

# Application of Utaut2 Model to Identify Factors Influencing Akulaku User Behavior

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## Abstract

This study investigates the factors influencing user behavior towards Akulaku, a leading Buy Now, Pay Later (BNPL) service in Indonesia, using the UTAUT2 model. Employing a quantitative approach with 378 respondents, the research evaluates the relationships between constructs such as performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit, in predicting behavioral intention (BI) and use behavior (UB). The results reveal that all constructs except effort expectancy significantly affect BI, with social influence being the most influential. Moreover, habit and facilitating conditions directly affect UB. These findings confirm the robustness of UTAUT2 in explaining technology usage behavior in the BNPL context. Strategic recommendations are proposed for Akulaku to enhance user retention by leveraging social influence, habit formation, and improving technical infrastructure.

**Keywords:** Akulaku, Behavioral Intention, BNPL; UTAUT2, Use Behavior

## 1. Introduction

### 1.1. Background

The rapid growth of financial technology (fintech) has significantly transformed Indonesia's digital economy landscape. According to Bank Indonesia [1], fintech transactions grew by 89% between 2021-2023, with Buy Now, Pay Later (BNPL) services like Akulaku becoming one of the fastest-growing sectors. This growth is driven by increasing e-commerce adoption and consumer demand for flexible payment solutions [2]. However, industry competition has intensified, requiring providers to understand factors influencing sustainable usage behavior rather than just initial adoption [3].

A critical gap exists between behavioral intention and actual use - approximately 60% of BNPL users in Indonesia discontinue after their first transaction [4]. This study addresses this gap by applying the Extended Unified Theory of Acceptance and Use of Technology (UTAUT2) model [5], which comprehensively examines rational (performance expectancy), emotional (hedonic motivation), and habitual factors influencing fintech usage.

### 1.2. Problem identification

Based on the background, this research addresses three critical questions:

1. What factors in the UTAUT2 Model significantly influence the intention to use (BI) Akulaku?
2. How do intention (BI), habit (HB), and facilitating conditions (FC) contribute to actual usage behavior (UB)?
3. What strategies can be recommended to Akulaku to enhance user retention based on empirical findings?

### 1.3. Research objectives

This study aims to:

1. Test the validity of the UTAUT2 Model in the context of BNPL in Indonesia.
2. Identify key determinants influencing user behavior of Akulaku.
3. Provide strategic recommendations based on evidence for service improvement.

### 1.4. Research contributions

1. Theoretical: Expanding the application of the UTAUT2 Model to BNPL services in emerging markets, particularly Indonesia.
2. Practical: Providing insights for Akulaku to design data-driven marketing and retention strategies.

3. Policy: Recommendations for regulators in formulating consumer protection policies in fintech.

## 2. Literature review

### 2.1. Theoretical framework: UTAUT2 model

The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) [(5)] extends the original UTAUT model to consumer contexts, identifying seven key determinants of technology adoption:

1. Performance Expectancy (PE): The degree to which users believe that using technology will enhance their performance.
2. Effort Expectancy (EE): The perceived ease of use of the technology.
3. Social Influence (SI): The influence of important others on the user's decision to use the technology.
4. Facilitating Conditions (FC): The resources and support available to use the technology.
5. Hedonic Motivation (HM): The pleasure or enjoyment derived from using the technology.
6. Price Value (PV): The user's perception of the value obtained compared to the costs incurred.
7. Habit (HB): The extent to which the use of technology becomes an automatic behavior for the user.

Recent meta-analyses show UTAUT2 explains ~56% of variance in behavioral intention across fintech studies [9].

### 2.2. Previous research

Previous studies on fintech adoption in Indonesia have revealed several significant insights. Research indicates that Performance Expectancy (PE), Social Influence (SI), and Price Value (PV) are the strongest predictors of e-wallet adoption, highlighting the importance of perceived benefits and social recommendations in driving user intentions (10). Additionally, Habit (HB) has been shown to mediate approximately 38% of long-term usage in mobile payment applications, suggesting that habitual use plays a critical role in sustaining user engagement [11]. Cultural factors also significantly influence the impact of Social Influence, with studies indicating that its effect is heightened by 22% in collectivist cultures compared to Western contexts [12]. Despite these findings, gaps remain in the literature, particularly regarding the specific drivers of adoption for Buy Now, Pay Later (BNPL) services. There is a need for further exploration into the mechanisms of habit formation and the contextual factors unique to emerging markets like Indonesia. This study aims to address these gaps by focusing on the determinants of user behavior specific to Akulaku, a leading BNPL service in the region.

### 2.2. Hypothesis development

Based on the UTAUT2 theoretical framework and previous research reviews, the hypotheses proposed in this study are as follows:

1. Hypotheses Related to Behavioral Intention (BI):
  - a. H1: Performance Expectancy (PE) positively influences Behavioral Intention (BI).
  - b. H2: Effort Expectancy (EE) positively influences Behavioral Intention (BI).
  - c. H3: Social Influence (SI) positively influences Behavioral Intention (BI).
  - d. H4: Facilitating Conditions (FC) positively influences Behavioral Intention (BI).
  - e. H5: Hedonic Motivation (HM) positively influences Behavioral Intention (BI).
  - f. H6: Price Value (PV) positively influences Behavioral Intention (BI).
  - g. H7: Habit (HB) positively influences Behavioral Intention (BI).
2. Hypotheses Related to Use Behavior (UB):
  - a. H8: Behavioral Intention (BI) positively influences Use Behavior (UB).
  - b. H9: Habit (HB) positively influences Use Behavior (UB).
  - c. H10: Facilitating Conditions (FC) positively influences Use Behavior (UB).

## 3. Method

### 3.1. Research design

This study employs a quantitative research design, utilizing a cross-sectional survey method to collect data from Akulaku users in Indonesia. The quantitative approach allows for the statistical analysis of relationships between variables, providing insights into user behavior and the factors influencing it [13].

### 3.2. Population, sample, and sampling technique

The target population for this research consists of Akulaku users across Indonesia. A sample size of 400 respondents was determined using the Slovin's formula, ensuring a confidence level of 95% and a margin of error of 5%. The sampling technique employed is non-probability sampling, specifically convenience sampling, which allows for the collection of data from readily available respondents [14].

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### 3.4. Data collection

Data analysis was conducted using Structural Equation Modeling (SEM) with the SmartPLS software, which is particularly suitable for exploring complex relationships between observed and latent variables. The analysis process involved several key steps:

1. **Data Preparation:** Initially, the collected data was cleaned to remove any incomplete or inconsistent responses. This involved checking for missing values and outliers. Any responses with more than 10% missing data were excluded from the analysis to ensure the integrity of the dataset.
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3. **Measurement Model Assessment:** The first step in SEM analysis was to evaluate the measurement model, which assesses the reliability and validity of the constructs. This involved:
  - a. **Reliability Analysis:** The internal consistency of the constructs was evaluated using Cronbach's alpha and Composite Reliability (CR). A Cronbach's alpha value above 0.70 was considered acceptable [16].
  - b. **Validity Analysis:** Convergent validity was assessed through Average Variance Extracted (AVE), with values above 0.50 indicating adequate convergent validity. Discriminant validity was evaluated using the Fornell-Larcker criterion, ensuring that each construct was distinct from others.
4. **Structural Model Assessment:** After confirming the measurement model, the structural model was analyzed to test the hypothesized relationships among the constructs. This involved:
  - a. **Path Coefficients:** The significance of the relationships was assessed using bootstrapping with 5,000 resamples to generate t-values and p-values for each path coefficient. A path coefficient with a t-value greater than 1.96 ( $p < 0.05$ ) was considered statistically significant.
  - b. **R-squared Values:** The R-squared values for Behavioral Intention (BI) and Use Behavior (UB) were calculated to determine the amount of variance explained by the model. Values above 0.10 indicate a moderate effect size.
5. **Hypothesis Testing:** Each hypothesis was tested based on the path coefficients and their significance levels. The results were interpreted to confirm or reject the proposed relationships, providing insights into the factors influencing user behavior in the context of Akulaku.
6. **Model Fit Assessment:** Finally, the overall model fit was evaluated using the Goodness of Fit (GoF) index, which combines both the measurement and structural model assessments. A GoF value above 0.36 indicates a good fit for the model [17].

## 4. Result

### 4.1. Respondent characteristics

Demographic	Group (Age in years)	Frequency	%
Age	18–22	12	3.40%
	23–27	113	29.80%
	28–32	88	23.20%
	33–37	67	17.70%
	38–42	74	19.50%
	43–47	24	6.30%
	Total	378	100%
Gender	Male	193	51.00%
	Female	185	49.00%
	Total	378	100%

### 4.2. Validity and reliability test results (outer model)

The evaluation of the measurement model shows that all constructs used in this study are valid and reliable. Table 4.1 summarizes the results of the reliability and convergent validity tests. All Composite Reliability (CR) values have exceeded the threshold of 0.70, and all Average Variance Extracted (AVE) values are above 0.50.

**Table 1:** Reliability and Validity Evaluation Results of Constructs

Construct (Variable)	Composite Reliability (CR)	Average Variance Extracted (AVE)	Description
Behavioral Intention (BI)	0.882	0.714	Reliabel & Valid
Effort Expectancy (EE)	0.880	0.649	Reliabel & Valid
Facilitating Conditions (FC)	0.812	0.523	Reliabel & Valid
Habit (HB)	0.937	0.832	Reliabel & Valid
Hedonic Motivation (HM)	0.930	0.817	Reliabel & Valid

Performance Expectancy (PE)	0.889	0.668	Reliabel & Valid
Price Value (PV)	0.942	0.845	Reliabel & Valid
Use Behavior (UB)	0.947	0.856	Reliabel & Valid

### 4.3. Hypothesis testing results (Inner Model)

The structural model of this study was tested to determine the causal relationships among the variables. The results of the hypothesis testing for each hypothesis are presented in detail in Table 4.2.

**Table 2:** Hypothesis Testing Results

Path Influence	Path Coefficient ( $\beta$ )	T-Statistics	P-Values	Decision
PE $\rightarrow$ BI	0.119	2.462	0.014	Accepted
EE $\rightarrow$ BI	0.064	1.461	0.144	Rejected
SI $\rightarrow$ BI	0.214	4.128	0.000	Accepted
FC $\rightarrow$ BI	0.114	2.348	0.019	Accepted
FC $\rightarrow$ UB	0.314	6.609	0.000	Accepted
HM $\rightarrow$ BI	0.159	3.333	0.001	Accepted
PV $\rightarrow$ BI	0.175	3.411	0.001	Accepted
HB $\rightarrow$ BI	0.125	2.311	0.021	Accepted
BI $\rightarrow$ UB	0.341	6.973	0.000	Accepted
HB $\rightarrow$ UB	0.256	5.275	0.000	Accepted

### 4.4 discussion

The final data analysis results indicate that the UTAUT2 model can comprehensively explain the mechanisms of Akulaku user behavior, where Use Behavior (UB) is driven through three strong and significant pathways.

#### 4.4.1 Intention Path

Based on Table 4.2, the path from Behavioral Intention (BI) to Use Behavior (UB) is significant ( $\beta = 0.341$ ;  $p = 0.000$ ). This finding confirms the fundamental assumption of many technology acceptance theories, including UTAUT2, that strong intention is indeed an important driver of actual action. In other words, the stronger the intention or plan of a user to use Akulaku, the greater the likelihood that they will actually use it.

1. Intention itself is shaped by a wide range of factors. The research results show that all hypothesized factors, except for Effort Expectancy (EE), significantly influence intention. Specifically:
  - a. Social Influence (SI) is the strongest driver of intention ( $\beta = 0.214$ ), indicating that recommendations from friends, family, or social image as modern service users greatly influence the desire to use Akulaku.
  - b. Price Value (PV), Hedonic Motivation (HM), and Performance Expectancy (PE) also proved significant. This indicates that user intention is formed by a combination of rational considerations (benefits and price) and emotional considerations (shopping enjoyment).
  - c. Facilitating Conditions (FC) and Habit (HB) also contribute to building intention, meaning that good technical support and positive past experiences strengthen the desire to use the service in the future.

#### 4.4.2 Habit Path

In addition to intention, the data shows that behavior is also driven directly by habit. The path from Habit (HB) to Use Behavior (UB) is highly significant ( $\beta = 0.256$ ;  $p = 0.000$ ). This indicates that some of the usage behavior of Akulaku occurs automatically. Users who have frequently transacted no longer go through the process of thinking and weighing intention each time; they directly choose Akulaku as a routine response to online shopping situations.

#### 4.4.3 Opportunity Path

Finally, the path from Facilitating Conditions (FC) to Use Behavior (UB) is also proven to be significant and strong ( $\beta = 0.314$ ;  $p = 0.000$ ). This finding emphasizes that actual behavior heavily depends on the opportunities and technical resources available. The availability of a stable internet connection, a responsive application, and supportive smartphones directly triggers transactions.

### 4.5 Implications of Research Findings

These findings indicate that to encourage the use of Akulaku, a comprehensive strategy must target all three pathways that drive behavior.

**Table 3:** Practical Implications Based on Three Pathways Driving Behavior

Pathway Driving Behavior	Strategic Implications for Akulaku	Example Actions
<b>Intention Path</b>	Build Image and Offer Holistic Value: Focus on marketing and communication to build strong positive intentions among potential users.	-Collaborate with influencers to strengthen social influence (SI). Offer exclusive promotions and clear installment schemes (PV). Emphasize the benefits of convenience and enjoyment in shopping (PE & HM).
<b>Habit Path</b>	Turn Usage into Routine: Focus on retention strategies that build habits and automation.	Develop a tiered loyalty program that rewards routine transactions. Make Akulaku the default payment option or one-click on partner platforms.
<b>Opportunity Path</b>	Ensure a Perfect Technical Experience: Focus on technical optimization to ensure no barriers when users have the urge to transact.	Ensure the application is lightweight, fast, and stable across various devices. Simplify the transaction flow to the minimum necessary.

## 5. Conclusion

This study aimed to apply the UTAUT2 model to identify the key factors influencing user behavior of Akulaku, a prominent Buy Now, Pay Later (BNPL) service in Indonesia. The findings reveal several significant insights regarding the determinants of both Behavioral Intention (BI) and Use Behavior (UB) among users. The analysis confirmed that Performance Expectancy (PE), Social Influence (SI), Price Value (PV), Hedonic Motivation (HM), Facilitating Conditions (FC), and Habit (HB) significantly influence users' intentions to use Akulaku. Notably, Social Influence emerged as the strongest predictor, highlighting the importance of recommendations from peers and social networks in shaping user intentions. Additionally, the study found that Habit (HB) directly influences Use Behavior (UB), indicating that frequent users of Akulaku tend to engage with the service automatically, without deliberation. This underscores the importance of creating a seamless user experience that encourages habitual usage. The results also emphasized the role of Facilitating Conditions (FC) in driving actual usage behavior, as access to reliable internet, responsive applications, and supportive devices are crucial for enabling users to transact effectively. Based on these findings, it is recommended that Akulaku implement comprehensive strategies targeting the identified pathways, including enhancing marketing efforts to build positive user intentions, developing loyalty programs to foster habitual usage, and ensuring optimal technical performance to facilitate transactions. In conclusion, this research contributes to the understanding of user behavior in the fintech sector, particularly in the context of BNPL services in Indonesia, and the insights gained can inform strategic decisions for Akulaku and similar platforms, ultimately enhancing user engagement and satisfaction.

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