



Conference Paper

A Proposed Framework for Assessing BNPL (Buy Now, Pay Later) Adoption and its Impact on Consumers' Buying Behavior

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Abstract.

Buy Now, Pay Later (BNPL) services allow retailers and enterprises to offer their consumers installment-based payment plans to help them manage their personal finances. As such, this research aims to examine the impact of BNPL services on consumer buying behavior. BNPL services are segmented into a convenient payment system, flexible repayment system, and accessible credit system. The study proposed primary data to be collected from Malaysian youth aged between 18 to 40 years through questionnaire. Partial Least Square-Structural Equation Modeling (PLS-SEM) is proposed to analyze the data. The conceptualized framework is underpinned based on the Diffusion of Innovation (DOI) theory that suggests that the adoption of BNPL services has a significant and positive impact on consumer buying behavior. This study will provide insights for regulators and industry players to decide BNPL's future and to enhance its availability and adoption among the consumers.

Keywords: BNPL services, convenient payment system, flexible repayment system, and accessible credit system, diffusion of innovation theory

1. Introduction

In the modern era, digital communication technologies have become integral part of billions of people's lives, and the COVID-19 pandemic significantly impacted consumer behavior, leading to increased engagement in online shopping, particularly among young people [1]. Rapidly changing environment due to pandemic leads toward increasing of consumer engaging in purchasing online, gave rise to several online payment schemes, including Buy Now, Pay Later (BNPL). BNPL is a payment method that allows consumers to make purchases and defer payment to a later date, usually in installments over a period. The surge in online shopping has given rise to BNPL options, which have gained popularity due to their convenience and affordability compared to traditional

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payment methods [2]. BNPL services allows consumers to make purchases and defer payments in installments without the need for a loan or credit check, offering flexibility in payment schedules. As the pandemic reshaped the retail sector in Malaysia, many FinTech companies have implemented BNPL solutions to cater to the demand for easier access to credit, especially among the underbanked and unbanked population [3].

This payment method has gained popularity in recent years, with a number of providers offering BNPL services for online and in-store purchases. BNPL services typically allow consumers to make purchases without having to pay the full amount upfront, which can be more convenient and affordable than other payment methods. The payment plan for BNPL usually includes interest or fees, although some providers offer interest-free or fee-free plans. BNPL services can provide a perceived level of flexibility and control over payment schedules, allowing consumers to choose the payment plan that best fits their financial situation.

The Covid-19 pandemic has undoubtedly changed consumer behavior and reshaped the retail sector in Malaysia. The pandemic-led financial uncertainty has taught consumers to become more cautious with their spending habits. Consequently, giving the opportunity for many FinTech companies in the country to implement buy now, pay later (BNPL) solutions, replacing the traditional payment methods with a more flexible, convenient financing option [4], [5]. Notably, 55% of the Malaysian population is still underbanked and unbanked. This sizeable gap in the traditional banking system represented the growing need for efficient digital banking solutions to provide consumers with easier access to credit in the country [6]. Players including Grab, Pine Labs, Atome, and Adyen have all jumped at the opportunity to this potentially lucrative gap in the Malaysian market. Medium to long term growth story of BNPL industry in Malaysia remains strong. The BNPL payment adoption is expected to grow steadily over the forecast period, recording a CAGR (Compound Annual Growth Rate) of 33.2% during 2021-2028. The BNPL gross merchandise value in the country will increase from US\$ 271.8 million in 2020 to reach US\$ 3,571.8 million by 2028 [7]. With such significance of BNPL solutions, it is important to document the impact of BNPL solutions on buying behavior. Thus, this study aimed to examine the impact of BNPL services on consumer buying behavior.

The remainder of the document is constructed as follows: the next section discusses the literature review and hypotheses development. Section three builds the theoretical arguments pertinent to the relationship of BNPL services and consumer buying behavior. Subsequent section presented the conceptual framework, followed by a description of



the research methodology. The last section of this paper presents the conclusion and future recommendations.

2. Literature Review and Hypotheses Development

The main objective of this study is to document the impact of BNPL services on consumer buying behavior among the youth of Malaysia. This study has segmented the BNPL services into convenient payment system, flexible repayment system, and accessible credit system. A convenience payment method refers to any manner that is easy to use and simplifies the payment process for consumers. It typically involves a quick and seamless transaction process that allows consumers to pay for goods or services without any hassles or complications. It can take many forms, such as mobile payments, contactless payments, digital wallets, or buy now, pay later (BNPL) services. The use of payment cards regarding its convenience use dominates the industry and developed a huge user base due to simplicity and familiarity of its use [8]. Flexible repayment system is one of the most important factors in a customer's decision to obtain a loan [9]. The author describes several ways in which a loan with flexible repayment terms can benefit borrowers. It provides a grace period prior to the start of repayment, allowing borrowers to better manage their finances. In addition, it permits instalment payments over a longer period, thereby making the loan more affordable and manageable. In addition, it provides borrowers with greater control over their repayment schedule, thereby reducing the risk of default and enhancing their overall financial health. Flexible repayment schedules in agricultural microfinance finds that flexible repayment schedules consistently help all consumers [10]. Additionally, it also indicates that flexible repayment uniformly improves the loan delinguency outcomes for all borrowers. Finally, an accessible credit system, in the context of BNPL, refers to a financial ecosystem that allows consumers to easily access credit and make purchases through flexible payment options like BNPL services. Accessible credit system services create a more seamless and streamlined process for consumers to obtain credit and manage their payments [11]. Besides that, the accessible credit system is designed to strengthen trust and incentivize trustworthy behavior among individuals and businesses in China [12].

Consumer buying behavior refers to the actions and decisions consumers make when searching for, evaluating, purchasing, using, and disposing of products and services. It includes the psychological, social, and cultural factors that influence how and why people buy certain products and brands over others. During the post covid, the BNPL



market has overgrown due to increasing consumer awareness and aversion to highinterest rates, particularly among younger generations. Buy Now, Pay Later (BNPL) is significantly influencing consumer buying behavior as it offers a range of benefits and conveniences [13]. Consumers are enticed to make more frequent purchases and explore higher-priced items with the option to split payments into manageable installments, resulting in increased purchase frequency and larger basket sizes. The services also reshape consumer behavior across generations, with younger consumers showing greater adoption and willingness to spend. Younger generations like Millennials and Generation Z are more receptive to BNPL due to its flexibility and convenience, leading to increased impulse buying and higher spending [14]. The specific terms of BNPL arrangements can vary depending on the provider and the purchase amount, but the payment plan is typically more flexible than a traditional installment plan. Conclusively, from the published literature, it inferred that BNPL services are the significant predictors of consumer buying behavior. Therefore, this present study formulated the following hypotheses as follows:

H1: Convenient Payment System will have a significant positive impact on consumer buying behavior among the youth of Malaysia.

H2: Flexible Repayment System will have a significant positive impact on consumer buying behavior among the youth of Malaysia.

H3: Accessible Credit System will have a significant positive impact on consumer buying behavior among the youth of Malaysia.

3. Theoretical Framework

In the context of BNPL services, the Diffusion of Innovation (DOI) theory can help us understand how consumers' buying behavior is affected by introducing and adopting these payment options. The convenience of BNPL, the flexibility in repayment terms, and the ease of accessing credit through this system can influence consumers to embrace and adopt this innovative payment method. DOI theory developed by Everett Rogers, explores how new ideas, innovations, or technologies spread and are adopted within a social system [15], [16]. This theory identifies five key elements that influence the rate of adoption: relative advantage (perceived benefits over existing alternatives), compatibility (fit with existing values and needs), complexity (ease of understanding and use), observability (visibility of results), and trialability (opportunity to experiment with the innovation). Through DOI theory, the identification of critical factors influencing the adoption of innovations is a relative advantage, which refers to the perceived



benefits of adopting the new technology or service over existing alternatives. In this context, the adoption of mobile payment systems from the perspective of merchants in Malaysia which validates the applications of DOI theory [17]. Next, flexible repayment systems are designed to allow consumers to choose different repayment schedules based on their preferences and financial capabilities [18]. The DOI theory suggests that innovations are adopted more quickly when they are perceived as compatible with consumers' needs and values. To expand and enhance the benefits of credit and debit cards by offering a more flexible payment option by demonstrating the diffusion of this innovation [19]. DOI theory is highly relevant in understanding the adoption of mobile banking as an accessible credit system by microfinance service providers in Sudan. The accessibility of credit is a critical factor that influences consumer behavior, especially when it comes to making significant purchases [20], [21]. Concluding the above arguments, DOI provides highly theoretical support in integrating new ideas and technological innovation, regarding the utilization of BNPL solutions in the entire social system.

4. Conceptual Framework

The primary objective of this study is to propose a framework to examine the impact of BNPL services on buying behavior among the Malaysian youth. The BNPL services are segmented into convenient payment systems, flexible payment systems, and accessible credit system consumer. Based on this objective, this study formulated a conceptual framework as shown in Figure 1.



Figure 1: Conceptual Framework.





5. Description of Methodology

This study aims to propose a framework that investigates the impact of BNPL services' adoption on consumer buying behavior. The target population for this study is proposed to be the Malaysian youth aged between 18 to 40 years. A survey questionnaire is developed to measure the constructs involved in this study. BNPL is an endogenous construct of this research which is comprised of three dimensions including convenient payment system, flexible repayment system, and accessible credit system. To measure convenient payment system this research has adapted a scale of [22], which incorporates four (04) items. The items of flexible repayment system (04 items) and accessible credit system (08 items) were adapted from [9]. On the other side, consumer buying behavior which is an exogenous construct measured through four (04) items adapted from the study of [23]. All the items will be measured on the 5-point Likert scale ranging from "1" (strongly disagree) to "5" strongly agree. SmartPLS4.0 is proposed for data analysis.

6. Conclusion and Future Recommendations

The present study' aimed to investigate the impact of BNPL services on consumer buying behavior. The BNPL services were segmented into a convenient payment system, flexible repayment system, accessible credit system. To achieve these objectives, this study formulated a total of three (03) hypotheses. This study suggested SmartPLS4.0 for the hypotheses testing. Based on the Diffusion of Innovation (DOI) theory, the current study proposed that all the BNPL services adoption including convenient payment system, flexible repayment system, accessible credit system will have a significantly positive impact on consumer buying behavior.

This study proposes several potential directions for future research to expand the understanding of the relationship between BNPL services and consumer buying behavior. First, businesses and financial institutions should focus on enhancing their convenient payment systems to attract more consumers. Emphasizing mobile payment solutions, easy checkout processes, and multiple payment options can positively influence consumer buying behavior. Second, this proposed framework should be empirically evaluated by financial institutions in several countries with large sample sizes. It will provide benefits in two aspects: a) the typical characteristics of different financial institutions will help to test the applicability and suitability of this study. b) the empirical validation with a larger sample size in different territories will increase the generalizability of this



study' results. Third, this study did not integrate any moderating or mediating effect between the relationship of BNPL services and consumer buying behavior. Thus, future studies can integrate the moderating or mediating effect between the relationship of BNPL services and consumer buying behavior. Fourth, this study utilized the quantitative approach while the future studies can employe mixed method approach to enhance the existing literature on BNPL services and consumer buying behavior.

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