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Digital Security Strategies Through Stakeholder Collaboration in Combating Online Gambling from an Organizational Resilience Perspective

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Abstract - Online gambling (judol) has become one of the significant challenges in the digital era, causing multidimensional effects, including economic losses, threats to social stability, and weakening of the law. Despite various efforts such as blocking sites and cutting off funding streams, quick adaptation by perpetrators, lack of coordination among agencies, and limitations in technology and human resources remain major obstacles. This study aims to evaluate the performance of stakeholders related to handling online gambling, map the obstacles faced by stakeholders, and formulate strategies for handling online gambling through stakeholder collaboration. The research method used in this study is a qualitative approach with interview techniques with stakeholders, namely Komdigi, Polri, and the Financial Transaction Reports and Analysis Center (PPATK), using formal evaluation analysis. The results show that Komdigi's performance is not effective due to resource limitations and technological capacity, Indonesian National Police (Polri) faces obstacles in legal instruments and international cooperation, while the Financial Transaction Reports and Analysis Center also has resource constraints and secondary data limitations. This study finds that site blocking and cutting off funding streams are effective but hindered by perpetrators' technological adaptation and suboptimal cross-agency coordination. Low public awareness also complicates the handling. Recommendations include strengthening coordination, optimizing detection technology, adaptive regulation, public education, and international cooperation for a more holistic and sustainable approach.

Keywords: Combating digital crime; Cross-agency coordination; Digital literacy; Online gambling; Organizational resilience.

Introduction

Online gambling *(judol)* has become one of the biggest challenges in the digital era, especially in countries with large populations like Indonesia. Its digital nature, offering easy, anonymous, and flexible access, has made this activity increasingly difficult to eradicate. Although it is strictly prohibited with criminal threats under Article 303 of the Criminal Code and Article 27 Paragraph 2 of the ITE Law updated with Law No.1 of 2024, this phenomenon continues to grow rapidly, causing

multidimensional impacts on society, including social, economic, and legal stability issues (Akbar et al. 2024).

A report from the Financial Transaction Reports and Analysis Center (PPATK 2024b) revealed that the value of online gambling *(judol)* transactions in Indonesia reached 327.05 trillion rupiahs, involving 2.37 million individuals, including 800,000 children under 10 years old. This data reflects the extensive penetration of *judol* in society, with adverse consequences for both individuals and the national economy. Asyidiqi (2024) showed that the flow of funds from *judol* activities weakens the country's financial stability, reduces currency value, and triggers inflation. More distressingly, public funds such as social assistance worth 1.2 trillion rupiahs are also involved in this activity. Apart from the economic side, *judol* also has proven social (Adhamianda, Hidayat, and Abas 2024), psychological (Budiman et al. 2022), public health (Wheaton et al. 2024), and even domestic violence impacts on women and children (Kamalludin 2024).

Most of the Indonesian government's policies in combating *judol* focus on the supply-side, such as blocking sites and taking action against operators. Aryadi et al. (2024) noted that this approach is often ineffective because *judol* operators can quickly adapt, using sophisticated encryption and frequently changing domains. Besides, the supervision of financial transactions used by gambling operators still has many loopholes. The supply-side approach also faces significant challenges in terms of coordination among agencies. Preliminary analysis shows that cooperation between the Financial Transaction Reports and Analysis Center (PPATK), the Ministry of Communication and Digital (Komdigi), and the Indonesian National Police (Polri) is often hampered by a lack of goal alignment and technical coordination.

Emphasizing the role of the government in this issue is crucial as government policies are far more systemic and important than individual choices (Miller, Thomas, and Robinson 2018). This further highlights that without evaluation and strengthening of cross-agency coordination, efforts to combat judol will remain sporadic and unsustainable. Besides domestic cooperation, international collaboration is also needed to combat this issue (Pradika 2024).

Moreover, studies in other countries provide insights into similar challenges. In Malaysia, for instance, (Loo and Phua 2016) reported that although the government has blocked access to gambling, operators continue to innovate to avoid detection. This aligns with the findings of (Fahrudin et al. 2024), which emphasized that without comprehensive regulation and strengthening surveillance technology, blocking efforts tend to be temporary. From a technological perspective, *judol* operators exploit digital payment systems that are difficult to track to evade regulation. This is exacerbated by the use of encryption and VPN technology, which allows operators to remain anonymous and protect their networks from blocking. This aligns with what Sudarwanto and Kharisma (2023) emphasized that without integrating advanced technology into eradication strategies, government efforts will only be short-term solutions.

In Indonesia, the role of institutions like Komdigi is crucial in monitoring *judol* sites. Akbar et al. (2024) reported that thousands of sites are blocked each year, but the number of new sites emerging is almost always proportional to those successfully shut down. Husen, Dewi Suryandari, and Susilowati (2024) highlighted that technology alone is not enough, and a collaborative approach between technology regulators, law enforcement, and the financial sector is required. Based on study results, there are several gaps found. Hasbi (Aimo, Bassoli, and Marionneau 2024) showed that there is no unified mechanism to evaluate the effectiveness of inter-agency coordination in combating *judol*. Gainsbury and Wood (2011) also highlighted the importance of strengthening financial regulations to support supply-side approaches. Meanwhile, Bassoli, Marzulli, and Pedroni (2021) emphasized that integrating technology, law, and public education is key to creating more effective policies.

In this context, the concept of organizational resilience becomes crucial to ensure that each agency involved in combating online gambling can adapt, coordinate, and respond to threat dynamics effectively. Organizational resilience not only includes technical readiness in blocking illegal sites but also reflects structural flexibility, efficiency in inter-agency communication, and the ability to manage resources and risks sustainably. Without a strong resilience approach, efforts to combat online gambling will continue to face challenges of new site regeneration and cross-sector coordination limitations.

There are several important gaps in research related to the supply-side: *first*, evaluation of inter-agency coordination: no studies have identified how effectively coordination between PPATK, Komdigi, and Polri runs. *Second*, optimize blocking technology: in-depth studies are needed on how existing technology can be integrated to address the adaptive patterns of *judol* operators. And *third*, multilateral approaches: further research is needed to identify opportunities for cross-country cooperation in combating *judol*.

Based on the previous description, this research aims to evaluate the performance of inter-agency coordination in combating *judol*, map the problems of each agency in combating *judol*, assess mitigation, anticipation, reaction, and absorption capabilities of stakeholders, and develop a strategy to improve coordination/collaboration based on organizational resilience with a focus on inter-agency coordination. By exploring the challenges and opportunities in supply-side based strategies, this research is expected to provide relevant recommendations to strengthen *judol* eradication policies in Indonesia.

Theoretical Framework

This article will review how organizational resilience mechanisms are in line with the views of Vogus and Sutcliffe (2007), where these mechanisms include affective, cognitive, relational, and structural aspects, which enable organizations to face challenges and adapt to changes. Vogus and Sutcliffe propose a theoretical framework of organizational resilience, emphasizing four key mechanisms—affective, cognitive, relational, and structural aspects—that enable organizations to withstand disruptions and adapt to change.

Affective mechanisms pertain to the emotional and psychological resilience of an organization, including collective optimism, confidence in problem-solving, and the ability to maintain composure under stress. These elements foster a culture that embraces uncertainty as an opportunity for growth rather than a threat. Cognitive mechanisms involve how organizations process information, identify risks, and make sense of complex environments. Organizations with strong cognitive resilience engage in "mindful organizing", ensuring continuous learning, early detection of weak signals, and proactive problem-solving rather than reactive crisis management. Relational mechanisms focus on the strength of interpersonal and interdepartmental relationships, emphasizing trust, communication, and collaboration. Organizations that exhibit relational resilience prioritize deference to expertise, ensure open channels for information sharing, and cultivate strong networks that enhance adaptability. Lastly, structural mechanisms encompass the design, flexibility, and resource allocation of an organization. Resilient organizations maintain slack resources, decentralized decision-making, and adaptive governance structures that enable rapid responses to emerging threats. By integrating these four mechanisms, organizations develop a holistic resilience capacity, allowing them not only to survive but also to evolve and thrive in dynamic and uncertain environments.

Material and Methodology

This research uses a qualitative approach with formal evaluation analysis. The study is conducted through document analysis and followed by semi-structured interviews, combining probing, critical interview, and socratic questioning techniques to gather in-depth information from key stakeholders.

The interviews were conducted with three work units in three institutions, namely the Directorate of Aptika Control at the Ministry of Communication and Digital, the Deputy for Analysis and Examination at the Financial Transaction Reports and Analysis Center, and the Directorate of Cyber Crime at the Criminal Investigation Agency of the Indonesian National Police.

Each institution was represented by officials at the Echelon II and III levels, namely the Acting Director of Aptika Control, the Head of Administrative Affairs, and the Unit Head 3. The interviews were conducted in the fourth week of December 2024. In addition to answering the general research questions, the interviews aimed to uncover specific aspects such as preemptive and preventive measures, reorientation of achieved results, and strategy formulation.

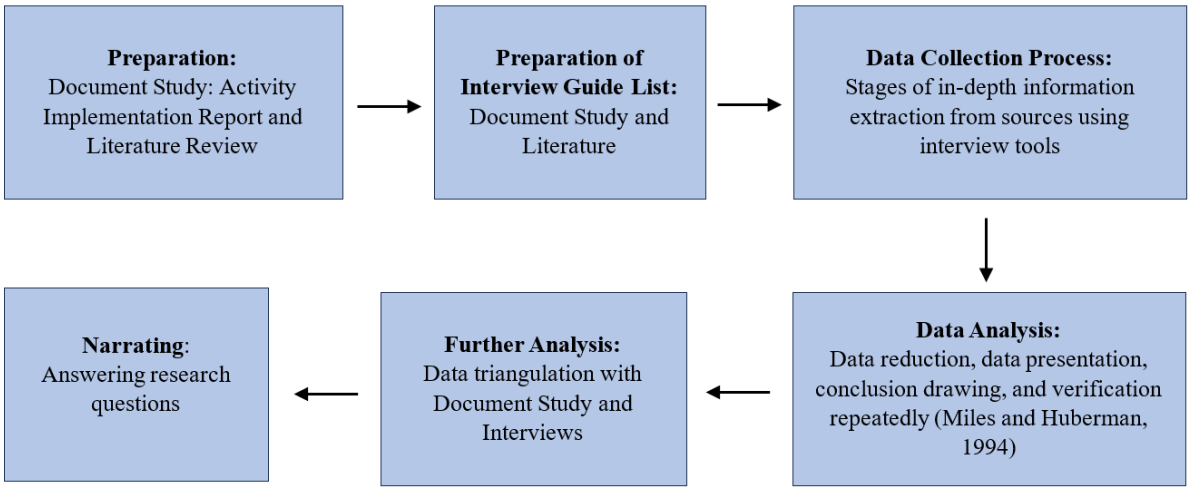


Figure 1. Research Process Stages
Source: Authors Analysis

This study is a policy analysis using retrospective analysis, where this research conducts a policy analysis of the efforts and/or achievements that have been made with synthesis analysis. This research will examine how coordination between stakeholders is carried out, identify existing obstacles, and strategies that need to be implemented in eradicating online gambling in Indonesia.

Result and Discussion

The eradication of online gambling in Indonesia has become a national agenda involving various related agencies such as *Ministry of Communication and Digital* (Komdigi), Polri, and PPATK. Despite various efforts, there is still a gap between the set targets and the results achieved by each agency. This gap analysis is important to evaluate the effectiveness of the implemented strategies and formulate more precise corrective measures.

Ministry of Communication and Digital. Komdigi has set ambitious targets in eradicating online gambling, namely blocking 10 million sites in the 2019-2024 period, with a site blocking response time of less than 24 hours. In addition, increasing public digital literacy is also a major focus, with the hope of achieving an awareness level of up to 80% in recognizing and reporting online gambling sites. These targets are expected to create a safer digital environment and effectively eradicate online gambling.

As of December 2024, Komdigi has successfully blocked around 5 million online gambling sites, which is still far from the target of 10 million sites. The response time for blocking still takes an average of 3-5 days due to limited verification resources and monitoring technology. Digital literacy has only reached around 55% based on internal surveys, indicating the low understanding of the public regarding the dangers of online gambling. These results show that greater efforts are still needed to achieve the set targets.

The identified gaps in Komdigi include a lack of adequate human resources and technology infrastructure for quick site verification. In addition, the lack of data integration with other institutions causes delays in detecting new sites. Public education is also not optimal due to limited media reach and less engaging educational methods. To close this gap, Komdigi needs to increase investment in AI-based automatic detection technology, strengthen coordination with internet service providers, and expand digital literacy campaigns.

Indonesian National Police (Polri). Polri has set ambitious targets in eradicating online gambling with the goal of uncovering 1,000 major online gambling cases in 2024. In addition, they aim to arrest at least 80% of the identified perpetrators and increase the capacity of specialized personnel in cybercrime to 500 people. These targets aim to increase the effectiveness of law enforcement and narrow the room for online gambling actors to operate in Indonesia.

As of the end of 2024, Polri has uncovered 370 major cases out of the target of 1,000 cases. The success rate of arresting identified perpetrators has only reached 50%. The number of specialized personnel available has only reached 250 people due to recruitment and training constraints. Although

significant efforts have been made, the results achieved indicate that there are still many challenges that need to be overcome to meet the set targets.

Polri faces various challenges that cause gaps between targets and achieved results. The complexity in enforcement is a major constraint as many perpetrators operate abroad. The limitations of digital evidence that can be used in court also pose serious obstacles. In addition, the high workload due to overlapping duties with other cybercrime cases slows down the investigation process. To address this gap, Polri needs to enhance international cooperation, develop more advanced digital forensics, and allocate greater resources.

Financial Transaction Reports and Analysis Center (PPATK). PPATK targets to monitor 1 million suspicious transactions related to online gambling per year. In addition, they aim to block at least 50,000 accounts associated with online gambling activities. PPATK also seeks to issue routine reports of analysis results to law enforcement with a turnaround time of less than 2 weeks to expedite legal action against suspicious financial activities.

As of Q3 2024, PPATK has monitored around 490,949 transactions with a turnover of more than 800 trillion rupiah. The accounts that have been blocked amount to 13,481, far from the target of 50,000 accounts. Analysis reports take an average of 4-6 weeks before they can be followed up by law enforcement agencies. These achievements show that there are several factors hindering the attainment of the set targets.

The identified gaps in PPATK include the limitations of tools and technology to identify complex transactions using new payment methods such as cryptocurrency. Dependency on cooperation with financial institutions, which sometimes are slow in providing data, is also a major obstacle. In addition, limited analysis capacity due to an inadequate number of analysts also slows down the investigation process. To address this gap, PPATK needs to enhance the capacity of AI-based financial transaction analysis technology, expedite regulations to accelerate data access, and increase the number of analysts.

Affective Aspects: Emotions, Attitudes, and Organizational Culture

The affective aspect in the eradication of online gambling reflects the attitudes, organizational culture, and collective awareness in facing this threat. The government has shown its seriousness in eradicating online gambling by forming the Online Gambling Eradication Task Force (Satgas Judol) based on Presidential Decree No. 21 of 2024. This task force involves various agencies such as the National Police, Komdigi, PPATK, Financial Services Authority (OJK), State Inteligence Agency (BIN), the Attorney General's Office, and National Cyber and Crypto Agency (BSSN).

Since 2018, Komdigi has blocked more than 5 million online gambling sites with an average of 7,090 content blocks per day. In addition, cutting off the flow of funds has become a major focus, with PPATK tracking 490,949,660 transactions by Q3 2024 with a turnover of more than 800 trillion rupiahs. These efforts demonstrate that the state is trying to address the evolving threats with data-driven policies and repressive actions against online gambling networks.

Public awareness of the dangers of online gambling continues to increase, as evidenced by the numerous reports received by Komdigi and Polri. The government has provided three complaint platforms: Content Complaints, Number Complaints, and Account Check, enabling the public to actively participate in identifying and reporting illegal activities. However, low digital literacy remains a significant barrier. Studies Reith and Dobbie (2012) show that individuals with low financial literacy are more vulnerable to gambling, especially among young people and women (McCarthy et al. 2019). Therefore, digital education campaigns through social media and collaboration with influencers are increasingly emphasized by the government.

The success of eradicating online gambling relies heavily on the use of technology. As perpetrators improve their evasion techniques, the government adopts artificial intelligence (AI) and machine learning-based algorithms to detect illegal sites more quickly and accurately. Data from Komdigi shows that from 2023 to 2024, more than 21,632 keywords related to online gambling have been identified and reported to Google and Meta for immediate blocking. Although perpetrators continue to find new loopholes, there is optimism that with rapid technological adaptation, law enforcement can be more effective.

Cognitive Aspects: Information Processing, Risk Management, and Organizational Learning

From January to September 2024, PPATK issued 35 Analysis Reports related to online gambling with a turnover of almost 73 trillion rupiahs. Monitoring transaction patterns is crucial as perpetrators increasingly rely on alternative payment methods such as credit transfers, e-wallets, QRIS, and even cryptocurrency to make detection difficult. Studies Aimo, Bassoli, and Marionneau (2024) emphasize that supply-side strategies, such as cutting off the flow of funds, need to be combined with technology-based interventions to enhance long-term effectiveness.

Mindful Organizing: Preparedness and Adaptive Response

Mindful organizing is an important aspect in ensuring a swift response to the threat of online gambling. This is evident in the collaboration between Komdigi and PPATK in developing an automatic detection system that relies on big data analysis. With real-time data integration, these agencies can more quickly identify suspicious transactions and coordinate necessary actions. However, the lack of expert personnel remains a major obstacle. Currently, PPATK has only 7 employees handling online gambling transaction analysis, while the number of cases continues to increase each year.

Online gambling perpetrators continue to innovate in avoiding detection, including through web defacement techniques that transform legitimate sites into hidden gambling portals. Data from BSSN shows that from January to December 2024, there were 3,118 URLs affected by such attacks, with 572 URLs still active and in the process of being handled. Therefore, increasing cybersecurity capacity becomes a top priority to keep monitoring systems adaptive to new threats.

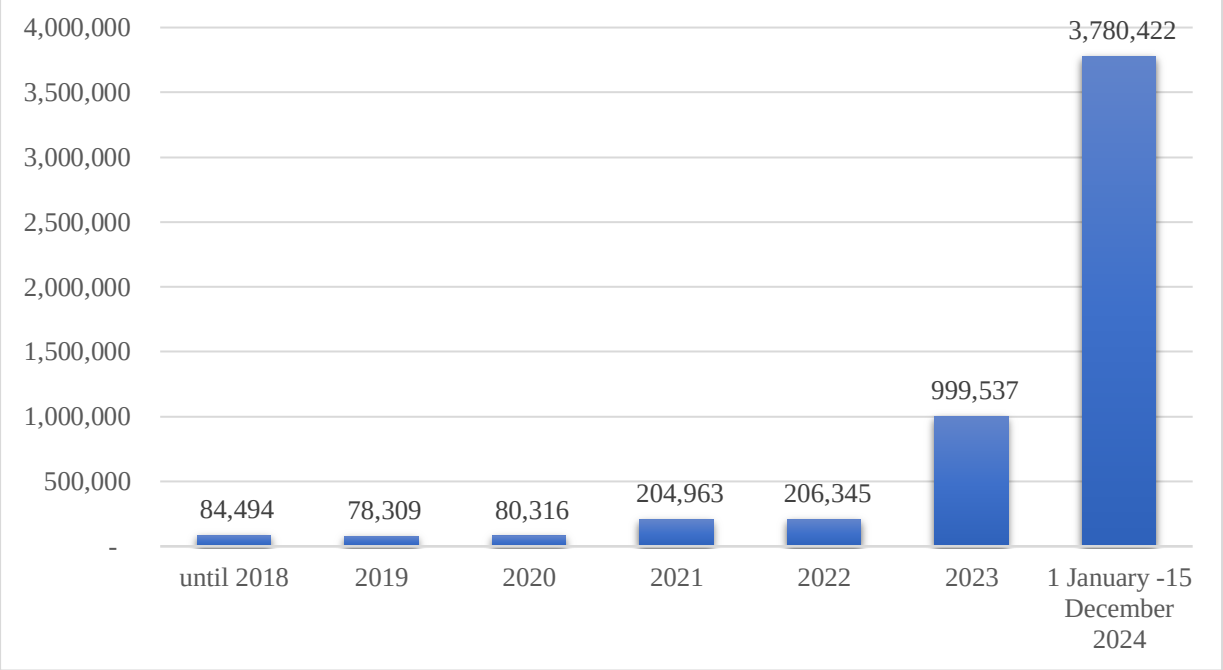


Figure 2. Gambling Content Handling Data Period 2017-December 15, 2024
Source: Komdigi, 2024

In cutting off the flow of funds, by the third quarter of 2024, PPATK had tracked 490,949,660 transactions with a turnover of more than 800 trillion rupiah. Additionally, from January to September 2024, PPATK also temporarily halted transactions for 13,481 accounts at 28 banks with total balances exceeding 400 billion rupiah and blocked several accounts suspected of being used in gambling activities, in collaboration with the Financial Services Authority (OJK) and other financial institutions. During the same period, PPATK also issued 35 Analysis Reports related to gambling with a turnover of almost 73 trillion rupiah.

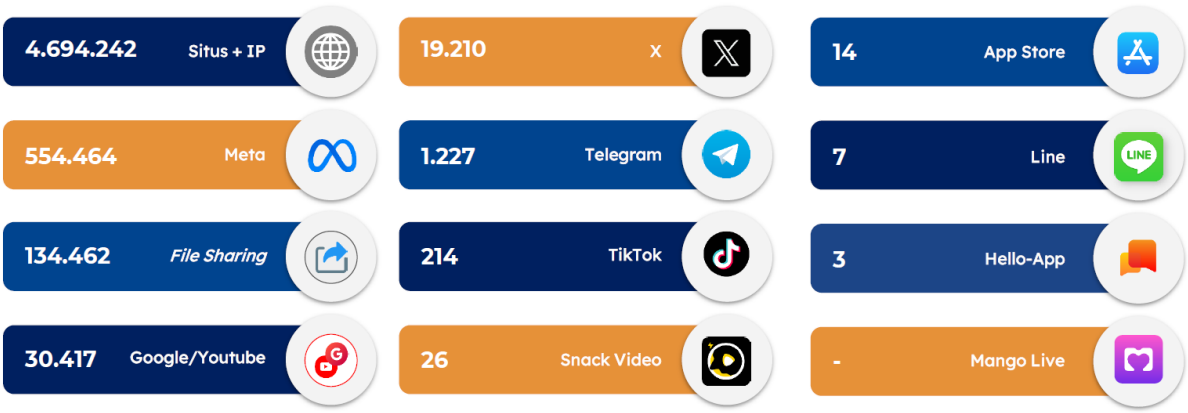


Figure 3. Gambling Content Media Type Handling Data
Source: Komdigi, 2024

From the law enforcement side, the police have managed to apprehend several gambling perpetrators through planned operations based on community reports and investigations by PPATK. From June to November 2024 alone, 300 gambling cases were uncovered with 370 suspects arrested (Kompas 2024).

Table 1. Online Gambling Transaction Statistics

Year	Fund Turnover Value (Rp)	↑ % (YoY)	Transaction Value	↑ % (YoY)
2017	2.009.676.571.607		250.726	
2018	3.975.512.890.359	98%	666.104	166%
2019	6.183.134.907.079	56%	1.845.832	177%
2020	15.768.525.166.418	155%	5.634.499	205%
2021	57.910.725.296.081	267%	43.597.112	674%
2022	104.417.674.955.287	80%	104.791.427	140%
2023	327.053.085.765.891	213%	168.347.552	61%
2024	283.356.024.964.663		165.816.408	

Source: (PPATK, 2024a)

Relational Aspect: Coordination, Collaboration, and Trust

Synergy between Komdigi, PPATK, and the National Police is the backbone of combating online gambling. However, obstacles are still found in the slow exchange of data and differences in priorities between agencies. For instance, although the Online Gambling Task Force has been established, there is no integrated evaluation mechanism that measures the effectiveness of this coordination (Aimo et al., 2024). Studies show that without a strong coordination system, repressive actions taken are often unsustainable and only have temporary impacts.

In addition to involving digital platforms such as Meta and Google, the government has also collaborated with electronic system providers (PSE) to ensure that their services are not used as illegal payment methods. Since 2023, this collaboration has resulted in the blocking of thousands of e-wallet accounts suspected of being linked to online gambling. However, a major challenge still exists as many online gambling operators are based abroad, making law enforcement difficult due to differences in international regulations.



Figure 4. Information Sharing Service Platform managed by Komdigi
Source: Komdigi, 2024

Structural Aspect: Systems, Procedures, and Infrastructure

The structural aspect reflects organizational design, operational flexibility, and infrastructure readiness in facing the challenges of online gambling. Limited human resources and technology infrastructure are the main challenges in combating online gambling. Currently, Komdigi only has 170 verifiers, far from the ideal need of 700 personnel. The same happens at PPATK, where the available analysts are insufficient compared to the volume of transactions that must be processed daily. Therefore, increasing budget allocation for the recruitment and training of experts is an urgent need.

Most online gambling platforms exploit regulatory loopholes, such as using cryptocurrency and international digital payment systems. Thus, regulations need to be updated to be more adaptive to financial technology developments. The government is also exploring international cooperation with Interpol and FATF to narrow the operational space of online gambling operators based abroad.

Mitigation, Anticipation, Reaction, and Absorption

Based on the stages and time of handling, the steps taken by the three institutions in dealing with the shock of massive online gambling in Indonesia have been mapped.

Mitigation. The government in general has mitigated the issue of online gambling as part of its strategy (Nadim 2013) and reduced the risks that arise (Kasdan 2024). Komdigi has taken firm steps by blocking millions of active online gambling sites in Indonesia. This step shows the government's commitment to combating illegal activities that are increasingly rampant in the digital era. Not stopping at blocking, Komdigi continues to strive to increase the effectiveness of monitoring systems through technological development and collaboration with various parties, including internet service providers. This effort aims to ensure that these sites cannot easily reappear or circumvent existing systems.

On the other hand, the Financial Transaction Reports and Analysis Center (PPATK) has also played its role in combating online gambling by focusing on monitoring the flow of funds. Through sophisticated analysis systems, PPATK can detect suspicious financial transactions and identify patterns leading to gambling activities by flagging any account that has even a single transaction with an affiliated gambling account. With the data collected, PPATK not only helps in cutting off the financial chain of online gambling but also provides important information to law enforcement agencies to take further action. This step is key to dismantling the operational networks of online gambling, which often involve cross-country actors.

Besides law enforcement steps, the government also pays great attention to public education. Through various digital literacy campaigns, the public is introduced to the risks and negative impacts caused by online gambling, both economically, psychologically, socially, and religiously (Judijanto et al. 2024). These campaigns are designed to raise public awareness to be wiser in using technology and not fall into illegal activities. With better understanding, the public is expected to become the first line of defense in fighting the proliferation of online gambling, as well as supporting the government's efforts to create a healthier and safer digital environment (Deans et al. 2017; Booth et al. 2021).

Anticipation. Investment in modern technology is one of the main priorities in the effort to combat online gambling. The government and related institutions are starting to utilize artificial intelligence (AI) and machine learning to detect new patterns often used by perpetrators to evade monitoring systems. This technology allows faster and more accurate detection of suspicious activities, such as IP address changes or the use of sophisticated algorithms to disguise illegal sites. By continuously developing this technology, the government hopes to always be one step ahead of online gambling perpetrators.

Because many online gambling servers operate abroad, international collaboration is very important. The Indonesian government continues to expand cooperation with various countries to track and take action against perpetrators based outside domestic jurisdiction. This cooperation involves information exchange, technical training, and the formation of strategic alliances with international institutions, such as Interpol and global technology service providers. This cross-country approach is expected to narrow the operational space of online gambling networks and strengthen law enforcement efforts at the global level.

In facing unexpected surges in online gambling cases, contingency planning becomes a key element. The government has built emergency response mechanisms involving cross-agency coordination to respond quickly and effectively. This mechanism includes the provision of additional resources, increased technological capacity, and public communication strategies to reduce negative impacts. With thorough planning, the government can ensure that the response to online gambling threats remains controlled, even as the scale continues to grow.

Reaction. The National Police takes concrete steps in combating online gambling through intensive arrest operations. These operations are carried out based on public reports and data analysis from PPATK. By combining information from various sources, the Police can identify the operational locations of online gambling networks and carry out measured raids. This step aims not only to capture perpetrators but also to dismantle the wider network, including technology providers and infrastructure supporting illegal activities.

As a follow-up effort, accounts identified as being used for online gambling activities are immediately blocked. This cut-off of funds aims to paralyze the perpetrators' operations by stopping their sources of income. Cooperation between PPATK, banks, and other financial institutions is key in ensuring the effectiveness of this step. By cutting off the flow of funds, the government not only suppresses ongoing activities but also sends a strong signal that online gambling activities will not be tolerated in Indonesia.

In addition to operations and cutting off the flow of funds, the government also pays great attention to processing public reports. Every incoming complaint is quickly verified to ensure its validity before taking firm legal action. This approach aims to increase public trust in the government's efforts to combat online gambling. With a responsive and transparent complaint handling system, the public is expected to be more active in reporting illegal activities, thereby strengthening collaboration between the government and the public in combating this threat.

Absorption. To handle online gambling cases effectively, the development of human resources (HR), both in quality and quantity, must be a top priority. Intensive training is provided to personnel from various related institutions, such as Komdigi, the National Police, and PPATK, to improve their ability to analyze cybercrime patterns, operate the latest technology, and conduct in-depth investigations. This training program also includes learning about international laws and cross-country cooperation techniques, considering the global nature of online gambling networks. With skilled human resources, case handling can be done faster, more accurately, and in a more coordinated manner.

In addition to HR development, the enhancement of information technology infrastructure has become a strategic step to support the eradication of online gambling. The government strengthens data analysis and monitoring systems by investing in advanced servers, detection software, and more sophisticated site blocking systems utilizing artificial intelligence. This infrastructure is designed to handle large and continuously growing data volumes and ensure operational stability in combating increasingly complex and continuous threats. However, the use of this system needs to be considered as it may cause false positives and false negatives.

Inter-agency collaboration is also strengthened through the development of a joint platform that allows real-time data sharing between Komdigi, the National Police, and PPATK. This data integration aims to speed up threat identification and coordinated action-taking. Through this platform, information such as suspicious transaction reports, server locations, and perpetrator activity patterns can be accessed by all involved parties. With an integrated data-based approach, online gambling eradication efforts can run more cohesively, reduce duplication, and increase operational efficiency.

In facing these challenges, various mitigation steps have been taken by Komdigi and the Cyber Directorate. Komdigi, for example, utilizes machine learning technology to detect gambling site patterns based on keywords and specific activities. Additionally, public education through digital literacy campaigns is also a focus, especially to prevent exposure to online gambling among children and teenagers.

On the other hand, the Cyber Directorate has expanded its operational capacity by forming special teams to handle cyber cases, including online gambling. The National Police has also established Cyber Directorates in 8 Regional Police to curb the rate of cybercrime in areas considered to have high risks. Artificial intelligence technology is starting to be used to analyze suspicious

transaction networks. Moreover, cooperation with the Financial Services Authority (OJK) and PPATK has been enhanced to track and cut off the flow of funds related to online gambling activities.

Handling Strategy

Going forward, the strategy for eradicating online gambling is focused on an integrated approach that includes technological, legal, and social aspects. Cutting off the flow of funds becomes the main step, likened to "cutting the arteries" of online gambling operators. Additionally, increasing technical capacity at Komdigi and the Cyber Directorate becomes a priority, including adding personnel and developing more advanced technology.

International cooperation is also an important agenda, considering many online gambling operators operate across countries. Indonesia is exploring partnerships with other countries to share data and take joint action against cross-border perpetrators. On the domestic level, Komdigi plans to update regulations related to digital transactions to close legal loopholes that are often exploited by online gambling perpetrators.

In terms of eradication, data shows that efforts by Komdigi and the Cyber Directorate of the National Police have resulted in significant blocking numbers. An average of 7,090 gambling content is cut off daily, with a total of more than 3.5 million gambling sites blocked in 2024. Although these numbers are impressive, their effectiveness remains a question. Blocked sites often reappear with new domains, reflecting the adaptive patterns of online gambling operators that are difficult to anticipate.

In response, the effort to cut off the flow of funds has become a focused strategy. By involving PPATK and other financial institutions, tracking bank accounts, digital wallets, and other payment methods becomes a priority. However, major challenges remain, particularly in terms of real-time data sharing between financial institutions and technology regulators. Additionally, inter-country coordination becomes increasingly urgent, considering many gambling operators are based abroad.

Table 2. Comparison of Cross-Stakeholder Strategies in *Judol* Eradication

Aspects	Strength	Debilitation	Recommendations
Gambling Site Blocking	- Blocking of 5 million sites since 2017. - An average of 7,090 gambling content is disconnected per day.	- New sites quickly replace blocked ones. - Blocking is only reactive.	- Focus on preventing capital flows. - Use artificial intelligence (AI) for automatic detection.
Inter-Agency Coordination	- Arrest of the perpetrator by the police. - Development of cybercrime regulations.	- Unclear investigation authority. - Regulations have not been adaptive to the dynamics of judol.	- Harmonization of legal instruments. - Increase the capacity of the apparatus for handling cyber cases.
Law Enforcement	- Arrest of the perpetrator by the police. - Development of cybercrime regulations.	- Unclear investigation authority. - Regulations have not been adaptive to the dynamics of judol.	- Harmonization of legal instruments. - Increase the capacity of the apparatus for handling cyber cases.
Use of Technology	- The use of AI to detect gambling sites. - Improvement of information security technology.	- The technology of the perpetrator is more advanced. - Government data security systems are vulnerable.	- Greater investment in AI and prevention technologies. - Improve information security infrastructure.
Community Literacy	- There is a digital literacy program for education. - Social media involvement in campaigns.	- Low public awareness. - The campaign is not yet massive and sustainable.	- Use influencers and community leaders for campaigns/counter-narratives.

			- Increase campaign penetration through popular platforms.
Prevention of Fund Flow	Cooperation with OJK and PPATK for account tracking.	- The use of e-wallets and credit transfers is difficult to monitor. - The system has not been able to block the flow of funds quickly.	- Strengthen regulations on electronic transactions. - Increase international cooperation to track funds across borders.
Resource Management	- The capacity of organizations such as Komdigi is increasing. - Restructuring to expand reach.	- The need for human resources far exceeds the available amount. - Limited budget for operations and technology.	- Recruit new human resources and conduct intensive training. - Allocate a larger budget for operations and technology.

Source: Author's Analysis

In conclusion, it should be emphasized once again that institutional reliability is a key component of national resilience because public trust in political and public institutions is one of the four main components of national resilience, as stated by Be-Dor in (Eshel and Kimhi 2016).

SWOT Analysis Matrix: Strategy Based on a Combination of Internal and External Factors

Based on the findings above, below is an analysis of the strengths, weaknesses, opportunities, and threats of each strategy taken.

Table 3. Analysis of Strengths, Weaknesses, Opportunities, and Threats

	Opportunities	**Threats**
Strengths	**SO (Strength-Opportunity) Strategies** 1. Strengthen international cooperation for information exchange and cross-border enforcement with Interpol and FATF. 2. Developing more adaptive AI technology to detect suspicious transaction patterns and the introduction of new gambling sites. 3. Improving digital literacy through sustainable campaigns involving public figures and major digital platforms such as YouTube and TikTok.	**ST (Strength-Threat) Strategies** 1. Strengthen cybersecurity in government agencies to deal with the threat of hacking by online gamblers. 2. Drafting specific regulations related to crypto-based transactions and alternative payment methods to reduce legal loopholes. 3. Optimizing the disconnection of fund flows with the support of the OJK and global financial institutions.
Weaknesses	**WO (Weakness-Opportunity) Strategies** 1. Increasing the number and capacity of human resources in institutions is related to in-depth training on online gambling investigations. 2. Encourage the preparation of integrated regulations that are more adaptive to the development of financial and digital technology. 3. Utilizing technology platforms to accelerate the process of coordination and data exchange across agencies.	**WT (Weakness-Threat) Strategies** 1. Strengthening international regulations to prevent cross-border gambling activities and make it difficult for perpetrators to adapt. 2. Provide a larger budget for monitoring and operational technology upgrades. 3. Establish a stricter supervision mechanism for financial transactions using new methods such as QRIS and e-wallets.

Source: Author's Analysis

Conclusions

Combating online gambling in Indonesia faces significant challenges involving technology, law, and social aspects. Government efforts include blocking websites, cutting off financial flows, and legal actions against perpetrators, but their effectiveness is hindered by the rapid adaptation of online gambling actors, resource limitations, and slow inter-agency coordination. Despite investments in technology such as artificial intelligence and international collaboration to track servers abroad, these measures need to be accompanied by strengthening regulations, public education, and data integration between agencies to expedite decision-making.

Public participation in reporting online gambling activities shows increased awareness, but this effort must be supported by broader and ongoing digital literacy. Meanwhile, future strategies require a holistic approach that integrates technology, law, and social policies to create more sustainable solutions. With cooperation between the government, private sector, and community, it is hoped that combating online gambling can be more effective and have a long-term impact on Indonesia's social and economic stability.

The next question is, with the very high security cost, is the government willing to spend a lot of money to protect its people?

Recommendation

In an effort to comprehensively eradicate online gambling, three main pillars need to be strengthened: internet content monitoring, money circulation monitoring, and law enforcement. Law enforcement must be maximized with the application of money laundering laws, so that not only the main perpetrators are heavily punished, but also allows for the confiscation of crime proceeds to break the economic chain of online gambling. In addition, a multi-door strategy should be implemented, considering that online gambling is often related to other crimes such as fraud and human trafficking. Thus, legal loopholes that could be exploited by perpetrators can be minimized, and law enforcers have more instruments to firmly act against this crime. Bilateral and multilateral cooperation among law enforcement agencies across countries also needs to be strengthened, especially to anticipate the differences in legal system perspectives.

In terms of inter-agency cooperation, clear targets and concrete operational mechanisms are needed so that coordination is not merely normative. The formulation of joint regulations containing standard operating procedures (SOP) will ensure measurable and directed steps. Furthermore, it is important to strengthen anticipatory and absorptive capacities in facing the dynamics of this cybercrime. The establishment of a special unit within the Ministry of Communication and Information that oversees Civil Servant Investigators (PPNS) is a strategic step to accelerate law enforcement, for example by blocking accounts without the need for OJK approval. Incidents involving officers in the Ministry of Communication and Information also serve as a reminder that there needs to be increased punishment for officers who abuse their authority in efforts to eradicate online gambling.

From a national resilience perspective, it is important to eliminate the missing link in coordination among stakeholders by unifying cooperation priorities. The establishment of Computer Security Incident Response Teams (CSIRT) or Cyber Incident Response Teams (CIRT) in academic and government institutions will enhance response to cyber-attacks exploiting national infrastructure. More adaptive legal instruments are also needed so that the blocking and reporting process can be carried out quickly without being hindered by bureaucracy.

On the other hand, an in-depth study on the impact of online gambling addiction must be conducted, because without reducing demand, efforts to break the supply chain will not be effective. Finally, strengthening Public-Private Partnerships (PPP) with a more dynamic information exchange mechanism will ensure closer collaboration between the government and the private sector in addressing this threat.

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