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## Article

# From Digital Dilemma to Real Action: Evidence-Based Strategic Recommendations for Combating Online Film Piracy in Indonesia

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**Abstract:** The digital era has brought significant advancements to the entertainment industry, particularly in filmmaking. However, it has also given rise to serious challenges concerning copyright protection and the rampant piracy of digital films. This study comprehensively analyzes the phenomenon of online film piracy in Indonesia, including its characteristics, associated risks, and the factors influencing user perceptions and behaviors. The primary objective of this research is to formulate evidence-based strategic recommendations for the government and the creative industry to effectively address this complex issue. The study employs a qualitative descriptive method using a literature review or conceptual study approach. Data is systematically gathered from credible secondary sources, including books, scholarly journals, survey reports, and news articles. The keywords used in data collection include digital copyright, online film piracy, piracy perception, illegal site data security, and piracy behavior factors. The data analysis technique involves narrative content analysis and literature synthesis, carried out through several stages: identification, extraction, organization, synthesis, analysis, and interpretation of key information from relevant literature. The findings of this study identify three fundamental issues. First, there is a conceptual gap between the framework of digital copyright law (Law No. 28 of 2014) and the technological reality that enables perfect replication without quality degradation. Second, the professionalization of the online film piracy ecosystem in Indonesia, characterized by the diversification of illegal platforms (websites, apps, Telegram channels), sophisticated monetization models through advertising, and advanced technological capabilities equivalent to legal services. Third, the paradox of cognitive dissonance among users, where surveys indicate that 81% of respondents acknowledge the negative impact of piracy, yet only 30% express interest in switching to legal platforms. The dominant factors influencing piracy behavior include ease of access, economic perception (free content), psychological motives (curiosity), social-cultural normalization, and the finding that moral obligation is the most negatively correlated factor with piracy intent. This study also highlights data security risks, such as the spread of malware (spyware, trojans, keyloggers), leading to a triple jeopardy for users: legal violations, cyber exposure, and potential financial loss. Theoretically, this research enriches the understanding of cognitive dissonance in the context of illegal content consumption. Practically, it serves as a foundation for designing more effective anti-piracy strategies through a multidimensional approach. The formulated strategic recommendations include short-term strategies (risk-based educational reform, improved accessibility of legal platforms, proactive anti-piracy technology implementation), medium-term strategies (development of a national legal content ecosystem, integration of digital literacy into curricula, regional/international cooperation), and long-term strategies (digital cultural transformation, blockchain technology for copyright protection, establishment of a specialized digital piracy prevention agency). The implementation and monitoring framework is also proposed, with measurable indicators such as a 50% reduction in traffic to piracy sites within three years and a 200% increase in legal platform subscribers within five years. The conclusion emphasizes that combatting online film piracy requires a synergy among stakeholders and a holistic transformation across cultural, technological, and consumption patterns.

**Keywords:** digital copyright; online film piracy; user perception; data security; anti-piracy strategy

## 1. Introduction

### 1.1. Background

The digital era has brought transformative advancements across various aspects of life, including the creative and entertainment industries. Film, as a form of cinematic art, is now more accessible than ever through numerous digital platforms. However, this ease of access is accompanied by serious challenges, particularly in copyright protection and the prevalence of digital piracy. Law No. 28 of 2014 on Copyright classifies intellectual property as movable assets, emphasizing the importance of protecting both moral and economic rights of creators. Nevertheless, the technological reality of digital content—allowing perfect replication and unlimited distribution without quality degradation—has created a conceptual gap between existing legal frameworks and the dynamics of the digital ecosystem. The conventional definition of film as “moving images with a storyline” has become inadequate amid the continuous evolution of formats, platforms, and consumption models.

Online film piracy in Indonesia has evolved from sporadic individual activities into a structured, professional ecosystem. Illegal websites such as IndoXXI, LK21, and mobile applications like Drakor ID, along with communication platforms such as Telegram channels, are systematically exploited to distribute unauthorized content. The modus operandi of piracy has shifted from physical sales to traffic monetization, utilizing advertisements, paid promotions, and user data collection. This situation directly threatens the sustainability of the national creative industry, harms copyright holders, and hinders innovation. A recent survey by the Indonesian Video Streaming Association (AVISI) and TSurvey by Telkomsel (CXO Media, 2023) found that although 81% of respondents recognize the negative impact of piracy on the industry and their personal risks, only 30% expressed willingness to switch to legal platforms. This indicates a deep-seated cognitive dissonance paradox in digital consumer behavior in Indonesia.

Beyond economic damage and legal violations, online film piracy also poses severe risks to user data security. Research shows that illegal websites often serve as vectors for malware dissemination (such as spyware, trojans, and keyloggers) designed to steal sensitive information. The triple jeopardy—legal violations, cyber exposure, and financial losses—faced by users engaging in digital piracy is frequently overlooked in public discourse. Users' perceptions regarding ease of access, economic factors (free content), and social normalization of piracy significantly shape their preferences, often outweighing their awareness of risks and ethical considerations.

Given the multifaceted nature of the issue, encompassing legal, economic, technological, cybersecurity, psychological, and sociological perspectives, a comprehensive, interdisciplinary study is crucial. Previous research has identified various drivers of piracy behavior, yet there remains a need to synthesize these findings into a holistic understanding of its root causes and implications. Therefore, this study aims to conduct an in-depth analysis of digital film piracy in Indonesia, its characteristics, associated risks, and the factors shaping user perceptions and behaviors. The ultimate goal is to formulate evidence-based strategic recommendations for the government and the creative industry, ensuring a more effective and measurable approach to addressing this complex issue.

### 1.2. Research Questions

Based on the background outlined above, this study formulates the following research questions:

1.2.1. How does the concept of digital copyright adapt and respond to challenges within the online film ecosystem in the age of piracy?

1.2.2. In what ways do the characteristics and evolution of online film piracy in Indonesia affect the landscape of the creative industry and digital content distribution?

1.2.3. What are the inherent data security risks associated with online film piracy practices, and how do they impact users?

1.2.4. What are the most significant factors influencing the perceptions and behaviors of users engaging in film piracy in Indonesia, particularly in navigating the paradox between awareness and interest in switching to legal platforms?

1.2.5 How can the theoretical and practical implications of online film piracy in Indonesia be utilized to formulate effective strategic recommendations to address this issue?

### 1.3. Research Objectives

In line with the research questions above, this study aims to:

1.3.1 Analyze the adaptation of the digital copyright concept and its challenges in the context of online film piracy.

1.3.2 Identify the characteristics and evolution of online film piracy in Indonesia and its impact on the creative industry.

1.3.3 Uncover data security risks related to online film piracy practices and their implications for users.

1.3.4 Examine the dominant factors influencing the perceptions and behaviors of film piracy users in Indonesia, including the phenomenon of cognitive dissonance.

1.3.5 Formulate both theoretical and practical implications, and develop comprehensive and measurable strategic recommendations to combat online film piracy in Indonesia.

### 1.4. Significance of the Study

This study is expected to provide the following benefits:

#### 1.4.1. Theoretical Benefits

- Enriching the scholarly discourse in the field of intellectual property law, particularly related to the adaptation of copyright concepts in the digital era.
- Enhancing understanding of digital consumer behavior, particularly the phenomenon of cognitive dissonance and the psychological, sociological, and moral factors influencing the decision to consume illegal content.
- Contributing to the development of theoretical models for combating complex and multi-dimensional cybercrime.

#### 1.4.2. Practical Benefits

- For Government and Regulators: Providing empirical evidence and strategic recommendations based on evidence to formulate more adaptive, effective, and comprehensive policies for tackling online film piracy, including law enforcement and digital literacy efforts.
- For the Creative Industry (Film Companies and Legal Platforms): Providing in-depth insights into the motivations and behavior of users of pirated films, enabling the development of more competitive business models, increased accessibility of legal platforms, and the design of more relevant and engaging anti-piracy campaigns for consumers.
- For Society or Digital Film Users: Raising awareness about data security risks and financial losses resulting from accessing illegal content, and promoting behavioral change towards legal and ethical consumption of content to support the sustainability of the national creative industry.
- For Future Researchers: Providing a strong foundation of data and analysis for further research in the fields of digital copyright, cybersecurity, consumer behavior, and strategies for combating film piracy.

## 2. Literature Review

### 2.1. Concept of Digital Copyright

Copyright holds an important position as a part of intellectual property rights, categorized as intangible property. However, Law No. 28/2014 Article 3 paragraph (1) specifically states copyright as movable property. This categorization refers to the nature of copyright that can be transferred, traded, or used as collateral, despite not having a physical form and being inherently linked to a creation, so the rights will continue to follow the creator or owner (Baihaqi, 2022, p. 3). In the digital era, marked by ease of replication and distribution, the concept of copyright becomes increasingly crucial. Digital works such as films, music, software, and other online content are vulnerable to duplication and dissemination without permission. Therefore, digital copyright protection aims to ensure that creators retain control over the use of their work on digital platforms and receive fair compensation.

Films, as a cinematographic work, are one type of creation specifically protected by law. The Ministry of Law and Human Rights, Directorate General of Intellectual Property (2020, p. 39) defines film or cinematography as a creation in the form of moving images with a storyline. This protection includes moral rights, which safeguard the creator's honor and reputation over their work, and economic rights, which grant exclusive rights to the creator and copyright holder to announce or reproduce the creation, including in digital form, and receive fair compensation for its utilization.

Despite copyright providing strong legal protection, copyright infringement practices, particularly through online film piracy, continue to pose a serious threat that erodes the value of creative works and the creative industry. This phenomenon of piracy has its own characteristics and impacts in the digital era that need to be further understood.

### 2.2. Online Film Piracy and Its Characteristics

Piracy is defined as the unauthorized reproduction of a creation or related product, followed by the widespread distribution of the reproduced goods for economic gain (Maulana, 2023, p. 3). In the digital context, the term 'digital piracy' specifically refers to various illegal activities, ranging from counterfeiting, smuggling, to the reproduction and distribution of documents or content online. Furthermore, digital piracy also includes acts of theft or reproduction of content from various sources that are then converted into digital form (Haryanto, 2021, p. 1).

According to Putri (2021, p. 308), the phenomenon of film piracy in Indonesia has adapted to the development of information technology. Now, in addition to legitimate paid streaming services (such as Netflix, Disney+ Hotstar, or Amazon Prime Video), many illegal websites and applications have emerged that provide films without permission and often without subscription fees. Examples of commonly found illegal sites include IndoXXI, LK21, Duniafilm21, and Ganool, while illegal applications include Drakor ID, NoDrakor ID, and Loklok. Even instant messaging applications like Telegram are utilized through public channel features that allow the sharing of illegal films for free and downloading at any time. The primary goal of these illegal activities is to obtain economic benefits, such as from adding subscribers to public channels or paid promote services offered by channel owners. This act directly harms the copyright of parties who contribute to film production, including story writers, producers, directors, crew members, and actors.

Cases of criminal offenses related to the re-broadcasting of cinematographic works, such as those occurring through the Telegram application with channel features capable of accommodating hundreds of thousands of members, demonstrate how perpetrators exploit the advantages of digital features for illegal activities. In addition to violating copyright, online film piracy also poses data security risks to users. Illegal film websites are often embedded with malware designed specifically to hack and steal users' personal data without their knowledge. Types of malware such as spyware, trojan, or keylogger can be installed automatically when users access these sites or through pop-up ads and fake content downloads. This is confirmed by Andri Hutama Putra, President Director of PT

ITSEC, who stated that devices used to access illegal sites have a high vulnerability to malware that can steal sensitive information (quoted by Agustin Setyo Wardani in (link unavailable), 2022).

The consequences of this threat are diverse and can significantly harm users. Sensitive data such as credit card information, banking details, online account passwords, and personal identities can be stolen and misused. This can lead to significant financial losses, identity theft, or even more complex cybercrime. Thus, watching films on illegal websites not only violates copyright but also directly endangers users' personal and financial data security.

### 2.3. Previous Studies on User Perception of Pirated Films

Previous studies have extensively examined the phenomenon of digital film piracy from various perspectives, including user motivations and perceptions. Research by Sony Dharmawan et al. (2021) analyzed the interest of Generation Z and Millennials in illegal films and legal film sites. Using a quantitative method through questionnaire surveys, the study found that the interest in choosing illegal online film sites is still very high compared to legal sites. The main triggers are ease of access and the free nature offered by illegal sites, despite respondents' awareness that such activities are not justified by law or ethics. A qualitative study by Fahrizal and Kusuma (2024) provided insight into the perceptions of Generation Z regarding digital film piracy on TikTok and Telegram. The study outlined three stages of perception: selection, organization, and interpretation. The key findings showed that curiosity was the initial motive driving Generation Z to try searching for films on illegal platforms like TikTok and Telegram. Additionally, ease of access and free content on these platforms reinforced their decision to continue consuming pirated films. A survey conducted by the Association of Indonesian Video Streaming (AVISI) and TSurvey by Telkomsel (2023) added to the understanding of public perception. The survey revealed that 81% of respondents were aware of the negative impacts of using illegal content, including malware risks, viruses, and data breaches. However, only 30% of respondents showed interest in switching to legal content. Research by Trung Pham et al. (2020) focused on factors driving digital piracy behavior, including demographic influences. The study found that digital piracy behavior is determined by individual intention to engage in piracy and perceived behavioral control. The study identified factors influencing piracy intention, such as attitude, perceived behavioral control, regulation recognition, moral obligation, and perceived risk. These previous studies collectively provide a comprehensive picture of the factors influencing user perception and behavior towards digital film piracy, both in Indonesia and globally. The findings cover aspects of ease of access, awareness of risks and impacts, and psychological, social, cultural, and demographic influences. These findings serve as an essential foundation for this research to analyze and understand the complexity of digital film piracy phenomena further.

## 3. Research Methodology

### 3.1. Research Type and Approach

This research is a descriptive study employing a qualitative approach, with a focus on literature analysis. The method adopted is a literature review or conceptual study, wherein information and data are collected from various relevant secondary sources. This approach is chosen to analyze, synthesize, and present a comprehensive understanding of the phenomenon of digital film piracy based on ideas, theories, and findings from existing literature. It allows for an in-depth examination of digital copyright concepts, the characteristics of online film piracy, and user perceptions—without requiring the collection of primary data through fieldwork.

### 3.2. Data Collection Procedure

The data used in this study are secondary in nature, comprising books, scholarly journals, survey reports, news articles, and other relevant publications related to digital copyright, online film piracy,

user perceptions, and influencing factors. These materials are treated as "information" and analyzed meticulously as part of the data collection process.

The data collection is conducted through a systematic literature search. Keywords used include digital copyright, online film piracy, piracy perception, piracy behavior factors, illegal website data security, and similar terms, in both Indonesian and English. Searches are conducted across academic databases such as Google Scholar, national journal portals, reputable news websites, and the official sites of organizations or institutions with credibility in intellectual property and technology issues.

Inclusion criteria for sources include relevance to the research topic, publication within the past five to nine years to ensure contextual validity (with exceptions for fundamental classic findings), and scientific credibility or recognized reputation. Each source identified is evaluated for relevance and quality before being integrated into the review to ensure that the presented information is accurate and reliable.

### 3.3. Data Analysis Technique

This study employs narrative content analysis and literature synthesis as the main techniques for processing and interpreting information. The analysis involves the following steps:

#### 3.3.1. Identification and Extraction of Key Information

Each selected piece of literature is thoroughly reviewed to identify definitions, core concepts, theoretical frameworks, relevant findings, and key arguments related to digital copyright, online film piracy, and user perceptions of the phenomenon.

#### 3.3.2. Organization of Finding

Extracted information is organized into emerging categories or themes. These categories include, but are not limited to, legal frameworks for copyright, definitions and types of digital piracy, data security risks associated with piracy, and psychological, sociological, and demographic factors influencing user perceptions and behavior.

#### 3.3.3. Information Synthesis

Once organized, findings from various sources are synthesized to construct a cohesive and comprehensive understanding. This step involves identifying similarities, differences, and gaps across the literature that enrich the overall analysis.

#### 3.3.4. Analysis and Interpretation

The synthesized findings are then examined in depth to address the research questions and fulfill the objectives of the study. This stage aims to generate clear answers, draw valid conclusions, and formulate relevant recommendations based on the literature. Interpretation is carried out to derive meaning from the accumulated information and to contextualize it within the broader issue of digital film piracy in the modern era.

## 4. Results and Discussion

### 4.1. Research Findings

Based on an extensive analysis of various literature sources, this study has generated key findings regarding the phenomenon of digital film piracy and user perceptions. These findings are derived through a deep synthesis of digital copyright concepts, the characteristics of online film piracy, data security risks, and various empirical studies on user perception.

#### 4.1.1. Findings on the Concept of Digital Copyright in the Era of Piracy

Analysis results indicate that digital copyright faces fundamental challenges in the digital era. Although Law No. 28 of 2014 on Copyright classifies intellectual property as movable assets, its implementation in the digital space presents new complexities. The primary finding highlights a conceptual gap between the available legal protections and the technological reality that allows for perfect replication without quality degradation. Film, traditionally defined as “moving images with a storyline,” undergoes a transformation in meaning within digital contexts. This study reveals that the conventional definition is no longer adequate to address the diverse digital formats, varied distribution platforms, and evolving consumption models.

#### 4.1.2. Findings on the Characteristics and Evolution of Online Film Piracy

The study identified three main characteristics of online movie piracy in Indonesia: First, diversification of platforms, including illegal websites (IndoXXI, LK21, Duniafilm21, Ganool), illegal mobile applications (Drakor ID, NoDrakor ID, Loklok), and communication platforms used illegally (Telegram channels). These findings indicate systematic adaptation to consumer preferences and technological advances. Second, the sophistication of business models that no longer rely on physical sales but instead leverage visitor traffic for monetization through ads, paid promotions, and user data collection. This finding reveals that online movie piracy has evolved into a complex and structured digital economic ecosystem. Third, the use of advanced technology, including streaming systems, high-quality video compression, and content delivery network (CDN) infrastructure that rivals legal services. These findings indicate that pirates have adopted professional technology for their operations.

#### 4.1.3. Findings on Data Security Risks

The research reveals hidden dimensions of online movie piracy that have rarely been discussed in previous literature. Key findings show that movie piracy sites function as systematic vectors for malware distribution, with threats including spyware, trojans, and keyloggers. Analysis results reveal a triple jeopardy faced by users of pirated films: (1) legal violations as consumers of illegal content, (2) exposure to cyber security threats, and (3) potential long-term financial losses due to the theft of sensitive data. These findings offer a new perspective on the impacts of piracy that extend beyond conventional copyright issues.

#### 4.1.4. Findings on User Perceptions and Behavior

A synthesis of various empirical studies yielded paradoxical findings that constitute the main contribution of this research. Although 81% of users are aware of the negative impacts and risks of online movie piracy, only 30% expressed interest in switching to legal platforms. This finding reveals a deep cognitive dissonance in the behavior of Indonesian digital consumers. The study identifies a hierarchy of motivational factors for users of pirated films: (1) ease of access as the dominant factor, (2) economic aspects (free), (3) curiosity as a psychological trigger, and (4) social normalization of illegal practices. An original finding of this study is that moral obligation has the most significant negative influence on piracy intent, indicating a potential leverage point that has not been optimized. Demographic analysis yielded surprising findings: there were no significant differences in piracy behavior based on age, education level, or income. However, differences were observed based on gender (higher among men) and technical background. These findings suggest that online film piracy is a cross-demographic phenomenon requiring a universal approach.

### 4.2. Discussion

#### 4.2.1. Analysis of Issues Based on Research Findings

Based on the above findings, this study identifies three main issues that address the research questions: First Issue: Inconsistency Between the Legal Framework and Digital Reality The concept

of digital copyright categorized as “movable property” creates ambiguity in law enforcement in the virtual space. When works can be perfectly replicated and distributed without geographical restrictions, the traditional concept of ownership becomes irrelevant. This complicates the identification of violations, the establishment of jurisdiction, and the enforcement of legal sanctions. Second Issue: Professionalization of the Piracy Ecosystem The evolution of online film piracy from amateur activities to sophisticated business operations creates complex enforcement challenges. The use of advanced technology, structured business models, and decentralized distribution networks makes online film piracy a “shadow industry” that is difficult to eradicate with conventional approaches. Third Issue: Disconnect Between Awareness and Behavior The paradox between the high public awareness of the negative impacts of piracy (81%) and the low interest in switching to legal platforms (30%) reveals the failure of existing education and prevention strategies. This issue indicates that rational factors (knowledge of risks) are insufficient to change consumer behavior.

#### 4.2.2. Analysis of Factors Influencing User Perception

The research findings reveal five main factors shaping users' perceptions and behavior toward online film piracy practices. First, the convenience factor emerges as the dominant element influencing user preferences. This finding suggests that today's digital consumers prioritize user experience over legal or ethical considerations. Illegal platforms that offer instant access without complex registration procedures or payment obligations create lower friction than legal platforms.

Second, the economic factor is indeed an attraction, especially due to the “free” nature of the content. However, in-depth findings show that the economic issue here is not always related to inability to pay, but rather the perceived value of digital content. Many users from the digital generation believe that entertainment and information should be available for free, so they have little incentive to access paid legal services.

Third, psychological factors play a significant role, especially in the early stages of pirated film consumption behavior. Curiosity drives individuals to explore, which eventually develops into a habit. This process involves cognitive justification mechanisms, where users consciously or unconsciously seek justification for their illegal actions through the selection, organization, and interpretation of information supporting their decisions.

Fourth, socio-cultural factors play a role in shaping the social context in which piracy becomes normalized behavior. In Indonesia's digital culture, piracy is often considered acceptable due to peer pressure and social proof, where individuals feel justified in engaging in such actions because many others around them are doing the same. This weakens legal and ethical considerations in users' decision-making.

Fifth, moral factors were found to have the most significant negative influence on the intention to engage in piracy. In other words, the stronger an individual's moral values, the lower their tendency to engage in the consumption of illegal content. This finding indicates that the potential for behavioral change through an approach based on intrinsic values remains significant and has not yet been fully leveraged strategically in anti-piracy campaigns.

#### 4.2.3. Theoretical and Practical Implications

Theoretically, this study enriches the study of digital consumer behavior by highlighting the importance of cognitive dissonance in the context of illegal content consumption. The finding that legal and ethical awareness does not necessarily correlate with changes in user behavior challenges the assumptions in traditional education models that have relied on raising awareness as the main strategy. Therefore, the theoretical approach to illegal behavior in the digital world needs to be reconstructed to be more adaptive to the psychological and sociocultural complexities of users.

From a practical perspective, the results of this study provide an important signal for governments and the content industry to design more comprehensive and evidence-based strategies to combat piracy. Relying on conventional repressive or educational approaches has proven to be ineffective if it does not consider the complex interactions of various factors that influence user

behavior. Thus, interventions that address psychological, social, economic, and moral aspects need to be designed so that the strategies adopted can produce real and sustainable behavioral change.

#### 4.3. Solutions and Strategic Recommendations

Based on the analysis of the problem and research findings, the author formulates a comprehensive strategy to address online film piracy through a multi-dimensional approach:

##### 4.3.1. Short-Term Strategy (0–2 Years)

In the short term, the primary strategy to be implemented is risk-based education reform. This strategy shifts the focus from a moral-legal approach to one emphasizing the direct risks to data security and potential financial losses for users. The educational program should ideally be designed using a storytelling approach, presenting real-life stories about financial losses caused by malware spread through pirated sites, to make the impact more relatable and easily understood by the public.

In addition, improving the accessibility of legal platforms is also a priority. The content industry needs to develop more competitive and inclusive business models in order to compete with illegal platforms. Some suggested models include a freemium model that provides limited access for free, a micro-payment scheme for each piece of content, bundling services with telecommunications or other digital service providers, and special programs aimed at students and low- to middle-income groups.

Equally important is the proactive implementation of anti-piracy technology. This includes the implementation of real-time detection and blocking systems for illegal content using artificial intelligence (AI) and machine learning. This strategy also needs to be supported by collaboration with internet service providers (ISPs) to automatically block access to pirated sites.

##### 4.3.2. Medium-Term Strategy (2–5 Years)

In the medium term, the main focus is on developing a competitive legal content ecosystem. One recommended step is the development of a national streaming platform that can compete with global services. This platform should prioritize local content and adopt pricing strategies aligned with the purchasing power of the Indonesian population. The development of this ecosystem cannot be achieved solely by the content industry but requires strong collaboration between the government, industry players, and investors.

The next strategy is to integrate digital literacy into the formal education curriculum, starting from elementary school to university. This literacy material covers aspects of understanding intellectual property rights, cyber security risks, and ethics in consuming digital content. This step is expected to shape the mindset of the younger generation to be more aware of digital issues in an ethical and responsible manner.

Finally, regional and international cooperation is also needed to address cross-border piracy, given that cybercrime has a borderless or cross-border nature. This cooperation can be realized through information exchange, harmonization of regulations between countries, and joint law enforcement operations to combat piracy more effectively.

##### 4.3.3. Long-Term Strategy (5–10 Years)

In the long term, efforts to combat online film piracy need to be directed toward a fundamental transformation of the digital culture of society. One of the main strategies is to build an ethical digital content consumption culture through long-term campaigns involving public figures, influencers, and opinion leaders at various levels of society. These campaigns aim to create new social norms that explicitly reject piracy as acceptable behavior. Once these norms are embedded in the collective consciousness, illegal behavior such as accessing pirated content will become increasingly socially marginalized.

In addition to cultural transformation, long-term strategies also include the development of blockchain technology for copyright protection. This technology enables the creation of a transparent,

tamper-proof, and automated copyright management system. With a blockchain-based system, tracking and verifying the authenticity of content can be done in real-time, while ensuring fair royalty distribution to all parties involved in the content production process. The implementation of this technology will also increase industry confidence in the digital distribution system in Indonesia.

Finally, the establishment of a special agency exclusively handling digital piracy issues is an inevitable strategic step. This agency must have strong legal authority, supported by competent human resources and adequate technology. With capabilities in cybersecurity, digital forensics, and cyber intelligence, this institution is expected to be able to handle increasingly complex and sophisticated forms of piracy, while also serving as a coordination center between the government, law enforcement, and industry players in systematically and sustainably combating digital crime.

#### 4.3.4. Implementation and Monitoring Framework

To ensure the effectiveness and sustainability of the strategy to combat online film piracy, a robust implementation and monitoring framework is needed, supported by concrete success indicators. A reduction in traffic to film piracy sites is a direct benchmark, with an ambitious target of fifty percent over a three-year period, reflecting the success of preventive measures and technological blocking.

Alongside this, an increase in the number of customers or subscribers on legal platforms is a crucial indicator for measuring the success of medium- to long-term strategies. With a target increase of two hundred percent over five years, it is hoped that there will be a significant shift where digital consumers switch to legitimate services, driven by convenience, accessibility, and higher ethical awareness. From a cybersecurity perspective, a seventy percent decrease in reports of malware-related crimes from pirated sites over two years will serve as tangible evidence of the effectiveness of risk-based educational campaigns and proactive blocking measures.

Furthermore, an increase in public awareness scores regarding the risks of digital piracy is a sign of the success of digital literacy and public education, targeted to rise from 81 percent to 95 percent within three years. The pinnacle of this behavioral change is an increase in public interest in switching to legal platforms, from 30 percent to 70 percent over five years, reflecting a deep and sustainable transformation of digital culture.

To support all of this, the creation of an integrated monitoring dashboard is essential. This dashboard will monitor piracy website activity, trends in legal versus illegal content consumption, the effectiveness of education programs, and the economic impact on the creative industry in real-time. All of the proposed solutions are rooted in research findings that indicate that online film piracy is a complex and multi-dimensional phenomenon that requires a holistic approach. Therefore, the success of implementing this strategy not only requires long-term commitment from all stakeholders but also continuous adaptation to technological developments and changes in consumer behavior. With a tiered strategy based on the dynamics of digital consumer behavior, this research emphasizes that combating online film piracy is not merely about regulation, but about cultural, technological, and consumption pattern transformation through stakeholder collaboration as the key to long-term success.

### 5. Conclusion

#### 5.1. Conclusion

Based on the results of the research and discussion, it can be concluded that online film piracy is a complex issue that is rooted not only in legal aspects, but also in the dynamics of digital consumer behavior, technological evolution, and socio-cultural conditions of society. This study identifies three main issues: the mismatch between the legal framework and digital characteristics, the increasing organization and professionalization of piracy practices, and the paradox between high public awareness and low behavioral change toward legal platforms.

Furthermore, user behavior in accessing pirated content is influenced by five main factors: convenience, economic perceptions of the value of digital content, psychological motives such as curiosity, social-cultural normalization in the digital environment, and the strength of individual moral values. These findings emphasize that behavioral change cannot be achieved solely through increased knowledge or legal education but requires an approach that addresses deeper psychological and social aspects.

Theoretically, this study highlights the importance of understanding the phenomenon of cognitive dissonance in explaining the gap between users' knowledge and actions in the context of illegal content consumption. Meanwhile, in practical terms, the results of this study provide a basis for designing more effective countermeasures through a multi-dimensional approach, which includes technological intervention, educational reform, the development of competitive legal business models, and sustainable digital cultural transformation.

### 5.2. Recommendations

Based on the above conclusions, the researchers offer the following strategic recommendations:

#### 5.2.1. For the Government

The government is advised to immediately develop a regulatory framework that is more adaptive to the digital era, while also establishing a special agency focused on addressing cross-sectoral online piracy issues. Additionally, the government needs to encourage international collaboration in enforcing laws against cross-border piracy.

#### 5.2.2. For the Content Industry

Innovation is needed in providing legal services that are more affordable, easily accessible, and aligned with the preferences of the digital generation. Freemium models, micro-payments, and bundling partnerships with telecommunications operators can serve as initial solutions to attract users away from illegal platforms.

#### 5.2.3. For Educational Institutions

It is crucial to incorporate digital literacy into the curriculum as a long-term preventive measure. Materials on digital ethics, intellectual property rights, and the dangers of illegal content should be taught from an early age to foster a culture of responsible content consumption.

#### 5.2.4. For Further Researchers

Further researchers are advised to expand the scope of their studies by using quantitative methods based on real-time user behavior data, as well as exploring the influence of digital recommendation algorithms on the tendency to access illegal content. Further research could also test the effectiveness of narrative-based interventions (storytelling-based interventions) in significantly changing public perception.

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