Millennials and Buy Now Pay Later Adoption in Sabah: Trends, Determinants, and Insights from the Unified Theory of Acceptance and Use of Technology 2 and Perceived Risk Framework

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ABSTRACT

Buy Now, Pay Later (BNPL) has become a notable financial innovation, enabling consumers to defer payments for online and in-store purchases. Although existing studies have centred largely on Generation Z, Millennials remain comparatively underexamined despite representing a significant proportion of global users. This group demonstrates higher economic stability, stronger financial literacy, and more mature digital habits, including hedonic and habitual motivations that shape their intention to adopt and continue using Buy Now, Pay Later services. Established behavioural frameworks such as the Theory of Planned Behaviour (TPB), the Technology Acceptance Model (TAM), and the Unified Theory of Acceptance and Use of Technology (UTAUT) provide useful foundations but insufficiently incorporate cost, experiential, behavioural, and risk considerations. UTAUT2 offers an extended approach yet remains limited in addressing multidimensional perceived risks, including performance, psychological, social, time, and delivery risks. This review synthesises studies published between 2023 and 2025, with a focus on adoption patterns in Malaysia, Indonesia, and India, and particular attention to Millennials and regional nuances such as Sabah. The integration of UTAUT2 with perceived risk theory provides a more comprehensive understanding of behavioural intention and highlights key gaps to inform policymakers, practitioners, and future research.

Keywords: Buy Now Pay Later, Millennials, UTAUT2, Perceived Risk, Behavioral Intention

INTRODUCTION

Buy Now, Pay Later (BNPL) has emerged as one of the fastest-growing innovations in digital financial technology, enabling consumers to defer payments for online and offline purchases. Globally, the BNPL market is projected to reach USD 160.7 billion by 2032, reshaping consumer purchasing behaviour through short-term, interest-free credit arrangements (Galetsi, Katsaliaki and Kumar, 2023; Raj, Jasrotia and Rai, 2024; Spherical Insights & Consulting, 2023) . In Malaysia, the BNPL market is expected to reach USD 4.76 billion by 2029, up from USD 2.78 billion in 2024 (Research and Markets, 2024), reflecting growing consumer demand for flexible payment solutions that reduce upfront financial burden. Beyond convenience, BNPL services are increasingly positioned as instruments of digital financial inclusion, particularly for digitally engaged consumers seeking accessible short-term credit options.

BNPL adoption in Malaysia has expanded steadily, reaching approximately 5.1 million active users. However, this figure remains considerably lower than Indonesia’s 13.6 million users, indicating that BNPL market penetration in Malaysia remains relatively untapped given its 34.1 million population (Statista, 2024; Department of Statistics Malaysia, 2024). Understanding generational and regional differences is therefore crucial, as consumer decision-making varies with cultural, socioeconomic, and infrastructural conditions; in Malaysia, these differences are reflected in communications infrastructure and usage indicators (Malaysian Communications and Multimedia Commision, 2023), persistent inter-state income gaps (Department of Statistics Malaysia, 2022), and the latest household income distributions reported for 2024 (Department of Statistics Malaysia, 2025). For example, in Sabah, limited digital infrastructure, a substantially lower median household income (RM 4,861, compared to the national median of RM 7,017), and uneven financial inclusion may contribute to distinct BNPL adoption patterns (Department of Statistics Malaysia, 2025).

Although prior BNPL research has predominantly focused on Generation Z, Millennials represent an increasingly influential segment due to their greater economic stability, digital literacy, and financial capacity. Nevertheless, existing Malaysian BNPL studies largely rely on aggregated national samples or focus on specific urban areas, often assuming homogeneous technology acceptance across populations (Osman et al., 2024; Wong et al., 2024). Consequently, variations related to generational characteristics, regional contexts, and user experiences may remain insufficiently captured. Moreover, the literature presents fragmented and sometimes inconsistent findings regarding key adoption drivers, while perceived risk is frequently examined in a limited, unidimensional manner. This raises concerns about the adequacy of current approaches in explaining BNPL adoption, continued usage, and repayment behaviour across diverse consumer segments and regions.

Accordingly, this review aims to synthesise existing BNPL literature by highlighting underexplored issues related to Millennials, regional contexts such as Sabah, and the multidimensional nature of perceived risk. By consolidating and critically evaluating current findings, this review provides a structured foundation for understanding BNPL adoption and identifies directions for future research to support responsible and sustainable BNPL usage.

LITERATURE REVIEW

Mat et al. (2025) investigated the factors influencing Generation Z students' adoption of Buy Now, Pay Later (BNPL) services at Universiti Teknologi MARA (UiTM) Selangor, using a sample of 101 respondents, comprising 38 males and 63 females. Guided by the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), the study employed a structured survey to measure users' perceptions, behavioural intentions, and usage patterns. The findings indicate that perceived usefulness significantly drives BNPL adoption, as students value the flexibility and convenience the service provides. Financial literacy was identified as an important factor in supporting responsible usage, mitigating risks associated with overspending and debt accumulation. Social influence, including peer recommendations and digital marketing exposure, also positively affected adoption intentions. However, perceived risk, particularly concerns about hidden fees, financial instability, and regulatory gaps remained a major barrier. While the study offers valuable insights into the behavioural drivers of BNPL use among Generation Z, its small and localised sample limits the generalisability of its conclusions, indicating the need for broader and more diverse research.

Ismail et al. (2025) proposed a conceptual study exploring the factors influencing impulsive online purchasing using BNPL services among Generation Z in Malaysia. Drawing on the Theory of Planned Behaviour (TPB), the study considers attitude, subjective norms, and perceived behavioural control as potential determinants of online purchasing behaviour. The authors further suggest that financial challenges commonly faced by Generation Z may moderate these relationships, highlighting the role of financial vulnerability. Although empirical data were not collected, the study contributes theoretically by identifying relevant constructs that may shape consumer engagement with BNPL services, thereby offering a foundation for future empirical work.

Huey et al. (2023) examined the factors influencing Generation Z's adoption of BNPL services in Malaysia using a quantitative survey involving 401 respondents, consisting of 179 males and 222 females. The majority of respondents were Chinese (365), followed by Malay (24) and Indian (12). In terms of income, most respondents earned below RM 2,000 (291), followed by RM 4,001–6,000 (17) and RM 6,001–8,000 (6). Using TAM and

UTAUT, the study analysed perceived ease of use, perceived usefulness, social influence, perceived risk, and financial literacy. The results show that perceived ease of use, perceived usefulness, social influence, and financial literacy positively influence the intention to adopt BNPL services, whereas perceived risk exerts a negative effect.

Wong et al. (2024) examined BNPL adoption among Malaysian consumers using a quantitative research design and SPSS analysis on data from 384 respondents: 180 males and 204 females. The study did not target a specific generation; instead, respondents were distributed across age groups, with the largest segment aged 26–35 years (153), followed by 36–45 years (114), 18–25 years (69), 46–55 years (38), and above 55 years (10). Ethnicity was led by Malay respondents (162), followed by Chinese (107), Indian (101), Siamese (13), and Native Sabah (1). Income levels were dominated by individuals earning RM 2,501–4,000 (150). Educational qualifications varied, with most holding Diplomas or Certificates (167), followed by Bachelor's degrees (142). The study adopted UTAUT and extended it with materialism, user-friendliness, and trust. The findings reveal that social influence, materialism, and user-friendliness significantly and positively affect BNPL adoption, with social influence being the strongest determinant, while trust does not significantly affect behavioural intention.

Min and Cheng (2023) investigated BNPL adoption among Malaysian consumers using a quantitative approach with 200 respondents (80 males and 120 females). The largest age group was 25 years and below (100 respondents), followed by 26–35 years (63), 36–45 years (30), and 46–55 years (7). Income data indicate that most respondents were from the B40 group earning RM 4,849 or below (139). Using UTAUT as the theoretical framework and including perceived security as an additional construct, the study found that performance expectancy, facilitating conditions, and perceived security significantly influenced intention to use BNPL, while social influence and effort expectancy did not. The results highlight the importance of system performance, platform stability, and consumer trust in security mechanisms.

Tang, Sa'adi and Andam (2025) analysed BNPL adoption among Generation Y and Generation Z in Sarawak, Malaysia, using a quantitative approach with 384 respondents (178 males and 206 females). The sample comprised 200 Gen Y and 184 Gen Z respondents, with ethnic representation predominantly Chinese (115), followed by Iban (108), Malay (98), and Bidayuh (45). Most respondents were single (196), and educational attainment was led by undergraduates (195). Using UTAUT extended with perceived security and attitude, the findings show that performance expectancy, effort expectancy, attitude, and perceived security significantly influence BNPL adoption among Gen Y and Gen Z, emphasising the importance of both functional and psychological determinants.

Izham et al. (2025) explored the relationship between BNPL and impulsive buying behaviour among Generation Z consumers in Shah Alam using a quantitative approach with 350 respondents (180 males and 170 females). Ages were concentrated between 22–28 years (118), 18–21 years (112), and below 18 (62). Occupations were dominated by part-time workers (148) and students (144). Using TAM, the study examined deferred payment structure, perception of affordability, and ease of use. All three factors significantly influenced impulsive buying behaviour, with deferred payment structure showing the strongest effect.

Raj, Jasrotia and Rai (2025) examined behavioural intention towards BNPL services in India using data from 537 BNPL users, analysed through SPSS 23 and PLS-SEM. Respondents included 334 males and 203 females, with most aged up to 24 years (379). Most held a graduation degree (285). BNPL usage frequency was high, with 277 respondents using BNPL more than twice per month. Grounded in UTAUT2 and extended with perceived risk and perceived benefits, the findings show that perceived benefits, performance expectancy, effort expectancy, habit, and social influence significantly increase intention to use BNPL, while perceived risk negatively influences intention. Behavioural intention also positively affects actual usage.

Azzahra et al. (2023) focused on behavioural intention and usage of Shopee PayLater among millennial users in Indonesia using a sample of 122 respondents (95 males and 27 females). Usage durations varied, with most using SPayLater for less than one year (70). Applying UTAUT2, the study found that hedonic motivation and habit significantly influence behavioural intention, while other UTAUT2 constructs showed no significant effect. Behavioural intention, facilitating conditions, and habit significantly shaped actual usage behaviour.

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Susetyarini and Fauzi (2020) examined consumers' intention to use FinTech payment services in Malaysia during the COVID-19 pandemic using data from 546 respondents analysed with PLS-SEM. Respondents were predominantly female (310) and aged 26–35 years (229). Ethnic distribution was led by Malay respondents (267). Using an integrated UTAUT–VAM framework, the study found that performance expectancy, effort expectancy, social benefit, privacy risk, and openness to change significantly influenced intention to use FinTech payments, with openness to change emerging as the strongest predictor. Social influence, economic benefit, security risk, and regulatory support were not significant, suggesting that UTAUT and VAM constructs were only partially supported.

METHOD

Research Design

This study adhered to the principles of content analysis, focusing on findings from multiple studies published in scientific journals. The research method was adapted from the approach of Susetyarini and Fauzi (2020). The reviewed studies were predominantly conducted in Malaysia (eight studies), followed by Indonesia (one study) and India (one study).

Data Sources

Data were collected through content analysis of articles examining factors influencing Buy Now Pay Later (BNPL) services. The articles were sourced from Google Scholar and selected based on their relevance to BNPL factors. A total of 10 articles, including studies conducted in Malaysia, Indonesia, and India, published online from 2023 to 2025, were thoroughly analyzed. This approach enables the determination of the extent of discussion on BNPL factors, helps identify research gaps, and minimizes information bias.

Research Instrument

The instrument used in this study was a content analysis guideline that included relevant aspects under observation (Table 1). A total of six main aspects were reviewed for content analysis. These aspects included (1) type of theory, (2) type of independent variables, (3) research subject, and (4) study location.

TABLE 1. ASPECTS AND CATEGORIES USED FOR CONTENT ANALYSIS

No	Aspect	Categories	
1	Type of theory	A. 1- TAM A. 2- TPB	A. 3- UTAUT A. 4- UTAUT2
2	Type of independent variable	B.1- Perceived Usefulness B.2- Perceived Ease of Use B.3- Social Norms B.4- Perceived Control Behaviour B.5- Attitude B.6- Performance Expectancy B.7- Effort Expectancy B.8- Social Influence B.9- Facilitating Condition B.10- Hedonic Motivation B.11- Price Value B.12- Habit B.13- Financial Literacy	B.14- General Perceived Risk (Financial & Privacy) B.15- Materialism B. 16- User-Friendliness B.17- Trust B.18- Perceived Security B.19- Deferred Payment B.20- Perception of Affordability B.21- Perceived Benefit B.22- Openness to Change B.23 - Economics Benefit B. 24- Perceived Security B. 25- Perceived Privacy B. 26- Social Benefit

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3	Research Subject	C.1- Gen Z C.2- Gen Y & Gen Z	C.3- Millennial Generation C.4- General
4	Location of study	D.1- Malaysia Context D.2- Shah Alam, Selangor D.3- UiTM Shah, Selangor	D.4- Sarawak (Urban & Rural) D.5- Indonesia D.6- India

Data Analysis

In the review process, each article was classified into a specific category based on predefined criteria. The classification was determined using information provided by the authors in the abstract, methodology, and discussion sections. Subsequently, the collected data were presented in the form of a bar chart.

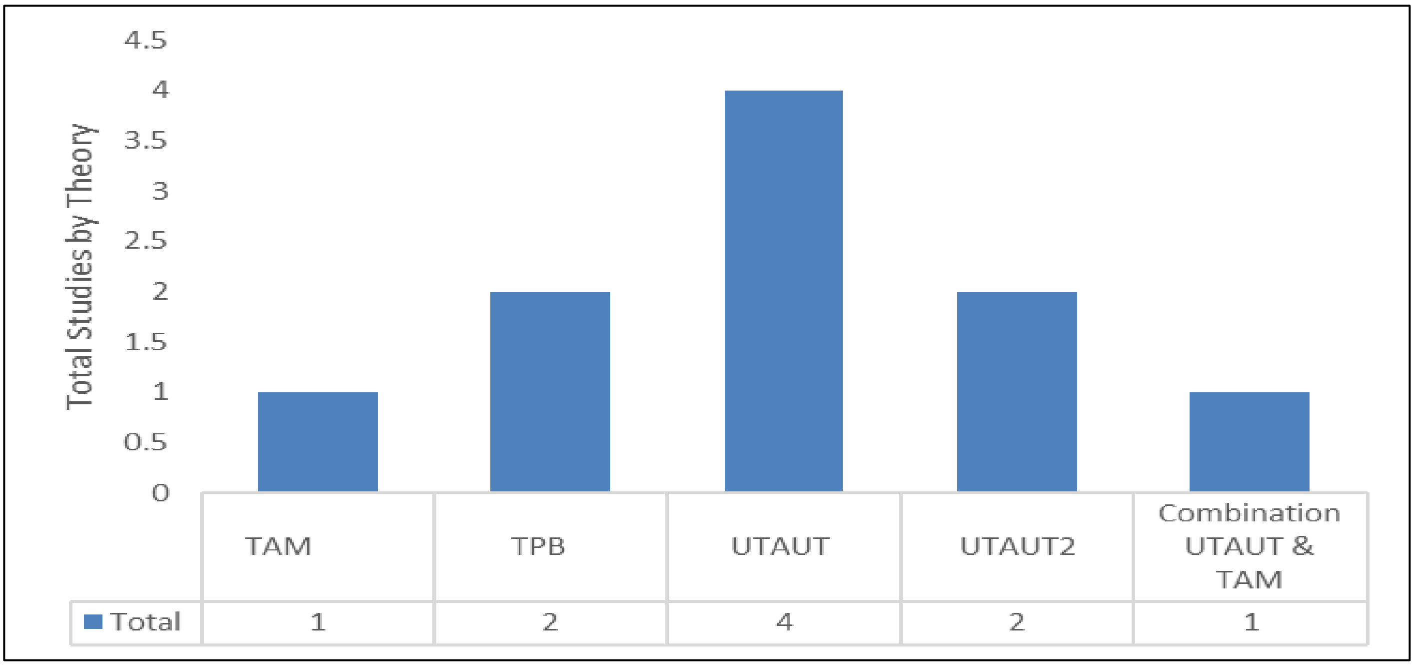
FINDING AND DISCUSSION

Type of Theory

Based on Fig. 1, the UTAUT model was the most commonly used theory to study BNPL services, with 4 studies applying it. TPB and UTAUT2 were each used in 2 studies, while TAM and a combination of UTAUT and TAM were less common. Studies using UTAUT2 were mainly conducted in Indonesia and India, reflecting an international trend to focus on individual-level factors, since BNPL adoption involves personal cost, enjoyment, and habit (Raj, Jasrotia and Rai, 2025; Azzahra et al., 2023). In contrast, most research from Malaysia relied on UTAUT, TAM, or TPB models. Research using UTAUT2 to explore BNPL behavior in Malaysia is still limited, indicating a clear gap and the need for context-specific studies.

The UTAUT model explains factors such as performance expectancy, effort expectancy, social influence, and facilitating conditions (Huey et al., 2023; Min and Cheng, 2023), but it has limitations in capturing individual-level behaviors, particularly regarding cost, enjoyment, and habit (Venkatesh, Thong and Xu, 2012; Marikyan and Papagiannidis, 2025). UTAUT2 addresses these individual factors more effectively, explaining up to 74% of behavioral variance and 52% of usage variance (Venkatesh, Thong and Xu, 2012). Scholars consider UTAUT2 the most suitable model for understanding individual user behavior in BNPL adoption (Marikyan and Papagiannidis, 2025; Azzahra et al., 2023; Raj, Jasrotia and Rai, 2025).

Figure 1. Distribution of BNPL studies by theory type



Type of Independent Variable (IV)

Based on Fig. 2, the number of independent variables used in BNPL studies from Malaysia, Indonesia, and India indicates growing interest in understanding user behavior comprehensively. Many researchers have integrated new predictor variables into established theories or combined TPB, TAM, UTAUT, and UTAUT2 models to examine BNPL adoption and usage (Wong et al., 2024; Mat et al., 2025; Ismail et al., 2025; Huey et al., 2023; Tang, Sa'adi and Andam, 2025; Izham et al., 2025; Raj, Jastoria and Rai, 2025; Chen, Habibullah and Sapar, 2024). Such integration is necessary due to the complexity of customer behavior and the need to adapt models to specific contextual conditions (Raj, Jastoria and Rai, 2025).

Despite the international trend, research in Malaysia remains limited in examining users' perceptions of cost (price value), enjoyment (hedonic motivation), and habit. In contrast, studies in Indonesia and India highlight these factors as crucial for long-term adoption and actual usage of BNPL services (Raj, Jastoria and Rai, 2025; Azzahra et al., 2023), revealing a clear research gap in the Malaysian context.

In addition, there is an increasing trend in the exploration of risk perceptions related to BNPL services. Numerous studies have shown that users' perceptions of risk play a significant role in BNPL adoption, as adoption decisions are influenced by perceived risks (Raj, Jastoria and Rai, 2025; Mat et al., 2025; Wong et al., 2024; Min and Cheng, 2023; Tang, Sa'adi and Andam, 2025; Chen, Habibullah and Sapar, 2024). Raj, Jastoria and Rai (2025) stated that higher levels of perceived risk faced by users lead to a decrease in their intention to adopt BNPL services. This suggests that research on risk perceptions in BNPL should be extended to include additional types of risk, as many previous studies have primarily focused on limited risk dimensions, such as privacy, financial, and security risks (Raj, Jastoria and Rai, 2025; Mat et al., 2025; Wong et al., 2024; Min and Cheng, 2023; Tang, Sa'adi and Andam, 2025; Chen, Habibullah and Sapar, 2024).

Performance and time efficiency during transactions also influence BNPL adoption (Azzahra et al., 2023). Evidence from related domains such as electronic bill payment systems (Featherman and Pavlou, 2003), credit card usage (Trinh, Tran and Vuong, 2020), and online shopping (Mahbob, Hasim and Ishak, 2023) demonstrates that performance, psychological, time, social, and delivery risks significantly impact behavioral intention. However, these risks have not been systematically studied in BNPL, particularly in Malaysia. Furthermore, psychological and social risks are relevant because BNPL usage involves personal finance and social perceptions. Users may feel uncomfortable revealing installment-based purchases due to social concerns (Christen and Morgan, 2005). Similarly, delivery risks affect service quality, as timely and accurate delivery is critical in online transactions (Mahbob, Hasim and Ishak, 2023).

Overall, this review identifies a gap in understanding cost, enjoyment, habit, and multiple risk dimensions in the Malaysian BNPL context. Future research should extend investigations to performance, time, psychological, social, and delivery risks to better explain user behavioral intentions and support adoption. Proactive risk management is essential to increase user confidence and reduce hesitation in adopting BNPL services (Mahbob, Hasim and Ishak, 2023).

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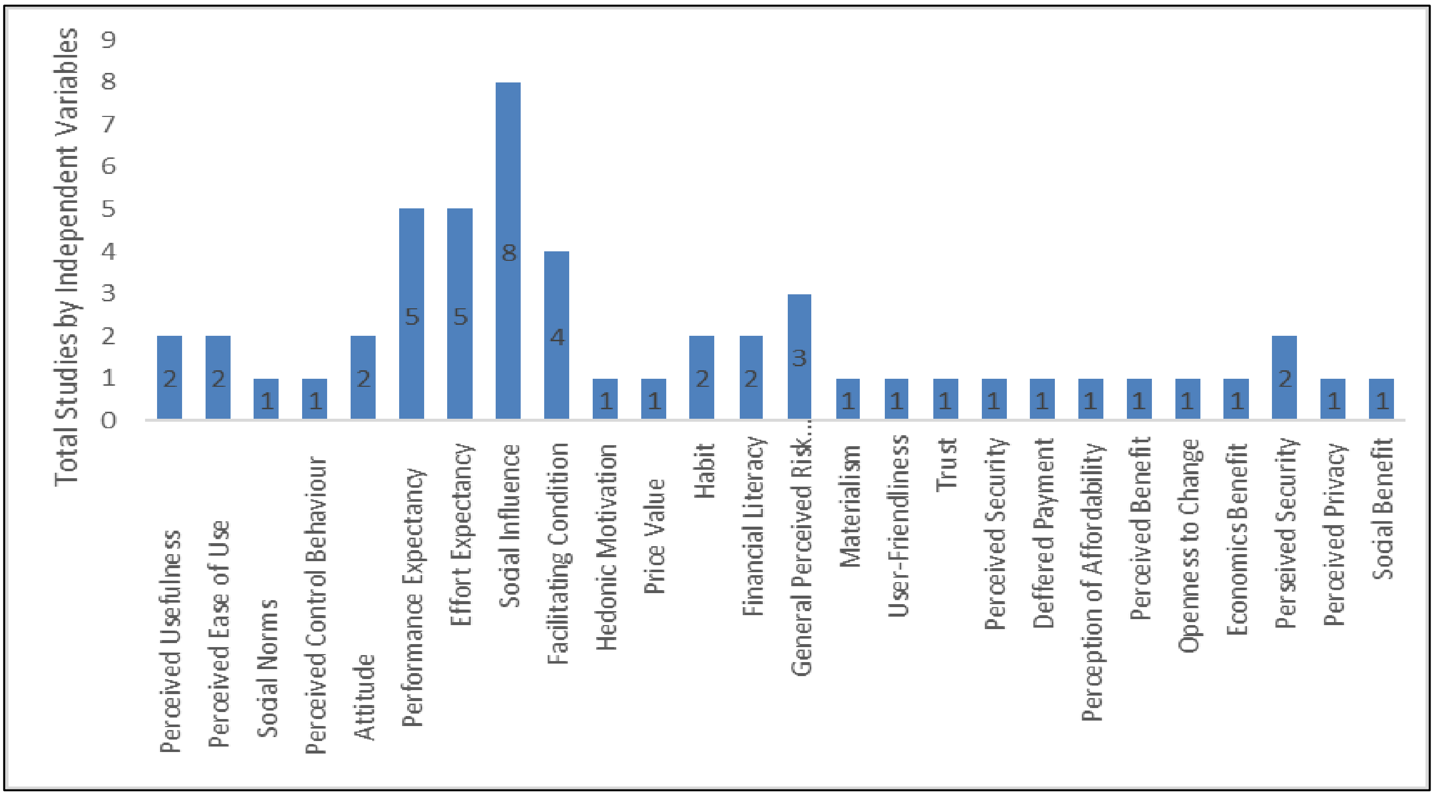
Figure 2. Distribution of BNPL studies by independent variables



Type of Subject

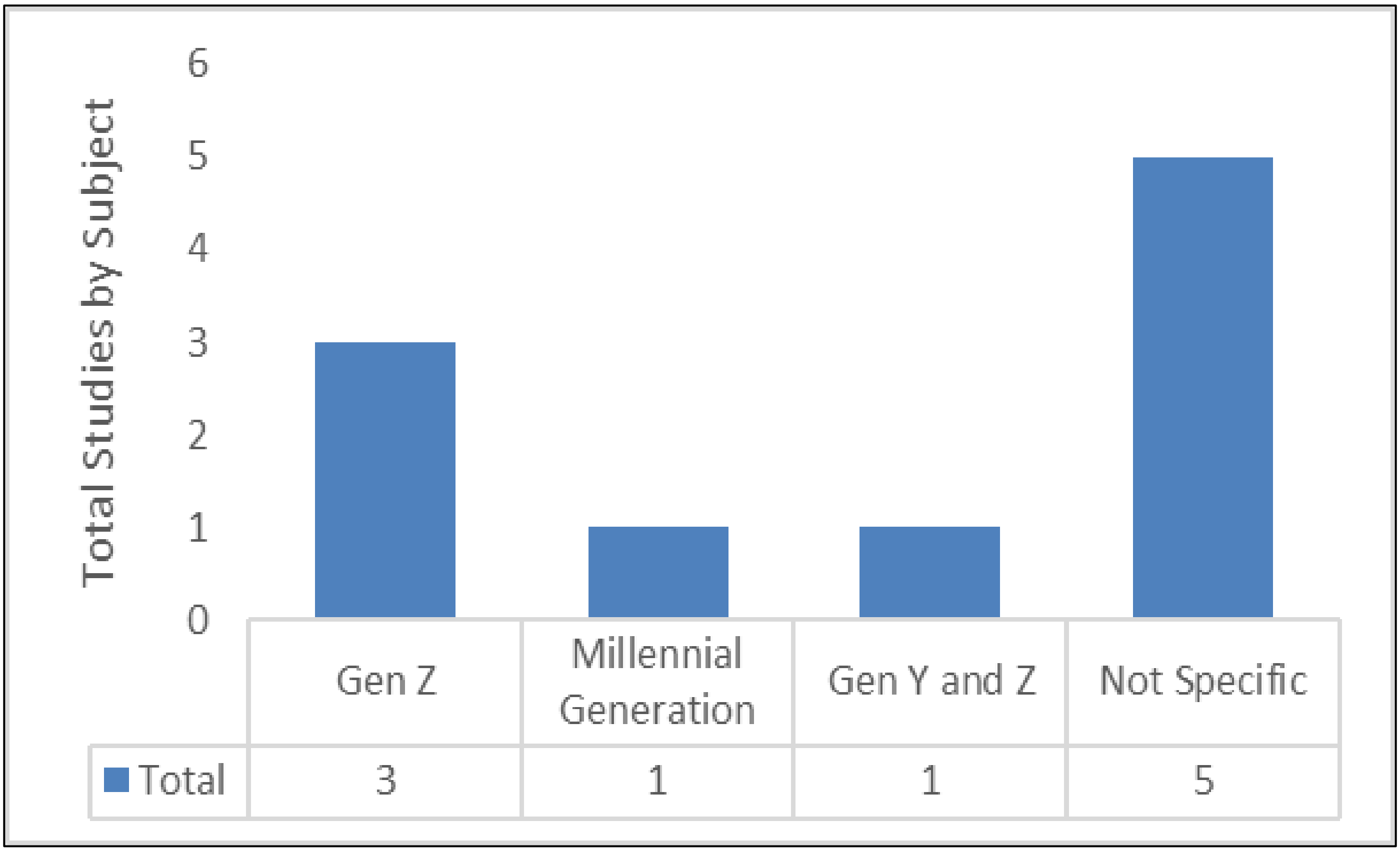
Based on Fig. 3, the distribution of study subjects in BNPL research shows that eight studies were conducted in Malaysia, followed by one study each in Indonesia and India. Most BNPL studies did not focus on a specific generational group (five studies), while three studies examined Generation Z, one study focused exclusively on Millennials, and one included both Generation Y and Z. In the Malaysian context, BNPL studies largely employ non-specific generational samples, with respondents classified as general users. Studies specifying generational groups primarily focus on Generation Z or combined Y and Z cohorts, whereas research in Indonesia predominantly examines Millennials, and studies in India largely rely on non-specific generational samples.

This pattern highlights a clear research gap, particularly regarding the behavioral characteristics of specific generational cohorts, especially Millennials. Prior studies indicate that different generations exhibit distinct decision-making processes, financial attitudes, and technology adoption behaviors (Putri and Ishak, 2024; Nga and Yien, 2013; Marjerison et al., 2025), influencing how users perceive financial risks, evaluate costs, and respond to convenience and promotional strategies (Simcock, Sudbury and Wright, 2006; Bauman et al., 2020; Yang et al., 2015). While Millennials and Gen Z are both categorized as ICT-literate (Min and Cheng, 2023), they differ in cognitive traits and decision-making patterns (Umunadi, 2011). Millennials generally make careful, analytical decisions, weighing long-term implications and financial risks before acting (Azzahra et al., 2023; Burstein, 2013; Kim, Anderson and Seay, 2019; Gorman, Nelson and Glassman, 2004), whereas Gen Z tends to act faster and more adaptively, relying on technological convenience, instant information, and user experience, resulting in more spontaneous, context-driven decisions (Thangavel, Pathak and Chandra, 2019; Ridwan, Musa and Haeruddin, 2025; Dimitriou and AbouElgheit, 2019).

Focusing on specific generational cohorts is crucial because BNPL services are closely associated with personal financial management and consumption behavior, which vary across age groups (Halim et al., 2024). For instance, Millennials may demonstrate different spending priorities, risk tolerance, and repayment attitudes compared to Generation Z, who are more influenced by social media exposure and peer norms (Pokharel and Maharjan, 2024; Irawan and Khoir, 2025; Tolani et al., 2025). The lack of generational specificity in Malaysian

BNPL studies limits understanding of adoption patterns and user behavior. Therefore, future BNPL research should emphasize generational-based analysis, particularly by isolating Millennials, who represent a dominant global population cohort and are key contributors to the rapid growth of the BNPL market (Spherical Insights and Consulting, 2023). Examining BNPL adoption among Millennials would provide more precise insights into decision-making processes and support the development of targeted, generational-specific BNPL strategies and policies.

Figure 3. Distribution of BNPL studies by subject



Type of Location

Based on Fig. 4, the geographical distribution of BNPL studies reveals a strong concentration of research in Peninsular Malaysia, with limited representation from East Malaysia, particularly Sabah. Among the studies reviewed, four Malaysian studies excluded Sabah from their samples. Only one study examined Malaysia at the national level while including respondents from Sabah and Labuan, with a combined sample size of 54. Other location-specific studies were conducted in Shah Alam, Selangor, including one study at UiTM Shah Alam, as well as one study in Sarawak that covered both urban and rural areas. In addition to Malaysian studies, one study was conducted in Indonesia and another in India.

Recent BNPL research in Malaysia demonstrates an emerging tendency to analyse user behaviour within geographically bounded contexts. This regional focus is important, as financial decision-making is shaped by cultural norms, socioeconomic conditions, and infrastructural development, all of which vary significantly across locations (Leyshon and Thrift, 1994; Kabakova and Plaksenkov, 2018; Aggarwal and Goodell, 2014; Malaysian Communications and Multimedia Commission, 2023; Department of Statistics Malaysia, 2022).

Despite this emerging trend, Sabah remains underrepresented in the existing BNPL literature. Although some studies included respondents from Sabah, these individuals were frequently aggregated with those from Labuan, resulting in a combined sample of only 54 respondents. Such aggregation limits analytical precision by obscuring the distribution of respondents across the two regions and may compromise data accuracy and reliability

(Gotway and Young, 2002); Calderero and Marques, 2010; De Leeuw, 2005). This limitation is particularly salient given the pronounced differences between Sabah and Labuan in terms of infrastructure, cultural context, and socioeconomic characteristics. In 2022, median household income in Sabah was RM 4,577, compared with RM 6,904 in Labuan (Department of Statistics Malaysia, 2022). Sabah's larger rural population and relatively constrained digital infrastructure (Fang et al., 2022; Communications and Multimedia Commission, 2023) are likely to influence access to BNPL services, adoption patterns, and repayment behaviour differently from those in Labuan.

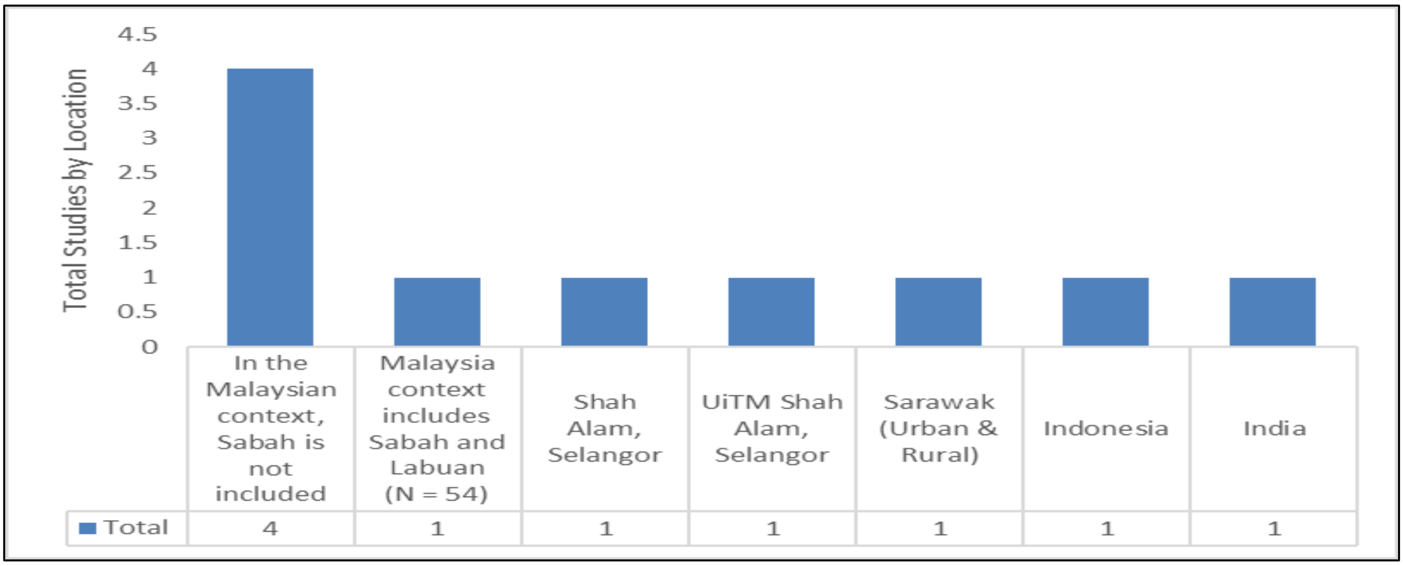
Sample size, study location, and respondent characteristics play a crucial role in explaining variability in BNPL research outcomes. Financial decision-making is shaped by factors such as cultural background, socioeconomic status, and regional infrastructure (Jones and Lucas, 2012; Van Kerkhoff and Pilbeam, 2017; Wilkerson et al., 2017). Consequently, the reliability and generalisability of survey findings depend heavily on adequate sample sizes. Based on the Krejcie-Morgan sample size guidelines, a minimum of 384 respondents is recommended for populations exceeding one million to achieve acceptable confidence levels and minimise sampling error (Krejcie and Morgan, 1970).

With Sabah's population estimated at 3,418,785 people (Department of Statistics Malaysia, 2025), the relatively small samples employed in existing BNPL studies, particularly those that combine respondents from Sabah and Labuan, raise concerns regarding representativeness. The aggregation of data from regions with distinct socioeconomic and infrastructural characteristics further constrains the ability to draw meaningful location-specific inferences. As a result, the current body of BNPL research offers only partial and fragmented insights into user behaviour in Sabah, highlighting a clear methodological gap in capturing regional heterogeneity within Malaysia.

Consequently, current research provides limited insights into BNPL user behavior and perceptions in Sabah, highlighting a critical gap in understanding regional variations in BNPL adoption. Addressing these differences is essential for designing effective BNPL strategies, as location-specific factors influence users' perceptions of cost, risk, convenience, and technology adoption. Without accounting for these factors, providers risk implementing strategies that may not resonate with local users, potentially reducing adoption rates and overall user satisfaction (Niven et al., 2015; Karim et al., 2024; Oliva and Kallenberg, 2003; Hage et al., 2013).

Future research should therefore prioritize granular, region-specific studies, especially in underrepresented areas like Sabah. Collecting disaggregated data would generate richer, contextually relevant insights (Sil, 2018; Mair, 2024; Ahram, 2011), enabling policymakers and BNPL providers to tailor offerings to local needs while accounting for socioeconomic, infrastructural, and cultural diversity.

Figure 4. Distribution of BNPL studies by location



CONCLUSION

This review examined BNPL studies published between 2023 and 2025 to identify research trends, theoretical approaches, predictor variables, research subjects, and study locations. The findings indicate growing scholarly interest in BNPL adoption in Malaysia, where most studies rely on established models such as UTAUT, while the application of UTAUT2 and examination of individual-level factors, including cost, enjoyment, and habit, remain underexplored compared to studies from Indonesia and India. Social influence emerged as the most frequently examined predictor, whereas important dimensions such as price value, hedonic motivation, habit, and diverse risk perceptions received limited attention. Moreover, BNPL research in Malaysia largely employs non-specific generational samples and focuses on the general national context, with minimal consideration of specific cohorts, such as Millennials, and underrepresented regions like Sabah.

Alluding to these findings, several recommendations are proposed for future BNPL research. Firstly, researchers should extend the application of theoretical models by incorporating UTAUT2 and other extended frameworks to better capture individual-level behavioral factors. Secondly, future studies should broaden the range of predictor variables by examining multiple dimensions of perceived risk, including performance, time, psychological, social, and delivery risks. Thirdly, greater attention should be given to generational-based analyses, particularly focusing on Millennials, to enhance understanding of generational differences in financial decision-making and technology adoption. Finally, BNPL research should adopt more granular, location-specific approaches, especially in underrepresented areas such as Sabah, to reduce information bias and generate more contextually relevant insights that support effective, inclusive, and context-sensitive BNPL strategies for both policymakers and service providers.

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