REPOSITIONING THE INDONESIAN CREDIT CARD INDUSTRY IN THE ERA OF DIGITAL FINANCIAL SERVICES: A SCENARIO PLANNING APPROACH

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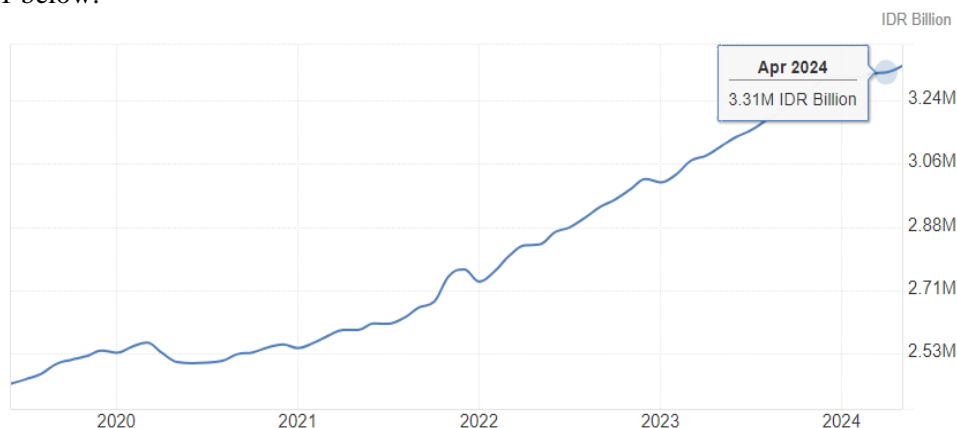Jl. H. R. Rasuna Said Kav. 1 Setiabudi, Jakarta Selatan, DKI Jakarta, Indonesia 12950

Abstract

This study aims to analyze the current position of the Indonesian credit card industry in formulating alternative scenario planning as a repositioning effort in the digital era. Using a qualitative research design with descriptive methods, this study was conducted using interview data collection and documentation studies from various literature sources. Scenario planning was developed using PESTEL analysis and Porter's Five Forces to identify key points, changes, and future scenario planning for credit cards in Indonesia. The results indicate that efforts to reposition the Indonesian credit card industry require strengthening and integrating the Indonesian credit card industry ecosystem with digitalized services. Transformation efforts are not limited to just transformation efforts, but also the need to strengthen regulators that offer customer acquisition and expand flexible collaboration

Keywords: credit card; digital; financial technology; paylater; scenario planning

INTRODUCTION

Technological advancements in the financial services industry, including the credit card industry, have been driven by several factors: technological advancements necessitating adaptation and innovation, changing customer preferences for ease of transactions, and regulatory changes. The credit card industry has been in existence since the 1980s, providing customers with flexibility in managing their loans. Amidst this development, digital payments have flourished in recent years, driven by the penetration of digital technology and regulatory support for the transformation of the financial services industry. Currently, financial technology is a competitor to the credit card industry, driven by innovations in contactless financial technology. According to the latest data, consumer credit in Indonesia increased to IDR 3,329,127 billion in May 2024, an all-time high for consumer credit in Indonesia, as shown in Figure 1 below.
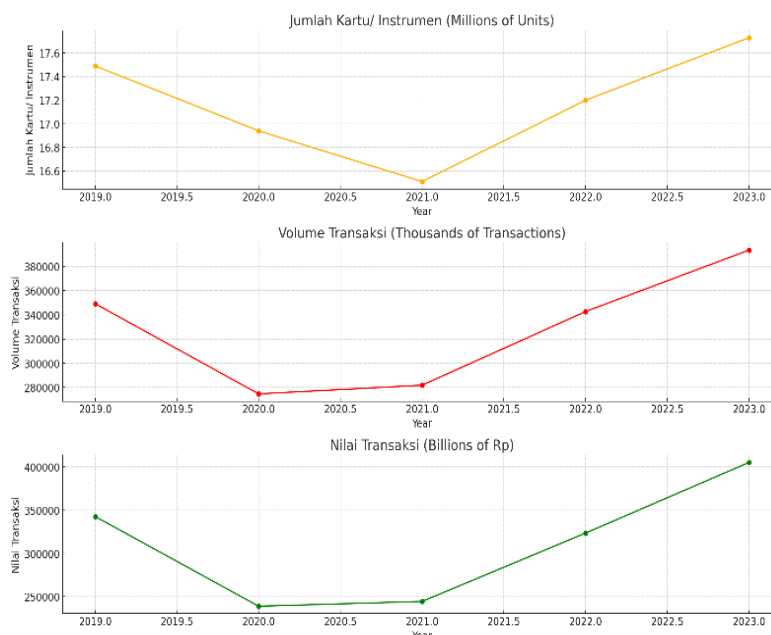

Figure 1. Period 1 Indonesia Consumer Credit Data
Source: Trading Economics (2024)

Figure 1 above shows the growth in customer interest in credit, indicating that the existence of financial technology has increased customer demand for credit. This poses a challenge for the traditional credit card industry and presents the potential for customer shifts and attrition. A recent report from CNBC Indonesia indicates a growing preference among Indonesian consumers for Buy Now, Pay Later (BNPL) services over traditional credit cards (Puspadini, 2024). This trend is driven by the convenience and flexibility offered by BNPL options, making them increasingly popular among younger demographics and those seeking alternative financing methods or transaction funding sources. In line with this report, Katadata & Kredivo, through their June 2024 survey, highlighted the use of BNPL among millennials and Gen Z, with 70% citing convenience and cash flow management as the primary reasons for adopting BNPL. Furthermore, the survey also highlighted a significant shift in online payment preferences from 2023 to 2024 (Katadata Insight Center & Kredivo, 2024). Competition between the traditional credit card industry and financial technology offering BNPL services impacts platform-based supply chain systems. Li et al., (2023) explains that online credit card offerings through financial technology can capture market segments that traditional credit cards have not yet been able to access. This online credit card offering model has an impact on increasing retail prices and influencing credit card ownership strategies and personal disposable income. This online credit card model tends to provide subsidized benefits to its customers, especially when the dispersion of personal disposable income is large or the cost of mismatch is low (Herkenhoff & Raveendranathan, 2025). Other data also illustrates the decline in the Indonesian credit card industry from 2019 to 2021, likely due to the emergence of financial technology competitors, as seen in Figure 2 below.

Figure 2. Bank Indonesia Data of Credit Cards
Source: Bank Indonesia (2023)

As the adoption of technological advancements continues, the financial technology industry continues to expand, potentially expanding over the next few years. In 2023 and 2024, a shift in online transaction preferences will impact financial technology products, such as the popular PayLater platform, becoming the primary choice. This has resulted in a 15% decline in credit card usage, demonstrating that the financial technology industry offers greater appeal, offering conveniences not available in the traditional credit card industry (Katadata Insight Center & Kredivo, 2024). However, the credit card industry still holds significant regulatory advantages, as Bank Indonesia and the Financial Services Authority remain strict in their licensing and regulatory requirements for the financial technology industry (Anestiawati et al., 2025; Septiansyah et al., 2025). Therefore, the credit card industry remains a powerful force for both parties, impacting market decisions and performance. Technological transformation is driving the need for the financial industry to adapt to technological developments. Currently, the financial industry is focusing on how financial services can be delivered digitally. The adoption of digital financial transactions and management certainly

requires services that not only provide perceived convenience but also ensure security and trust in perceived value. Belanche et al., (2022) stated that digital financial services carry risks, including data breaches and cybercrime. This presents a challenge that could hinder the financial industry's presence amidst the need for technological transformation. The adoption of digital financial services is often influenced by the concept of innovation diffusion. Rogers (2003) proposed that the five attributes of innovation diffusion are relative advantage, compatibility, complexity, trialability, and observability. Hendrawan et al., (2023) defines the concept of innovation diffusion in line with the current digital evolution in the financial industry, with the emergence of various financial technology platforms.
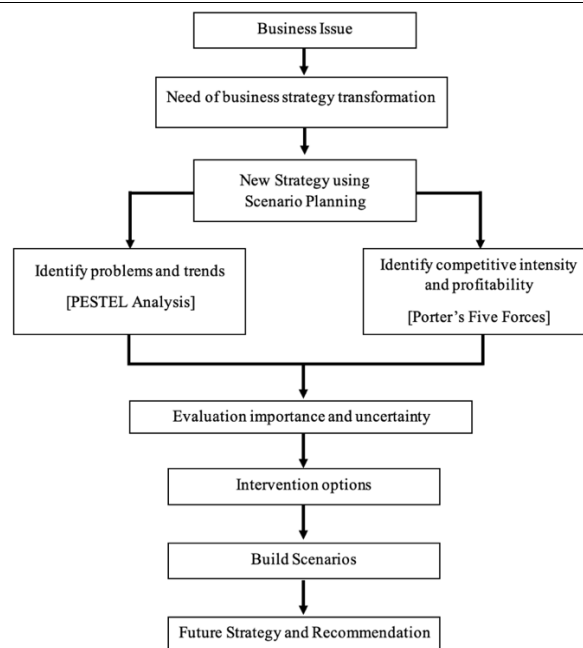
The credit card industry faces competitors in the financial technology industry, offering convenient transactions, such as e-wallets, QRIS (Quick Response Code Indonesian Standard), and Buy Now Pay Later (BNPL) services. This has shifted customers' perceptions of financial services' value. While credit cards were previously a convenient transaction tool, the advent of financial technology has become more advantageous, allowing for quick transactions and integration with everyday mobile devices. This shift from traditional to digital financial services has impacted the credit card industry, requiring innovation and adjustments to services, products, and marketing strategies in an increasingly competitive environment. Hughes et al., (2024) stated that when the financial services industry fails to digitally transform, it risks losing market share compared to its competitors, the financial technology industry, which is more agile and adaptable to change.

The Technology Acceptance Model (TAM) concept in assessing the existence of the credit card industry is also used as a theoretical basis in this study. TAM was originally proposed by Fred Davis as a framework to identify and assess the influence of information and communication technology systems on user acceptance of new technologies (Lee et al., 2025). TAM has important components, namely Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), which assess how the main determinants of customer intentions when using a particular system. Perceived usefulness will explain the extent to which customers have confidence when using technology that can facilitate daily performance. Meanwhile, perceived ease of use is defined as the extent to which customers can have confidence in the use of technology. Both of these, perceived usefulness and perceived ease of use, will shape customer intentions that will ultimately lead to the reasons for actual use of the technology used.

A study examining the current landscape of the Indonesian credit card industry amidst the presence of competitors in the financial technology industry can be seen as aligned with the TAM concept. The presence of the financial technology industry poses a threat that can complement deficiencies and even replace traditional credit cards. Utomo et al., (2025) explains that perceived usefulness and perceived ease of use have a significant influence on customer decisions in adopting financial services. As financial services become easier for customers to use, they are more likely to use them as the most appropriate and primary service. TAM offers insights into how customers go through the stages of adoption, exposure to services and products, and actual choice. TAM helps predict user responses to future developments in the credit card ecosystem, including biometric payments, AI-based credit scoring, or integrated financial platforms. This research is based on the competitive situation of the credit card industry, which requires alternative scenarios during technological transformation. This massive technological adaptation necessitates the credit card industry's stability amidst a dynamic market. By addressing these business challenges, credit card companies in Indonesia can strategically position themselves to thrive in the rapidly evolving digital payments landscape. Therefore, this study aims to analyze and explore future scenarios for the credit card industry in Indonesia amid the evolution of digital payments.

METHOD

This study use scenario planning using a descriptive qualitative research design, examining the credit card industry landscape amidst increasing options and the presence of financial technology competitors. Scenario planning serves as a strategic tool and method for creating long-term plans, identifying elements of uncertainty and the forces that drive robust decision-making processes and greater adaptability to change (Goodwin & Wright, 2014).

Figure 3. Conceptual Framework

Based on Figure 3 above, this study design scenario planning by identifying the situation and conditions of the Indonesian credit card industry in the era of digital financial services using PESTEL analysis and Porter's Five Forces analysis. PESTEL analysis are used to identify issues and trends in the Indonesian credit card industry and its financial technology competitors. PESTEL analysis are used to create scenario planning based on political, economic, social, technological, environmental, and legal analysis. The six elements of PESTEL analysis will serve as an analytical framework for identifying challenges and dynamics in the internal and external environments that affect an organization's ability to achieve and maintain its competitive advantage (Jatmiko et al., 2021). The results of the PESTEL analysis evaluation can be used as a tool to predict future conditions by managing challenges and facilitating changes or improvements in appropriately identified areas (Satutikirono & Sunitiyoso, 2021; Christodoulou & Kevin Cullinane, 2019; Pan et al., 2019).

Porter's Five Forces analysis is also used as an analytical framework to identify the situation and conditions of competitive intensity and profitability in assessing the credit card industry in Indonesia against competitors in the financial technology industry. The Porter's Five Forces concept can also be used to assess industry attractiveness, which indirectly has its own individual determinants, determined by the behavior of the social framework in which the business operates (Ateljević et al., 2023). Porter's Five Forces analysis framework refers to five company strengths: Rivalry Among Existing Competitors, Threat of New Entrants, Threat of Substitutes, Bargaining Power of Buyers, and Bargaining Power of Suppliers. Every company has threats and competitive advantages that serve as sources of value for the company in determining its strategic position compared to its competitors. Porter's Five Forces analysis components can determine unique aspects and which series of activities have a value chain to optimize (Miao, 2021). The data collection technique used was in-depth interviews as primary data to analyze and identify the conditions and situation of the credit card and financial technology industries in Indonesia. In this study, the informants consisted of experts involved in the credit card and financial technology service providers, as shown in Table 1 below.

Table 1. List of Interview Experts

Informant Position	Company Category	Experience in the Role (yrs)	Experience in Industry (yrs)
Head of Products and Solutions	International Credit Card Principal	4	30
Card Business Head	Issuer & Acquiring Banks	3	20
Banker - Manager	Customer / User	3	10
Financial Services Authority	Regulators	4	5
Head of Product & Technology	Industry Association	8	28
Project Manager – Financial Technology	Fintech Company	2	5
DPR RI Komisi XI – Financial Sector	Legislator	5	40

This study also utilized documentation and literature study data collection techniques as secondary data from various documents and literature, including journals, books, news articles, and regulations. The data analysis technique employed was thematic analysis using coding techniques. Data from interviews with experts, documentation and literature studies, and were processed using a structured scenario planning approach. Scenario planning utilized causal loop diagrams (CLDs), visualizing the relationships between different factors, including their mutual influence, strengthening, weakening, and neutralizing effects. These factors were mapped based on their priority level of impact and uncertainty on the industry, providing a baseline for scenario development. This uncertainty measurement resulted in priorities that formed four distinct scenarios in a matrix format, leading to the creation of four plausible future scenarios for the Indonesian credit card industry.

RESULTS

The PESTEL analysis describes the business ecosystem, situation, and conditions of the credit card industry in Indonesia amidst the transformation of digital financial services technology, which has led to the emergence of competitors in the financial technology industry. Aspects such as politics, economics, social issues, technology, the environment, and law are the focus for a deeper understanding of the factors that can influence a company's operations and business strategy. The findings derived from the analysis using the PESTEL framework are shown in Table 2 below.

Table 2. PESTEL Analysis Findings

No.	Factor	Insight
1.	Politic	Require balanced regulatory policies to ensure fair competition between paylater and credit cards.
2.	Economic	Provide growth potential, but alternative financial products are gaining traction.
3.	Social	Low trust and financial literacy, requiring consumer education efforts.
4.	Technology	Demand continuous innovation to keep up with fintech competitors.
5.	Environment	Encourage the adoption of sustainable financial solutions.
6.	Legal	Data protection and cybersecurity regulation.

The following analysis, Porter's Five Forces analysis, outlines the industry structure and competitive strengths of the Indonesian credit card industry amidst the transformation of digital financial services technology, which has led to the emergence of competitors in the financial technology industry. Aspects such as competitive dynamics, supplier power, buyer power, the threat of substitute products, and the threat of new competitors are the focus for a deeper understanding of the factors that can influence a company's operations and business strategy. The findings derived from the analysis using Porter's Five Forces framework are shown in Table 3 below.

Table 3. Porter's Five Forces Analysis Findings

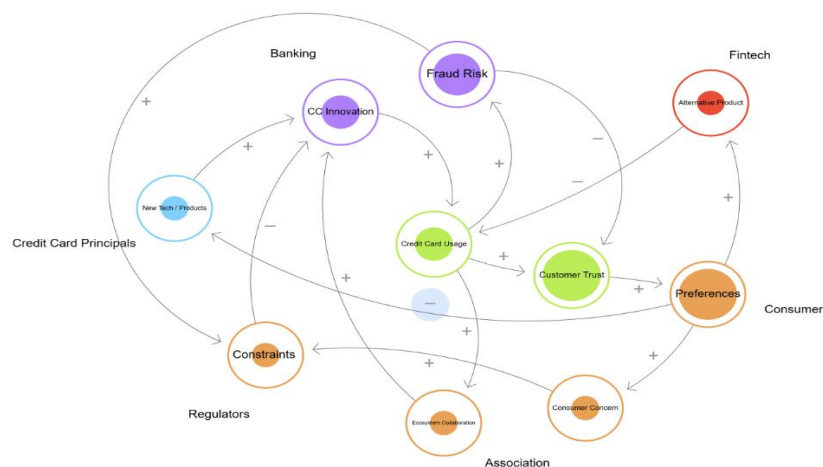| No.	Factor	Insight	Impact
1.	Threat of New Entrants	The credit card industry faces new threats from aggressive fintechs despite the need for capital, technology, and trust.	Moderate
2.	Bargaining Power of Suppliers	The credit card industry relies on global networks and is racing to strengthen security.	Moderate
3.	Bargaining Power of Buyers	The credit card industry faces consumers who like the challenge of various payment alternatives, one of which is paylater.	High
4.	Threat of Substitutes	The credit card industry is under pressure from a variety of digital products that are easier and free of charge.	High
5.	Industry Rivalry	The credit card industry is competing fiercely through feature differentiation amidst the rise of fintech.	High

After identifying key findings from the PESTEL and Porter's Five Forces analyses, a driving force analysis was conducted on each factor deemed to drive the inter-component relationships within the Indonesian credit card industry. Based on the analysis coding conducted on the results of interviews with experts, a quantitative summary code was generated that identifies each key finding, thus indicating which interests reflect the key issues of emphasis within each topic. This is shown in Table 4 below for each driving force finding.

Table 4. Driving Forces Mentions

No.	Driving Forces	Total Mentions
1.	Consumer Behavior Shift (BNPL & e-Wallets)	12
2.	Technological Innovation (AI & Virtual Cards)	13
3.	Regulatory Direction	8
4.	Cybersecurity & Trust	7
5.	Macroeconomic Stability	9
6.	Green Banking / Environmental Factors	4
7.	Digital Inclusion / Literacy Gap	7

Based on the data in Table 4 above, it describes the components that form the dynamic correlation relationship between factors developed in the Causal Circle Diagram visualization. Figure 4 visualizes the Causal Circle Diagram in the credit card industry in Indonesia, which establishes an interdependent relationship and feedback loop between regulatory direction, innovation speed, consumer behavior, security, and collaboration.

Figure 4. Causal Loop Diagram – Credit Card Industry

Based on the visualization of the illustration in Figure 4 above, it explains the dynamics of the driving force factors of the power and interdependence in the feedback loop between the nodes 'Credit Card (CC) Innovation', 'Customer Trust', and 'Credit Card Usage' as the main axis influenced by the presence of regulatory actors, financial technology companies, associations, and credit card principals. The presence of positive (+) and negative (-) markers illustrates when an increase in one factor can increase or conversely decrease the connected factor. For example, an increase in 'Credit Card (CC) Innovation' can increase 'Credit Card Usage'. However, in 'Credit Card Innovation' there is a decrease in demand for 'Alternative Products', the impact of which is disruption driven by the financial technology industry. When increased usage also triggers how there is an increase in 'Fraud Risk' which pressures 'Regulators' to implement 'Restriction' policies. This potential indirectly impacts 'Credit Card Innovation', so that interdependence can reflect a cycle of reinforcement and balancing that is very important for scenario planning. The factors used to determine these critical uncertainties aim to measure which factors are more impactful and uncertain. Key uncertainties that could impact the future of the credit card industry in Indonesia amidst the digital transformation of the financial industry are identified based on their level of uncertainty (Low, Medium, High) and their level of impact (Low, Medium, High). The research findings, which illustrate how the evolution of digital payments has impacted the credit card industry in Indonesia, provide insights for formulating appropriate scenario planning and strategies. A summary of these critical uncertainties is presented in Table 6 below.

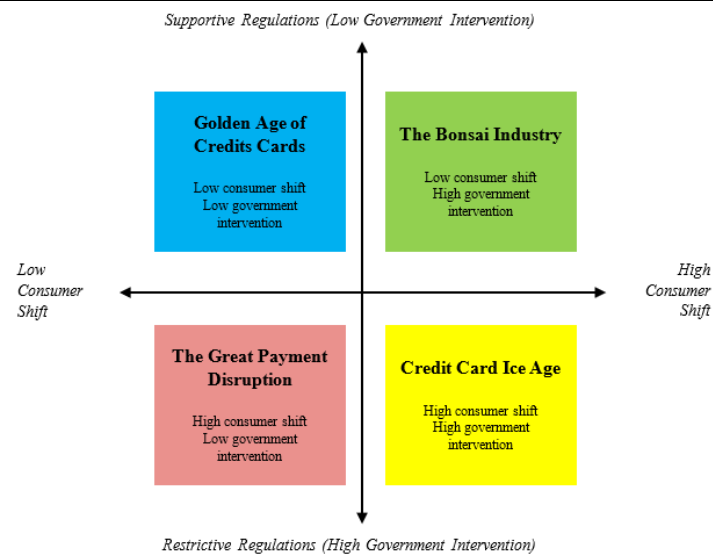**Table 6 Degree of Uncertainty and Impact of Key Factors**

No.	Factors	Degree of Uncertainty	Degree of Impact
1.	Consumer Behavior & Preferences	High	High
2.	Regulatory Direction & Clarity	High	High
3.	Digital Payment Innovation	Medium	High
4.	Cybersecurity and Trust	Medium	High
5.	Macroeconomic Stability	Medium	Medium
6.	Financial Inclusion & Kredit Literacy	Medium	High
7.	Industry Collaboration & Ecosystem Readiness	Medium	Medium
8.	Environmental and Social Presure	Low	Low

Based on the critical uncertainties framework in Table 6 above, it can be explained that the uncertainty and impact on the credit card industry are predominantly influenced by changes in consumer behavior and regulatory direction. Changes in consumer behavior, particularly among Gen Z, as young consumers responsive to innovation and technological transformation, influence the direction of credit card usage, which favors digital-based service products such as paylater. The convenience of digital services, fast processing, and attractive promotions are the main factors in choosing financial technology services over credit cards, which are considered complicated and riskier. Meanwhile, in terms of regulation, existing regulatory policies (Bank Indonesia and the Financial Services Authority) are also considered to indicate ambiguous uncertainty. While digitalization is encouraged, there are also unclear interest and transaction regulations. Furthermore, regulations do not strictly guarantee cybersecurity, competition between financial technology service providers, technological pressures and readiness, and economic conditions require the credit card industry to face the need for rapid adaptation to remain relevant.

To develop a strategic perspective on the future of the credit card industry in Indonesia, a 2x2 scenario matrix has been constructed based on the two most critical uncertainties identified in the previous section: Shifts in Consumer Behavior: The extent to which consumers continue to use traditional credit cards or shift to alternative digital-based financial services such as paylater. Regulatory Impact on the Industry: The extent of government intervention through policies that support or restrict the credit card industry, such as interest rate caps, transaction fee regulations, or mandatory digital payment integration. By placing these two uncertainties as the axes of the scenario matrix, four possible future scenarios emerge, each representing a different combination of factors. Figure 5 shows the scenario framework for the credit card industry in Indonesia amidst the digital transformation of financial services.

Figure 5. Scenario Matrix of the Future Credit Card Industry in Indonesia

Based on Figure 5 above, this scenario framework presents four possible futures for the Indonesian credit card industry, shaped by two critical uncertainties: shifts in consumer behavior and the how is the government regulation regarding the industry. These uncertainties impact the adoption, competition, and sustainability of credit cards in the digital payment ecosystem. In the Golden Age of Credit Cards scenario, consumer trust in credit cards remains strong, and the government implements favorable policies to support innovation. This scenario encourages growth, increased security, and seamless integration with digital payment platforms. Financial institutions can expand their market presence by enhancing AI-based fraud detection, instant approvals, and flexible credit models. This scenario benefits both consumers and credit card providers, leading to strong market retention and industry stability.

In the The Bonsai Industry scenario, while credit cards remain a primary financial instrument, stringent regulations and government-imposed compliance requirements increase operational costs for financial institutions. Nevertheless, credit cards remain relevant in the market, especially among consumers who value their security and global acceptance. Industry players need to focus on compliance, risk management, and customer education to maintain growth. Conversely, the Technology Disruption scenario sees a decline in credit card usage, as consumers increasingly choose alternative digital payment methods such as Paylater. However, in this case, the government supports financial technology innovation, encouraging the industry to develop and integrate with digital solutions. Credit card providers must embrace partnerships with fintech companies, offer hybrid financial products, and create more flexible payment models to remain competitive.

The most challenging scenario is Credit Card Ice Age, where consumers shift away from credit cards due to the rapid adoption of Paylater and other financial technologies. At the same time, stringent regulations increase compliance costs, making it difficult for traditional credit card providers to compete. In this scenario, industry players must undergo a complete transformation, focusing on digital banking, AI-based financial services, and new revenue models to survive. This framework highlights the urgent need for innovation, regulatory adaptability, and strategic foresight. The future of the Indonesian credit card industry will be determined by its ability to respond to evolving consumer preferences and overcome regulatory challenges. Industry players must proactively explore new business models, strengthen digital integration, and enhance security measures to remain relevant in an increasingly digital financial landscape.

DISCUSSION

The Indonesian credit card industry faces challenges along with technological innovation and transformation, which also targets the financial industry. Currently, the financial services industry is required to adapt to technological transformation, resulting in the presence of the financial technology industry as a competitor to the traditional credit card industry. Changes in consumer behavior and regulatory trends are crucial factors impacting how the credit card industry currently faces its biggest challenges. These changes in consumer behavior and regulatory trends have a significant impact on the future of the credit card industry in Indonesia. From an innovation diffusion perspective,

the adoption rate of a product or service is influenced by perceptions of relative superiority and suitability to the user's lifestyle (Xie et al., 2022). When the financial technology industry introduced the paylater feature, it was considered more attractive to customers, especially younger generations (especially Gen Z), who were interested in obtaining credit without complicated requirements and easy access through their devices. This perception positions paylater services as more desirable and has advantages over the credit card industry due to their closer, adaptive integration with the everyday digital ecosystem (Wortmann et al., 2023; Tan, 2022). This shift in customer preferences reflects the lower perceived ease of use and usefulness of the credit card industry compared to the financial technology industry. Consumers view credit cards as a complex and less flexible credit service, while paylater is considered simpler, without complicated requirements, and accessible to novice users. Perceptions of ease and usefulness are important determinants of financial service adoption. Paylater offers easy access through digital devices, in contrast to traditional credit cards, which require users to have an account. Many paylater services that collaborate with e-commerce platforms are also considered more attractive than credit cards. This decline in credit cards is not solely due to technological factors, but also the industry's failure to align its value proposition with digital user expectations (Naimi-Sadigh et al., 2022).

Meanwhile, the regulatory perspective is still considered ambiguous, creating strategic uncertainty for credit card service providers. Regulation can be said to be both a barrier and a driver for the development of the financial services industry. The importance of regulatory support, specifically Bank Indonesia and the Financial Services Authority, is crucial for the credit card and financial technology industries to operate. While regulators granting licenses to the financial technology industry for digital payments, such as QRIS, and fintech licensing, it does open up opportunities for integration, potential restrictions such as interest rate regulations, transaction fees, and security compliance can actually suppress the flexibility of credit card innovation (Jameaba, 2024; Utami & Ekaputra, 2021). This situation indicates a tension between financial system stability and the need for market adaptation, which impacts the sustainability of the credit card industry in Indonesia. Technological pressures and the urgency of cybersecurity are also key points regarding the risks of adopting digital financial services and credit cards. Data security and privacy risks are crucial aspects that can shape user trust and influence usage intentions. Increasing credit card innovation can increase usage, but it's important to note the risk of fraud, which can lead to regulatory intervention (Septiansyah et al., 2025). This means that digital transformation doesn't always result in linear growth, but rather is dynamic and full of feedback loops. This input is crucial as the credit card industry moves toward digital innovation and transformation.

The results of this study design a scenario planning framework that repositions the credit card industry, which needs to rely on the ability to build a collaborative ecosystem with fintech companies, regulators, and global principals aligning to which scenario that the industry is heading at the moment. There will be an early warning signals, that shows where the industry will go in the future, which can help the banks and other players in the industry to prepare how would they face the future scenario. The solution to the declining relevance of credit cards lies not only through technological innovation but also through product simplification, increased financial literacy, and repositioning the narrative of credit cards' value as a long-term financial management tool. The gap between the problem and the solution lies in the misalignment between credit card product design and the reality of digital consumer behavior. Therefore, the credit card industry needs to utilize these findings as a basis for formulating adaptive strategies that align with technology adoption theory and regulatory dynamics, in order to maintain relevance and competitiveness in Indonesia's digital financial ecosystem.

CONCLUSION

The future of the credit card industry in Indonesia is largely determined by its ability to adapt to changing consumer behavior and regulatory dynamics in the era of digital financial services. Shifting preferences and changing consumer behavior, particularly among the younger generation, demand convenience, flexibility, and digital integration that conventional credit cards have not yet fully met. This makes perceptions of convenience and usability key determinants of financial service adoption. On the other hand, ambiguous regulatory direction creates strategic uncertainty as well as opportunities for collaborative innovation for the industry. Therefore, credit cards need to be repositioned not simply as a means of payment, but as part of a secure, adaptive, and user-oriented digital financial ecosystem.

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