL in online overconsumption. Relja et al. [5] on the other hand, highlight the influence of privacy and trust on BNPL usage intentions using an extended Theory of Planned Behavior. Complementing this, Raj et al. [5] analyze the influence of materialism, perceived risk, and perceived benefits on BNPL adoption. Zainudin et al. [51] examine credit misuse among Malaysian youth, drawing relevant comparisons to BNPL behavior. Aisjah [2] examines how ease of use, perceived risk, social influence, and financial literacy shape BNPL usage intentions using the Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT) frameworks. Lastly, Liu et al. [52] and Abd Haling et al. [53] address broader marketing and technological systems without focusing specifically on BNPL.

TABLE VI
FINANCIAL ECOSYSTEM AND FINTECH MARKET

DOI	Author	Year	TC	TOPIC 1
10.1108/QRFM-07-2024-0185	[2]	2025	1	0.994075
10.1016/j.intmar.2014.09.002	[44]	2015	7	0.994292
10.1007/s13384-021-00470-8	[45]	2022	4	0.994615
10.3390/economies11080218	[46]	2023	3	0.995005
10.24239/jipsya.v1i1.2.1-15	[47]	2021	13	0.995019
10.3390/SU12187322	[48]	2020	46	0.99514
10.1177/14707853231219927	[49]	2024	2	0.995968
10.1108/IJBM-08-2022-0343	[50]	2024	17	0.996223
10.1108/IJBM-08-2018-0215	[51]	2019	21	0.996305
10.1080/23311886.2024.2306705	[9]	2024	7	0.996347

Figures 6 and 7 show gray bars representing the overall frequency of each term in the business administration corpus and overlaid red bars showing their frequency in a selected topic. This visual comparison reveals terms that, while generally common, become particularly relevant depending on the analyzed thematic focus [47].

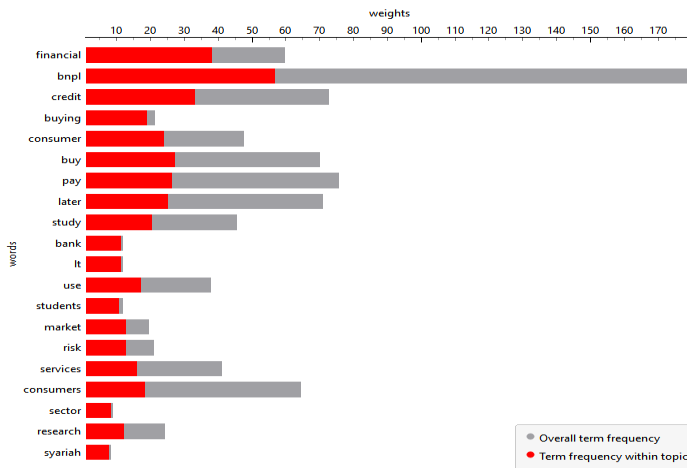


Fig. 6 Financial Ecosystem and FinTech Market

Adoption and Consumer Behavior in BNPL

This second topic compiles essential studies on the adoption and behavioral dynamics of BNPL, as illustrated in Table 7. Dadra et al. [54] use an integrated TEP-UTAUT-SDT framework to identify performance expectancy, perceived effort, financial flexibility, and motivational factors such as competence and belonging as the main drivers. Soni [33] also analyzes adoption factors but does not detail the methodology. Raj et al. [55] apply the Unified Theory of Acceptance and Use of Technology (UTAUT2) model, linking perceived benefits and risks with usage intention, mediated by trust. Similarly, Abed and Alkadi [31] use the DeLone and McLean Model and UTAUT to evaluate the impact of system performance, ease of use, and service quality on satisfaction and usage among young Saudi consumers. Relja et al. [5] extend the Theory of Planned Behavior to explain how trust and privacy concerns influence BNPL usage among Indian university students. From an economic perspective, Desai and Jindal [32] use structural models to demonstrate how the temporal inconsistency of BNPL enables firms to raise prices without reducing demand and thus decrease consumer welfare. Kumar et al. [56] examine BNPL loyalty through consumption values using PLS-SEM and study the moderating role of alternative availability. Feng et al. (2023) found that BNPL increases e-commerce spending per order. Finally, Kutbi et al. [57] provide an additional empirical analysis of BNPL, though it has received less academic attention.

TABLE VII
TOPIC 2: ADOPTION AND CONSUMER BEHAVIOR IN BNPL

DOI	Autor	Año	TC	TOPIC 2
10.1111/tran.12539	[34]	2022	12	0.995221
10.1080/21639159.2024.2391282	[54]	2024	2	0.995241
10.2139/ssrn.4359956	[33]	2023	4	0.995302
10.1108/JFM-01-2023-0004	[55]	2025	8	0.995486
10.3390/su16156368	[31]	2024	2	0.995503
10.1108/IJBM-07-2022-0324	[5]	2024	21	0.995672
10.1007/s11129-023-09271-y	[32]	2024	4	0.995774
10.1016/j.jretai.2024.09.004	[56]	2024	2	0.996015
10.1016/j.ejor.2022.08.010	[35]	2023	15	0.996681
10.55643/fcaptp.2.55.2024.4323	[57]	2024	2	0.99699

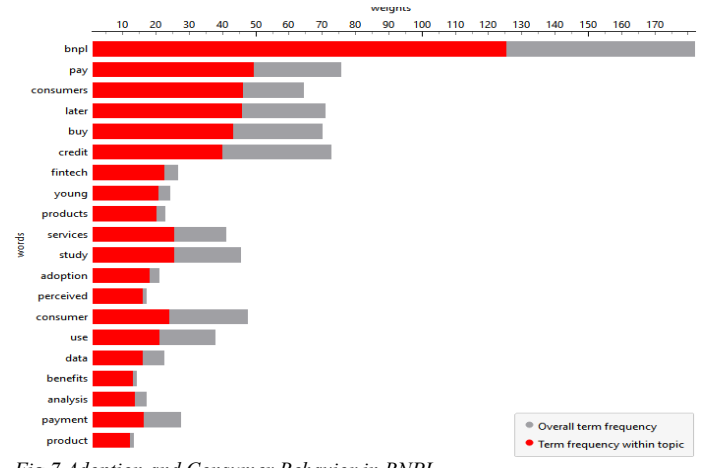


Fig. 7 Adoption and Consumer Behavior in BNPL

V. DISCUSSION AND CONCLUSION

A. Discussion

The growing popularity of BNPL services has sparked increasing academic interest, especially since the onset of the pandemic, when consumers became more reliant on digital financial tools [35]. This study employed a SLR and BA complemented by topic modeling techniques to map scientific research on BNPL and evaluate its impact on consumer behavior, research trends, and conceptual development. The triangulation of these methodologies provided comprehensive responses to the three research questions guiding this investigation. Addressing RQ1, the bibliometric analysis revealed a concentration of research output in Australia, India, and the United States—regions where fintech development and digital consumption habits are advanced [7], [19]. Co-authorship network analysis identified a relatively small, interconnected scholarly community with recurring collaborations suggesting the emergence of specialized clusters focused on consumer debt, financial literacy, and materialism [27], [55].

In response to RQ2, which concerned the primary research topics and conceptual streams, two dominant thematic areas were identified. The first is the financial ecosystem and fintech market, including studies that address the structural drivers of BNPL adoption, regulatory issues, and the integration of BNPL into broader financial systems [1], [14]. These works underscore the positioning of BNPL as an innovation that promotes financial inclusion but also raises regulatory and ethical challenges [33]. The second area focuses on adoption and consumer behavior, covering the psychological, technological, and sociocultural drivers behind BNPL usage. These studies explore the psychological, technological, and sociocultural drivers behind BNPL usage. These studies often use theoretical frameworks, such as UTAUT, TAM, TPB, and SOR, to explain behavioral intentions and patterns, especially among younger generations and digital natives [5], [54]. Importantly, the separation of purchase and payment inherent to BNPL tends to diminish consumers' perception of debt and encourage impulsive behavior [4], [12]. Although BNPL is often perceived as an accessible alternative to traditional credit,

especially by underbanked populations, this accessibility may lead to overconsumption and financial vulnerability without adequate financial education [10], [25]. The reviewed literature highlights the evolving understanding of debt in the digital age and the need to expand classical financial behavior models to incorporate elements such as instant gratification, social media influence, and algorithmic personalization, indicating a fertile ground for interdisciplinary research. The findings also suggest a convergence between consumer behavior, fintech innovation, and digital sociology, indicating fertile ground for interdisciplinary research [9], [22].

Despite the growing number of publications, RQ3 revealed persistent knowledge gaps. There is a lack of longitudinal and comparative studies evaluating the long-term impact of BNPL use on financial stability and psychological well-being. Additionally, most research is concentrated in developed economies, overlooking contextual dynamics in Latin America, Africa, and Southeast Asia, where BNPL is expanding rapidly as well. Similarly, the ethical dimensions of BNPL marketing strategies, especially those targeting young people, women, and low-income groups, remain understudied [22]. Finally, topic modeling using LDA showed the potential of combining bibliometric techniques and natural language processing. This combination can detect latent patterns and emerging themes, strengthening the evidence base for future research.

B. Conclusion

This study provides a structured synthesis of the academic literature on BNPL, offering a comprehensive overview of the field's intellectual structure, conceptual trends, and empirical focus. The results highlight the increasing scholarly concern about the dual nature of BNPL as a means of financial inclusion and a potential source of financial instability. Theoretical implications include validating technology acceptance models (UTAUT, TAM) in the context of digital financial services and calling for their expansion to include emotional, social, and contextual variables. This study contributes to financial behavior theory by emphasizing the psychological mechanisms underlying deferred payment models and highlighting the sociotechnical nature of BNPL platforms [2], [55]. From a practical standpoint, the study offers insights for BNPL providers, regulators, and educators. Fintech companies can enhance their value propositions by addressing the ethical dimensions of personalization and targeting. Regulators are encouraged to develop frameworks that ensure transparency, protect vulnerable consumers, and promote responsible borrowing. Financial educators should design programs that raise awareness of digital credit risks and encourage informed decision-making, particularly among young people and those new to credit [7], [13]. Nevertheless, the study has limitations. The bibliometric data were drawn solely from Scopus and Web of Science, which may have excluded relevant works from alternative sources. The thematic scope is also limited by publication criteria and keywords. Future research should incorporate comparative and longitudinal case studies, with particular attention to traditionally underrepresented geographic contexts. Additionally, a more explicit integration

of financial behavior and technology adoption models is needed in order to critically examine the balance between the potential for financial inclusion and the risks associated with BNPL becoming a debt trap. Additionally, mixed-methods approaches combining data mining with ethnographic or experimental techniques could provide a more nuanced understanding of how BNPL reshapes financial behavior in everyday life.

ACKNOWLEDGMENT

The authors wish to acknowledge the support provided by the Postgraduate Office of ITCR for this publication.

REFERENCES

- [1] L. Ah Fook y L. McNeill, «Click to Buy: The Impact of Retail Credit on Over-Consumption in the Online Environment», *Sustainability*, vol. 12, n.º 18, p. 7322, sep. 2020, doi: 10.3390/su12187322.
- [2] S. Aisjah, «Intention to use buy-now-pay-later payment system among university students: a combination of financial parenting, financial self-efficacy, and social media intensity», *Cogent Soc. Sci.*, vol. 10, n.º 1, p. 2306705, dic. 2024, doi: 10.1080/23311886.2024.2306705.
- [3] A. Hogan, «Financialisation of schooling in Australia through private debt: a case study of Edstart», *Aust. Educ. Res.*, vol. 49, n.º 5, pp. 897-913, nov. 2022, doi: 10.1007/s13384-021-00470-8.
- [4] J. Cook *et al.*, «Buy now pay later services as a way to pay: credit consumption and the depoliticization of debt», *Consum. Mark. Cult.*, vol. 26, n.º 4, pp. 245-257, jul. 2023, doi: 10.1080/10253866.2023.2219606.
- [5] R. Relja, P. Ward, y A. L. Zhao, «Understanding the psychological determinants of buy-now-pay-later (BNPL) in the UK: a user perspective», *Int. J. Bank Mark.*, vol. 42, n.º 1, pp. 7-37, ene. 2024, doi: 10.1108/IJBM-07-2022-0324.
- [6] S. Threadgold *et al.*, «Buy Now, Pay Later technologies and the gamification of debt in the financial lives of young people», *J. Cult. Econ.*, vol. 18, n.º 1, pp. 52-67, ene. 2025, doi: 10.1080/17530350.2024.2346210.
- [7] B. Guttman-Kenney, C. Firth, y J. Gathergood, «Buy now, pay later (BNPL) ...on your credit card», *J. Behav. Exp. Finance*, vol. 37, p. 100788, mar. 2023, doi: 10.1016/j.jbef.2023.100788.
- [8] H. M. Aji, M. M. Husin, A. K. Othman, A. Hidayat, y W. E. Wan Rashid, «Religious-based ethics and buy-now-pay-later re-usage intention among Muslim consumers in Indonesia and Malaysia: a commitment-trust theory perspective», *Cogent Bus. Manag.*, vol. 11, n.º 1, p. 2363441, may 2024, doi: 10.1080/23311975.2024.2363441.
- [9] L. Schomburgk y A. Hoffmann, «How mindfulness reduces BNPL usage and how that relates to overall well-being», *Eur. J. Mark.*, vol. 57, n.º 2, pp. 325-359, ene. 2023, doi: 10.1108/EJM-11-2021-0923.
- [10] D. A. Lușă-Tătaru, E. Nichifor, L. Dovleac, I. B. Chițu, R. D. Todor, y G. Brătuțu, «Buy Now Pay Later—A Fad or a Reality? A Perspective on Electronic Commerce», *Economics*, vol. 11, n.º 8, p. 218, ago. 2023, doi: 10.3390/economics11080218.
- [11] D. Johnson, J. Rodwell, y T. Hendry, «Analyzing the Impacts of Financial Services Regulation to Make the Case That Buy-Now-Pay-Later Regulation Is Failing», *Sustainability*, vol. 13, n.º 4, p. 1992, feb. 2021, doi: 10.3390/su13041992.
- [12] R. Powell, A. Do, D. Gengatharen, J. Yong, y R. Gengatharen, «The relationship between responsible financial behaviours and financial wellbeing: The case of buy-now-pay-later», *Account. Finance*, vol. 63, n.º 4, pp. 4431-4451, dic. 2023, doi: 10.1111/acfi.13100.
- [13] K. Waliszewski *et al.*, «Digital loans and buy now pay later from LendTech versus bank loans in the era of 'black swans': Complementarity in the area of consumer financing», *Equilib. Q. J. Econ. Econ. Policy*, vol. 19, n.º 1, pp. 241-278, mar. 2024, doi: 10.24136/eq.2982.
- [14] E. M. Cervellati, U. Filotto, D. Sgrulletti, y G. P. Stella, «Buy now, pay later consumer credit behavior: impacts on financing decisions»,

- Qual. Res. Financ. Mark.*, feb. 2025, doi: 10.1108/QRFM-07-2024-0185.
- [15] S. Maesen y D. Ang, «Buy Now, Pay Later: Impact of Installment Payments on Customer Purchases», *J. Mark.*, vol. 89, n.º 3, pp. 13-35, may 2025, doi: 10.1177/00222429241282414.
- [16] M. A. Rojas-Sánchez, P. R. Palos-Sánchez, y J. A. Folgado-Fernández, «Systematic literature review and bibliometric analysis on virtual reality and education», *Educ. Inf. Technol.*, vol. 28, n.º 1, pp. 155-192, ene. 2023, doi: 10.1007/s10639-022-11167-5.
- [17] W. M. Lim, S. Kumar, y N. Donthu, «How to combine and clean bibliometric data and use bibliometric tools synergistically: Guidelines using metaverse research», *J. Bus. Res.*, vol. 182, p. 114760, sep. 2024, doi: 10.1016/j.jbusres.2024.114760.
- [18] N. Cobelli y S. Blasi, «Combining topic modeling and bibliometric analysis to understand the evolution of technological innovation adoption in the healthcare industry», *Eur. J. Innov. Manag.*, vol. 27, n.º 9, pp. 127-149, dic. 2024, doi: 10.1108/ejim-06-2023-0497.
- [19] P. Gerrans, D. G. Baur, y S. Lavagna-Slater, «Fintech and responsibility: Buy-now-pay-later arrangements», *Aust. J. Manag.*, vol. 47, n.º 3, pp. 474-502, ago. 2022, doi: 10.1177/03128962211032448.
- [20] V. A. Raj, S. S. Jasrotia, y S. S. Rai, «Intensifying materialism through buy-now pay-later (BNPL): examining the dark sides», *Int. J. Bank Mark.*, vol. 42, n.º 1, pp. 94-112, ene. 2024, doi: 10.1108/IJBM-08-2022-0343.
- [21] U. Filotto, D. Salerno, G. Sampagnaro, y G. P. Stella, «Riding the wave of change: Buy now, pay later as a disruptive threat to payment cards in the global market», *Res. Int. Bus. Finance*, vol. 72, p. 102499, oct. 2024, doi: 10.1016/j.ribaf.2024.102499.
- [22] D. Cockayne y J. Loomis, «Geographies of Fintech and Everyday Life: Reconfiguring Spaces, Practices, and Scales of Digital Money and Finance», *Geogr. Compass*, vol. 19, n.º 5, p. e70028, may 2025, doi: 10.1111/gec3.70028.
- [23] R. Ashby, S. Sharifi, J. Yao, y L. Ang, «The influence of the buy-now-pay-later payment mode on consumer spending decisions», *J. Retail.*, vol. 101, n.º 1, pp. 103-119, abr. 2025, doi: 10.1016/j.jretai.2025.01.003.
- [24] K. Waliszewski, M. Solarz, y J. Kubiczek, «Factors Influencing the Use of Buy Now Pay Later (BNPL) Payments», *Contemp. Econ.*, vol. 18, n.º 4, pp. 444-457, dic. 2024, doi: 10.5709/ce.1897-9254.548.
- [25] H. P. Nguyen y T. B. D. Pham, «Determinants of risky buy-now-pay-later intentions and behaviors of Vietnamese students», *J. Financ. Serv. Mark.*, vol. 29, n.º 4, pp. 1318-1329, dic. 2024, doi: 10.1057/s41264-024-00283-7.
- [26] J. Loomis y D. Cockayne, «A feminist approach to fintech: exploring ‘buy now, pay later’ technologies and consumer fintech», *J. Cult. Econ.*, vol. 18, n.º 1, pp. 1-17, ene. 2025, doi: 10.1080/17530350.2024.2323692.
- [27] J. Coffey *et al.*, «Embodying debt: youth, consumer credit and its impacts for wellbeing», *J. Youth Stud.*, vol. 27, n.º 5, pp. 685-705, may 2024, doi: 10.1080/13676261.2022.2162376.
- [28] Y. Ji, X. Wang, Y. Huang, S. Chen, y F. Wang, «Buy now, pay later as liquidity insurance: Evidence from an early experiment in China», *China Econ. Rev.*, vol. 80, p. 101998, ago. 2023, doi: 10.1016/j.chieco.2023.101998.
- [29] C. K. Behera y R. Dadra, «Understanding young consumers’ attitude formation for new-age fintech credit products: an SOR framework perspective», *J. Financ. Serv. Mark.*, vol. 29, n.º 3, pp. 964-978, sep. 2024, doi: 10.1057/s41264-023-00247-3.
- [30] E. deHaan, J. Kim, B. Lourie, y C. Zhu, «Buy Now Pay (Pain?) Later», *Manag. Sci.*, vol. 70, n.º 8, pp. 5586-5598, ago. 2024, doi: 10.1287/mnsc.2022.03266.
- [31] S. S. Abed y R. S. Alkadi, «Sustainable Development through Fintech: Understanding the Adoption of Buy Now Pay Later (BNPL) Applications by Generation Z in Saudi Arabia», *Sustainability*, vol. 16, n.º 15, p. 6368, jul. 2024, doi: 10.3390/su16156368.
- [32] P. S. Desai y P. Jindal, «Better with buy now, pay later?: A competitive analysis», *Quant. Mark. Econ.*, vol. 22, n.º 1, pp. 23-61, mar. 2024, doi: 10.1007/s11129-023-09271-y.
- [33] S. Soni, «Regulating Buy Now, Pay Later: Consumer Financial Protection in the Era of FinTech», *SSRN Electron. J.*, 2023, doi: 10.2139/ssrn.4359956.
- [34] G. K. S. Tan, «Buy what you want, today! Platform ecologies of ‘buy now, pay later’ services in Singapore», *Trans. Inst. Br. Geogr.*, vol. 47, n.º 4, pp. 912-926, dic. 2022, doi: 10.1111/tran.12539.
- [35] L. Feng, J.-T. Teng, y F. Zhou, «Pricing and lot-sizing decisions on buy-now-and-pay-later installments through a product life cycle», *Eur. J. Oper. Res.*, vol. 306, n.º 2, pp. 754-763, abr. 2023, doi: 10.1016/j.ejor.2022.08.010.
- [36] M. Sonk y D. Tunger, «Trend mining with Orange – using topic modeling in futures research with the example of urban mobility», *Eur. J. Futur. Res.*, vol. 12, n.º 1, p. 6, mar. 2024, doi: 10.1186/s40309-024-00229-1.
- [37] C. Forlano, P. De Bernardi, y D. Yahiaoui, «Entrepreneurial universities: A bibliometric analysis within the business and management domains», *Technol. Forecast. Soc. Change*, vol. 165, p. 120522, abr. 2021, doi: 10.1016/j.techfore.2020.120522.
- [38] X. Chen y H. Xie, «A Structural Topic Modeling-Based Bibliometric Study of Sentiment Analysis Literature», *Cogn. Comput.*, vol. 12, n.º 6, pp. 1097-1129, nov. 2020, doi: 10.1007/s12559-020-09745-1.
- [39] A. Mora-Cruz y P. R. Palos-Sánchez, «Crowdfunding platforms: a systematic literature review and a bibliometric analysis», *Int. Entrep. Manag. J.*, vol. 19, n.º 3, pp. 1257-1288, sep. 2023, doi: 10.1007/s11365-023-00856-3.
- [40] H. Xie, Y. Zhang, Z. Wu, y T. Lv, «A Bibliometric Analysis on Land Degradation: Current Status, Development, and Future Directions», *Land*, vol. 9, n.º 1, p. 28, ene. 2020, doi: 10.3390/land9010028.
- [41] I. Zupic y T. Čater, «Bibliometric Methods in Management and Organization», *Organ. Res. Methods*, vol. 18, n.º 3, pp. 429-472, jul. 2015, doi: 10.1177/1094428114562629.
- [42] M. Aria y C. Cuccurullo, «bibliometrix : An R-tool for comprehensive science mapping analysis», *J. Informetr.*, vol. 11, n.º 4, pp. 959-975, nov. 2017, doi: 10.1016/j.joi.2017.08.007.
- [43] E. F. Bonilla-Chaves y P. R. Palos-Sánchez, «Exploring the Evolution of Human Resource Analytics: A Bibliometric Study», *Behav. Sci.*, vol. 13, n.º 3, p. 244, mar. 2023, doi: 10.3390/bs13030244.
- [44] J. A. Moral-Muñoz, E. Herrera-Viedma, A. Santisteban-Espejo, y M. J. Cobo, «Software tools for conducting bibliometric analysis in science: An up-to-date review», *El Prof. Inf.*, vol. 29, n.º 1, ene. 2020, doi: 10.3145/epi.2020.ene.03.
- [45] M. K. Verma y M. Yuvaraj, «AI-Based Literature Reviews: A Topic Modeling Approach», *J. Inf. Knowl.*, pp. 97-104, may 2023, doi: 10.17821/srels/2023/v60i2/170967.
- [46] J. Demsar, J. Demsar, T. Curk, T. Curk, A. Erjavec, y A. Erjavec, «Orange: Data Mining Toolbox in Python», *J. Mach. Learn. Res.*, vol. 14, pp. 2349-2353, 2013.
- [47] C. Sievert y K. Shirley, «LDAvis: A method for visualizing and interpreting topics», en *Proceedings of the Workshop on Interactive Language Learning, Visualization, and Interfaces*, Baltimore, Maryland, USA: Association for Computational Linguistics, 2014, pp. 63-70. doi: 10.3115/v1/W14-3110.
- [48] M. L. Pao, «Lotka’s law: A testing procedure», *Inf. Process. Manag.*, vol. 21, n.º 4, pp. 305-320, ene. 1985, doi: 10.1016/0306-4573(85)90055-X.
- [49] M. J. Cobo, A. G. López-Herrera, E. Herrera-Viedma, y F. Herrera, «SCIMAT : A new science mapping analysis software tool», *J. Am. Soc. Inf. Sci. Technol.*, vol. 63, n.º 8, pp. 1609-1630, ago. 2012, doi: 10.1002/asi.22688.
- [50] C.-F. Ni, R. Lundblad, C. Dykeman, R. Bolante, y W. Łabuński, «Content analysis of psychological first aid training manuals via topic modelling», *Eur. J. Psychotraumatology*, vol. 14, n.º 2, p. 2230110, nov. 2023, doi: 10.1080/200808066.2023.2230110.
- [51] R. Zainudin, N. S. Mahdzan, y M.-Y. Yeap, «Determinants of credit card misuse among Gen Y consumers in urban Malaysia», *Int. J. Bank Mark.*, vol. 37, n.º 5, pp. 1350-1370, jul. 2019, doi: 10.1108/IJBM-08-2018-0215.
- [52] H. Liu, J. Pancras, y M. Houtz, «Managing Customer Acquisition Risk Using Co-operative Databases», *J. Interact. Mark.*, vol. 29, n.º 1, pp. 39-56, feb. 2015, doi: 10.1016/j.intmar.2014.09.002.
- [53] D. K. Abd Haling, U. Hasanah, N. Nuriatullah, y N. Riefma Hidayah, «Analisis Implementasi Kartu Kredit Syariah pada PT. Bank BNI Syariah Cabang Palu Perspektif Ekonomi Islam», *J. Ilmu Perbank. Dan Keuang. Syariah*, vol. 1, n.º 1, pp. 1-15, jul. 2019, doi: 10.24239/jipsya.v1i1.2.1-15.

- [54] R. Dadra, A. Sonavane, S. Bachwani, y C. K. Behera, «Beyond credit cards: A TEP perspective on buy-now-pay-later adoption», *J. Glob. Sch. Mark. Sci.*, vol. 34, n.º 4, pp. 459-484, oct. 2024, doi: 10.1080/21639159.2024.2391282.
- [55] V. A. Raj, S. S. Jasrotia, y S. S. Rai, «Role of perceived risks and perceived benefits on consumers behavioural intention to use Buy-Now, Pay-Later (BNPL) services», *J. Facil. Manag.*, vol. 23, n.º 2, pp. 330-351, mar. 2025, doi: 10.1108/JFM-01-2023-0004.
- [56] A. Kumar, J. Salo, y R. Bezawada, «The effects of buy now, pay later (BNPL) on customers' online purchase behavior», *J. Retail.*, vol. 100, n.º 4, pp. 602-617, dic. 2024, doi: 10.1016/j.jretai.2024.09.004.
- [57] A. Kutbi, A. Alsilimani, y R. M. Khan, «THE EFFECT OF BUY NOW, PAY LATER FINTECH ON TRADITIONAL FINANCIAL SERVICES AND CONSUMER BEHAVIOR IN SAUDI ARABIA», *Financ. Credit Act. Probl. Theory Pract.*, vol. 2, n.º 55, pp. 281-297, abr. 2024, doi: 10.55643/fcaptop.2.55.2024.4323.