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The fair use doctrine in the digital age: Reassessing the balance between creators' rights and public access

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ABSTRACT

This paper critically reassesses the application and efficacy of the Fair Use doctrine within the contemporary Digital Age, noting that the rise of generative AI and mass digitization has amplified friction between Creator's Rights and the need for Public Access. This study employs a normative legal research methodology, integrating doctrinal analysis with critical policy evaluation by focusing on U.S. statutory provisions and analyzing landmark rulings concerning Digital Copyright. The main finding is that the conventional, four-factor balancing test is frequently inadequate in assessing modern cases, particularly those involving Transformation Use, as it fails to provide predictable standards. The academic contribution is the proposal of a refined analytical framework for the doctrine, aiming to re-establish the crucial balance between adequately compensating creators while actively fostering innovation and robust Public Access in an increasingly digitized information environment.

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1. Introduction

The advent of the Digital Age has fundamentally reshaped the creation, distribution, and consumption of creative works, placing immense strain on traditional legal doctrines designed to govern intellectual property. Among the most contested and critical areas of intellectual property law is the Fair Use doctrine. Enshrined in Section 107 of the US Copyright Act, Fair Use serves as a necessary safety valve for copyright, permitting the limited use of copyrighted material without permission for purposes such as criticism, comment, news reporting, teaching, scholarship, or research. The doctrine is a legal balancing test, intended to reconcile the utilitarian aims of copyright: protecting the rights of creators to incentivize production while simultaneously ensuring that the public has sufficient access to knowledge and material to foster subsequent creativity and innovation (Rahman et al., 2024).

However, the rapid proliferation of digital technologies, from high speed internet and ubiquitous file sharing platforms to social media and, most recently, sophisticated Generative

Artificial Intelligence (AI) systems, has created a complex environment where the application of this venerable doctrine is increasingly difficult, unpredictable, and highly litigable (Shen, 2024). The ease of perfect copying and instant global dissemination challenges the very foundation of the marketplace protected by copyright, making the four factor analysis the core of the Fair Use test a source of intense judicial and academic debate. This friction mandates a thorough reevaluation of whether the flexible common law origins of Fair Use can withstand the velocity and scale of digital transformation without sacrificing either the livelihoods of creators or the benefits of public domain enrichment (Bellt & Parchomovskytt, 2016).

The challenges to Fair Use in the digital sphere were significantly amplified by the passage of the Digital Millennium Copyright Act (DMCA) in 1998. Enacted primarily to implement the World Intellectual Property Organization treaties, the DMCA introduced anti circumvention provisions that legally bar users from bypassing technological protection measures (TPMs) used by copyright holders (Ortega, 2023). This legislative action, intended to enhance copyright protection, created an inherent conflict with the Fair Use doctrine. By making it illegal to circumvent a digital lock, regardless of the user's ultimate purpose, the DMCA effectively places a technological barrier in front of uses that would otherwise be deemed fair, such as extracting portions of a work for criticism or educational use (Lin & Guan, 2025).

Consequently, the DMCA has shifted the enforcement battleground from the legal analysis of "use" to the technological control of "access." This statutory overlay necessitates a constant regulatory process to carve out temporary exemptions to the anti circumvention rule, confirming that the initial legislative solution failed to harmonize technological control with the constitutional imperatives of promoting the useful arts. The tension highlights a fundamental flaw in the current legal architecture: an overemphasis on preventing initial access has inadvertently undermined the public's traditional rights to use content fairly once accessed, further stressing the delicate balance that this research seeks to address.

The judicial struggle to apply the four Fair Use factors in digital cases demonstrates a systemic challenge to the doctrine's adaptability. In recent years, the balance has often tipped in favor of the first factor, particularly if the use is deemed highly "transformative" (Rahman et al., 2024). Landmark decisions, particularly those concerning large scale library digitization, have focused on the societal benefit derived from the new use such as enabling new forms of research and search functionality rather than solely the commercial character of the user. Yet, the rapid emergence of Generative AI has renewed and intensified the debate over the fourth factor: the "effect of the use upon the potential market." AI models are trained on massive datasets that include copyrighted material, and the resulting outputs, though arguably transformative, have the unprecedented capacity to directly compete with, or entirely substitute for, the original works, thus creating significant and immediate market harm for content creators (Shen, 2024). This immediate and systemic threat to creators' livelihoods in nascent digital markets constitutes the practical urgency of this paper.

This creates a critical legal lacuna. If a use is highly transformative but simultaneously destroys or substantially harms the creator's market, which factor should prevail? The conflict forces the legal system to address not only direct market substitution but also the viability of nascent markets, such as the licensing of content specifically for AI training purposes, before they are fully established (Pham, 2025). Many scholars argue that the current flexible, case by case approach inherent in Fair Use provides insufficient certainty for both creators and innovators, leading to a "chilling effect" on legitimate expression and costly, protracted litigation (Boyle, 2008). The academic urgency of this study lies in addressing this uncertainty, as the current framework risks either overprotecting creators, thereby stifling beneficial innovation, or unduly prioritizing digital convenience, thereby eroding the economic incentive necessary for content creation.

The deployment of Generative AI represents the most severe test yet for the Fair Use doctrine. While much existing scholarship has critiqued the judicial application of the four factors in

general digital contexts, previous research has not adequately addressed or proposed a refined analytical framework that can reconcile the finding of high "transformative use" (Factor 1) with simultaneous and substantial "market harm" (Factor 4) specifically resulting from the scale and competitive nature of Generative AI training and output.

These systems operate by ingesting vast, sometimes complete, corpora of copyrighted materials including text, images, and music to train their underlying models. Proponents argue that this training process is a non expressive, highly transformative use, similar to a search engine indexing the web (Quintais, 2025). Opponents, predominantly creators and rights holders, argue that the output directly cannibalizes the market for human created works, especially when the AI is prompted to generate works "in the style of" a specific artist or author (Shen, 2024). The academic urgency of this study lies in addressing this uncertainty, as the current framework risks either overprotecting creators, thereby stifling beneficial innovation, or unduly prioritizing digital convenience, thereby eroding the economic incentive necessary for content creation.

This emerging conflict forces courts to look beyond the simplistic transformation test and consider the scale of unauthorized copying and the systemic market replacement enabled by AI. The sheer volume of works consumed during training challenges the traditional interpretation of the third factor ("amount and substantiality of the portion used"), while the market impact challenges the fourth factor, even if the use is deemed transformative. The legal response to AI training is not merely an extension of existing copyright law; it demands a fundamental reconsideration of whether Fair Use, conceived in an analog era, can effectively govern the economics of machine learning and mass algorithmic creation without legislative clarity. This paper posits that this new technological reality demands a more robust and predictable legal standard (You & Luo, 2025).

The fundamental research problem this paper addresses is that the Fair Use doctrine, as presently interpreted, fails to provide a predictable and consistent framework for balancing creators' economic rights with the public's interest in access and innovation in a rapidly evolving digital ecosystem characterized by transformative technologies and instant global reproduction. The existing legal ambiguity risks either overprotecting creators, thereby stifling beneficial innovation and public discourse, or unduly prioritizing digital convenience, thereby eroding the economic incentive necessary for content creation (Quintais, 2025). Therefore, the main research question to be answered is: How can the traditional four-factor Fair Use doctrine be conceptually adjusted and refined to provide a predictable, technologically neutral legal standard that effectively balances creators' economic rights against the imperative for innovation and robust public access in the Age of Generative AI?.

This research, therefore, seeks to critically reassess the doctrine's current application and propose conceptual adjustments to its framework. The analysis will proceed in three main stages. First, it will analyze the historical development and theoretical underpinning of the Fair Use doctrine, contrasting its origins with the demands of the digital environment, including the complications introduced by the DMCA. Second, the paper will conduct a detailed, critical review of landmark digital copyright cases over the past decade, focusing specifically on judicial interpretations of the transformative use and market harm factors in the context of mass digitization and, critically, artificial intelligence training. Finally, based on this analysis, the paper will propose a refined analytical approach for the Fair Use doctrine that emphasizes technological neutrality and regulatory foresight, aiming to reestablish the crucial balance between the legitimate claims of creators' rights and the imperative for robust public access and technological innovation in the Digital Age.

2. Method

This study employs a qualitative legal research methodology, specifically normative legal research, integrating both doctrinal analysis and critical policy evaluation (Yarosewick, 2025).

The research is fundamentally conceptual and analytical, focusing on interpreting and applying the Fair Use doctrine within the context of rapid digital change, rather than on empirical data collection.

The primary legal sources utilized include fundamental statutory provisions, specifically the U.S. Copyright Act of 1976, Section 107, and relevant sections of the Digital Millennium Copyright Act (DMCA), as these legislative enactments shape judicial interpretation (Stein, 2022). Data collection involves analyzing case law, specifically approximately 15-20 landmark rulings from U.S. Circuit Courts and the Supreme Court spanning the period of the last decade (2015 to present). Cases are selected based on their legal significance, their focus on the four statutory factors of Fair Use, and their direct involvement with digital reproduction and transformative technologies; the analysis encompasses both generative AI and all significant forms of digitalization. A critical component of the data collection involves analyzing case law, specifically landmark rulings from U.S. Circuit Courts and the Supreme Court over the last decade, with particular attention given to decisions concerning mass digitization and, most recently, litigation related to Generative Artificial Intelligence (AI) training data (Yarosewick, 2025).

Secondary sources further enrich the analysis, consisting of scholarly articles, law reviews, and authoritative reports, all selected within the last ten years to ensure contemporary relevance (Hasan et al., 2024). The data analysis technique involves a normative and critical interpretive approach. This begins with the doctrinal deconstruction of the four statutory factors of Fair Use to understand their original intent. Subsequently, key judicial precedents are subjected to hermeneutic analysis, which is applied by focusing on interpretive layers: identifying the court's expressed rationale for weighing the transformative nature of use (Factor 1) and critically examining the reasoning used to determine potential market harm (Factor 4). To maintain objectivity and rigor, the findings from the doctrinal deconstruction are triangulated against the results of the hermeneutic analysis of case law and further compared with the conclusions drawn from the secondary academic literature.

Finally, the study performs a critical policy evaluation to assess the doctrine's function as a regulatory tool, synthesizing findings to propose a refined analytical framework that ensures a balanced and predictable legal standard for the Digital Age.

3. Analysis and Results

The analysis of the Fair Use doctrine in the Digital Age reveals a profound and continuous struggle by the legal framework to keep pace with the velocity and scale of technological innovation. The findings, drawn from a critical evaluation of recent jurisprudence and scholarly works, demonstrate that the doctrine, while inherently flexible, faces unprecedented challenges that undermine its historical equilibrium between protecting creators' rights and fostering public access. Specifically, the rise of transformative, non expressive machine uses and the entanglement with anti circumvention laws have created significant legal instability across all four statutory factors, ultimately functioning as a significant technological subsidy.

A core finding of this study emphasizes the profound shift in judicial focus toward the first Fair Use factor the purpose and character of the use with transformative use becoming the almost exclusive determinant in digital copyright litigation (Aufderheide & Jaszi, 2024). Courts have increasingly sanctioned the wholesale copying of copyrighted works when the secondary use is non expressive and serves a new, functionally distinct purpose. This judicial approach implicitly redefines copyright protection as primarily safeguarding the market for *consumptive* expression, while largely excluding the market for *functional data use* (Gorwa, 2024). The jurisprudential analysis methods applied to assess the evolution of the four Fair Use factors involve a critical review of landmark rulings over the last decade, focusing on how judicial interpretation has progressively relaxed the criteria for Factors 2 and 3 and intensified the scrutiny on Factor 4 in the context of digital technology.

This judicial favoritism for transformative use has severely undermined the efficacy of the second and third factors. Regarding the second factor, the nature of the copyrighted work, the highly creative nature of a work, which once strongly disfavored fair use, is now routinely dismissed in non consumptive copying cases. The argument is that since the AI or search engine only processes "raw data" or "patterns" stripped of expressive value, the inherent creativity of the original work becomes irrelevant (Netanel, 2008). This creates a conceptual loophole where the very creativity copyright seeks to protect becomes a non issue when facing machine analysis.

The third factor, the amount and substantiality of the portion used, has undergone an even more radical subversion. The digital reality is that technologies like AI models require the full corpus of works for effective training. Confirmation of judicial acceptance of full work copying (100% reproduction) for transformative purposes represents a radical reinterpretation of this factor (Ding & Yang, 2025). The results of doctrinal hermeneutics are reflected in the finding that the third factor has been rendered moot by technological necessity, demonstrating a departure from the statutory fidelity of the original law.

This relaxation reflects judicial pragmatism, acknowledging that prohibiting wholesale copying would effectively prohibit the technology itself. However, it comes at the cost of statutory fidelity and creates a dangerous precedent where technological necessity overrides established legal boundaries. Empirical findings indicate that in modern litigation, copying the entirety of a work no longer reliably correlates with an unfavorable Fair Use outcome, illustrating the degree to which this factor has been rendered moot by technology (Ding & Yang, 2025).

Analysis confirms that the Digital Millennium Copyright Act (DMCA), passed to protect digital content, has created a fundamental contradiction known as the "Fair Use Gap." The DMCA's Section 1201 anti circumvention rules grant content owners technological control that overrides the legal exceptions provided by Fair Use (Fahleni et al., 2025).

This entanglement effectively turns the right to access content for fair use purposes into a commodified privilege. The DMCA introduces a layer of paracopyright protection that functions independently of the four factor test. Furthermore, many digital content providers utilize End User License Agreements (EULAs) or terms of service that explicitly prohibit uses that would otherwise be fair, such as reverse engineering or scholarly archiving (Yuan & Li, 2025). The implication of these different legal structures (statute-based Fair Use vs. contract/technological control) for the effectiveness of copyright protection in the future is that protection will shift from a universal legal right to a technologically enforced and privately contractual right, undermining the public interest balance.

These contractual restrictions, combined with the DMCA's technological barriers, create a double layer of insulation for content owners, effectively allowing private agreements to dictate public rights. The philosophical issue here is whether a legal right remains meaningful if its exercise is a statutory violation and a breach of contract (Chesterman, 2025). This regulatory oversight transforms the right to read, analyze, and critique into a right contingent upon technological acquiescence and contractual consent.

Analysis confirms that the emergence of Generative AI represents the most severe and immediate economic threat to the fourth Fair Use factor: the effect of the use upon the potential market. This challenge stems not merely from infringement, but from systemic market displacement driven by the unprecedented scale and efficiency of AI output. Recent litigation confirms that the Fair Use analysis in the context of Large Language Model (LLM) training is highly polarized and fact specific (Didsbury & Zhu, 2025), where key court rulings, reinforced by the US Copyright Office's latest guidance that transformativeness "is a matter of degree" and a competitive AI output significantly weakens the fair use defense (De La Durantaye, 2025) have established the "Transformative Paradox": a use can be conceptually transformative, but because the ultimate outcome depends critically on the market harm factor, the claim of Fair Use will likely fail if the outputs directly substitute for the original work (Eyo-Udo et al., 2025),

leading to the consensus that future plaintiffs must meticulously demonstrate concrete evidence of infringing outputs and systemic market impact, shifting the financial burden of proof onto creators in an unprecedented way.

Economic reports underline the urgency of this crisis. The global AI market is experiencing explosive, multi trillion dollar growth, driven by the low marginal cost of content creation offered by Generative AI systems (Hampole et al., 2025). This economic scale creates the potential for market saturation and systemic substitution. Empirical evidence from the freelance market shows a direct consequence: freelancers in occupations exposed to Generative AI have experienced quantifiable declines in both the number of contracts and earnings, suggesting direct labor substitution is already occurring, disproportionately affecting high skill workers (Demirci et al., 2025). Crucially, from an investment perspective, emphasize the inverse relationship between legal certainty and capital flow: the existence of the flexible Fair Use doctrine in the US is deemed economically essential for the continued rapid development of Generative AI, as it provides the legal predictability necessary to attract billions of dollars in venture capital and investment, a phenomenon notably absent in jurisdictions with restrictive copyright laws (Shafik, 2025). This economic finding underscores that the debate is not just about compensating creators but about the fundamental legal infrastructure underpinning the technology sector's future global leadership.

The analysis suggests that the market harm test must evolve to address latent market harm the suppression of the nascent market for licensing training data (Camargo Salamanca et al., 2025). The risk inherent in courts ruling AI training as Fair Use is that large tech companies could seize a multi billion dollar economic opportunity based on the compulsory, non compensatory use of existing creative assets, consequently extinguishing the primary economic incentive for future human creativity, an outcome further compounded because AI is substituting not only primary markets (e.g., generating new images instead of commissioning a photographer) but also secondary derivative markets (e.g., generating style templates or derivatives that traditionally required separate licensing) (Yarosewick, 2025), which is why the core argument against Fair Use for AI training relies on the principle that the act is functionally different from Text and Data Mining (TDM) and its purpose is not simply to derive abstract insights, but rather to enable the creation of new works that compete directly with the training data (Fontana, 2025).

The challenges faced by the Fair Use doctrine in the US are compounded in jurisdictions like Indonesia, where the statutory framework for copyright exceptions is less flexible and enforcement is significantly weaker. Court decisions are analyzed only in the US legal context because the Indonesian legal system relies on a rigid, exhaustive list of exceptions rather than a flexible judicial balancing test (Fair Use), making US jurisprudence the necessary basis for analyzing the evolution of the four factors. Indonesia's Copyright Law (Law No. 28 of 2014) includes specific limitations and exceptions, often structured more rigidly than the US Fair Use doctrine, focusing on explicit public purposes like education and research (Mayana et al., 2022).

Indonesian scholarly analysis highlights that the rigid, exhaustive list of exceptions in national law struggles to accommodate the fast pace of digital innovation and the participatory web culture (Alfian, 2025). Where US law uses the broad concept of "transformative use" to adapt, Indonesian law struggles with the "digital gap" because its exceptions are not flexible enough to cover new, non traditional uses like text and data mining for commercial AI development. This rigidity means that many creative uses on platforms, often termed "prosumer" behavior, technically constitute infringement, creating immense legal risk and hindering digital expression (PRI, 2025). Furthermore, low public awareness of Intellectual Property Rights (IPR) in Indonesia exacerbates the problem, normalizing piracy and infringement in the digital sphere (Andanni & Santoso, 2025).

The primary weakness in the Indonesian system lies in enforcement. Research confirms that despite clear statutory provisions, weak law enforcement, low institutional technical

understanding of digital evidence (such as deepfakes or AI generated infringement), and a lack of integrated digital justice systems plague effective copyright protection (Manurung & Simamora, 2025). In the Indonesian legal context, the difficulties in jurisdictional control, perpetrator anonymity, and the high costs associated with digital litigation mean that creators often have little recourse against large scale online piracy or infringement, consequently rendering the Indonesian legal system highly susceptible to the market disruption caused by AI, as the foundational mechanism to deter large scale unlicensed copying is already weak. This comparative finding clarifies that the analysis results are not limited to the US and Indonesian legal contexts but rather use them to demonstrate the two major components of the global crisis: a philosophical crisis over Fair Use (US) and a fundamental crisis of legal capacity and enforcement (Indonesia), allowing for global generalization of these structural deficits.

This comparative analysis demonstrates that while the US faces a philosophical crisis over Fair Use, Indonesia faces a fundamental crisis of legal capacity and enforcement in the digital era, resulting in an environment of poor enforcement where the administrative and judicial capacity to effectively prosecute or award damages against a technological giant challenged for AI training is compromised (Habibi & Sujadmiko, 2025), thus clarifying the comparative finding that the global philosophical crisis over Fair Use interacts with local structural deficits to create a nearly insurmountable barrier to protecting creators in emerging digital economies.

The complexity of AI goes beyond market substitution, revealing technical and ethical failures that challenge the very foundation of the Fair Use defense. The relationship between the analysis results and the theoretical framework is outlined by the finding that the results directly challenge the utilitarian theory of copyright (incentivizing creation) because the legal uncertainty and litigation burden (Findings) actively suppress creator incentives (Theory). The technical reality of data memorization poses a direct threat to the "non expressive use" argument central to the AI Fair Use defense.

Studies have shown that Generative AI models can occasionally reproduce copyrighted input data verbatim or near verbatim when prompted (Craig & Kerr, 2025). This technical failure creates a clear case of direct infringement for both the developer (for the copying during training) and the user (for the infringing output), regardless of the Fair Use status of the training phase itself. This technical imperfection demonstrates that the claims of abstraction and non expression are often factually unsustainable, making the legal risk highly volatile.

A major finding is the pervasive lack of transparency regarding AI training data provenance. AI developers often acquire vast datasets from uncontrolled sources, including potentially pirated works or content scraped without proper rights documentation. This due diligence deficit introduces a severe taint to the Fair Use defense. Several courts have indicated that Fair Use cannot be invoked to excuse illegal acquisition of the source material. The chaotic sourcing of these training sets mean that AI developers are building their commercial platforms upon a foundation of potential legal liability, which inevitably contributes to the systemic risk borne by the creative economy.

The economic models and litigation underscore that the cost of defending Fair Use in the AI era is rapidly escalating, placing an untenable financial burden on both creators and innovators. The malleability of the doctrine, combined with the technical complexity required to prove infringement against an AI model (often requiring expert testimony about model architecture and training data), ensures that only well capitalized entities can afford the legal battles. This system actively favors those who can litigate endlessly, thus transforming Fair Use from a defense of innovation into a weapon of legal attrition. The individual creator is essentially barred from accessing justice due to the prohibitive discovery and expert costs necessary to challenge a highly resourced AI developer. The concentration of litigation risk and expense among a few large tech firms and organized plaintiff groups further highlights the unequal access to justice created by this technological shift (Dratler Jr & McJohn, 2025).

The findings overwhelmingly point to the conclusion that the doctrine of Fair Use is currently functioning as an instrument of technological subsidy rather than a genuine balance. Its malleability favors those who can afford the litigation to defend their mass copying practices, while the economic reality disproportionately burdens individual creators. The long term sustainability of creative industries is at risk if the law fails to address the systemic nature of AI market saturation. This necessitates a move beyond piecemeal judicial interpretation towards a solution that ensures equitable compensation for creators, possibly through compulsory licensing regimes or targeted legislative amendments that explicitly account for the economic externalities created by large scale AI systems (Morganti & Valdes, 2025). The proposed new framework, focused on mandatory liability rules and equitable remuneration, is specifically designed to be compatible with international legal standards (such as the EU's DSM Directive) by embracing the principle of mandatory collective rights management for non-consumptive uses, thus providing a universally applicable model for the Digital Age.

4. Conclusion

This study undertook a critical reassessment of the Fair Use doctrine in the Digital Age, concluding that the legal framework operates under a condition of acute systemic instability, which is functionally operating as an instrument of technological subsidy rather than a genuine balance. The analysis successfully achieved its primary objective of identifying the doctrine's flaws by demonstrating the severe erosion of traditional copyright principles, where the judicial tendency to prioritize transformative use (Factor One) has normalized mass, non-compensatory reproduction necessary for platforms like Generative AI. Furthermore, the analysis confirmed that the DMCA's anti-circumvention rules have created a "Fair Use Gap," transforming the right to access content into a costly, technologically controlled privilege. The most critical finding confirms that Generative AI poses an unprecedented economic crisis of market saturation and displacement that invalidates the predictability of the fourth Fair Use factor, severely risking the long-term sustainability of creative industries. The core theoretical contribution of this work is the proposal of a refined analytical framework for Fair Use that introduces a mechanism for mandatory liability, offering a solution to reconcile the utilitarian aims of copyright law with the systemic market disruption caused by large-scale non-consumptive machine use. This reality necessitates a definitive move beyond piecemeal, case-by-case judicial interpretation toward solutions ensuring equitable compensation for creators. However, this study's primary limitation lies in its conceptual and normative scope; it does not include empirical economic modeling or detail the political feasibility of the proposed framework. Consequently, future research should focus on developing quantitative econometric models to precisely measure the latent market harm and undertake a detailed comparative legal analysis of how mandatory licensing frameworks could be structurally adapted into the U.S. and Indonesian legal systems.

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