Annual International Conference on Islamic Economics and Finance
Vol. 2, 2026

Implementation of The National Payment Gateway in Enhanching Transactions in Islamic Banking: A Case study of BSI KCP Bung Tomo

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Abstract:
The development of digital payment systems in Indonesia continues to progress, one of which is through the launch of the National Payment Gateway (GPN) by Bank Indonesia. This system was created to integrate various payment methods into a single, efficient, and secure national network. This study focuses on how the GPN system is implemented at Bank Syariah Indonesia (BSI) KCP Bung Tomo and how it supports Sharia-compliant financial transactions. The main objectives are to understand the practical application of GPN, identify the challenges faced during implementation, and evaluate its strengths and weaknesses using a SWOT analysis. This research uses a qualitative descriptive approach, with data collected through interviews, direct observation, and documentation. Informants include internal bank staff and several active customers. Data analysis was carried out by reducing, presenting, and drawing conclusions from the findings.
The results show that GPN provides real benefits, such as lower administrative fees and easier interbank transactions across the country. However, many customers are still unfamiliar with the system, and it lacks international transaction capabilities. SWOT analysis reveals that GPN's strengths lie in its efficiency and domestic connectivity, while its weaknesses relate to limited global reach. There are opportunities in expanding QRIS usage among SMEs, but threats arise from the growing popularity of e-wallets and fintech platforms. In conclusion, GPN implementation at BSI KCP Bung Tomo is relatively effective, yet improvements in customer education and feature development are needed to meet the demands of today's digital banking environment.

Keywords: *GPN, Payment System, SWOT, Islamic Bank, Digital Transaction*

A. INTRODUCTION

The rapid transformation of the digital economy has necessitated a corresponding evolution in the financial services sector, particularly in payment infrastructure. In Indonesia, the establishment of the National Payment Gateway (NPG) or *Gerbang Pembayaran Nasional (GPN)* represents a pivotal effort to create an efficient, integrated, and secure national payment system. The NPG aims to standardize payment processing, reduce transaction costs, and enhance the independence of the domestic financial system. (Humaidi & Hakim, 2019)

To curb inefficiencies and reduce reliance on foreign payment processors (such as Visa and Mastercard), the government and BI launched a strategic domestic initiative: the National Payment Gateway (NPG) or *Gerbang Pembayaran Nasional (GPN)*. Officially launched under Bank Indonesia Regulation No. 19/8/2017, the NPG is designed to ensure the interconnection between switching operators and the interoperability of all domestic retail payment transactions. This initiative explicitly aims to support national data sovereignty and reduce the overall Merchant Discount Rate (MDR). The NPG framework was later complemented by the introduction of the QR Code Indonesia Standard (QRIS), unifying various digital payment platforms into a single, regulated system. (Sriekaningsih, 2020)

The landscape of Islamic finance in Indonesia has consolidated, with Bank Syariah Indonesia (BSI) emerging as the nation's largest Islamic bank. Sharia banks operate under a unique dual obligation: adhering to modern banking standards while strictly complying with Sharia principles (e.g., non-interest-based transactions). Consequently, the effectiveness of the NPG must be examined within the BSI context: how does this centralized infrastructure policy affect daily operations and service delivery while maintaining the distinct ethical and compliance requirements inherent to Sharia banking. (Fahira, 2021)

Existing research broadly acknowledges the macroeconomic success of the NPG, highlighting its role in improving national payment efficiency, reducing transaction costs (MDR), and enhancing data security through domestic processing. However, most studies maintain a macro-level focus on policy outcomes. A significant knowledge gap persists at the micro-level implementation of the NPG within the specialized context of Sharia banks. There is a scarcity of in-depth, empirical literature particularly qualitative case studies analyzing the practical processes, challenges, and detailed perceptions of NPG adoption by Sharia-compliant financial institutions. While BSI is a major entity, the day-to-day reality of integrating the NPG's system (which, for instance, currently lacks international processing capability) into the unique product offerings and operational culture of a Sharia branch remains largely undocumented.

This research gap restricts policymakers and bank management from fully understanding the specific supporting and hindering factors (strengths and weaknesses) of NPG usage within the distinctive framework of Islamic finance. The research will deeply analyze the implementation process from the perspective of the key actors involved.

B. LITERATURE REVIEW

In the context of this research, the implementation of the National Payment Gateway (GPN) system as a national policy in the payment system sector needs to be analyzed to determine the extent to which this policy is carried out at the operational branch level of Islamic banking, specifically at BSI KCP Bung Tomo, using the Van Meter and Van Horn theory. The Van Meter and Van Horn theory is employed to analyze how a policy or program is executed by an organization in the field. This theory emphasizes that policy implementation is a complex process influenced by various interconnected variables. (Winarno, 2007)

Van Meter Van Horn

The variables used to analyze the implementation of the GPN policy are:

Policy Standards and Objectives

This variable refers to the clarity of the goals of the implemented policy or program. Clear and measurable standards and objectives will facilitate the implementers in carrying out the policy as expected.

Implementation Resources

Policy implementation requires adequate resource support, in terms of human resources, technology, infrastructure, knowledge, and technical readiness. In the execution of the GPN system at BSI KCP Bung Tomo, the readiness of employees, the availability of payment system devices, and the ability to provide education to customers are critical factors determining implementation effectiveness. (Nurdin, 2023)

Socio-Economic Conditions

this variable encompasses the external environment that can influence policy execution, such as the level of public literacy and the community's attitude towards new policies. The still-low level of financial literacy and insufficient education from the bank have resulted in passive rejection or confusion among customers regarding the use of the GPN debit card.

Dispositions or Attitudes of Implementers

This variable refers to the attitudes, perceptions, and commitment of the policy implementers. The implementers' understanding significantly affects the success of the implementation. (Hill & Hupe, 2002)

Theory of Planned Behavior (TPB).

Furthermore, this study utilizes the Theory of Planned Behavior (TPB), with a SWOT analysis integrated into the interview process, to explore in depth the aspects aligning with the elements of the Theory of Planned Behavior (TPB). Theory of

Planned Behavior is a psychological theory used to explain and predict individual behavior. This theory suggests that a person's behavior is primarily determined by their intention to perform the behavior, which is influenced by three key factors: attitude, subjective norm, and perceived behavioral control. (Lestari et al., 2023)

Attitude

Attitude describes an individual's positive or negative evaluation of a specific behavior. If someone perceives an action as beneficial, pleasant, or advantageous, they will have a positive attitude and thus a higher intention to perform it.

Subjective Norm

Subjective norm relates to social influence or pressure from the surrounding environment, such as family, friends, or the community. This factor is present if the individual feels the influence of significant others to perform or not perform a certain action.

Perceived Behavioral Control

This measures the extent to which an individual perceives they have the ease or capability to perform an action. If they feel it is easy, the tendency to perform the action is higher. (Ajzen, 1991)

National Payment Gateway

National Payment Gateway is defined as an electronic system designed to process various payment transactions utilizing a range of instruments, such as ATM/debit cards, electronic money, and credit cards. GPN offers several advantages to the public, including the ability to conduct effective non-cash transactions at any domestic bank and a reduction in transaction costs. Furthermore, the implementation of GPN is expected to strengthen the resilience, self-sufficiency, and competitiveness of the national payment system. (Haykal, 2019)

Transactions in Islamic Banking

Transactions in Islamic (Sharia) banking are fundamentally similar to conventional transactions, involving the exchange of value or an agreement between two parties. The distinguishing factor lies solely in the contracts (akad) employed by Islamic banks during transactions, as Islamic banks adhere to Islamic principles (Sharia principles) in all their operational activities.

SWOT Analysis

Strengths, Weaknesses, Opportunities, and Threats—is a widely used analytical framework. This analysis is conducted to identify and evaluate the internal strengths and weaknesses, as well as the external opportunities and threats facing an organization or company. The primary objective of conducting this analysis is to ensure that the organization or company can sustain its viability and competitiveness even when confronted with various market rivals. (Mashuri, 2020)

C. RESEARCH METHODOLOGY

The research method used in this study is a descriptive qualitative method. Primary data sources were collected through interviews and documentation. Secondary data sources consisted of data obtained from third parties or specific institutions, such as the Bank Indonesia and Bank Syariah Indonesia. Data analysis was performed using sequential steps, specifically, data reduction, data presentation, and conclusion drawing.

D. RESULTS AND DISCUSSION

Implementation of the National Payment Gateway (GPN) System at BSI KCP Bung Tomo in Supporting Sharia Banking Transactions

Based on the Van Meter and Van Horn theory, there are three related variables in this study:

Policy Standards and Objectives

The National Payment Gateway (GPN) is a payment system developed by Bank Indonesia (BI) to nationally integrate various payment instruments. In line with BI's mandate, Islamic banks, including BSI KCP Bung Tomo, have been gradually implementing GPN since 2018. This implementation aims to support the efficiency of the national payment system and simultaneously mitigate the dominance of foreign payment systems. In this context, the GPN policy is designed to streamline the national payment ecosystem, enhance transaction efficiency, and reduce reliance on international networks such as Visa and Mastercard.

Implementation Resources

The execution of GPN at BSI KCP Bung Tomo is generally supported by adequate facilities and infrastructure. The bank provides GPN-logo debit cards and an integrated system to facilitate this. Structurally, the GPN system is encapsulated within a chip embedded in the ATM card. This chip is a core component that stores critical data and functions as the primary transaction security mechanism. If the chip is damaged or scratched, the card becomes unusable for transactions. Crucially, GPN transactions are processed domestically, meaning they bypass international networks like Visa or Mastercard. This domestic processing supports the Indonesian economy by decreasing dependence on international networks. Furthermore, the GPN network enables interbank transactions across different EDC machines and ATMs due to the unified network connectivity.

Dispositions and Attitude of Implementers

The GPN system is designed to be highly accessible to all socioeconomic segments, catering to customer needs irrespective of their profession. At BSI KCP

Bung Tomo, the Customer Service (CS) representative typically inquires during account opening whether the customer prefers a GPN-logo or Visa-logo card, allowing for customer choice. The adoption of GPN cards is facilitated through continuous education delivered by both Customer Service and Teller staff during transactions and new account openings. Therefore, within the scope of this study, the disposition or attitude of the implementers reflects how bank employees execute their role in the GPN policy by leveraging their understanding, willingness, and competence to effectively socialize this policy to the customers.

Constraints in the Implementation of the National Payment Gateway (GPN) System at BSI KCP Bung Tomo

Policy implementation does not always proceed without impediments. Based on the findings of this study at BSI KCP Bung Tomo, several constraints were identified that affect the effectiveness of the GPN system. Applying the Van Meter and Van Horn theoretical framework, three related variables were found to be critical sources of these constraints:

Implementation Resources

According to a Customer Service representative, one of the primary obstacles faced by BSI KCP Bung Tomo following the GPN implementation relates to the card chip. Specifically, the ATM cards are not tested upon issuance but only when the account is opened. A frequently encountered issue is a card being unreadable due to a damaged or malfunctioning chip. If the chip is defective, neither the ATM nor the EDC machine can process the card, rendering it unusable for transactions. Consequently, customers must return to the bank to file a complaint and replace the card. Thus, the common constraint is often localized to the physical card component.

Socio-Economics Conditions

This variable highlights the significant influence of the community's social conditions on the success of a policy. In this research, a major constraint is the lack of customer understanding regarding GPN. This is primarily caused by insufficient education on GPN. The majority of customers still lack comprehensive knowledge about the system and are generally unaware of the differences between GPN-logo cards and international-logo cards, such as Visa.

Dispositions or Attitudes of Implementers

This factor plays a crucial role in the overall success of the policy. The disposition of the implementers reflects their support, understanding, and commitment to the implemented policy. This attitude is, in turn, reflected by the response and perception of the policy recipients, which, in this case, are the bank customers using GPN cards. Following interviews with several BSI KCP Bung Tomo customers, some stated that they did not feel a significant change before and after the GPN implementation. Although GPN offers substantial benefits, this reaction suggests that the advantages provided by the GPN system are not visibly manifested in daily life, leading to a less than optimal acceptance among some parties.

SWOT Analysis of the National Payment Gateway (GPN)

The SWOT analysis is employed as an analytical tool to identify the Strengths, Weaknesses, Opportunities, and Threats encountered in the implementation of this system. This SWOT analysis is structured based on in-depth interviews with two internal informants from BSI KCP Bung Tomo (a Customer Service and a Teller representative), as well as several customers of BSI KCP Bung Tomo. The findings are synthesized using the Theory of Planned Behavior (TPB), which posits that individual behavior is influenced by three main factors: attitude toward the behavior, subjective norms, and perceived behavioral control.

Attitude

This variable encompasses the individual's favorable or unfavorable evaluation of the behavior. Strengths, the greatest strength of GPN compared to Visa and other international systems is cost efficiency. Interbank transactions within the GPN network incur lower fees because they utilize the domestic network. Specifically at BSI KCP Bung Tomo, the monthly tariffs for GPN-logo cards and Visa cards differ. This cost advantage is significant in a Sharia context, as it minimizes unnecessary additional burdens in muamalah (transactional) dealings.

Weaknesses, weaknesses lie in the limited features of GPN compared to international networks. GPN operates solely at a national level, meaning it is restricted to domestic use. Consequently, customers who wish to transact abroad, use international e-commerce platforms, or conduct cross-border payments are required to use internationally based Visa/Mastercard cards. This challenge creates an impression that the GPN system is "incomplete."

Perceived Behavioral Control (Opportunities)

This variable contains the feeling or belief in one's capacity to perform a specific action. Opportunities are included within this variable. The most prominent opportunity stemming from the GPN system implementation is the potential to reach the Micro, Small, and Medium Enterprise (MSME) segment through QRIS (Quick Response Code Indonesian Standard). GPN's connectivity with QRIS has a highly significant impact on MSME actors or merchants across all bank users, including BSI customers. By linking QRIS to the GPN system, business owners no longer face difficulties with payment systems; they can accept payments from various banks and digital wallet (e-wallet) applications across Indonesia using a single QRIS code connected to their BSI account, often with a relatively lower Merchant Discount Rate (MDR).

Subjective Norm

This variable includes the element of Threats, reflecting the perceived social pressure to engage or not to engage in a behavior. Despite the numerous strategic benefits in efficiency and expanding transaction reach, particularly for Sharia banks like BSI KCP Bung Tomo, there remains a serious external challenge or threat: the intensifying competition from financial technology (fintech) services, specifically digital wallets (e-wallets) such as DANA, GoPay, OVO, and ShopeePay. Many users increasingly prefer e-wallets for daily transactions because their flexibility, ease of use, and various promotional offers are the main factors attracting consumers, especially the younger generation.

E. CONCLUSION

GPN system implementation at BSI KCP Bung Tomo was carried out smoothly and in accordance with the directives and regulations issued by Bank Indonesia. Internally, the GPN system operates efficiently. However, this implementation has not been followed by a thorough understanding from the customers. Some customers do not fully comprehend the GPN system, its benefits, or its advantages compared to previous cards. This indicates a gap in the socialization process.

The application of the National Payment Gateway (GPN) system at BSI KCP Bung Tomo faced technical constraints originating from the internal process, specifically the chip on newly issued cards, which may be damaged upon issuance and remain undetected until the account opening process. This issue can trigger customer complaints. Another constraint lies in the minimal customer understanding, which results in customers tending to perceive little change before and after the GPN system implementation.

Through the SWOT approach and the interview analysis regarding the GPN implementation at BSI KCP Bung Tomo, it was found that: Strengths lie in cost efficiency; Weaknesses are in the inadequate international transaction capabilities; Opportunities involve the assistance provided to MSME owners through the facilitated transaction ease within the GPN system, which connects all payment systems (e.g., QRIS). Threats to the GPN system stem from competition with fintech services that offer more aggressive digital transaction convenience, such as digital wallets (e-wallets).

Based on the findings of this in-depth research, the author offers the following suggestions: For BSI KCP Bung Tomo: The branch should enhance communication with customers regarding the GPN system, presenting information in a simple and engaging manner, particularly during the account opening process. This is crucial so that customers can understand the differences between GPN and Visa, as well as the specific benefits and advantages of GPN. Regarding System Improvement: To prevent transaction failures, it is suggested that internal systems be improved, including transaction responsiveness. Additionally, complaint handling needs to be a top priority in this regard. For Future Researchers: It is expected that subsequent researchers can expand upon this topic by utilizing a greater number of references and more competent sources to achieve more comprehensive research results. Furthermore, future researchers are encouraged to focus their studies on aspects identified as having less than optimal implementation, especially concerning the socialization of the National Payment Gateway (GPN) system.

REFERENCES

A, Fahira Al'ainaa, "Analisis Penerapan Sistem Bagi Hasil Pada Pembiayaan Mudharabah Di PT Bank Negara Indonesia Syariah Cabang Makassar." *Pusat Studi Pendidikan Rakyat* 2, no. 1 (2021): 111–24.

Ana Sriekaningsih, *QRIS Dan Era Baru Transaksi Pembayaran 4.0* (Yogyakarta, 2020)

Anak Agung Elik Lestari, Ni Nyoman Kerti Rasa, I Gusti Ketut Ayu Giantari, I Putu Gde Sukaatmaja, *Techlonogy Accepted Model Theory of Planned Behavior Dan Fear of Covid 19: Niat Konsumen Melanjutkan Penggunaan Dompel Digital* (Bali, 2023)

Haykal, Hassanain, 'The Impacts Of Applying National Payment Gateway In The Indonesian Payment System', *Yustisia Jurnal Hukum*, 8.3 (2019)

Hill Michael, Hupe Peter, *Implementing Public Policy* (London, 2002)

Humaidi, Muhamad Reza, and Sofyan Hakim, "Preferensi Minat Masyarakat Kota Palangka Raya Bertransaksi Menggunakan Kartu Pembayaran Elektronik Berlogo Gerbang Pembayaran Nasional Bank Indonesia." *Al-Amwal: Jurnal Ekonomi Dan Perbankan Syari'ah* 11, no. 2 (2019): 191–204.

I, Ajzen. "The Theory Of Planned Behavior", dalam *Organizational Behavior And Human Decision Processes, Vol 50, No. 2, 1991.*

Mashuri, Mashuri, and Dwi Nurjannah, 'Analisis SWOT Sebagai Strategi Meningkatkan Daya Saing', *JPS (Jurnal Perbankan Syariah)*, 1.1 (2020), 97–112

Nurliah Nurdin, *Implementasi Teori dan Kebijakan Publik Terapan* (Jawa Barat, 2023)

Winarno Budi, *Kebijakan Publik: Teori dan Proses* (Yogyakarta, 2007)