Ethical Analysis of Software Piracy in the Context of Information Technology: Impacts on Intellectual Property Rights, Copyright Holders, and Users

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Abstract

Software piracy has emerged as a critical ethical concern in the digital era, challenging the principles of intellectual property and innovation. This study aims to explore the ethical dimensions of software piracy and analyze its implications for copyright holders, consumers, and society. Utilizing a systematic literature review, this paper investigates legal frameworks, moral consequences, and ethical dilemmas associated with software piracy. Findings reveal that piracy undermines both the moral and economic rights of creators, leading to extensive financial losses and heightened cybersecurity risks. The study emphasizes the need for ethical education, stronger legal enforcement, and digital literacy initiatives to mitigate software piracy. This paper contributes to the understanding of ethical issues in digital innovation and proposes strategies to enhance compliance and integrity in software usage.

Keywords

Ethics, Software Piracy, Intellectual Property Rights, Copyright, Ethical Solutions

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Introduction

Software piracy remains one of the most pervasive ethical and legal challenges in the realm of information technology. It refers to the unauthorized copying, modification, distribution, or use of proprietary software (Sepang & Koesoemo, 2021). Such activities not only violate copyright laws but also undermine the principles of fairness, respect for ownership, and intellectual honesty. The widespread availability of high-speed internet and peer-to-peer sharing platforms has accelerated the global proliferation of pirated software, making it increasingly difficult for software developers to protect their creations. Consequently, software piracy represents not merely a legal infraction but also an ethical dilemma that tests the moral integrity of individuals and organizations operating in the digital ecosystem (Setiono & Bramantyo, 2023).

In a rapidly evolving digital environment, the ethical dimensions of software piracy are deeply intertwined with legal, social, and technological considerations. According to Lutfi and Setiawan (2021), the act of piracy disrupts the innovation cycle by diminishing the incentive for developers to create and improve software products. Copyright protection embodies both legal entitlement and moral recognition of intellectual labor (Edy, 2002; Rongiyati, 2017). From an ethical standpoint, piracy can be viewed as a form of intellectual theft that disregards the creator's right to benefit from their work. Moreover, Efendi et al. (2023) emphasize that users of pirated software expose themselves to significant cybersecurity risks such as data breaches, ransomware infections, and privacy violations—thereby broadening the ethical discourse beyond economic harm to encompass personal responsibility and digital trust.

Globally, software piracy accounts for approximately 34% of all software installations, resulting in estimated annual losses exceeding USD 73 billion (Das, 2019; Corwin, 2018). Despite the availability of affordable licensing models and cloud-based services, piracy continues to flourish, particularly in developing nations where enforcement mechanisms and public awareness remain weak. In Southeast Asia and Indonesia, for instance, the Business Software Alliance (BSA, 2021) reports piracy rates ranging between 80–83%, making the region one of the highest contributors to global software infringement. This persistent problem not only weakens national innovation capacity but also erodes trust in the formal digital economy. As a result, addressing software piracy requires a comprehensive framework that integrates legal enforcement, public education, and moral accountability.

While extensive research has explored the economic and legal dimensions of software piracy, fewer studies have analyzed its ethical implications within the context of information technology ethics. Most existing works focus on quantifying financial losses or improving technological protection mechanisms, leaving a gap in understanding the moral reasoning behind user behavior and institutional responses. To bridge this gap, this paper employs normative ethical theories—specifically deontological ethics (duty-based) and utilitarian ethics (consequence-based)—to evaluate the moral justifications and societal implications of software piracy. By applying these frameworks, the study aims to distinguish between moral intent, ethical justification, and the real-world consequences of piracy within the information technology domain.

Therefore, the primary objective of this study is to analyze software piracy through an ethical and legal lens, focusing on its impact on intellectual property rights, copyright holders, and users. This paper seeks to contribute to the discourse on digital ethics by proposing an integrative perspective that emphasizes individual responsibility, corporate governance, and state regulation in promoting an ethical digital ecosystem. The findings are expected to provide insights for policymakers, educators, and technology professionals in formulating strategies that strengthen awareness, reduce piracy behavior, and encourage sustainable innovation in the software industry. Ultimately, this research underscores that combating software piracy is not solely a matter of law enforcement but a moral obligation shared by all stakeholders in the information society.

Methodology

Research design, site, and participants

This study adopts a qualitative literature review methodology to synthesize findings from academic journals, conference papers, and legal frameworks addressing software piracy ethics. The review emphasizes comparative analysis between international and Indonesian contexts.

Data collection and analysis

Sources were selected from 2000–2023 based on relevance, credibility, and scholarly impact. The inclusion criteria required sources to discuss ethics, law, and policy concerning intellectual property rights. Analysis focused on identifying common ethical principles, patterns of violation, and potential interventions.

Results

Legal and Ethical Dimensions of Copyright

According to Law No. 28 of 2014 on Copyright, creators automatically acquire exclusive rights upon creation (Supri et al., 2019). These include moral and economic rights (Irawati, 2019). Violations occur when copyrighted materials are distributed without consent, an act punishable under Indonesian law (Munandar et al., 2021). Zurnetti et al. (2011) identify piracy as complete reproduction without authorization. Ethically, such acts contravene the principle of respect for intellectual labor and fairness.

Impact on Copyright Holders

Software piracy has severe financial and reputational consequences. Corwin (2018) estimated global losses of USD 73 billion annually. Anandito et al. (2023) documented a 2023 incident where illegal streaming via Telegram caused losses of IDR 1.4 billion to official content providers. Such acts diminish consumer trust and brand credibility, emphasizing the necessity for ethical conduct and digital law enforcement.

Implications for Consumers

Pirated software exposes users to risks including malware, spyware, and compromised privacy (Lee, 2017). Users unknowingly perpetuate unethical cycles that undermine legitimate developers. Ethically, consumers are responsible for informed, lawful software usage and supporting creators' rights.

Broader Societal and Global Context

Globally, software piracy reflects varying cultural, economic, and legal conditions. In developing nations, limited access to affordable licensed software contributes to piracy prevalence (Nugraha, 2020). International collaboration, cross-border law enforcement, and corporate responsibility are essential in addressing these global ethical challenges.

Discussion

Software piracy, when viewed through the lens of information technology ethics, represents a multidimensional moral issue that transcends mere legality. From a deontological perspective, the act of using or distributing pirated software is inherently unethical because it violates moral duties—particularly the obligation to respect ownership and intellectual property. This framework emphasizes moral intention and duty regardless of consequence. Individuals who engage in piracy may justify their behavior as harmless or necessary due to high software prices, yet such reasoning fails to acknowledge the ethical duty of fairness toward creators. The deontological view thus asserts that even when piracy benefits users or society temporarily, it remains morally wrong because it disrespects the creator's right to control and benefit from their intellectual work.

Conversely, utilitarian ethics evaluates actions based on their consequences for overall well-being. From this standpoint, some argue that piracy may democratize access to technology and knowledge, particularly in developing countries where purchasing licensed software is economically prohibitive. However, this short-term benefit must be weighed against long-term societal harm—loss of innovation incentives, reduced trust in digital markets, and decreased software security. As piracy proliferates, legitimate developers face declining revenues, leading to reduced research investments and product quality. The utilitarian balance, therefore, reveals that the collective harm caused by piracy far outweighs its perceived advantages. A truly utilitarian approach would promote equitable access through legal alternatives such as open-source initiatives, educational discounts, and fair-use licensing.

The ethical discussion cannot be separated from the legal frameworks governing intellectual property rights. Software piracy directly undermines international agreements such as the TRIPS Agreement and the WIPO Copyright Treaty, both of which emphasize moral and economic rights of authors. In Indonesia, the Copyright Law No. 28 of 2014 provides criminal sanctions for piracy, yet enforcement remains inconsistent due to limited awareness and weak digital governance. Ethically, the failure to enforce these laws reflects collective irresponsibility—both institutional and societal—in upholding justice and protecting creativity. Educational institutions, government agencies, and corporations must therefore act as moral agents by embedding digital ethics in policy, curriculum, and organizational practice.

Another layer of complexity arises from the moral psychology behind software piracy. Many users rationalize their actions through cognitive dissonance—believing that copying

software "doesn't hurt anyone" or that large corporations "can afford the loss." This mindset reflects a cultural normalization of unethical digital behavior, where convenience overrides moral reasoning. In societies with low digital ethics literacy, piracy is often perceived as an act of practicality rather than theft. Such normalization erodes the collective moral fabric and fosters a culture of digital irresponsibility. Ethical education and awareness campaigns are therefore crucial in reshaping user attitudes, promoting moral reflection, and transforming piracy from a social norm into a moral concern.

Ultimately, addressing software piracy requires an integrative ethical framework that harmonizes individual morality, institutional responsibility, and state policy. An ethical digital ecosystem is built upon three pillars: (1) moral awareness—educating users about the ethical consequences of piracy; (2) legal consistency—ensuring fair, transparent, and accessible enforcement; and (3) technological innovation—developing affordable, secure, and ethical software alternatives. Encouraging collaboration among governments, software companies, and educational institutions can foster digital integrity and reduce the appeal of piracy. As technology becomes more embedded in daily life, cultivating moral responsibility in digital behavior is no longer optional—it is essential for sustaining creativity, fairness, and trust in the information society.

Conclusion and Recommendations

This research concludes that software piracy poses significant ethical, legal, and economic challenges. It undermines innovation, compromises user security, and violates the moral integrity of creators. Addressing these issues requires cross-sector collaboration involving policymakers, educators, and software industries. Strengthening digital ethics education, enhancing law enforcement, and improving accessibility of licensed software are vital for reducing piracy. Future studies should examine behavioral factors influencing software piracy and explore digital policy frameworks fostering ethical compliance.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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References

Anandito, R. H., Aswangga, T. A., & Lubis, H. A. (2023). Analysis of video piracy in the context of intellectual property rights. Journal of Intellectual Property and Law Studies, 12(1), 55–67.

- Corwin, J. (2018). Preventing pirated software use within an organization. Tech Ethics Press.
- Das, M. (2019). Software piracy: Global impacts and legal perspectives. Springer.
- Edy, D. (2002). Hukum Hak Cipta. Bandung: Alumni.
- Efendi, A., Yusuf, R., & Kurniawan, B. (2023). Ethical implications of software piracy and user privacy. Journal of Information Security and Ethics, 9(2), 101–115.
- Irawati, I. (2019). Digital rights management in the protection of copyright in the digital era. Diponegoro Private Law Review, 4(1), 45–52.
- Lee, S. (2017). Privacy concerns in the era of software piracy. Journal of Cybersecurity Ethics, 22(3), 189–204.
- Lutfi, A., & Setiawan, R. (2021). Regulation of software piracy under Indonesian law. Journal of Legal Studies, 1(2), 18–27. https://doi.org/10.36722/jmih.v1i2.733.
- Matompo, O. S. (2020). Legal protection against intellectual property violations in Indonesia. Legal Standing: Journal of Law, 2(1), 104–113. https://doi.org/10.24269/ls.v2i1.2941
- Munandar, S. A., Abdullah, A., & Rispalman, R. (2021). Criminal aspects of using pirated software under Law No. 28 of 2014. Legitimasi: Journal of Criminal Law and Legal Politics, 10(2), 238–250. https://doi.org/10.22373/legitimasi.v10i2.11342
- Nugraha, N. I. (2020). Intellectual property rights for startups and developers. Journal of Informatics and Management Studies, 5(1), 1–5.
- Rongiyati, S. (2017). Legal protection of intellectual property rights in creative economy products. Negara Hukum: Journal of Law and Justice, 9(1), 1–15. https://doi.org/10.22212/jnh.v9i1.1001
- Sepang, M., & Koesoemo, A. T. (2021). Legal review of copyright violations based on Indonesian copyright law. Journal of Legal Research, 9(2), 77–88.
- Setiono, G. C., & Bramantyo, R. Y. (2023). Implementation of criminal sanctions for copyright violations in Indonesia. Transparansi Hukum, 6(1), 55–70. https://doi.org/10.30737/transparansi.v6i1.4596
- Supri, M., Miru, A., Patittingi, F., & Muin, H. A. (2019). Protection of online news copyrights against aggregators. Amanna Gappa, 27(1), 29–42.
- Zurnetti, T., Sulista, A., & Aria, H. (2011). Hukum Pidana: Horizon Baru Pasca Reformasi. Jakarta: Rajawali Pers.

Biographical Notes

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