



Investigating Factors Influencing Customer Churn in the Online Bill Payment Services

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ABSTRACT: In Indonesia's growing digital economy, the high churn rate in online services, such as bill payment platforms, is a critical concern. An example is BillsXYZ, a pseudonym used in this research for confidentiality, where similar services are readily available, and customer switching is effortless. The study conducted an analysis of the external environment to gain insights into the competitive landscape of the market. Using the Theory of Planned Behavior, a framework including key elements like customer experience and satisfaction, price and promotions, service quality, social influence, brand image, ease of use, and features of the service. The research involved 110 survey participants and four detailed interviews. Key findings from the analysis indicate that while there is moderate satisfaction with the online bill payment service, there are areas that require improvement, including recurring payment failures, limited availability of certain payment methods, and insufficient awareness of certain features. To address these issues and enhance customer retention, recommendations were put forth, such as increasing feature awareness, improving service quality, and implementing strategic promotions. This study provides valuable insights for online bill payment services to improve customer retention strategies.

KEYWORDS: Churn, Customer Retention, Online Bill Payment, Promotion Strategy, User Experience

1. INTRODUCTION

Digital technology use in Indonesia has shown substantial growth in recent years. A report from the Indonesian Internet Providers Association (APJII, 2022) revealed an increase in internet users from 175 million in 2020 to 220 million in 2022, reflecting technology and the internet's escalating significance in daily life. This expansion marks a burgeoning opportunity for digital services in the region. With the digital service market's rise, Indonesia has experienced a parallel influx of technology service companies. Notably, both traditional companies pivoting towards digital services and startups with substantial investments seek to capture this expanding market share.

The digital marketplace hosts an array of services, one being online bill payment, enabling customers to consolidate their bills, including utilities and phone expenses, on one platform. However, the competitive landscape in digital services necessitates businesses, like those offering bill payment, to focus on delivering a seamless user experience and add value to retain customers. The ability to effortlessly switch platforms has led to customer loyalty being a significant challenge and churn rate - the number of customers discontinuing use of a service - a key concern.

In this study, we consider the case of an online bill payment platform, referred to as 'BillsXYZ' for the purpose of anonymity, operating in Indonesia. This platform, despite its convenience and practicality, faces challenges in terms of customer retention. It has been observed that BillsXYZ has not been able to accelerate its user growth as anticipated and consistently falls short of its targets for monthly active users. The company's internal data has revealed a relatively high churn rate, which further adds to their customer retention concerns.

Online bill payment service providers in Indonesia frequently employ promotional tactics, such as cashback offers and transaction fee waivers, advertised through various channels. Aggressive promotional and rewards strategies aim to capture and sustain market share in this competitive landscape. However, these strategies have given rise to customers becoming promotion-dependent and less loyal to any single platform, given the ease of transition between services. The resulting churn complicates customer retention for bill payment service providers like BillsXYZ, posing a continual challenge.

Given these circumstances, the aim of this study is to understand the factors influencing customer churn in the online bill payment industry and propose effective strategies to enhance customer retention. By identifying key issues that contribute to customer

discontinuation, this research aims to improve the overall customer experience and contribute to the long-term success of online bill payment services.

2. THEORETICAL FRAMEWORK

In the quest to understand and improve customer retention, researchers and practitioners have looked to various theories and frameworks to guide their efforts. One such theory is the Theory of Planned Behavior (TPB), which is a social cognition framework and is commonly used to explain and predict a variety of human behaviors (Ajzen, 1991). The TPB has been used extensively in the fields of psychology, marketing, and consumer behavior, and has shown promise in improving customer retention in various industries. In the context of customer retention, TPB can be applied to identify the factors that influence customers' intentions to stay with a company or switch to a competitor. According to the TPB, behavior is determined by three factors: attitude, subjective norms, and perceived behavioral control. Each element of the TPB will be explored and discussed in relation to customer retention. The conceptual framework used in this study, based on relevant literature and theory on the previous explanation, is visually represented in the diagram below.

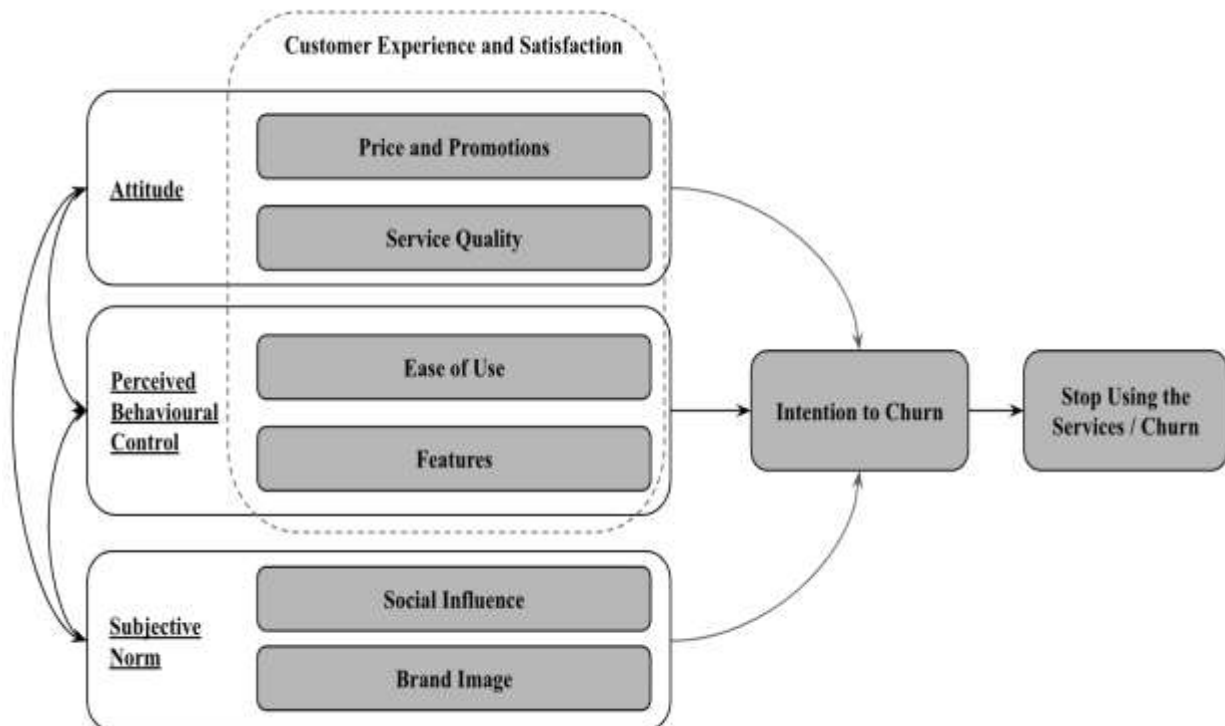


Figure 1. Conceptual Framework

Based on the Theory of Planned Behavior (TPB), certain factors can be associated with each concept within the framework. Attitude, which reflects an individual's positive or negative evaluation of a behavior, can be associated with price and promotions as well as service quality in the context of bill payment services. Customers' attitudes towards a service may be influenced by their perception of the price, including any promotional offers or discounts, as well as their assessment of the overall quality of the service provided. Perceived behavioral control, another concept within TPB, refers to an individual's perception of the ease or difficulty of performing a behavior and the level of control they have over it. In the context of bill payment services, perceived behavioral control can be associated with ease of use and supporting features. Customers' perceptions of the user-friendliness of the service and the availability of helpful features can influence their perceived control over using the service effectively.

Subjective norm, which represents the perceived social pressure or influence to perform a behavior, can be associated with social influence and brand image. Social influence encompasses the impact of others' opinions and recommendations on customers' decision-making regarding bill payment services. Customers may be influenced by the experiences and recommendations of their



peers or social environment. Brand image, on the other hand, reflects customers' perceptions of the reputation and credibility of the service provider. Positive brand image can influence customers' subjective norms and their belief that using the service is socially acceptable.

3. RESEARCH METHODOLOGY

Research Design

This study uses a mix of qualitative and quantitative research methods. The research design follows a structured and logical process with several steps. First, the problem or business issue is identified, which gives the study context and helps focus on finding solutions. Next, the goal of the research is defined, which is to understand why customers stop using a service and to create strategies to manage this issue. The next stage in the research design is data collection, using both primary and secondary data sources to answer the research questions. Primary data will be collected through surveys and in-depth interviews, while secondary data will be obtained through a literature review of previous research related to customer churn and service management. In addition, the study will analyze the external business environment using PESTEL analysis. Once the data is collected and analyzed, the research will focus on creating a business solution and a plan to implement it based on the findings.

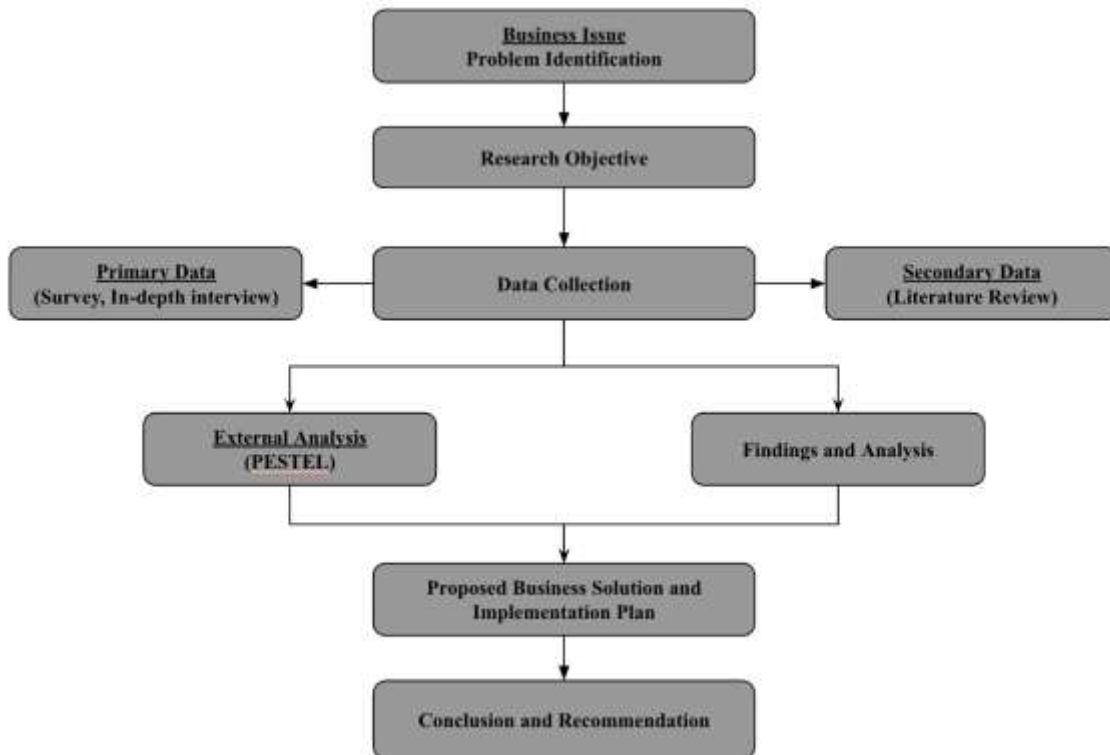


Figure 2. Research Design

Data Collection Methods

Primary data is being collected through questionnaires and in-depth interviews to address the research questions and meet the study objectives. Alongside this, secondary data is being gathered through a comprehensive literature review, aiming to understand the business landscape of bill payment platforms in Indonesia and the factors contributing to customer churn in the mobile payment service industry. This review makes use of diverse resources including scientific papers, news articles, reports, and other publicly available documentation.

1. Survey Questionnaire

The research utilizes a survey questionnaire comprising both close-ended and open-ended questions to understand customers' experiences and viewpoints on a bill payment service. A 6-point Likert scale measures the degree of agreement with certain



statements, while open-ended inquiries seek detailed descriptions of user experiences. Demographic questions are also included for respondent profiling.

The sample size was calculated using Slovin's formula, employing the number of internet users in Indonesia as a proxy for the population size. This approach is due to the population size of the bill payment service's churn users being confidential. Based on 210 million internet users in 2022 and a 99% confidence level with a 10% margin of error, the sample size requirement for the study was determined to be 100.

The survey was distributed online using Google Forms, primarily shared through personal social media contacts, who were also encouraged to share the survey within their networks. The survey were conducted to collect data based on two customer criteria: Customers who had ever paid monthly bills using the service.

Customers who had not used the service to pay their bills within the past 2 months and use another platform to pay.

The initial target was to gather responses from 100 participants, but the actual data collection exceeded this goal, totaling 110 respondents.

2. In-depth Interviews

In-depth interviews will be conducted as a qualitative research method to deepen understanding of the factors causing customer churn. This approach uses purposive sampling, intentionally selecting participants who can provide relevant information, adhering to the same criteria as those of the questionnaire participants. Four individuals will be chosen based on their alignment with the study's criteria and will be recruited via social media and referrals from the survey. The interview involves open-ended questions designed around the study's conceptual framework, probing for detailed responses on participants' experiences, perceptions, reasons for leaving, and potential improvements for the service.

Data Analysis Methods

Primary data from the survey questionnaire will be assessed using descriptive statistics such as frequency distribution, mean, median, or mode for a clear summary of responses. This analysis will provide an overview of the general characteristics of the respondents and the distribution of their responses to the Likert scale questions. For the in-depth interviews, a systematic summarization approach is used. All interviews are audio-recorded and transcribed verbatim, followed by summarizing each participant's response. This approach offers a condensed depiction of the interviews.

4. RESULT AND ANALYSIS

Porter's Five Forces

In the context of Indonesia's bill payment platform industry, Porter's five forces analysis reveals a dynamic and highly competitive market:

1. Threat of New Entrants (High): The industry faces high threats from new entrants, fueled by rapid digitalization, a large potential customer base, and government initiatives promoting cashless transactions. Regulatory constraints, however, may provide some barriers to entry.
2. Bargaining Power of Suppliers (Moderate): Various billers, acting as suppliers, have moderate bargaining power. The diversity of suppliers offsets the influence of dominant entities like utility companies.
3. Bargaining Power of Buyers (High): Buyers exhibit high bargaining power due to the vast selection of payment options, making them price-sensitive and able to switch platforms easily.
4. Threat of Substitutes (Moderate): There's a moderate threat from substitutes, including emerging technologies such as payment apps launched by financial institutions.
5. Competitive Rivalry (High): The industry experiences intense competitive rivalry with numerous players competing for market share, and the prevalence of non-digital payment services.

In conclusion, to navigate this competitive landscape, bill payment platform operators in Indonesia must remain innovative and agile, ensuring they offer high-quality, convenient, and differentiated services to attract and retain customers.



Questionnaire Result

Users generally express satisfaction with the overall customer experience and service quality. Approximately 92% of survey participants indicated they had not experienced any issues while using BillsXYZ for their bill payments. In regards specifically to the service quality, a majority of respondents (97%) also indicated a high level of satisfaction with the quality of payment processing when using BillsXYZ to pay their bills. However, about 8% reported negative experiences. These problems ranged from system response failures, as reported by five respondents, slow system responses as noted by two respondents, and failed payment processing experienced by two more participants.

The Ease of Use aspect of the survey, covering the accessibility of the bill payment service within the app and its user-friendly design, received a high level of agreement from respondents, with only 2% selecting a disagreement response, reflecting the effectiveness of a well-designed user interface and user experience. However, despite these positive aspects, it is important to note that churn still occurs among users, suggesting that the Ease of Use aspect may not be the primary influencing factor in users' decision to churn.

Social influence, such as reviews and recommendations, plays a significant role in shaping user decisions, as indicated by more than 90% of respondents who agreed that they consider the opinions of others when choosing a bill payment platform. Additionally, despite the majority of respondents (97%) expressing confidence in the brand image due to positive branding and reputation, the occurrence of churn suggests that brand image alone may not have a significant impact on the decision to churn.

The features aspect analyzed in this research includes payment methods, billers, automatic payment, and reminders/notifications. The findings reveal that a significant percentage of churn users (98%) appreciate the diverse payment methods and billers provided by the service. However, it is noteworthy that only 18.2% of churn users utilize the automatic payment feature, and a substantial 67.27% of churn users do not receive bill payment reminders/notifications. These percentages suggest that although users value certain features offered by the service, the low utilization and absence of certain features may have contributed to their decision to churn.

In the aspect of Price and Promotions, it is notable that price and promotions play a significant role in influencing users' decision to use the bill payment service. According to the survey results, 62% of respondents consider price and promotions important, indicating their influence on user choices. Furthermore, when asked about the acceptability of the price, including admin fees and additional charges, 80% of respondents expressed disagreement, implying that a majority of users find the pricing unfavorable. This unfavorable perception of the price contributes to users' decision to churn. However, despite the unfavorable pricing, 93% of respondents find the promotions offered by the service attractive. This suggests that users regard the promotions as compelling and appealing, yet they still churn. It is worth mentioning that 25% of respondents struggle to find promotional information, highlighting the need for improved accessibility and communication.

Interview Result

Below is the detailed summary of the interview from each aspect.

1. Price and Promotion

The respondent indicated that the pricing was competitive with other platforms, with some competitors having lower and others higher administrative fees. However, the respondents felt that the value from promotions on other platforms seemed to surpass the cost considerations. Specifically, the drawbacks mentioned were the charges during both the top-up process and the transaction phase. When asked about possible promotional offerings that could have encouraged them to stay, respondents mentioned:

- a. Promotions for specific payment methods for bill payments.
- b. Larger cashback rewards for frequent transactions.
- c. Cross-selling promotions, particularly with food delivery services.

Moreover, a few respondents were not aware of any ongoing promotions, suggesting that the platform needs to improve its promotional communication strategies. The perceived superior value from competitors' promotions and the need for improvements in the promotional offerings and communication strategies were the main takeaways from the respondents' feedback.



2. Service Quality

The respondents reported no major deficiencies with the service compared to the platform they switched to. They found the payment processing fast, and the access to payment receipts convenient, indicating that the fundamental features and user experience met the respondents' expectations. Nevertheless, a specific issue was brought to light concerning the platform's bill payment processing. One respondent encountered a problem where it failed to display a particular month's bill data, inhibiting their ability to make a payment. In comparison, the competitor's platform promptly provided the bill data, enabling immediate payment. This experience points to a potential improvement area for enhancing the timeliness and reliability of bill data presentation.

3. Social Influence

Respondents acknowledged that while others' opinions didn't directly influence their platform choice, they did trigger exploration of new services. However, personal evaluation, especially of promotions, was crucial before making a switch. Thus, firsthand experiences had a significant role in decision-making.

4. Brand Image

While it is perceived as a reliable and user-friendly platform, there's concern about its recognition. Some respondents indicated that the service isn't as well-known as expected. Despite the brand's trustworthiness, there appears to be a need for the service to increase its visibility and reach.

5. Ease of Use

Respondents found the interface intuitive and visually pleasing, appreciating features like the readily accessible transaction history and re-order button. However, they expressed dissatisfaction over losing this history upon logging out, a feature handled better by competitor platforms. For improvements, respondents suggested persisting the transaction history post logout and customization options for the arrangement of billers on the main page for more straightforward access.

6. Features

It satisfies fundamental requirements, but respondents found it lacked certain payment methods and had limited knowledge about the diversity of billers available on the platform. Users preferred manual budget management over the autopay feature and considered the platform's reminder system less comprehensive compared to competitors. To enhance user experience, respondents suggested improvements in the notification system, including detailed reminders for bill payments and current promotions. They also recommended broadening the array of service providers, specifically integrating additional housing-related billers, as a unique addition that could differentiate the service from competitors.

In overall, respondents from the interview also had a generally satisfactory experience using the service, appreciating the fast payment process and convenience of using the internal wallet balance. However, concerns were raised regarding several concurrent issues, such as failed payment attempts, loss of billing number history after logging out, and unavailability of bill data for certain months. The decision to stop using the service was influenced by more attractive promotions offered by competitors, the absence of the certain payment method, insufficient balance in the internal wallet, familiarity with and comfort using competitor platforms, and facing some issues. To win back customers, respondents recommended implementing appealing cross-selling promotions, enhancing the reminder notification system to include promotional information, incorporating certain payment method as an alternative, improving communication about new billers and services, offering unique features to differentiate the service, ensuring no issue occur, and reevaluating administrative fees for top-up and bill payments.

Summary of the Result

Table I. Summary of the Result

Aspect	Alignment of Questionnaire and Interview Result	Contribution to Churn
Customer Experience and Satisfaction	Both shows generally satisfied experiences but also identify occasional technical issues.	Yes: Identified technical issues may contribute to churn.
Service Quality	Both suggest that while quality is generally good, there are areas for improvement.	Yes: Occasional failed payments, unupdated billing information, and slow responses could lead to churn.



Social Influence	Survey indicates significant social influence while interviewee is independent in decision making.	No: While the result from the survey does not indicate social influence as a reason for churn, the interview result suggests that it only encourages them to explore the other platform, but still requires some comparison to shaping user decisions.
Brand Image	Both suggest a generally positive brand image and it is not affecting the decision to churn.	No: Brand image is not identified as a negative aspect in both survey and interview.
Ease of Use	Both reflect a positive response and show lack of significant influence. However, they do highlight areas that require improvement.	No: While the responses are positive, Identified areas for improvement in user interface could help prevent churn.
Features	Both identify certain missing features and lack of awareness.	Yes: Limitations in the features could lead to churn.
Price and Promotion	Both suggest that price and promotions are significant factors, with potential areas for improvement.	Yes: Discontent with prices, admin fees, and perceived better promotions elsewhere may contribute to churn.

5. CONCLUSIONS & RECOMMENDATIONS

Conclusions

Aspects that significantly influencing users to churn in online bill payment:

- 6. Price and Promotion: Discontent with prices, admin fees, and perceived better promotions elsewhere may contribute to churn.
- 7. Service Quality: Identified technical issues, such as occasional failed payments, unupdated billing information, and slow responses could lead to churn.
- 8. Features: Limitations in the features such as lack of availability of certain payment methods could lead to churn.

Aspects that do not significantly influence users to churn in online bill payment:

- 1. Social Influence: The results do not indicate social influence as a reason for churn. It suggest that it only encourages users to explore other platforms but still requires some comparison to shape their decisions.
- 2. Brand Image: Brand image is not identified as a negative aspect in both the survey and interview.
- 3. Ease of Use: While the responses do not indicate this aspect as a significant contributor to churn, it is still a necessary aspect that could further enhance customer satisfaction.

RECOMMENDATIONS

Considering the findings and analysis above, the following recommendations are proposed for the company:

- 1. Pricing Strategies
 - a. Improve visibility of promotional information within the app.
 - b. Offer tailored cross-selling promotions.
 - c. Introduce loyalty-based promotions.
- 2. Enhancing the Features
 - a. Increase availability or broadening the payment method and billers availability and improve awareness of new payment methods and billers and communicate the availability.
 - b. Improve the function and promote benefits of Autopay.
 - c. Optimize the notification message to provide reminders, biller names, and ongoing promotions
- 3. Service Quality and Usability
 - a. Conduct a thorough system audit to address underlying issues and improve system stability. Focus on improving user experience through system enhancements.



- b. Allow a customizable biller placement to enhance user experience and personalization.
- c. Implement a low-balance checking and reminder feature to prevent service discontinuation due to low balance.

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