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A Review Paper: Anti-Money Laundering / Countering Financing of Terrorism (AML/CFT) and Its Effect on the Adoption of Online Payment in Malaysia

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ARTICLE INFO	ABSTRACT

Introduction: The increasing adoption of online payment systems in Malaysia has raised critical concerns about balancing financial innovation and BNM regulatory compliance. Anti-money laundering and Countering the Financing of Terrorism (AML/CFT) regulations play a significant role in protecting and securing Malaysia's banking system and the national financial ecosystem, keeping it safe from illegal activities such as money laundering (ML) and terrorism financing (TF). However, this regulatory framework can be costly for businesses to comply with and may slow the growth of digital payments. This review examines how AML/CFT regulations affect the adoption of online payments in Malaysia, focusing on challenges such as the cost of compliance, the impact on customer experience, and how financial institutions adapt through AI technology. This paper highlights the difficulties and opportunities these regulations create by examining the relationship between these factors. Using advanced technologies, such as RegTech, and introducing more flexible rules can reduce compliance challenges while encouraging the growth of online payment systems. This study applies the Diffusion of Innovation Theory (DIT), Institutional Theory (IT), and Technology Acceptance Model (TAM) to the scenario, considering BNM (Tom) as the regulator and informal financial operators as the "Hawala" operator network (Jerry) within the context of TAM and DIT. This framework analysis will recommend balancing compliance implementation with innovation.

Objectives: The current AML/CFT compliance framework in Malaysia primarily focuses on the online payment landscape, predominantly targeting large financial institutions, which overlooks small players such as bank and non-bank service providers. The existing policy needs to comprehensively examine how AML/CFT regulations uniquely affect both groups regarding compliance costs and operational challenges in corporate governance practices. Furthermore, there is a need to explore how AML/CFT requirements impact the adoption of online payments, especially concerning customer experience and retention during flight, cargo, and car service onboarding. The AML/CFT policy should be expanded to other departments, such as the Immigration Department, Customs Department, Royal Malaysia Police, and related government agencies (Bank Negara Malaysia MSB Act 2020). To fill these gaps, this research critically examines the effects of regulation, especially KYC, CDD, and Enhanced CDD, and identifies the end Beneficial Owner (BO) of the online payment process. This study will also explore how realignment or re-licensing mitigates loopholes in grey areas, particularly in the KYC process when customers approach operators to perform transactions.

Methods: This study adopts a mixed-methods approach to assess the impact of AML/CFT regulations on online payment adoption in Malaysia. The research integrates qualitative and quantitative data collection to comprehensively understand compliance challenges, financial institution adaptation strategies, and consumer behaviour.

Results: This study conducts comprehensive analyses by utilizing interviews and field studies, which can be time-consuming and require additional financial resources and costs during lunch, dinner, or tea-break interview sessions. These constraints necessitate additional timeframes and extra financial budgeting to meet the threshold throughout the survey or interview process until completed within the timeframe. Results of the survey or interview on

AML/CFT compliance require data analysis, compliance costs, customer experience, and adoption rates during the survey and interview sessions.

Conclusions: The adoption of online payments in Malaysia is significantly influenced by AML/CFT regulatory requirements, which aim to protect the financial ecosystem from illicit activities.

Keywords: AML/CFT; Online Payment Adoption; Compliance Costs; Malaysia; Financial Technology Regulation.

INTRODUCTION

The increasing adoption of online payment systems in Malaysia has raised critical concerns about balancing financial innovation and BNM regulatory compliance. Anti-money laundering and Countering the Financing of Terrorism (AML/CFT) regulations are significant in protecting and securing Malaysia's banking system for the national financial ecosystem, keeping it safe from illegal activities, such as money Laundering (ML) and Terrorism Financing (TF). However, this regulation framework can be costly for businesses to comply with and may slow the growth of digital payments. This review looks at how AML/CFT regulations affect the adoption of online payments in Malaysia. It focuses on challenges like the cost of compliance, the impact on customer experience, and how financial institutions adapt through AI technology. This paper highlights the difficulties and opportunities these regulations create by examining the relationship between these factors. The findings suggest that using advanced technologies, such as RegTech, and introducing more flexible rules to reduce compliance challenges while encouraging the growth of online payment systems. This study will apply DIT, IT, and TAM management theory to the scenario; we can consider BNM (Tom) as the regulator and informal financial operator as the "Hawala" operator network (Jerry) within the context of the Technology Acceptance Model (TAM) and Diffusion of Innovation Model (DIM). This frame analysis will recommend checking and balancing compliance implementation with innovation.

OBJECTIVES

The current AML/CFT compliance within Malaysia only focuses on the online payment landscape, predominantly on large financial institutions, which overlook small players like bank and non-bank service providers. The existing policy needs to comprehensively examine how AML/CFT regulation uniquely affects both groups regarding compliance costing and operation challenges on corporate governor practice. Furthermore, there needs to be more exploration of how AML/CFT requirements impact the adoption of online payments, especially concerning customer experience and retention onboarding by flight, cargo, and car. The AML/CFT policy should be extended or expanded to another department, such as the Immigration Department, Customs Department, Royal Malaysia Police, and related field government agencies. (Bank Negara Malaysia MSB Act 2020). To fill these gaps, this research critically examines this to understand the effects of regulation, especially KYC, CDD, and Enchantment CDD, and to find out who the end Beneficial Owner (BO) of the online payment process is. This study will finally explore how realignment or re-licensing mitigates the loophole in grey areas, especially in the KYC process when customers approach the operator to perform the transaction.

Literature Review and Theoretical Framework

The rise of new financial systems and the rapid growth of online payments have sparked significant academic interest in the relationship between regulatory compliance, innovation, and technology acceptance. Our study integrates three foundational theories to explore how compliance risks among providers of money remittance services in Malaysia are managed and mitigated: Institutional Theory, Diffusion of Innovation (DIT), and the Technology Acceptance Model (TAM). These frameworks provide a lens through which to examine the relationship between regulatory compliance and its impact on stakeholders (Scott, 2008; Rogers, 2003; Davis, 1989).

Institutional Theory

According to Institutional Theory, organizations are regulated and pressured by the external environment to adopt distinctive forms and styles. Within the context of AML/CFT compliance, the theory helps to explain how banks and

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non-bank financial institutions adjust their internal arrangements to enhance or sustain regulatory legitimacy (Higgins & Walker, 2012). From this viewpoint, organizations comply with regulatory expectations to avoid sanctions and establish legitimacy with stakeholders (DiMaggio & Powell, 1983).

Institutional Theory suggests that regulatory regimes, such as the 2010 AML/CFT Act, generate formal and informal pressures on financial institutions to develop robust compliance systems. These pressures may lead to adopting novel technologies, such as AI, to facilitate monitoring and reporting processes (Scott, 2008; Heeks, 2010), contributing to a better institutional image and fewer compliance risks.

Diffusion of Innovation Theory (DIT)

The Diffusion of Innovation Theory (DIT), based on Rogers' (2004) work, examines how new ideas and technologies are disseminated between organizations or spread through organizational networks. DIT allows us to explore how financial institutions and remittance service providers embrace innovation to address regulatory challenges. In the context of online payments and remittance services, DIT can explain how AI-based banks and non-bank operators use compliance tools to promote risk management practices (Rogers, 2003).

DIT research shows that the diffusion of organizational technology is influenced by relative advantage, compatibility, complexity, and observability. For example, AI is increasingly being integrated into AML/CFT compliance because of its potential to enhance detection capabilities efficiently, mainly when processing large volumes of transactions. However, the expense and complexity of implementing such technologies may pose barriers to adoption for smaller operators (Tornatzky & Fleischer, 1990).
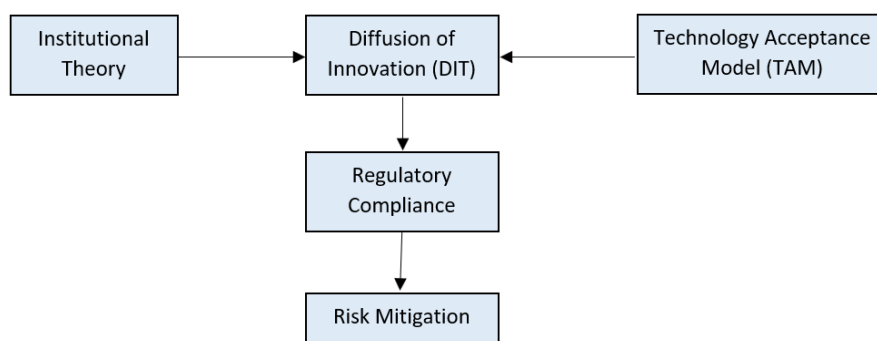
Technology Acceptance Model (TAM)

According to the Technology Acceptance Model (TAM), two factors are paramount to technology acceptance: perceived usefulness and ease of use (Davis, 1989). TAM provides a framework to examine the perception of AI-based compliance solutions by financial institutions and remittance service providers in the context of online payment platforms and money remittance services. It proposes that if these solutions are perceived as beneficial and easy to use, their likelihood of adoption increases, outweighing the associated costs (Venkatesh & Davis, 2000).

TAM is beneficial for understanding the attitudes of bankers, remittance agencies, and other stakeholders toward compliance technologies. When AI is perceived as helpful in mitigating compliance risks, broader adoption and implementation within current regulatory frameworks can be facilitated, leading to more effective risk mitigation strategies (Venkatesh et al., 2003)

Link to Regulatory Compliance and Risk Mitigation

The Theoretical Framework for Regulatory Compliance and Risk Mitigation illustrates how Institutional Theory, DIT, and TAM interact to influence compliance and risk management behaviour in Malaysian remittance services.

Flow Chart Explanation:

Institutional Theory, Diffusion of Innovation (DIT), and the Technology Acceptance Model (TAM) are the main components at the highest level. These theories form the basis for understanding how organizations respond to

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regulatory pressures, make technology adoption decisions, and develop compliance strategies (Scott, 2008; Rogers, 2003; Venkatesh et al., 2003).

Organizational compliance sits at the centre of regulatory compliance, showing how all three theories drive organizational compliance. Through the influence of the external environment, compliance also reflects the success of innovation adoption, enabling organizations to behave "legally" or conform to laws and regulations (Zohdy, 2019; Bank Negara Malaysia, 2010).

The arrows between the various elements of the theory illustrate how they are linked to establishing regulatory compliance. While institutional pressures steer organizations to conform to regulatory requirements, the diffusion of innovation provides insights into adopting innovative technologies that impact compliance practices (Rogers, 2003). TAM details how the "perceived ease-of-use" and "perceived usefulness" of such technologies significantly impact compliance capabilities (Venkatesh et al., 2003).

Regulatory compliance feeds into risk mitigation, demonstrating that compliance with regulations (influenced by the three theories) effectively reduces risk. This shows how robust compliance frameworks mitigate financial and operational risks (Zohdy, 2019).

The above flow chart illustrates how combining the three theoretical components influences compliance and risk management behaviour in Malaysian remittance services.

METHODS

This study adopts a mixed-methods approach to assess the impact of AML/CFT regulations on online payment adoption in Malaysia. The research integrates qualitative and quantitative data collection to comprehensively understand compliance challenges, financial institution adaptation strategies, and consumer behaviour.

Data Collection

The study adopts a multi-faceted approach to examine the impact of Anti-Money Laundering (AML) comprehensively and Countering the Financing of Terrorism (CFT) regulations on the adoption of online payment systems in Malaysia. It begins with an analysis of the regulatory framework, focusing on the guidelines established by Bank Negara Malaysia (BNM), the Financial Action Task Force (FATF) recommendations, and other international compliance frameworks. This analysis provides a foundational understanding of the regulatory landscape, highlighting the alignment and gaps between local and global standards and their implications for adopting online payment systems. To assess the operational and financial impact of AML/CFT compliance, a structured survey is conducted among financial service providers, including banks, fintech firms, and non-bank operators. This survey explores the cost implications, technological adaptations, and regulatory burdens associated with compliance, offering insights into the challenges faced by these entities in balancing regulatory requirements with operational efficiency.

In parallel, a consumer behaviour study is undertaken to understand the perceptions of online payment users regarding compliance measures, onboarding friction, and their overall trust in digital payment platforms. This research component sheds light on the user experience dimension, revealing how compliance-related processes influence adoption rates and user satisfaction. To complement these quantitative findings, semi-structured interviews are conducted with compliance officers from banks, fintech companies, and regulatory experts. These interviews provide qualitative insights into the operational challenges of implementing AML/CFT measures and the strategies to balance security with user experience. The perspectives gathered from these interviews enrich the understanding of the practical realities faced by industry stakeholders.

Additionally, the study incorporates a case study analysis of real-world AML/CFT implementations within Malaysian fintech firms. This analysis examines the role of innovative technologies, such as AI-driven RegTech solutions, blockchain integration, and digital identity verification (E-KYC), in enhancing compliance efficiency and reducing costs. By reviewing these cases, the study demonstrates how technological advancements are leveraged to address regulatory challenges while fostering innovation in the digital payment ecosystem. Together, these components provide a holistic view of the interplay between regulatory requirements, industry practices, and user experiences,

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offering valuable insights for regulators, financial institutions, fintech firms, and policymakers aiming to promote a secure, efficient, and inclusive digital payment landscape in Malaysia.

Data Analysis

The study employs a robust analytical framework to derive meaningful insights from the collected data. Survey responses from financial service providers and online payment users are subjected to statistical analysis, utilizing descriptive statistics, correlation tests, and regression analysis to identify patterns and relationships among key variables such as compliance costs, customer onboarding times, and user adoption rates. This quantitative approach enables the identification of trends and factors influencing the implementation of AML/CFT measures and their impact on the digital payment ecosystem. Complementing this, thematic analysis is applied to the qualitative data gathered from semi-structured interviews with compliance officers and regulatory experts. The interview data is systematically categorized into key themes, including operational challenges in compliance, the adoption of AI-driven solutions, and the role of user trust in shaping the success of online payment systems. This qualitative analysis provides depth and context to the statistical findings, offering a nuanced understanding of industry stakeholders' practical realities and strategic considerations.

Furthermore, the study incorporates a comparative analysis to evaluate Malaysia's AML/CFT framework against international best practices. This comparison highlights regulatory gaps, areas of alignment, and opportunities for improvement, providing a benchmark for enhancing Malaysia's regulatory framework to meet global standards while addressing local needs. By integrating these analytical approaches, the study offers a comprehensive evaluation of the regulatory, operational, and user experience dimensions of AML/CFT compliance in the context of online payment systems. The findings contribute to the academic understanding of the subject and provide actionable recommendations for policymakers, regulators, and industry players aiming to foster a secure, efficient, and inclusive digital payment landscape.

Methodological Review of AML/CFT Regulations Impact on Online Payment Adoption in Malaysia

This section provides an in-depth analysis of the methodologies used to assess the impact of Anti-Money Laundering (AML) and Countering the Financing of Terrorism (CFT) regulations on adopting online payments in Malaysia. The focus is on crucial compliance elements, such as Know Your Customer (KYC), Customer Due Diligence (CDD), and Ongoing Due Diligence (ODD), along with advanced technologies like artificial intelligence (AI) and blockchain-based RegTech solutions. Additionally, the role of user surveys and interviews in understanding customer behavior is evaluated.

Review of Key Regulatory Compliance Elements

Know Your Customer (KYC)

Know Your Customer (KYC) is a fundamental component of Anti-Money Laundering (AML) and Countering the Financing of Terrorism (CFT) frameworks, mandating that financial institutions and non-bank remittance service providers verify the identities of both senders and recipients. The KYC process typically involves several critical steps, beginning with collecting personal information, including national identification numbers, addresses, contact details, monthly income, employment details, and the purpose of transactions. This data serves as the foundation for establishing the identity and legitimacy of customers. Following data collection, the verification and screening phase ensures that the information is cross-checked against authoritative databases such as the Office of Foreign Assets Control (OFAC) sanctions list, U.S. sanctions lists, and United Nations sanctions lists to identify potential risks or red flags.

In addition to verification, a risk-based assessment (RBA) is conducted to evaluate the level of risk associated with each customer. This assessment considers various factors, including customer profiles, transaction patterns, geographical factors such as proximity to national borders, and the origins of transactions. Based on these factors, customers are assigned risk scores, determining the intensity of monitoring and due diligence required. The RBA approach allows financial institutions to allocate resources more efficiently, focusing greater scrutiny on higher-risk customers while streamlining processes for lower-risk ones. Together, these steps form a comprehensive KYC process

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that not only ensures regulatory compliance but also plays a crucial role in mitigating financial crime risks, enhancing the financial system's integrity, and fostering trust in digital payment platforms.

Challenges in KYC Implementation

Digital identity verification has emerged as a transformative element within the KYC process, with traditional face-to-face verification increasingly being replaced by electronic KYC (E-KYC) solutions. These solutions leverage advanced technologies such as biometric authentication, including fingerprint and facial recognition, to streamline identity verification while enhancing accuracy and security. However, while E-KYC offers significant advantages in terms of efficiency and scalability, it also raises important considerations regarding user experience. Overly stringent verification processes, even when digitized, can introduce friction, potentially discouraging users from adopting online payment systems. Balancing regulatory compliance with a seamless user experience remains a critical challenge for financial institutions and fintech firms.

Recent studies have employed empirical research methods to evaluate the efficiency and effectiveness of KYC systems in Malaysia, mainly focusing on how E-KYC innovations enhance compliance and reduce onboarding time. These studies often utilize case studies to examine real-world implementations of E-KYC in the fintech and banking sectors, providing insights into digital identity verification's practical benefits and challenges. Additionally, comparative analyses are conducted to evaluate the performance of traditional KYC methods against their digital counterparts, highlighting E-KYC's advantages in speed, cost-effectiveness, and scalability. By combining these approaches, researchers have been able to assess the impact of E-KYC on both compliance outcomes and user satisfaction, offering valuable recommendations for optimizing KYC processes to support regulatory requirements while fostering the adoption of digital payment systems.

Customer Due Diligence (CDD)

CDD involves understanding the customer's intent behind account opening and transactions, monitoring transactions for consistency with customer profiles, and identifying red flags indicative of suspicious activity (e.g., large cash deposits or frequent cross-border transactions).

Methodologies for Evaluating CDD Effectiveness

Longitudinal studies have been employed to track the effectiveness of KYC systems in identifying high-risk customers over time, providing valuable insights into the evolving nature of financial crime and the adaptability of compliance measures. These studies often complement data analytics approaches, where statistical tools are used to assess compliance trends among financial service providers, identifying patterns in onboarding efficiency, risk detection, and regulatory adherence. Expert interviews are conducted with compliance officers to enrich the understanding of these trends further, offering qualitative insights into the operational challenges and strategic considerations involved in implementing KYC processes. These interviews reveal the practical realities of balancing regulatory requirements with operational efficiency, particularly in rapidly evolving digital payment ecosystems.

In Malaysia, case studies have highlighted the significant role of Bank Negara Malaysia (BNM) guidelines in shaping Customer Due Diligence (CDD) practices, particularly for fintech firms and money transfer operators. These guidelines have driven the adoption of innovative solutions, such as E-KYC and risk-based assessments while ensuring alignment with international AML/CFT standards. By examining real-world implementations, these case studies demonstrate how BNM's regulatory framework has influenced the development of robust compliance practices, enabling financial institutions to mitigate risks effectively while supporting the growth of digital payment systems. Together, these research methods—longitudinal studies, data analytics, expert interviews, and case studies—provide a comprehensive understanding of the effectiveness and challenges of KYC systems in Malaysia, offering actionable insights for policymakers, regulators, and industry stakeholders aiming to enhance compliance while fostering innovation and user trust.

Ongoing Due Diligence (ODD)

Ongoing Due Diligence (ODD) builds upon the foundation established by initial KYC verification and second-level Customer Due Diligence (CDD), ensuring the continuous monitoring of customer accounts and transaction patterns

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to detect and mitigate potential risks. A critical component of ODD is transaction monitoring, which involves the identification of red flags based on predefined AML/CFT frameworks. These red flags may include unusual transaction patterns, high-value transfers, or activities linked to high-risk jurisdictions. When such anomalies are detected, Enhanced Due Diligence (EDD) is applied, involving increased scrutiny of flagged accounts by compliance officers to assess the legitimacy of the transactions and the associated risks.

In addition to transaction monitoring and EDD, regulatory assessments play a vital role in maintaining compliance with Bank Negara Malaysia (BNM) standards. These assessments involve periodic audits conducted at various intervals—daily, weekly, monthly, quarterly, and semi-annually—to ensure that financial institutions adhere to regulatory requirements and address any identified gaps promptly. By integrating these components, ODD provides a dynamic and proactive approach to risk management, enabling financial institutions to respond effectively to emerging threats while maintaining the financial system's integrity. This continuous monitoring process not only supports regulatory compliance but also enhances the ability of financial institutions to detect and prevent financial crimes, thereby fostering greater trust and security in digital payment platforms.

Cash Transaction Reporting (CTR) in Malaysia

Bank Negara Malaysia (BNM) has established robust reporting thresholds to strengthen the detection and prevention of money laundering and terrorist financing activities. A key component of this framework is Cash Transaction Reporting (CTR), which mandates that any cash transaction exceeding RM25,000 must be reported to the authorities. Effective January 1, 2019, the reporting threshold for CTR was reduced from RM50,000 to RM25,000, reflecting BNM's commitment to enhancing the granularity and effectiveness of financial surveillance. In addition to CTR, the framework emphasizes the importance of identifying and reporting suspicious transactions, even if they fall below the RM25,000 threshold. Financial institutions must file Suspicious Transaction Reports (STRs) when transaction patterns or behaviours suggest potential money laundering or terrorist financing activities, regardless of the amount involved. Combining threshold-based reporting with behaviour-based monitoring, this dual approach ensures a comprehensive and proactive system for detecting financial crimes. By implementing these measures, BNM has reinforced Malaysia's AML/CFT framework, aligning it with international standards and fostering greater confidence in the financial system's integrity.

Wire Transfer Limits

Cross-border transfers exceeding RM50,000 are subject to heightened scrutiny, particularly when they involve high-risk jurisdictions or exhibit characteristics that raise suspicions of money laundering or terrorist financing. Financial institutions must monitor such transactions closely, ensuring they align with legitimate business purposes and not facilitate illicit activities. Additionally, unusual behaviour patterns, such as frequent transfers to unrelated parties or layered transactions conducted through multiple accounts in small increments, are flagged for further investigation. These patterns often indicate attempts to obscure the origin or destination of funds, a common tactic used in money laundering schemes. By incorporating these monitoring mechanisms into their AML/CFT frameworks, financial institutions can more effectively identify and mitigate risks, contributing to the overall integrity and security of the financial system. This proactive approach not only supports regulatory compliance but also enhances the ability of authorities to detect and prevent financial crimes, thereby fostering greater trust in digital payment platforms and cross-border financial transactions.

Cryptocurrency Transactions

Cryptocurrency transactions exceeding RM25,000 are subject to heightened scrutiny under Malaysia's AML/CFT framework, particularly when the source of funds or the purpose of the transaction remains unclear. Such transactions may trigger Suspicious Transaction Reports (STRs), requiring financial institutions and cryptocurrency service providers to conduct further investigations to ensure compliance with regulatory standards. Additionally, transactions involving privacy-enhancing cryptocurrencies, such as Monero or Dash, raise immediate red flags due to their inherent features that obscure transaction details, making it challenging to trace the flow of funds. These privacy coins are often associated with higher risks of being used for illicit activities, including money laundering and terrorist financing. As a result, financial institutions and regulators are increasingly vigilant in monitoring and reporting such activities, ensuring that the anonymity provided by these cryptocurrencies does not undermine the

integrity of the financial system. By addressing these risks, Malaysia's regulatory framework aims to balance fostering innovation in the cryptocurrency space and maintaining robust safeguards against financial crimes.

High-Risk Sectors and Individuals

Transactions involving Politically Exposed Persons (PEPs) are subject to heightened scrutiny under Malaysia's AML/CFT framework, even if they fall below standard reporting thresholds. PEPs, due to their influential positions, are considered at higher risk for potential involvement in corruption or money laundering, necessitating enhanced due diligence and continuous monitoring. Similarly, high-value transactions involving luxury assets, such as real estate, art, precious metals, luxury sports cars, or private aircraft, are closely monitored to prevent their use as vehicles for money laundering or illicit wealth storage. These transactions often attract regulatory attention due to their potential to facilitate the movement of large sums of money with limited transparency. Furthermore, Malaysia's border areas, particularly those near Singapore, Thailand, Indonesia, the Philippines, and Brunei, are classified as high-risk geographies due to their susceptibility to smuggling and illicit financial activities. The proximity to international borders increases the likelihood of cross-border financial crimes, prompting financial institutions to apply stricter monitoring and reporting measures in these regions. By addressing these specific risk factors—PEPs, luxury asset purchases, and high-risk geographies—Malaysia's AML/CFT framework demonstrates a comprehensive approach to mitigating financial crime risks, ensuring the integrity of the financial system while aligning with international best practices

Filing Suspicious Transaction Reports (STRs)

Filing a Suspicious Transaction Report (STR) involves a structured and meticulous approach to ensure compliance with regulatory requirements and to support the detection of potential financial crimes. The first step is identification, where suspicious activity is flagged through automated monitoring systems or manual detection by financial institution staff. Once flagged, the activity undergoes a thorough analysis, verifying it against AML watchlists, such as those maintained by the Office of Foreign Assets Control (OFAC) and the United Nations (UN) sanctions lists, to determine whether the activity is genuinely suspicious. Following this analysis, a detailed report is compiled, documenting the transaction details, the nature of the suspicious activity, and any supporting evidence. This documentation is critical for providing a clear and comprehensive account of the concerns raised. The completed STR is then submitted to the Financial Intelligence Unit (FIU) at Bank Negara Malaysia (BNM), the central agency for receiving and analyzing such reports. After filing, financial institutions must fulfil post-filing obligations, which include continuing to monitor the account in question without disclosing the STR filing to the customer. This precaution is essential to avoid tipping-off violations, which could compromise ongoing investigations. By adhering to these steps, financial institutions play a pivotal role in supporting Malaysia's AML/CFT framework, contributing to the prevention and detection of financial crimes while maintaining the financial system's integrity.

Trends in STR Submissions in Malaysia

Bank Negara Malaysia (BNM) has reported a significant and consistent upward trend in submitting Suspicious Transaction Reports (STRs) in recent years, reflecting heightened vigilance and improved detection mechanisms within the financial sector. In 2020, 133,000 STRs were filed, marking the baseline for this growing trend. By 2021, the number of STRs surged to 191,387, representing a 43% increase compared to the previous year. This upward trajectory continued in 2022, with 250,000 STRs submitted, reflecting a 30% increase from 2021. The trend persisted into 2023, with STR submissions reaching 317,435, a 31% rise compared to 2022. This consistent growth in STR filings underscores the enhanced capabilities of financial institutions in identifying and reporting suspicious activities, driven by advancements in monitoring technologies, stricter regulatory enforcement, and increased awareness of AML/CFT obligations. The upward trend not only highlights the effectiveness of Malaysia's AML/CFT framework but also signals the financial sector's proactive role in combating financial crimes, ultimately contributing to the integrity and stability of the financial system.

Industry-Specific STR Trends

The submission of Suspicious Transaction Reports (STRs) in Malaysia involves a diverse range of entities across the financial and non-financial sectors, each playing a critical role in detecting and preventing financial crimes. Financial

institutions, particularly banks, consistently report the highest number of STRs due to their extensive transaction volumes and comprehensive monitoring systems. Insurance companies also contribute by identifying and reporting unusual claims or large, atypical premium payments that may indicate money laundering or fraud. Money Services Businesses (MSBs), including remittance services and currency exchange operators, actively monitor cross-border transactions and high-risk activities linked to money laundering. The Securities Commission Malaysia (SC) collaborates closely with Bank Negara Malaysia (BNM) to detect and report suspicious activities such as market manipulation and insider trading in the securities and investment sector.

Designated Non-Financial Businesses and Professions (DNFBPs), including real estate agencies, law firms, and auditing firms, are mandated to report STRs related to high-value property transactions and corporate structuring that may be used to conceal illicit funds. The gaming and casino industry, exemplified by entities such as Genting Casinos, monitors significant cash transactions involving chips and winnings to ensure compliance with AML/CFT regulations. Additionally, digital and cryptocurrency exchanges have emerged as key players in the fight against financial crime, with virtual asset service providers enforcing stricter Know Your Customer (KYC) measures. For instance, Touch N Go has implemented a requirement for KYC verification by December 31, 2024, with non-compliant accounts facing closure. This broad participation across sectors underscores the collaborative effort required to maintain the integrity of Malaysia's financial system, demonstrating the effectiveness of its AML/CFT framework in addressing diverse risks and ensuring comprehensive oversight.

CONCLUSION

The study underscores the necessity of aligning Malaysia's regulatory framework with international best practices, such as Bank Negara Malaysia (BNM) guidelines and Financial Action Task Force (FATF) recommendations. Adopting advanced technologies, including electronic Know Your Customer (E-KYC), artificial intelligence (AI), and blockchain, has significantly enhanced compliance efficiency and reduced onboarding friction. However, stringent compliance measures may inadvertently hinder user adoption, particularly in the digital payments sector.

The increasing trend in Suspicious Transaction Report (STR) submissions indicates improved detection mechanisms and heightened vigilance among financial institutions. While this signifies progress in financial crime prevention, it also highlights the evolving nature of financial threats, necessitating continuous regulatory and technological adaptation. This research provides valuable insights into the complex interplay between AML/CFT compliance, technological advancements, and user behaviour, offering crucial guidance for policymakers and industry stakeholders in developing a more secure and efficient digital payment ecosystem in Malaysia. In conclusion, the study demonstrates that while AML/CFT regulations are essential for mitigating financial crime risks, their implementation must be carefully balanced with user experience to foster the widespread adoption of online payment systems. The findings suggest that leveraging technology-driven solutions, such as AI-driven analytics and digital identity verification, can streamline compliance processes and reduce operational burdens. However, future research should explore the long-term impact of these technologies on user trust and adoption rates, particularly in underserved populations.

Additionally, the study's reliance on survey data and case studies may limit the generalizability of its findings, highlighting the need for broader empirical research across diverse contexts. To address these limitations, future studies could incorporate longitudinal analyses and cross-country comparisons to provide deeper insights into the effectiveness of AML/CFT measures in different regulatory environments. Policymakers and industry stakeholders should prioritize collaboration to develop adaptive regulatory frameworks that support innovation while maintaining robust safeguards against financial crime. By doing so, Malaysia can strengthen its position as a leader in digital finance, ensuring a secure, inclusive, and efficient payment ecosystem for all users.

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