

The Effect of Customer Satisfaction, Switching Barriers Mediated By Customer Loyalty to Customer Retention in ISP Industry

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Abstract. The rapid growth of Internet usage in Indonesia contrasts with a notable decline in sales and market share for one particular Internet Service Provider (ISP). In the fiercely competitive ISP sector, major players such as Biznet, CBN, Linknet, Moratel, and Indonet stand out, among 1341 registered ISPs, many of which do not focus on corporate sales (B2B) but rather on retail (B2C) divisions. This study delves into the crucial factors of customer satisfaction and switching barriers, mediated by customer loyalty, and their collective impact on customer retention within the ISP industry. Given the indispensable role of internet connectivity in contemporary business operations, understanding corporate client behavior is paramount. This research aims to analyze the positive influence of customer satisfaction on customer loyalty, analyze the positive influence of switching barriers on customer loyalty, analyze the positive influence of customer loyalty on customer retention. A comprehensive quantitative approach was employed, with convenience and judgmental sampling techniques to gather data from corporate ISP users, specifically targeting IT decision-makers. A total of 140 questionnaires were distributed. The study reveals the critical importance of addressing impediments to customer churn, given the substantial switching costs and operational disruptions involved. Effective relationship management, characterized by personalized assistance and proactive engagement, emerges as a key factor in nurturing enduring customer relationships. The findings underscore the necessity of prioritizing customer retention strategies to foster competitive advantage and refine marketing strategies tailored to the unique needs of business clients within the ISP landscape. This research not only contributes valuable insights to the academic field but also offers practical guidance for ISPs aiming to enhance service delivery and maintain competitive positioning in a dynamic market.

Keywords: Internet Service Providers, Customer Satisfaction, Switching Barriers, Customer Loyalty, Customer Retention, Corporate Clients, IT Decision-Makers, Quantitative Methodology, Relationship Management, Competitive Advantage.

1. INTRODUCTION

In the context of the digital age, Internet Service Providers (ISPs) are integral to facilitating access to the Internet for both individuals and businesses. This is particularly pertinent in Indonesia, where the telecommunications sector is expanding rapidly, driven by technological advancements and a growing dependence on internet connectivity. As of the second quarter of 2019-2020, Indonesia's internet user base reached 196.7 million, marking an 8.9% increase from the previous year and highlighting the rising demand for internet services (APJII, 2020; Pradana, 2023). This increasing demand presents significant opportunities for ISPs to extend their market presence and enhance their infrastructure to meet the evolving needs of corporate and individual users [1].

The ISP market in Indonesia is distinguished by its diversity and competitive nature, influenced by various elements such as the number of corporate subscribers, infrastructure reach, and annual revenue. Prominent ISPs like CBN, Linknet, Moratel, and Indonet exhibit a range of strategies and operational scales, reflecting the dynamic characteristics of the market. For example, Linknet and Moratel, with their extensive networks and substantial revenues, represent large-scale operations while CBN and Indonet exemplify successful business models with significant revenues relative to their infrastructure sizes [2].

Since 2015, the competitive landscape has intensified, prompting ISPs to adopt diverse promotional strategies and competitive pricing models. Many companies now bundle internet services with other offerings to attract and retain customers. PT Cyberindo Aditama, for example, has established a significant presence in the Sumatra-Java-Bali region by offering a range of integrated services [3].

The provision of corporate internet services is heavily influenced by factors such as customer satisfaction, switching barriers, customer loyalty, and retention. Customer satisfaction is a critical factor that drives electronic word-of-mouth and repeat transactions, which are essential for fostering customer retention (Bobalca, 2014). The interplay between these factors significantly affects an ISP's ability to maintain and expand its customer base. For instance, switching barriers, including the costs and efforts associated with changing providers, can deter clients from switching, thereby enhancing retention rates [4].

Additionally, customer loyalty, characterized by repeat purchases and positive recommendations, offers numerous benefits, such as increased revenue, enhanced brand trust, and customer upscaling. This loyalty is cultivated through high-quality service, reliable technical support, and strong interpersonal relationships between service providers and clients [5].

This study aims to explore the intricate dynamics of customer satisfaction, switching barriers, customer loyalty, and retention within the Indonesian ISP market. By examining these factors, the research seeks to provide insights into effective strategies for ISPs to foster long-term customer relationships and sustain growth in a competitive

environment. This comprehensive understanding is crucial for ISPs to adapt and thrive amidst the rapidly changing demands and preferences of corporate clients.

This introduction sets the stage for an in-depth analysis of the ISP industry's current state in Indonesia, the competitive strategies employed by key players, and the critical factors influencing customer retention and loyalty. By investigating these aspects, the study contributes to a deeper understanding of how ISPs can navigate the challenges and opportunities in this burgeoning market.

2. LITERATURE REVIEW

Customer retention is a strategic objective aimed at fostering enduring relationships with customers. The ability to retain customers hinges on the company's initiatives implemented through diverse customer service initiatives. Simultaneously, customers' decisions to remain or switch companies are influenced by numerous factors such as service excellence, satisfaction levels, perceived customer value, switching costs, overall customer experience, commitment levels, trustworthiness, corporate image, reputation, and others [6].

Customer retention encompasses various dimensions, including the intention to continue purchasing services, the likelihood of remaining with a provider, and the decision to maintain a business relationship. It involves a commitment to ongoing business exchanges and incorporates aspects like customer preferences, identification, commitment, trust, the desire to recommend, and the intention to repurchase. This multifaceted concept can be divided into emotional-cognitive retention and behavioral intentions, ultimately linking to repeated subscriptions, repurchasing, and brand loyalty [7].

Customer retention is the enduring relationship and commitment between customers and a company, involving the ongoing consumption of products or services. It is considered a comprehensive marketing strategy designed to retain both new and existing customers by fostering long-term benefits. Retention is characterized by the intention to repurchase services, the likelihood of remaining with a service provider, and the decision to maintain a business relationship. It is also viewed as a commitment to sustained exchanges with the company [8].

Scholars such as Berry, Gronroos, Gummesson, and Little have emphasized the role of relationship marketing in fostering enduring customer relationships and ensuring retention through trust and commitment. Key aspects include maintaining integrity by keeping promises, demonstrating empathy, valuing customer input, and adapting to customer needs. Customer retention is often described as the intention to repurchase or the tendency to remain with a provider over time. It is also viewed as a commitment to ongoing engagement with a specific company. Empirical research has confirmed that relationship marketing significantly impacts customer retention. Additionally, customer satisfaction plays a critical role in retention, with higher satisfaction correlating with greater retention rates. The concept of switching costs, including perceptions of risk, evaluation difficulty, and psychological attachment to a brand, also significantly influences customers' decisions to stay with their current provider,

especially in markets with varying asset involvement and dynamics [9].

Customer satisfaction is a fundamental marketing concept crucial for meeting customer needs and ensuring a company's success. It is defined as the pleasure or disappointment customers feel when their perceptions of a product's performance are compared with their expectations. Key factors influencing customer satisfaction include warranty costs, complaint handling, market share, costs of poor quality, and industry reports. To measure customer satisfaction effectively, several indicators are used, such as security assurance, service speed, service facilities, employee attitude, and the variety of products and services [10]. It provides significant benefits to a company, including increased profitability. Retaining satisfied customers is generally more cost-effective than constantly acquiring and nurturing new ones to replace those who leave. Highly satisfied customers often generate positive word of mouth, effectively acting as ambassadors for the company and reducing the costs associated with attracting new customers. Customer satisfaction is defined as the response to how well a product or service meets expectations, and it serves as an indicator of the product's performance. It reflects the level of individual contentment after comparing a product's performance with expectations [11].

The literature on relationship marketing consistently demonstrates a strong positive link between satisfaction and customer loyalty. Satisfaction is recognized as a crucial driver of loyalty across various sectors, including retail banking, where it significantly influences customer loyalty. Additionally, satisfaction is seen as an emotional precursor to customer loyalty, with evidence showing that overall satisfaction fosters loyalty in industries such as cosmetics. In business-to-business contexts, satisfaction also positively affects behavioral loyalty, as observed in sectors like courier delivery services [12].

Customer satisfaction is a key metric for assessing business success and performance across various industries. It provides a comprehensive measure of customers' post-purchase experiences and the value they derive from products or services. By evaluating cumulative satisfaction, businesses gain insights into both immediate interactions and long-term relationships with customers, allowing them to refine strategies to better address customer needs and foster loyalty. However, relying solely on customer satisfaction may have limitations, particularly in business-to-business (B2B) contexts where decision-making is often more rational and less emotionally driven. In such environments, factors like perceived service quality and specific organizational characteristics can have a significant impact on repurchase intentions, potentially reducing the predictive power of customer satisfaction for loyalty and repeat business [13].

Switching barriers are crucial in fostering brand loyalty and maintaining customer relationships by creating obstacles or costs that make it difficult for customers to switch to alternative providers. These barriers include switching costs, the appeal of alternative options, and interpersonal relationships. They represent the evaluation of resources and opportunities required to switch, as well as the constraints that discourage customers from moving to different products or services. Research has shown a positive correlation between customer loyalty and the presence of switching barriers [14].

As defined by Valenzula (2012) stated that switching barriers are the company's efforts to prevent customer dissatisfaction and prevent customers from moving to other competitors. Jones, et al. (2000) argue that switching barriers are a company retention strategy that consists of anything that can make consumers feel more expensive and difficult to switch to other product or service providers. Jones, et al. (2000) mentioned the aspects of switching barriers: a. Interpersonal relationship: refers to the strength of the personal bonds that develop between customers and service employees. Good interactions between customers and service employees can lead to personal relationships that bind customers with service providers. b. Perception of switching costs: perceived switching costs are consumers' perceptions of time, money and effort in relation to changes in service providers. When the perceived cost of the activity increases, the likelihood of consumers switching products decreases. c. Alternative allure: alternative attractiveness refers to the customer's perception of the extent to which other alternative products available in the market are more profitable and attractive than the previous product [15].

Customer loyalty is characterized by a preference for a brand, a commitment to it, and an intention to make repeat purchases. It reflects a strong desire to continue buying from the same brand or service provider due to positive sentiments towards the organization. Enhancing customer loyalty can be achieved through strategies such as offering gifts, discounts, and freebies during special events. Building and maintaining customer loyalty is essential for organizations to thrive in a competitive market, fostering mutually beneficial relationships. Studies have shown that customer loyalty and satisfaction are crucial for customer retention. Research has demonstrated a significant relationship between customer loyalty and retention in various industries, including telecommunications [16].

Additionally, research has shown that switching barriers act as a moderating variable in the relationship between customer satisfaction and customer loyalty. Specifically, even when customer satisfaction levels are the same, customer loyalty can vary based on the strength of the switching barriers. The importance of customer loyalty is linked to a company's long-term survival and potential for strong future growth. Therefore, when a company reaches market saturation, faces a mature market, and encounters intense competition, focusing on retaining existing customers becomes more critical than aggressively trying to attract new ones. A defensive strategy aimed at maintaining current customers is essential for sustaining profits [17].

In the Korean mobile telecommunications sector, customer loyalty has become increasingly important due to the rising customer churn rate as the market matures. Specifically, the monthly average churn rate increased significantly from 1.3% in the late 1990s (1998–1999) to 3.3% in the early 2000s. These rates are relatively high compared to those of major international mobile carriers during the same period, which ranged from 1.0% to 3.0%. Additionally, the full-scale launch of IMT-2000 services and the introduction of mobile number portability are expected to further boost customer churn, highlighting the critical need for customer loyalty [18].

A qualitative study involving nine key employees from various banks in Jordan identified several crucial factors for improving customer retention, such as trust, satisfaction, commitment, loyalty, closeness, transparent communication, privacy, cost,

reputation, and organizational culture. Research has also shown that relationship marketing significantly impacts customer satisfaction, which in turn affects customer loyalty. Furthermore, it has been found that relationship marketing and switching costs both play significant roles in customer retention, with relationship marketing also influencing switching costs [19].

Based on the theoretical and empirical studies, the present study's research model is presented in Figure 1.

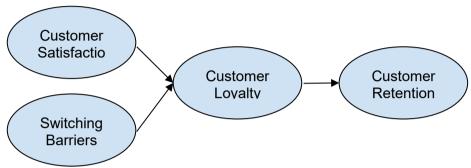


Figure 1 – Research Framework:

H₁: Customer satisfaction (CS) affects customer retention (CR).

H₂: Switching barriers (SB) affect customer retention (CR).

H₃: Customer loyalty (CL) affects customer retention (CR).

3. METHODS OF RESEARCH

The research involved gathering primary data from 140 customers within the business client segment of the Internet Service Provider sector. Sample selection criteria were based on demographic factors such as age, educational level, position, division, job tenure, firm size, and firm age. Respondents were chosen through accidental sampling, focusing on whether they had the authority to determine the selection of the Internet Service Provider used in their organization or company. Data collection occurred via face-to-face meetings using questionnaires that underwent prior validity and reliability testing. The questionnaire included five alternatives based on the Likert Scale, ranging from 1 for completely disagree to 5 for completely agree. Hypotheses were evaluated using SPSS and SmartPLS, involving steps such as formulating a structural model, creating a measurement model, developing a path diagram, deriving equations from the path diagram, estimating weights, loadings, and paths, assessing goodness of fit, and conducting hypothesis testing (Solimun, 2013).

The data analysis reveals that a significant portion of the respondents, comprising 40% of the total sample, fell within the demographic range of 35 to 39 years old, indicating notable representation from this age cohort. In terms of educational attainment, a majority proportion, constituting 50% of the participants, possessed a Bachelor's degree or its equivalent, underscoring a prevailing level of undergraduate education among the surveyed individuals. With regard to occupational roles, it was discerned that 45% of the respondents held positions as Founder/Owner, suggesting a predominant presence

of entrepreneurs or individuals occupying leadership positions within their respective organizations. Furthermore, while the majority of respondents were found to occupy founder/owner roles, the remaining participants encompassed a diverse spectrum of positions within their organizations, including staff roles, middle-level management positions (e.g., Managers or Supervisors), and top-level management roles (e.g., CEOs or Board of Directors members), albeit in smaller proportions. This detailed analysis provides insights into the demographic composition and occupational diversity evident among the respondents engaged in the study.

Table 1 – Validity and reliability Source: Data Analysis.

| Latent Variables | Indicators | Items | Pearson Correlation | Sig. (2- tailed) | Cronbach's Alpha |
|--------------------------|------------------------|-------|------------------------|---------------------|---------------------|
| Customer Satisfaction | Provider Courtesy | CS1 | .771 | .000 | .936 |
| | Timely Service | CS2 | .718 | .000 | .938 |
| | Competent Employees | CS3 | .722 | .000 | .937 |
| | Treatment received | CS4 | .620 | .000 | .940 |
| | Employees listen | CS5 | .761 | .000 | .937 |
| Switching Barriers | Switching Cost | SB1 | .744 | .000 | .937 |
| | Contractual Lock-In | SB2 | .770 | .000 | .937 |
| | Contractual Lock-In | SB3 | .740 | .000 | .937 |
| Customer Loyalty | Brand Experience | CL1 | .711 | .000 | .938 |
| | Brand Experience | CL2 | .685 | .000 | .939 |

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| | Trust | CL3 | .714 | .000 | .937 |
|-----------------------|--|-----|------|------|------|
| | Trust | CL4 | .739 | .000 | .936 |
| Customer Retention | Intention to Maintain the Relationship | CR1 | .783 | .000 | .937 |
| | High Involvement Rate | CR2 | .754 | .000 | .940 |
| | Sense of Belonging | CR3 | .701 | .000 | .938 |
| | Strong Intention to Stay | CR4 | .798 | .000 | .936 |

4. RESULTS AND DISCUSSION

The study's findings demonstrate that customer satisfaction and switching barriers, mediated by customer loyalty, significantly impact customer retention within the ISP industry [20].

Research on customer loyalty in courier delivery services showed that high customer satisfaction enhances customer loyalty. Similarly, it was confirmed that customer satisfaction significantly impacts both loyalty and retention in the telecommunications sector. However, other studies found that although customer satisfaction positively affects loyalty, switching barriers do not always lead to increased customer retention [21].

Unlike these earlier studies, the present research suggests that while customer satisfaction does not directly affect customer retention, it significantly influences customer loyalty, which in turn impacts retention. This discrepancy can be attributed to differences in research subjects and the perception of the studied variables. Jones et al. (2000) and Burnham et al. (2003) focused on credit card users and long-distance call customers, whereas this study targeted corporate ISP users. Corporate clients, who rely heavily on stable and high-quality internet services, may perceive loyalty and switching barriers differently from individual consumers [22].

The data collected from 140 respondents within the business client segment of the ISP sector underwent rigorous validity and reliability testing to ensure the robustness of the findings. Table 1 summarizes the results of the validity and reliability tests for each latent variable.

The high Cronbach's alpha values, all exceeding .930, signify excellent internal consistency for the scales measuring customer satisfaction, switching barriers, customer loyalty, and customer retention. The strong Pearson correlation values among the items further corroborate the validity of these constructs.

The data analysis indicates that a substantial portion of the respondents, accounting for 40% of the sample, were within the age range of 35 to 39 years, suggesting significant representation from this demographic. In terms of educational attainment, 50% of the participants held a Bachelor's degree or its equivalent, highlighting a predominant level of undergraduate education among the respondents. Occupationally, 45% of the respondents were founders or owners, indicating a significant presence of entrepreneurs or individuals in leadership roles within their organizations. The remaining respondents included staff members, middle-level managers (e.g., Managers or Supervisors), and top-level executives (e.g., CEOs or Board of Directors members), though these categories were less represented.

Customer satisfaction is viewed as a short-term emotional reaction to a specific service experience, while switching barriers are considered long-term and complex, especially in the context of corporate ISPs. For corporate clients, switching ISPs involves considerable costs and operational disruptions, making switching barriers crucial for customer retention. This perspective aligns with the idea that customers often see ISP products and services as similar, which reduces their likelihood of switching unless significant problems occur [23].

Moreover, the study's findings underscore the crucial role of effective relationship management in enhancing customer loyalty and retention. Personalized assistance and proactive engagement by ISPs emerged as key factors in cultivating robust, enduring relationships with corporate clients. This supports the argument that customer satisfaction alone is insufficient for retaining corporate clients; instead, a comprehensive strategy that includes mitigating switching barriers and fostering customer loyalty is essential.

The importance of prioritizing customer loyalty and retention strategies tailored to the specific needs of business clients in the ISP industry. ISPs aiming to maintain a competitive edge should focus on delivering superior service quality, reducing switching barriers, and nurturing customer loyalty through effective relationship management practices. These insights contribute to the academic understanding of customer retention dynamics in the ISP industry and provide practical guidance for ISPs seeking to improve their service delivery and sustain growth in a competitive market

5. CONCLUSION

Our findings are particularly advantageous for ISP practitioners amidst the highly competitive environment and the challenge of customer retention. Overall, our results will assist service providers in leveraging service quality, relationship management, customer satisfaction, and switching barriers to enhance customer retention independently and concurrently, depending on market dynamics.

For the ISP industry, effective relationship management is essential for enhancing customer retention, significantly impacting client loyalty. Additionally, managing switching costs is as important as promoting customer satisfaction. High-quality service features boost customer satisfaction, while strategically managing switching costs can further enhance retention. This is particularly important for ISPs in today's competitive environment, which includes not only traditional telecom providers but also new digital service companies and other tech entities targeting the same corporate customers [24].

Our study underscores the importance of prioritizing strategies focused on customer loyalty and retention, tailored to the specific needs of business clients within the ISP sector. To maintain a competitive edge, ISPs should prioritize delivering exceptional service quality, effectively managing switching barriers, and cultivating strong customer loyalty through robust relationship management practices. These insights not only enrich the academic understanding of customer retention dynamics in the ISP industry but also offer practical guidance for ISPs aiming to improve their service delivery and achieve sustained growth in a competitive market.

5.1 Limitations and Future Research

This study has several limitations. First, while we included traditionally examined antecedents of customer loyalty such as trust and satisfaction, other significant factors were not investigated. For instance, we did not examine the impact of promotions, loyalty programs, pricing strategies, or technological expectations. Second, the model was tested within the context of the corporate ISP market, which is highly competitive, with substantial marketing efforts and up-to-date technology. Consequently, generalizing these findings to other industries, particularly the goods industry, should be approached with caution. Third, our results are based on cross-sectional data, which limits the ability to make causal inferences. A longitudinal study would be more effective in capturing changes in customer behavior over time.

To expand the understanding of customer retention strategies, future research could focus on additional antecedents such as promotional activities and loyalty programs, to better understand their influence on service quality, satisfaction, trust, and loyalty. Additionally, exploring the relationship between customer culture and experiences could provide valuable insights, as perceptions of service quality and loyalty antecedents may vary across different cultural contexts.

Given the characteristics of the corporate ISP market, it would be beneficial to examine the relationship between customer experiences and factors such as customer involvement (the degree of interactivity between a customer and the service provider), brand image (how experiences alter customer perceptions of a brand), and brand equity (given the established link between experiences and loyalty, which is widely recognized as an antecedent of equity). Moreover, in the competitive ISP market, companies make significant efforts in marketing and advertising. Thus, further studies could investigate which specific marketing stimuli or actions have the most substantial impact on different dimensions of customer experiences and which dimensions most significantly contribute to the development of loyalty, satisfaction, quality, or trust.

REFERENCES

- [1] R. Ahmad and F. Buttle, "Customer retention management: A reflection of theory and practice," *Marketing Intelligence and Planning*, vol. 20, no. 3, pp. 149–161, 2002.
- [2] J. H. Ahn, S. P. Han, and Y. S. Lee, "Customer churn analysis: Churn determinants and mediation effects of partial defection in the Korean mobile telecommunications service industry," *Telecommunications Policy*, vol. 30, no. 10–11, pp. 552–568, 2006.
- [3] E. Anderson, C. Fornell, and D. Lehmann, "Customer satisfaction, market share and profitability: Findings from Sweden," *Journal of Marketing*, vol. 58, no. 3, pp. 53–66, 1994.
- [4] S. Aydin and G. Özer, "The analysis of antecedents of customer loyalty in the Turkish mobile telecommunication market," *European Journal of Marketing*, vol. 39, no. 7/8, pp. 910–925, 2005.
- [5] S. Aydin, G. Ozer, and O. Arasil, "Customer loyalty and the effect of switching costs as a moderator variable: A case in the Turkish mobile phone market," *Marketing Intelligence & Planning*, vol. 23, no. 1, pp. 87–103, 2005.
- [6] Bell, "BCE and Aliant form one of North America's largest regional telecommunications service providers," *News Release*, 2006. [Online]. Available: http://www.bce.ca/en/news/releases/corp/2006/03/07/73404.html. [Accessed: 04-May-2006].
- [7] N. Bendapudi and L. Berry, "Customers' motivations for maintaining relationships with service providers," *Journal of Retailing*, vol. 73, no. 1, pp. 15–37, 1997.
- [8] R. C. Caceres and N. G. Paparoidamis, "Service quality, relationship satisfaction, trust, commitment, and business-to-business loyalty," *European Journal of Marketing*, vol. 41, no. 7, pp. 836–867, 2007.
- [9] C. Calvo-Porral and J. P. Lévy-Mangin, "Switching behavior and customer satisfaction in mobile services: Analyzing virtual and traditional operators," *Computers in Human Behavior*, vol. 49, pp. 532–540, Aug. 2015.
- [10] S. Chakravarty, R. Feinberg, and E. Y. Rhee, "Relationships and individuals' bank switching behavior," *Journal of Economic Psychology*, vol. 25, no. 4, pp. 507–527, 2004.
- [11] H. W. Choi, I. J. Kim, and T. S. Kim, "Contingent claims valuation of optional calling plan contacts in the telephone industry," *International Review of Financial Analysis*, vol. 11, no. 4, pp. 433–448, 2002.
- [12] K. Clay, D. Sibley, and P. Srinagesh, "Ex post vs ex ante pricing: Optional calling plans and tapered tariff," *Journal of Regulatory Economics*, vol. 4, no. 2, pp. 111–138, 1992.
- [13] M. Colgate and B. Lang, "Switching barriers in consumer markets: An investigation of the financial services industry," *The Journal of Consumer Marketing*, vol. 18, no. 4, pp. 332–347, 2001.
- [14] M. Czajkowski and M. Sobolewski, "How much do switching costs and local network effects contribute to consumer lock-in in mobile telephony?," *Telecommunications Policy*, vol. 40, no. 9, pp. 855–869, 2016.

- [15] S. N. Danesh, S. A. Nasab, and K. C. Ling, "The study of customer satisfaction, customer trust and switching barriers on customer retention in Malaysia hypermarkets," *International Journal of Business and Management*, vol. 7, no. 7, pp. 141-152, 2012.
- [16] Z. Deng, Y. Lu, K. K. Wei, and J. Zhang, "Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China," *International Journal of Information Management*, 2009.
- [17] A. Eshghi, D. Haughton, and H. Topi, "Determinants of customer loyalty in the wireless telecommunications industry," *Telecommunications Policy*, vol. 31, no. 2, pp. 93–106, 2007.
- [18] C. Fornell, "A national customer satisfaction barometer: The Swedish experience," *Journal of Marketing*, vol. 56, no. 1, pp. 6–21, 1992.
- [19] C. Fornell and D. F. Larcker, "Structural equation models with unobservable variables and measurement error: Algebra and statistics," *Journal of Marketing Research*, vol. 18, no. 1, pp. 39–50, 1981.
- [20] L. Grzybowski, "Estimating switching costs in mobile telephony in the UK," *Journal of Industry, Competition and Trade*, vol. 8, no. 2, pp. 113–132, 2008.
- [21] L. Grzybowski and P. Pereira, "Subscription choices and switching costs in mobile telephony," *Review of Industrial Organization*, vol. 38, no. 1, pp. 23–42, 2011.
- [22] C. I. Tuncer, C. Unusan, and C. Cobanoglu, "Service quality, perceived value and customer satisfaction on behavioral intention in restaurants: An integrated structural model," *Journal of Quality Assurance in Hospitality & Tourism*, 2020.
- [23] M. Khalid, A. B. Messkah, and T. W. Isliko, "The effect of service quality and relationship marketing on switching costs, customer satisfaction, and customer retention: A study on the customers of Bank Perkreditan Rakyat in East Nusa Tenggara," *Eurasia: Economics & Business*, vol. 1, no. 43, Jan. 2021.
- [24] M.-K. Kim, M.-C. Park, and D.-H. Jeong, "The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services," *Telecommunications Policy*, vol. 28, no. 2, pp. 145-159, 2004.

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