

Rethinking Indonesian Anti-Money Laundering Laws in the Age of Online Gaming Economies

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Abstract: *Indonesia's Anti-Money Laundering (AML) laws were originally designed to combat traditional financial crimes; however, the rise of virtual items in online gaming economies presents new challenges. This study aims to assess whether the current legal framework is equipped to address the use of virtual items in money laundering activities. Utilizing a normative legal research method and a statutory approach, the research draws on secondary data from Law No. 8 of 2010 on the Prevention and Eradication of Money Laundering, sourced from Indonesian legal databases. The data are analyzed descriptively to evaluate their relevance to digital economies. The findings reveal that while the AML Law provides a basic framework, it requires further development to specifically address the role of virtual assets and gaming platforms in money laundering. This study proposes legal reforms, including clearer definitions of virtual assets and amendments to impose liability on gaming developers, with the aim of enhancing Indonesia's regulatory framework to address emerging threats.*

Introduction

Technological developments are increasingly becoming more influential in the lives of many people (Lusiana et al., 2022), as they are continuously integrated into various aspects of life. As the financial system continues to evolve alongside the advancements in digital technology, economic crimes such as money laundering also evolve to become more sophisticated (Hananto, 2022). Money laundering refers to the process by which criminals disguise illegally acquired funds, making the proceeds appear legitimate by separating them from their criminal origins, concealing the money trail, and ultimately reintegrating the funds into the legal economy (Korejo et al., 2021). Traditional money laundering laws are primarily designed for physical currency and tangible assets (Alhakim & Tantimin, 2024), which makes it difficult to prevent and punish money laundering practices in the digital realm (Hamin et al., 2014).

The problems associated with online gaming are significantly heightened, as it provides a platform that can facilitate money laundering practices, particularly by leveraging the value that in-game items hold for numerous players within online gaming environments (Anwar, 2023). Given the sustained growth of the online gaming player base in Indonesia (Hermawan & Rahmayanti, 2022), this conversation becomes increasingly crucial as the nation advances further into the digital age, wherein online

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gaming emerges as a pivotal activity in the lives of many Indonesians. Currently, Indonesia relies on Law No. 8 of 2010 to combat money laundering practices. Nonetheless, it is essential to acknowledge that this legislation was enacted several years ago and may not adequately address the contemporary challenges posed, especially in relation to money laundering practices.

The intersection of virtual economies and real-world financial systems presents a myriad of legal and regulatory challenges (Karapatakis, 2019). Online games often feature tradable items, virtual currencies, and marketplaces that facilitate player-to-player transactions, which create a unique interplay (Park & Lee, 2017). These virtual assets can be easily converted into real-world currency, as there is a growing demand for them in many online gaming environments (Duguleană et al., 2024). This issue is further complicated by the global nature of online gaming platforms (Omole, 2024), which opens the door to potential jurisdictional issues and, even more critically, the connection to international organized crime (Chanjana, 2023; Md & Nendi, 2023). As such, there is an urgent need to analyze the adequacy of the relevant legal frameworks in Indonesia and enhance anti-money laundering (AML) legal mechanisms to ensure a safer digital environment and greater integrity in online gaming.

The online system has been exploited for money laundering, with plaintiffs in a class-action lawsuit alleging that the economy of a popular game is implicated in such practices (Cyrus, 2023). In a separate case, a gaming company was fined €386,000 for violating anti-money laundering regulations, having failed to report suspicious transactions despite receiving notice from the Financial Intelligence Analysis Unit (FIAU) in Malta (Marley, 2022). These instances illustrate that the AML legal framework ultimately lacks collaboration with stakeholders in the gaming industry. This deficiency can be attributed to the inadequacies within the legal framework, as both cases highlight a lack of awareness among the gaming companies involved.

Throughout the literature, money laundering has been cited as a crime that threatens the integrity of the financial system, as highlighted by a study conducted by Lisanawati (2023). This study emphasizes that money laundering has become increasingly complex, necessitating a comprehensive legal framework to effectively combat it. Furthermore, it argues for the need to reformulate and harmonize the definitions and scope of suspicious financial transactions across various levels of regulation within Indonesia's anti-money laundering regime. Another study indicates that money laundering poses significant threats to national economies and political stability, as it can undermine and manipulate legitimate businesses, distort macroeconomic estimates, and subvert financial institutions (Issah et al., 2022). This study notes that money laundering has the potential to globally misrepresent macroeconomic estimates, distort currency markets, and foster illegal economies. Moreover, this study highlights that money laundering can have devastating effects on the banking sector, as it erodes customer confidence in financial institutions and threatens the integrity of the entire financial system.

Another study explores the possible utilization of the digital environment to facilitate money laundering practices (Rocha-Salazar & Segovia-Vargas, 2024). The study highlights how emerging technologies, such

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as mobile banking apps and internet-based services, have enabled new forms of cyber money laundering, allowing criminals to exploit digital channels to place, layer, and integrate illicit funds. It also notes that, while technologies like artificial intelligence have improved detection capabilities, cybercriminals continue to adapt their methods, necessitating ongoing vigilance and technological advancement in anti-money laundering efforts. These same technological advancements also present new opportunities for combating such crimes, as highlighted by a recent study (Rusli & Fermay, 2024). Furthermore, the study emphasizes the potential of open banking and regulatory technology (RegTech) in enhancing anti-money laundering efforts, particularly by improving transaction monitoring and customer due diligence processes. This study emphasizes the importance of cross-data sharing between financial institutions to create a more comprehensive view of suspicious activities.

While the literature has highlighted the urgency for a nuanced understanding of contemporary money laundering practices, most of the findings are often based on a generalized understanding of the digital environment. This approach essentially ignores the importance of analyzing specific methods used in money laundering practices, each of which has its own unique characteristics. The rapid growth of online gaming economies introduces new risks of money laundering that Indonesia's traditional AML legal framework (Law No. 8 of 2010) may not be fully equipped to address. This research gap is what this study aims to fill by focusing on the gaming environment as one of the methods employed in money laundering practices and examining how it is viewed through the lens of AML laws in Indonesia. This research will explore some of the characteristics and intrinsic elements presented by gaming economies that may facilitate potential money laundering practices and ultimately analyze the effectiveness of current AML Laws in preventing and punishing such crimes.

The research implications of this study are significant for both policymakers and the gaming industry. By identifying the gaps in current money laundering laws and proposing targeted reforms, this paper aims to contribute to the development of more effective regulatory strategies against money laundering crimes, addressing a relevant contemporary issue. The findings may inform future legislation and industry practices, potentially leading to improved detection and prevention of financial crimes in virtual environments. Furthermore, this research seeks to stimulate a broader dialogue regarding the nature of virtual property and its place within existing legal frameworks, potentially influencing how digital assets are treated in various areas of law beyond money laundering regulations.

Method

This research employs a normative legal research method, focusing primarily on the legal norms within existing positive laws (Disemadi, 2022). This method is supported by a statutory approach, as legislation serves as a key object of analysis. A typical purely normative framework of analysis is utilized in this study by employing secondary data in the form of primary legal sources, which will serve as the main legal basis for dissecting a specific legal issue (David tan, 2021). This approach is particularly suitable as it enables a

focused analysis of the relevant legal norms and their implications for contemporary issues, such as the use of online gaming environments for money laundering. The normative legal method aligns with the research objectives by concentrating on how existing legal frameworks address emerging challenges in online gaming economies, ensuring that the study critically evaluates gaps in money laundering laws. The secondary data used in this research includes Law No. 8 of 2010 on Prevention and Eradication of Money Laundering. The secondary data utilized in this research is Law No. 8 of 2010 on Prevention and Eradication of Money Laundering. The data have been collected from the database of Indonesian legislation and analyzed descriptively to ensure a thorough examination of the relevant legal norms embedded within the secondary data.

Results and Discussion

Categorization of Virtual Items and Their Perceived Value in Gaming Environments

The rapid evolution of online gaming economies has significantly contributed to the increasing popularity of this medium (Sanjaya et al., 2023). Online gaming now boasts a diverse demographic of players, connecting millions through interactive environments where individuals can engage in collaborative play, competition, or simple social interaction (Shilnova, 2014). It can even be argued that a substantial portion of the gaming community has developed a strong attachment to online gaming, integrating the virtual experience into their social identities (Chuang, 2020). To capitalize on this burgeoning popularity, most contemporary games are designed with online multiplayer capabilities, allowing players from various regions to connect through dedicated servers (Lal, 2019). On a positive note, one can assert that the online gaming environment has created new avenues for individuals to engage with like-minded peers and enjoy shared gaming experiences (Cabeza-Ramírez et al., 2022).

One significant aspect of the online gaming environment that warrants emphasis is its competitive dimension. While some individuals engage in online video games primarily to enjoy their leisure time and unwind, others find greater enjoyment in winning or achieving specific goals and quests presented by the game (Forrest, 2016). This competitive nature of online gaming carries real-world implications, as certain players can gain significant popularity for their exceptional skills in the games they play. This competitive trend is further evidenced by the growing prominence of e-sports, where players compete and celebrate the competitive elements of video games, thus creating a unique form of entertainment (Kauwelo, 2022).

Another aspect that merits consideration is the cosmetics of the game. Many players derive significant enjoyment from the visual and aesthetic elements of online games, which can enhance their overall gaming experience (Martínez, 2017). This enjoyment includes character customization options, unique outfits or “skins,” special effects for abilities or actions, and even decorative items for in-game environments. The appeal of these cosmetic elements extends beyond mere visual pleasure; they often serve as a form of

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self-expression within the game world, allowing players to showcase their individuality and achievements (Gibson et al., 2023). Moreover, rare or exclusive cosmetic items can become status symbols within gaming communities, further increasing their desirability and value. This cosmetic aspect of gaming has grown increasingly important in online games, with many developers focusing on creating diverse and attractive visual content to engage players and generate additional revenue streams through microtransactions.

These developments have led to a desire among many online gamers to improve their skills and enhance their experiences while playing online video games. Such improvements can be facilitated through specific in-game items that boost a character's strength or other key attributes. This phenomenon is particularly prevalent in Massively Multiplayer Online Role-Playing Games (MMORPG) (Lee et al., 2021), which encompass all the aspects mentioned above (Park & Lee, 2017). Players can not only socialize within this type of gaming environment but can also buy or sell items that are considered to have in-game value, whether for utility or aesthetics. These transactions are referred to as microtransactions, which ultimately contribute to the development of an economy within the online video game, where demand for certain items is analyzed and met by sellers who can influence the prices of those items.

First, it is important to categorize the items that are traded as objects of value in various online gaming economies. These items can generally be classified into three main categories: cosmetic items, functional items, and virtual currencies (Gattig et al., 2017). Cosmetic items are aesthetic enhancements that do not affect gameplay, such as character skins, emotes, and decorative elements. Functional items, on the other hand, directly impact gameplay by enhancing a player's abilities, statistics, or providing unique in-game advantages (Bae et al., 2019). Virtual currencies are in-game monetary units that can be used to purchase other items or services within the game (Asadi & Hemadi, 2018).

Each of these categories presents unique characteristics that contribute to their perceived value within the gaming economy. Cosmetic items often derive their worth from factors such as rarity, visual appeal, and social standing within the gaming community. Limited edition or exclusive cosmetic items can command high prices in player-to-player markets due to their scarcity and desirability. Functional items, however, can be more controversial because of their potential impact on game balance (Neely, 2021). They are valued for their ability to enhance player performance or provide shortcuts in game progression (Martínez, 2017). Furthermore, the value of virtual currencies can fluctuate based on game updates, player sentiment, and shifts in the virtual economy of online games (Kim et al., 2015).

Virtual currencies play a crucial role in many online gaming economies, serving as a medium of exchange within the game world (George et al., 2021). These currencies can often be purchased with real money, thereby establishing a direct connection between virtual and real-world economies. Some games feature multiple tiers of virtual currencies, with premium currencies being scarcer and more valuable. The exchange rates between different in-game currencies, as well as their relationship to real-world money, can create

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complex economic systems within games (Holm & Mäkinen, 2018). Furthermore, some games permit the conversion of virtual currencies back into real money, further blurring the lines between virtual and real economies and potentially creating opportunities for financial exploitation (King et al., 2019).

The dynamic valuation of virtual items has established a secondary market that operates alongside the official in-game economy. Players trade items among themselves, often utilizing external platforms or forums, with prices determined by perceived value rather than any intrinsic worth. High-value trades can involve substantial amounts of real-world currency, transforming virtual items into genuine financial assets for certain players. The liquidity of these markets and the ease of converting between virtual and real currencies render them attractive not only to gaming enthusiasts but potentially to individuals seeking to obscure the origins of their funds. As these virtual economies grow in complexity and value, mimicking aspects of real-world financial systems, they inadvertently create potential avenues for exploitation, including the risk of money laundering.

The lack of awareness regarding money laundering cases within the online gaming environment is a significant concern. This issue was highlighted in a class-action lawsuit involving a prominent gaming company, which has become increasingly complicated due to findings that suggest possible money laundering practices within the game's economy (Cyrus, 2023). A statement made by one of the company's representatives implied a serious lack of awareness, as the company asserted it had full control over its gaming economy, despite findings that detailed highly inefficient and costly transactions involving the game's currency (Marley, 2023). The key point of liability in this case is the fact that the company is indeed responsible for regulating the terms of its own currency, yet it failed to disclose suspicious transactions identified during the legal proceedings.

Therefore, from a legal standpoint, the perceived value of transactions within the gaming environment must be carefully supervised by game developers. Due to the digital and sophisticated nature of online gaming, it is increasingly crucial for developers to establish effective mechanisms for detecting such transactions. This need arises particularly from the significant control they have over data flow within their own games, including the dynamic aspects of their in-game economies. Failure to regulate online gaming economies in Indonesia could lead to heightened opportunities for money laundering, as the anonymity and fluidity of virtual items and currencies make them appealing for illicit financial activities. In the absence of clear legal frameworks, these platforms may become safe havens for criminal enterprises, ultimately undermining financial stability and enabling a variety of illegal activities to go undetected. Therefore, proper regulation is essential to bridge these gaps and ensure the integrity of Indonesia's financial systems.

Legal Implications and Legal Liability Associated with Money Laundering Through Online Games

Due to the rise of cybercrimes (Antoni, 2018), the effort to prevent criminals from benefiting from their illicit activities has become increasingly important. This necessity amplifies the need for the prevention and eradication

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of money laundering practices. As virtual economies continue to expand and intersect with real-world financial systems, the application of traditional AML laws becomes increasingly complex (Wu et al., 2023). The unique nature of virtual item transactions and in-game currencies creates potential vulnerabilities in the legal system that may be exploited for illicit financial activities. This development has necessitated a thorough examination of current AML legislation to assess its efficacy in addressing these emerging forms of potential financial crime, particularly in light of the continued rising popularity of online video games. The necessity to thoroughly analyze this potential problem aligns with the understanding that disruptive technologies are frequently associated with the risk of money laundering, as well as other related crimes (Akartuna et al., 2023).

The question of legal liability in the context of money laundering through online games extends beyond the primary actors involved in illicit transactions (Wronka, 2022). Game developers, platform operators, and players who may inadvertently facilitate suspicious transactions could face legal scrutiny. However, the acknowledgment of this legal liability remains a contentious issue and has not been thoroughly analyzed. Consequently, it is imperative to examine the existing legal framework in Indonesia to ascertain its applicability to this novel form of financial crime and identify any potential legislative or regulatory gaps that may require addressing.

Indonesia's legal framework for preventing and punishing money laundering practices is primarily established by Law No. 8 of 2010 on the Prevention and Eradication of Money Laundering (AML Law) (Aksa et al., 2024). The AML Law was enacted as a replacement for Law No. 15 of 2002 on Money Laundering Crime, which represented the first legislative effort to address the crime of money laundering (Lestari et al., 2024). The title of this law indicates a significant shift in focus from a purely punitive approach to one that encompasses both punitive and preventive measures, which is crucial for enhancing the integrity of the Indonesian financial system.

The AML Law, through Article 1, number 1, defines money laundering as any act that fulfills the elements of a criminal offense in accordance with the provisions of this Law. These elements are further specified in Articles 3, 4, and 5. Article 3 covers acts such as placing, transferring, or changing the form of assets known or suspected to be proceeds of crime. Article 4 addresses the concealment or disguise of the origin, source, or ownership of such assets. Article 5 deals with the receiving or controlling of assets known or suspected to be proceeds of crime. Together, these articles provide a comprehensive framework for identifying and prosecuting money laundering activities, encompassing a wide range of actions related to illegally obtained assets.

Microtransactions within online gaming economies can be classified as transactions under Article 1, number 4 of the Anti-Money Laundering (AML) Law, which broadly defines a "Transaction" as any activity that creates rights and/or obligations or establishes legal relationships between two or more parties. These virtual exchanges entail the transfer of real-world currency for digital assets, thereby generating economic value and obligations between players and game providers. Furthermore, Article 1, number 4 explicitly includes "placement, deposit, withdrawal, transfer, payment, grant, donation,

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storage, and/or exchange" in its definition of financial transactions. The exchange of real money for virtual currency or items in games can be viewed as analogous to these activities, particularly as a form of "exchange" or "payment." Additionally, the law's inclusive language, which refers to "and/or other actions related to money," offers the flexibility necessary to encompass innovative forms of transactions that arise within virtual economies. This broad definition, combined with the increasing economic significance of online gaming transactions, suggests that microtransactions in gaming environments could reasonably be considered within the scope of transactions governed by the AML Law. Additionally, there are other provisions that can be associated with the criminal act of money laundering occurring within online gaming economies, as presented in Table 1.

Table 1: Relevant Legal Basis of Money Laundering in Online Gaming Economies

Article	Content	Relevance to Gaming Microtransactions
1 number (4)	Definition of "Transaction"	A broad definition could include virtual exchanges
1 number (5)	Definition of "Suspicious Financial Transaction"	Could apply to unusual patterns in gaming transactions
2 paragraph (1)	List of predicate offenses	Includes cyber-related crimes potentially applicable to gaming
17 paragraph (1)	List of financial service providers	Includes e-money providers, potentially covering virtual currencies
18 paragraph (3)	Know-your-customer principles	Could apply to high-value gaming transactions
23 paragraph (1)	Reporting of suspicious transactions	Might include unusual gaming transaction patterns

Source: Primary Law

The interpretation based on Article 1, number 4, is further supported by Article 17, paragraph (1), which enumerates various types of financial service providers, including those involved in "electronic money and/or electronic wallets," as mentioned in letter a, number 12. This categorization potentially encompasses virtual currency systems used in games. Article 23, paragraph (1), mandates the reporting of suspicious transactions that could pertain to unusual patterns in gaming microtransactions. Furthermore, Article 1, number (5), defines "Suspicious Financial Transactions" in a manner that could include atypical behavior within gaming economies, such as transactions that deviate from a user's established profile or patterns. Additionally, Article 18, paragraph (3), requires the application of know-your-customer principles for transactions exceeding certain thresholds, which could be particularly relevant for high-value purchases in games. Lastly, Article 2, paragraph (1), enumerates predicate offenses, including cyber-related crimes, as implied in letter z. This provision could potentially relate to fraudulent activities in online

gaming transactions. This interpretation aligns with recent research that shows video game secondary marketplaces can potentially be exploited for money laundering activities, as demonstrated by the detection of suspicious transaction patterns in Steam marketplace data (Cooke & Marshall, 2024).

In examining the applicability of the AML Law to online gaming economies, a critical limitation emerges concerning legal liability. While Article 17, paragraph (1) could potentially include gaming developers as providers of electronic money and/or electronic wallets subject to reporting obligations, the law fails to establish clear criminal liability for these entities in cases of money laundering that occur through their platforms. Although Article 6 addresses corporate criminal liability, it applies only when a corporation itself is engaged in money laundering, rather than when it allows such activities to occur, either unintentionally or intentionally. Consequently, this provision cannot be applied to gaming developers, as it does not address their potential liability for facilitating or failing to prevent money laundering through their platforms. This limitation underscores the necessity for targeted amendments to the AML Law to clearly establish the extent of legal liability for gaming developers in money laundering cases, ensuring a more comprehensive approach to combating this emerging threat in online gaming economies.

Steps for Improvement of the Indonesian AML Legal Framework

The normative deficiencies identified previously indicate that the Anti-Money Laundering (AML) legal framework in Indonesia cannot effectively facilitate the prevention and criminalization of money laundering conducted through online gaming economies. Previous analyses also highlight the commonly recognized disparity between legal development and technological advancement (Irianto, 2021). Therefore, it is essential to elevate the interpretations of specific legal issues to ensure cohesive legal development, which better supports the application of the law in relevant courts (Rumadan, 2021). This situation necessitates ongoing legal development, fundamentally rooted in the acknowledgment that the evolution of digital technology has significantly impacted the governance of various sectors within society, thereby compelling rapid adaptations to maintain influence in the digital space (A.E. Isfihani et al., 2024).

To support this initiative, it is imperative to develop a set of normative suggestions that Indonesia can consider to ensure better financial integrity through a comprehensive AML legal framework. This framework should effectively address specific loopholes, such as those presented by online gaming economies.

Table 2: Suggestions for Improving Indonesia's AML Legal Framework

Aspect to Develop	Suggestion
Legal Liability for Gaming Platforms	Amend Article 6 of the AML Law to explicitly include liability for corporations that are passively allowing money laundering practices to happen on their platforms by not implementing a robust reporting system.

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Definition of Virtual Assets	Expand Article 1 to include a clear definition of virtual assets, encompassing in-game currencies and items with real-world value.
Reporting Requirements	Modify Article 23 to mandate specific reporting requirements for high-value transactions in virtual economies.
Customer Due Diligence	Enhance Article 18 to require gaming platforms to implement robust Know Your Customer (KYC) procedures for users engaging in significant virtual transactions, using a specific algorithm that can detect high volume or suspicious in-game transactions.
Cross-border Transactions	Introduce provisions addressing the international nature of online gaming economies and establish protocols for cross-border cooperation in AML efforts.
Automatic Flagging System	Introduce provisions to include an automatic flagging system that can generate a list of suspicious transactions for all electronic systems, which can include an online gaming system.

Source: Research Analysis Results

The expansion of definitions in Article 1 to include virtual assets is crucial for ensuring that the law keeps pace with technological advancements in online gaming economies. By clearly defining these assets, the law can more effectively regulate their use in potential money laundering schemes. The suggested modifications to reporting requirements and customer due diligence procedures in Articles 18 and 23, respectively, aim to create a more robust framework for monitoring and preventing suspicious activities within virtual economies. Recognizing the global nature of online gaming, the introduction of provisions for cross-border transactions and international cooperation is essential. This will help address the jurisdictional challenges often associated with online gaming platforms that operate across multiple countries. However, it is important to note that while cross-border cooperation may be facilitated by enhancing the AML legal framework, rather than through an international collaboration between countries in the same region through the Association of Southeast Asian Nations (ASEAN), where many countries in this region frequently share dedicated online gaming servers.

Another key aspect that can be developed within the Indonesian legal framework is the introduction of an automatic flagging system capable of generating a list of suspicious transactions across all types of electronic systems. This broad provision can also be applied to online gaming environments, which can similarly be considered electronic systems. Such measures can significantly enhance awareness, which was highlighted earlier as one of the key factors in the case involving a popular gaming platform. This additional layer of compliance can be implemented due to the fact that gaming developers typically maintain full control over their gaming economies, providing them with sufficient access to the relevant data.

Conclusion

This study has identified significant gaps in Indonesia's Anti-Money Laundering (AML) legal framework concerning online gaming economies. The primary weaknesses include a lack of legal liability for gaming platforms and inadequate definitions of virtual assets. Proposed improvements focus on amending the AML Law to explicitly include gaming developers in liability provisions, clearly define virtual assets, and enhance reporting requirements. While these suggestions aim to strengthen AML efforts in virtual economies, challenges remain in balancing effective regulation with user privacy and the gaming experience. Most importantly, the proposed improvements can be utilized to raise awareness and promote collaboration between the government and gaming developers, thereby creating a safer environment for gaming economies. Future research should explore practical implementation strategies and cross-jurisdictional approaches to address this evolving issue. It could also investigate the specific impacts of money laundering practices that are conducted through gaming economies, particularly on the integrity of the financial system, using various qualitative methods.

References

- A.E. Isfihani, Izomiddin, Antasari, R. R., & Is, M. S. (2024). Political Law of Electronic System Implementation in Indonesia. *Nurani: Jurnal Kajian Syari'ah dan Masyarakat*, 24(1), 215–234. <https://doi.org/10.19109/nurani.v24i1.22672>
- Akartuna, E. A., Johnson, S. D., & Thornton, A. E. (2023). The money laundering and terrorist financing risks of new and disruptive technologies: a futures-oriented scoping review. *Security Journal*, 36(4), 615–650. <https://doi.org/10.1057/s41284-022-00356-z>
- Aksa, A., Hadiyanto, A., & Ciptono, C. (2024). Upaya Pemberantasan Tindak Pidana Pencucian Uang oleh Pusat Pelaporan dan Analisis Transaksi Keuangan Melalui Kerjasama Internasional. *JURNAL USM LAW REVIEW*, 7(2), 586–602. <https://doi.org/10.26623/julr.v7i2.8896>
- Alhakim, A., & Tantimin, T. (2024). The Legal Status of Cryptocurrency and Its Implications for Money Laundering in Indonesia. *Padjadjaran Jurnal Ilmu Hukum (Journal of Law)*, 11(2), 231–253.
- Antoni, A. (2018). Kejahatan DUnia Maya (Cyber Crime) dalam SIMAK Online. *Nurani: Jurnal Kajian Syari'ah dan Masyarakat*, 17(2), 261–274. <https://doi.org/10.19109/nurani.v17i2.1192>
- Anwar, M. (2023). The Urgency of Reforming Regulations for Money Laundering in the Digital Era. *East Asian Journal of Multidisciplinary Research*, 2(7), 2895–2906. <https://doi.org/10.55927/eajmr.v2i7.5009>
- Asadi, A., & Hemadi, R. (2018). Understanding Virtual Currencies in Video Games: A Review. *2018 2nd National and 1st International Digital Games Research Conference: Trends, Technologies, and Applications (DGRC)*, 109–117. <https://doi.org/10.1109/DGRC.2018.8712047>
- Bae, J., Kim, S. J., Kim, K. H., & Koo, D.-M. (2019). Affective value of game items: a mood management and selective exposure approach. *Internet*

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- Research*, 29(2), 315–328. <https://doi.org/10.1108/INTR-12-2017-0477>
- Cabeza-Ramírez, L. J., Sánchez-Cañizares, S. M., Fuentes-García, F. J., & Santos-Roldán, L. M. (2022). Exploring the connection between playing video games and watching video game streaming: Relationships with potential problematic uses. *Computers in Human Behavior*, 128, 1–14. <https://doi.org/https://doi.org/10.1016/j.chb.2021.107130>
- Chanjana, K. (2023). *Combating Transnational Organized Crime in Thailand*. Golden Gate University.
- Chuang, Y. W. (2020). Promoting consumer engagement in online communities through virtual experience and social identity. *Sustainability (Switzerland)*, 12(3), 1–20. <https://doi.org/10.3390/su12030855>
- Cooke, D., & Marshall, A. (2024). Money laundering through video games, a criminals' playground. *Forensic Science International: Digital Investigation*, 50, 1–7. <https://doi.org/https://doi.org/10.1016/j.fsidi.2024.301802>
- Cyrus, F. (2023, March 31). *Hundreds Of Roblox Users May Be 'Engaged In Money Laundering,' Court Filing Claims*. Forbes. <https://www.forbes.com/sites/cyrusfarivar/2023/03/30/hundreds-of-roblox-users-may-be-engaged-in-money-laundering-court-filing-says/?sh=4f164095381c>
- David tan. (2021). Metode Penelitian Hukum: Mengupas dan Mengulas Metodologi Dalam Menyelenggarakan penelitian Hukum. *NUSANTARA: Jurnal Ilmu Pengetahuan Sosial*, 8(5), 1332–1336.
- Disemadi, H. S. (2022). Lenses of Legal Research: A Descriptive Essay on Legal Research Methodologies. *Journal of Judicial Review*, 24(2), 289–304. <https://doi.org/10.37253/jjr.v24i2.7280>
- Duguleană, A. R., Tănăsescu, C. R., & Duguleană, M. (2024). Emerging Trends in Play-to-Earn (P2E) Games. *Journal of Theoretical and Applied Electronic Commerce Research*, 19(1), 486–506. <https://doi.org/10.3390/jtaer19010026>
- Forrest, C. J. (2016). *Excessive appetites for video-games: an examination of the causes, consequences, and progression of problematic video-game playing* [University of Adelaide]. <https://doi.org/10.4225/55/5834f58f026a8>
- Gattig, D., Marder, B., & Kietzmann, J. (2017). The Avatar's New Clothes: An Examination of the Motivations to Purchase Cosmetic Virtual Items in Free-to-Play Games (A Structured Abstract). In M. Stieler (Ed.), *Creating Marketing Magic and Innovative Future Marketing Trends - Proceedings of the 2016 Academy of Marketing Science (AMS) Annual Conference* (pp. 327–332). Springer International Publishing.
- George, A., Joy, M. M., Muhammed Sajid., & Muhammed Nowfal S. (2021). Understanding the Intention to Use Virtual Currency in a Gamified E-Commerce Context. *International Journal of Online Marketing*, 12(1), 1–14. <https://doi.org/10.4018/ijom.288425>
- Gibson, E., Griffiths, M. D., Calado, F., & Harris, A. (2023). Videogame player experiences with micro-transactions: An interpretative phenomenological analysis. *Computers in Human Behavior*, 145, 1–16. <https://doi.org/https://doi.org/10.1016/j.chb.2023.107766>

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- Hamin, Z., Wan Rosli, W. R., Omar, N., & Awang Mahmud, A. A. R. (2014). Quagmires in the AML/CFT regimes in Malaysia. *Recent Trends in Social and Behaviour Sciences - Proceedings of the 2nd International Congress on Interdisciplinary Behavior and Social Sciences 2013, ICIBSoS 2013*, 591–596. <https://doi.org/10.1201/b16658-108>
- Hananto, A. R. (2022). Integrating Technology and Legal Strategies to Combat Evolving Money Laundering Tactics. *International Journal of Informatics and Information Systems*, 5(3), 142–149. <https://doi.org/10.47738/ijiis.v3i1.93>
- Hermawan, W., & Rahmayanti, R. (2022). Online Gaming: The Linkage on Social Identity and eCommerce. *Budapest International Research and Critics Institute (BIRCI-Journal)*, 5(1), 4076–4088.
- Holm, J., & Mäkinen, E. (2018). The Value of Currency in World of Warcraft. *Journal of Internet Social Networking and Virtual Communities*, 2018, 1–13. <https://doi.org/10.5171/2018.672253>
- Irianto, S. (2021). Legal Education for The Future of Indonesia: a Critical Assessment. *Indonesian Journal of Socio-Legal Studies*, 1(1), 1–36. <https://doi.org/10.54828/ijsls.2021v1n1.1>
- Issah, M., Antwi, S., Antwi, S. K., & Amah, P. (2022). Anti-Money Laundering Regulations and Banking Sector Stability in Africa. *Cogent Economics and Finance*, 10(1), 1–16. <https://doi.org/10.1080/23322039.2022.2069207>
- Karapatakis, A. (2019). Virtual worlds and money laundering under EU law: The inadequacy of the existing legal framework and the challenges of regulation. *New Journal of European Criminal Law*, 10(2), 128–150. <https://doi.org/10.1177/2032284419841711>
- Kauwelo, N. S. (2022). *The College Esports Experience: Gaming, Identity, and Development*. University of Hawaii.
- Kim, Y. Bin, Lee, S. H., Kang, S. J., Choi, M. J., Lee, J., & Kim, C. H. (2015). Virtual world currency value fluctuation prediction system based on user sentiment analysis. *PLoS ONE*, 10(8), 1–18. <https://doi.org/10.1371/journal.pone.0132944>
- King, D. L., Delfabbro, P. H., Gainsbury, S. M., Dreier, M., Greer, N., & Billieux, J. (2019). Unfair play? Video games as exploitative monetized services: An examination of game patents from a consumer protection perspective. *Computers in Human Behavior*, 101, 131–143. <https://doi.org/https://doi.org/10.1016/j.chb.2019.07.017>
- Korejo, M. S., Rajamanickam, R., & Md. Said, M. H. (2021). The concept of money laundering: a quest for legal definition. *Journal of Money Laundering Control*, 24(4), 725–736. <https://doi.org/10.1108/JMLC-05-2020-0045>
- Lal, K. (2019). How Multiplayer Mobile Games have Grown and Changed Over Time? *Asian Journal of Applied Science and Engineering*, 8(1), 61–72. <https://doi.org/10.18034/ajase.v8i1.56>
- Lee, Z. W. Y., Cheung, C. M. K., & Chan, T. K. H. (2021). Understanding massively multiplayer online role-playing game addiction: A hedonic management perspective. *Information Systems Journal*, 31(1), 33–61. <https://doi.org/10.1111/isj.12292>
- Lestari, M. A., Permata, K., Karunia, K., Azahra, S. Y., & Siswajanthi, F.

Rethinking Indonesian Anti-Money Laundering Laws in the Age of Online Gaming Economies

Shelvi Rusdiana, et al.

- (2024). Analisis Upaya Bank Indonesia dan Hukum Perbankan Indonesia dalam Mengatasi Tindak Pidana Pencucian Uang dalam Kasus Bank Mega. *Jurnal Pendidikan Tambusai*, 8(2), 27131–27149.
- Lisanawati, G. (2023). Unravelling Legal Issues Related to Financial Transactions in Money Laundering. *AML/CFT Journal: The Journal of Anti Money Laundering and Countering the Financing of Terrorism*, 1(2), 183–204. <https://doi.org/10.59593/amlcft.2023.v1i2.59>
- Lusiana, L., Harun, M., Fauziah, F., & Abdillah, M. (2022). Istihsan Concept in Multi Contract Online Transactions of Go-Food Services in The Go-Jek Application. *Nurani: Jurnal Kajian Syari'ah dan Masyarakat*, 22(1), 95–108. <https://doi.org/10.19109/nurani.v22i1.11131>
- Marley, R. (2022, January 18). *Online Gaming Company Fined €386,000 for AML Failings*. Shufti. <https://shuftipro.com/news/online-gaming-company-fined-e386000-for-aml-failings/>
- Marley, R. (2023, March 31). *Court Filing Reveals that Hundreds of Roblox users Are Laundering Money Using In-Game Currency*. Shufti. <https://shuftipro.com/news/court-filing-reveals-that-hundreds-of-roblox-users-are-laundering-money-using-in-game-currency/>
- Martínez, B. R. (2017). *Purchasing behaviour on aesthetic items in online video games with real currency: The case of Counter Strike: Global Offensive*. Uppsala University.
- Md, A., & Nendi, I. (2023). Behind Closed Doors: The Secret World Of Money Laundering. *Journal of Social Science (JoSS)*, 2(4), 394–402. <https://doi.org/10.57185/joss.v2i4.63>
- Neely, E. L. (2021). Come for the Game, Stay for the Cash Grab: The Ethics of Loot Boxes, Microtransactions, and Freemium Games. *Games and Culture*, 16(2), 228–247. <https://doi.org/10.1177/1555412019887658>
- Omole, J. (2024). Popularity and Cultural Significance of E-Sports in the 21st Century. *International Journal of Arts, Recreation and Sports*, 3(5), 28–40. <https://doi.org/10.47941/ijars.2074>
- Park, B., & Lee, D. H. (2017). The Interplay between Real Money Trade and Narrative Structure in Massively Multiplayer Online Role-Playing Games. *International Journal of Computer Games Technology*, 2017, 1–8. <https://doi.org/10.1155/2017/3853962>
- Rocha-Salazar, J.-J., & Segovia-Vargas, M.-J. (2024). Money Laundering in the Age of Cybercrime and Emerging Technologies. In K. H. Dogan (Ed.), *Corruption, Bribery, and Money Laundering - Global Issues* (p. Ch. 6 (1-16)). IntechOpen. <https://doi.org/10.5772/intechopen.1004006>
- Rumadan, I. (2021). Interpretation of The Legal Values and Justice in The Living Law Related To Court Decision. *Sociological Jurisprudence Journal*, 4(1), 13–22. <https://doi.org/10.22225/scj.4.1.2946.13-22>
- Rusli, G. R., & Fermay, A. H. (2024). Digital Financial Services Effort in Enforcing Anti-Money Laundering through Open Banking Optimization. *AML/CFT Journal: The Journal of Anti Money Laundering and Countering The Financing of Terrorism*, 2(2), 159–174. <https://doi.org/10.59593/amlcft.2024.v2i2.158>
- Sanjaya, K., Chandra, R., & Jose, J. (2023). The Digital Gaming Revolution: An Analysis of Current Trends, Issues, and Future Prospects. *Russian*

Rethinking Indonesian Anti-Money Laundering Laws in the Age of Online Gaming Economies

Shelvi Rusdiana, et al.

Law Journal, 11(1), 18–29. <https://doi.org/10.52783/rlj.v11i1.288>

Shilnova, E. (2014). *Social platform or fantasy world? - A mixed methods approach to the study of social interaction in World of Warcraft*. Lund University.

Wronka, C. (2022). “Cyber-laundering”: The change of money laundering in the digital age. *Journal of Money Laundering Control*, 25(2), 330–344. <https://doi.org/10.1108/JMLC-04-2021-0035>

Wu, J., Lin, K., Lin, D., Zheng, Z., Huang, H., & Zheng, Z. (2023). Financial Crimes in Web3-Empowered Metaverse: Taxonomy, Countermeasures, and Opportunities. *IEEE Open Journal of the Computer Society*, 4, 37–49. <https://doi.org/10.1109/OJCS.2023.3245801>