*Corresponding Author's Email: fmer21013@fme.aegean.gr
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Global Dynamics of Digital Platforms: Transforming Creative Industries with Equity and Sustainability

Vasiliki Fytrou
Department of Financial and Management Engineering, University of the Aegean, Kountouriotou, Greece

Abstract

We live in an era of unprecedented transformation, driven by digital platforms that are redefining the creation, distribution, and consumption of creative content. The emergence of new digital platforms such as YouTube, TikTok, and Patreon has led to new forms of social inequality in the economy, AI ethics, and environmental sustainability. Artificial Intelligence (AI) and Augmented Reality (AR) enhance content personalization and production efficiency, yet algorithmic opacity and revenue concentration create disparities that favor established creators. This study investigates the impact of digital platforms on creative industries through a qualitative methodology, integrating secondary data from global reports (e.g., UNCTAD, 2022) and case studies of TikTok, Patreon, and emerging Web3 alternatives. Findings highlight both opportunities—such as decentralized revenue models, AI-driven innovation, and regional creative growth—and challenges, including the monopolization of content distribution, ethical dilemmas in AI-generated creativity, and the environmental burden of data centers and blockchain transactions. This study focuses on the impact of Web3 technologies on the reliance of intermediaries while covering contemporary regulations on AI governance and platform responsibility. The study highlights the gap in policy efforts that ensure economic equity, transparency, and platform sustainability that need to be addressed. Suggested policy targets include more humane monetization of smaller creator's content, more responsible AI regulation, and the creation of less environmentally harmful digital systems. This study is situated within the larger discussion of the intersection of innovation, equity, and sustainability in the context of a developing digital creative economy.

Keywords: AI ethics, Web3, creator economy, algorithmic governance, policy recommendations

1. Introduction

As Zhao et. al., (2024) note, digital platforms are revolutionizing creative industries regarding how content is created, distributed and monetized. YouTube, TikTok, and Patreon have eased

barriers to entry, allowing content creators to access international markets directly (Mogno & Nuccio, 2023). AI and Augmented Reality (AR) technologies increase the efficiency of content production and further increase personalization (Wagan & Sidra, 2024).

While these platforms increase creator autonomy, they also raise concerns about algorithmic opacity, economic disparities, and AI-related ethical issues (Jacques, 2024; Zhao et al., 2024). The COVID-19 pandemic accelerated digital platform dependence, with services like Zoom and Twitch becoming central to creative collaboration (Lazić, 2023). However, revenue concentration remains a challenge, as over 300 million creators generate more than $100 billion annually, yet income is unevenly distributed (Florida, 2022).

Monetization opportunities exist, but platform algorithms favor established creators, reinforcing digital inequalities (The Economist Intelligence Unit, 2021). The "creator ecology" concept describes how creators use multiple platforms to maximize visibility and income, though dominant models benefit top earners (Ma, Gui, & Kou, 2023). Web3 technologies offer decentralized commercialization models using blockchain, smart contracts, and DAOs, reducing intermediary reliance (Wan et al., 2024). Platforms like Audius and BitTorrent facilitate direct micropayments, bypassing algorithmic filters, yet legal uncertainties and scalability challenges limit widespread adoption (Cakmak & Agarwal, 2025 ; Sun, 2023).

The implications of such algorithmic governance have called for transparency, attention, and more active policies from the platform (Reynolds & Hallinan, 2024). As AI takes control over more content, the problems regarding bias, visibility, and revenue equity become more pronounced (Chung et al., 2023). Meeting these challenges requires policies associated with regulation, platform responsibility, and self-governing structures (Garcia, 2024). This study analyzes digital platforms' impact on economic fairness, AI ethics, and sustainability, using secondary data from UNCTAD (2022) and case studies from TikTok, Patreon, and Web3 alternatives (Amudharasan, 2023; Zhao et al., 2024).

How do digital platforms shape economic relations in creative industries?

What challenges do small creators face in terms of fairness and access?

What are the ethical and legal challenges of integrating AI into the creative process?

What policies can improve platform sustainability and reduce environmental impact?

There is a significant body of literature concerning digital platforms, but few studies investigate the impacts of equity, AI ethics, and sustainability together. Furthermore, the transition to Web3 commercialization remains underexplored despite its potential to reshape power dynamics in creative industries. This article aims to bridge these gaps by providing a thoroughly integrated analysis of the strategies of the digital creative economy.

This is how the article is structured. In section two, the relevant framework is provided by analyzing sustainability concerning social equity, ethics of AI, and economic systems. In section three, the case studies were done, and in section four, the creative economy is explored and analyzed for emerging opportunities. In section 5, the methodologyis outlined, in section 6, the results are explained, and in section 7, the important barriers to progress are pointed out. In section 8, conclusions are provided and further research directions are specified.

2. Theoretical Background

The emergence of digital platforms is reshaping the creative industries and having impacts on the economy, social equity, algorithmic governance, and sustainability. This section clarifies the theoretical aspects of the study concerning its main dimensions.

2.1. Economic Dynamics and Digital Platforms in the Creative Industries

Digital platforms have greatly concentrated revenues within a small population of creators. Research suggests that ninety percent of revenue in creative industries are captured by ten percent of top-earning creators (Jacques, 2024). It is important to underscore, though, that this concentration differs from one platform to another.

On traditional Web2 platforms such as YouTube and TikTok, revenue heavily depends on algorithmic content recommendations and advertising-based models, reinforcing revenue accumulation among the most popular creators (Zhao et al., 2024). In contrast, subscription-based platforms such as Patreon and Substack exhibit lower financial concentration, as creators are paid directly by their audiences (Mogno & Nuccio, 2023).

The development of Web3 technologies and blockchain-based economic models proposes an alternative revenue distribution strategy, where creators gain direct control over their earnings by bypassing centralized platforms (Nathaniela, Princes, & Wang, 2024). Nevertheless, particular cryptocurrencies still suffer from a scarcity of liquidity, and stable legal conditions that accompany emergent technologies are still lacking (Sun, 2023).

2.2. Social Equity and Access to the Creative Industries

As digital platforms continue to expand, creators from underrepresented communities have the opportunity to share their work with unprecedented ease (Zhao et al., 2024). For instance, creators in the Balkans have leveraged platforms like YouTube and Instagram to access international markets, overcoming economic and geographical constraints (UNCTAD, 2022). However, algorithmic processes tend to favor already established creators, making it more difficult for new talents to gain visibility (Watiktinnakorn et al., 2023).

Recommendation algorithms prioritize engagement-driven content, which means that creators who already attract high levels of interaction are more likely to receive greater exposure, reinforcing visibility concentration and economic disparities (Ma, Gui, & Kou, 2023). The decentralized governance structures of Web3 aim to reduce these inequalities by facilitating more equitable revenue distribution and giving users greater control over content visibility (Reynolds & Hallinan, 2024). Still, the digital divide stays as a major problem since creators from developing areas do not possess the necessary technological skills to work with decentralized systems (Salamon, 2025).

2.3. Algorithmic Governance and AI Ethics in Content Promotion

Artificial intelligence (AI) plays a crucial role in determining content visibility across digital platforms (Cakmak & Agarwal, 2025). Nonetheless, the opacity of algorithmic choices usually results in the inequalities of so-called fringe creators because they do not enjoy the same level of visibility than more established content makers (Fenwick & Jurcys, 2023).

The governance of recommendation algorithms presents three main challenges. First, the opacity of algorithmic decision-making allows platform providers to control content distribution without creators understanding how ranking systems work. Second, algorithmic bias occurs as AI models are trained on historical data, which can reinforce existing inequalities in content visibility (Bonadio, Lucchi, & Mazziotti, 2022). Third, platforms

prioritize engagement-maximizing models that favor viral and advertiser-friendly content, often overlooking high-quality or innovative content (Garcia, 2024).

The European Union, through the Digital Services Act (DSA), promotes greater transparency in content ranking systems, while decentralized approaches propose the direct involvement of creators in AI model development (Reynolds & Hallinan, 2024). However, implementing these regulatory measures remains challenging, as AI governance policies remain fragmented across different jurisdictions (Bonadio, Lucchi, & Mazziotti, 2022).

2.4. Sustainability and Environmental Challenges in the Creative Industries

The environmental footprint of digital platforms is expanding, with energy-intensive data centers and blockchain transactions contributing significantly to CO_2 emissions. The emissions from online content streaming are estimated at 55gCO_2e per hour, equivalent to the emissions produced by a conventional gasoline-powered vehicle (Stephens et al., 2021; Marks & Przedpełski, 2022).

The increasing energy demand driven by cloud computing, AI infrastructure, and blockchain transactions, particularly on Proof-of-Work (PoW)-based networks, intensifies environmental concerns (Sun, 2023). Proposed sustainability solutions include the transition to Proof-of-Stake (PoS) blockchain mechanisms, which consume 99% less energy than PoW-based models (Sun, 2023). These changes, alongside investment in renewable energy powered data centers (Nathaniela, Princes, & Wang, 2024) and regulatory support for green initiatives from platforms (Wan et al., 2024) can help alleviate the burden of the digital economy.

3. Case Studies: Real-World Applications and Insights

In order to appreciate the creative industries and their digital platform influence, this section reviews select platforms that best describe economic, technological, and social change. TikTok, Patreon, Audius and Bit Clout, DALL-E, and Adobe Sensei are the case study examples in this category.

3.1. TikTok: The Link Between Creators and Brands

Content marketing has evolved into a vast arena, and TikTok has established itself as a powerful player in this domain by enabling content creators to get paid for their work through sponsored posts, affiliate sales, and monetization revenue sharing (Mogno & Nuccio, 2023). Its AI-driven recommendation system enables rapid content dissemination, offering new creators' visibility (Zhao et al., 2024).

However, over-reliance on TikTok's algorithm complicates audience retention (Ma, Gui, & Kou, 2023). While the Creator Marketplace facilitates brand partnerships, algorithmic biases still limit the visibility of smaller creators (Cakmak & Agarwal, 2025). Improved disclosure about ranking algorithms might enhance equity in content promotion and revenue sharing (Reynolds & Hallinan, 2024).

3.2. Patreon: Direct Funding and Financial Autonomy

Self-Financing and Economic Independence Rather than relying on advertisement monetization models, Patreon allows users to sponsor their favorite creators directly through subscriptions (Colombo, 2018). This model attracts artists, podcasters, and educators and thus makes financially sustainable communities possible (Fenwick & Jurcys, 2023).

Despite its benefits, Patreon does not guarantee financial success. Studies indicate that only 5% of creators earn enough to sustain themselves, while high platform and payment processing fees further challenge smaller creators (Jacques, 2024; Nathaniela, Princes, &

Wang, 2024). Patreon provides an alternative funding model that reduces reliance on corporate sponsorships and advertising.

3.3. Web3 and Blockchain-Based Platforms: Decentralized Content Commercialization

Web3 platforms challenge traditional models by enabling direct revenue generation through blockchain micropayments (Wan et al., 2024). Audius allows artists to bypass record labels, avoiding high streaming commissions, while BitClout introduces creator tokens for audience-supported revenue (Zeng & Kaye, 2022; Nathaniela, Princes, & Wang, 2024).

However, mass adoption faces obstacles. Users struggle with crypto wallets and decentralized exchanges, while revenue instability from cryptocurrency volatility and NFT market fluctuations remains a concern (Garcia, 2024). Additionally, legal uncertainties surrounding taxation, consumer protection, and copyright hinder broader adoption (Peukert & Windisch, 2024). Increased costs for transactions on Proof-of-Work (PoW) networks diminish economic feasibility even further (Sun, 2023).

3.4. Artificial Intelligence (AI) and Automated Content Creation

AI has transformed content creation, with tools like DALL-E and Adobe Sensei streamlining workflows and reducing production costs (Fenwick & Jurcys, 2023). DALL-E generates images from text descriptions, while Adobe Sensei optimizes design and video editing (Wagan & Sidra, 2024).

However, AI introduces legal and ethical challenges, particularly regarding copyright and content ownership. Current laws do not clearly attribute AI-generated works to a rightful owner (Peukert & Windisch, 2024). AI-driven recommendation algorithms may also exhibit biases, favoring certain content over others (Bonadio, Lucchi, & Mazziotti, 2022). Regulatory measures are needed to ensure fair copyright attribution and transparency in AI-driven content promotion (Garcia, 2024).

3.5. Comparative Analysis of Case Studies: TikTok, Patreon, Web3 and AI Platforms

Every platform applies a different form of monetization, which has a unique impact on the creative economy. In TikTok, users are paid based on the level of engagement on their videos because its algorithm gives greater visibility to videos that get more engagement. Patreon allows content creators more freedom by being financially supported via subscriptions but limits the discovery by new audiences. Web3 platforms do away with the middlemen, but the platforms have legal and adoption barriers to overcome. Ethically sensitive AI tools increase the volume of production but invite deeper questions regarding the ownership and profit sharing of the produced content.

The primary difference is in revenue retention and content control. Web2 platforms such as TikTok and Patreon depend on corporate supervision and algorithmic control, whereas Web3 and AI-based platforms provide alternatives that are decentralized. Yet, all of these models require greater transparency, better economic equality, and government action if a truly sustainable digital infrastructure is to be constructed.

4. Opportunities in Digital Creative Industries

The change in economies, social factors, and technology has altered the creative industries, all thanks to the shift to the use of digital platforms. Furthermore, centralised financial models offer revenue sharing in a transparent manner that enhances the profits earned by creators, AI technology as well as blockchain can be utilized in content creation as well as monetization on a global scale (Zhao et al., 2024; Lazić, 2023). Web3, in particular, grants

creators greater autonomy (Nathaniela, Princes, & Wang, 2024). This section focuses on these opportunities: economic growth, regional development, technological advancement, and social integration.

4.1 Economic Growth and Market Expansion

Creators are able to circumvent the intermedaries because platforms such as YouTube, Etsy, and Spotify are significantly lowering entry barriers (Mogno & Nuccio, 2023). Monetization options include ads, direct transactions, and subscriptions. Platforms like Patreon and Substack reduce reliance on advertising by facilitating direct audience monetization (Jacques, 2024).

Web3 introduces decentralized revenue-sharing, granting creators financial control. Platforms like Audius and BitClout facilitate direct payments, bypassing high platform fees (Wan et al., 2024). Audience engagement can be enhanced and monetization strategies can be optimized through sophisticated platform analytics, which enables sustainability in the creator economy (Amudharasan, 2023; Florida, 2022).

4.2 Regional Development and Innovation

Digital platforms allow creators from emerging markets to access global audiences. YouTube and Instagram, for example, have empowered artists in Eastern Europe and the Balkans without requiring significant marketing investments (UNCTAD, 2022; Lazić, 2023).

The rise of regional creative hubs and digital literacy programs has strengthened innovation. Collaboration between governments, educational institutions, and IT firms supports local creative industries (Jacques, 2024). Regions are able to participate in the global economy thanks to Web3 ecosystems like Decentraland and The Sandbox which allow regional creators to sell their digital products without the need for ordinary distribution methods (Sun, 2023).

4.3 Technological Advancements in AI and Blockchain

Innovations in AI and blockchain technologies altered the landscape of content creation and its trade. AI tools like Adobe Sensei and DALL-E reduce production costs and personalize content (Fenwick & Jurcys, 2023). AI-driven recommendation systems on Spotify and TikTok enhance audience targeting, improving creator revenue potential (Amudharasan, 2023).

Blockchain decentralizes content distribution, granting creators control over ownership and revenue rights. Web3 AI further enhances fairer visibility discrimination of content on the internet (Bonadio, Lucchi, & Mazziotti, 2022). Decentralized monetization fosters equitable economic benefits (Peukert & Windisch, 2024). However, legal and ethical challenges persist, particularly regarding data protection and AI-generated content ownership (Garcia, 2024). Forthcoming policies must guarantee protecting the rights of the creators while ensuring fairness in algorithmic decision-making.

4.4 Social Inclusion and Access to the Creative Economy

Social inclusion is taking economically disadvantaged creators on board as digital platform users, which allows them to earn TikTok, Patreon and Web3 collectives enable audience sponsored funding which lowers the barrier to access for new creators (Jacques, 2024; Lazić, 2023). DeFi models further lower barriers to entry, allowing smaller creators to compete. DAOs encourage participatory governance, ensuring fair revenue distribution (Reynolds & Hallinan, 2024).

The issue of the digital divide is still persistent and restrictive to income creators who lack the requisite skills and tools needed (Zhao et al., 2024). To promote more inclusive ecosystems of creativity, governments should support programs that fund freelance creators.

5. Methodology

To understand the relations of digital platforms with creative sectors, this research adopts a qualitative methodology, using case studies and thematic analysis to address the economic, social, and ecological aspects of platform governance, algorithmic decision-making, and monetization processes. Secondary data sources, including reports from UNCTAD and UNESCO, provide macroeconomic insights, while research articles on AI ethics, platform governance, and sustainability inform the analysis.

The selection of case studies is based on the commercialization models different platforms employ. The research focuses on TikTok and Patreon, representing algorithm-driven content promotion and direct subscription financing, respectively. YouTube Shorts and Substack are also examined to highlight alternative monetization strategies, while Web3-based platforms such as Audius and BitClout introduce decentralized financial models using blockchain and smart contracts. This comparative framework enables an evaluation of traditional and decentralized digital content monetization.

For analyzing governance model coding, content promotion systems and sustainability measures, a systematic coding method ensures the model is transparent and also guarantees that due diligence is performed. The work is organized under three primary evaluative dimensions. The first examines digital platform economics, analyzing revenue-sharing policies, Web3 monetization models, and decentralized structures. The second evaluates algorithmic decision-making, bias in content recommendations, and the role of public participation in AI regulation. The third assesses the environmental impact of digital platforms, including energy-intensive blockchain transactions and carbon emissions from streaming, while also considering energy-efficient blockchain models, green data centers, and sustainable AI infrastructure.

This methodological approach provides a comparative analysis of economic fairness, transparency, and sustainability within digital content platforms. Summarized in Table 1 is the analysis of the platforms concerning revenue models, governance structures, degrees of transparency, and adoption barriers.

Table 1. Comparative Analysis of the Four Main Platforms

Criterion	**TikTok**	**Patreon**	**Audius (Web3)**	**FROM-E (AI tools)**
Revenue Model	Advertisements & corporate partnerships	Subscriptions	Cryptocurrencies & NFTs	AI usage model
Algorithmic Governance	Very powerful recommendation system	Without algorithmic intervention	Use of blockchain smart contracts	AI-driven suggestions
Transparency	Low (non-public algorithms)	High (creators control subscriptions)	Medium (depends on blockchain)	Unclear content ownership
Adoption Barriers	Low (easy access, known platform)	Medium (requires loyal audience)	High (blockchain technical knowledge)	Legal & ethical issues

6. Results

The integration of data and the case study analysis showcases how digital platforms considerably affect creative industries, presenting both opportunities and challenges with respect to new economic forms, AI, and even ecology. In this section, we explore the features of these impacts in relation to some forms of economic inequalities, algorithmic governance, sustainability paradigms, and other socio-technical innovations policies.

6.1. Economic Impact of Digital Platforms

Digital platforms have expanded economic opportunities for creators through alternative revenue models and global audience access. Patreon enables direct financial transactions, bypassing traditional intermediaries (Colombo, 2018), while Web3 platforms like Audius and BitClout introduce blockchain revenue-sharing, enhancing financial autonomy (Wan et al., 2024). However, economic disparities persist, with 90% of revenue on platforms like YouTube, TikTok, and Instagram concentrated among the top 10% of creators (Jacques, 2024). Algorithmic content promotion reinforces this imbalance by favoring high-engagement creators, benefiting those already successful (Ma, Gui, & Kou, 2023).

Subscription-based platforms such as Patreon and Substack rely on direct user funding, reducing financial concentration (Mogno & Nuccio, 2023). The COVID-19 pandemic intensified these inequalities, increasing creator dependence on centralized platforms (Li et al., 2024). While monetizing using blockchain reduces the cost of intermediation, it is slowed down because of volatility, transaction costs, and regulation (Sun, 2023).

6.2. Social Equity and Algorithmic Bias

As Zhao et al. (2024) point out, digital platforms have lowered barriers targeted at creators from marginalized groups. Creators from the Balkans, for instance, have used YouTube and Instagram to overcome economic and geographical constraints (UNCTAD, 2022). However, algorithmic opacity and biases continue to reinforce inequalities, as recommendation systems prioritize already popular creators, limiting visibility for emerging artists (Watiktinnakorn et al., 2023; Lazić, 2023). Engagement-driven monetization further amplifies this imbalance by favoring high-interaction content (Ma, Gui, & Kou, 2023).

User behavior reinforces these patterns, as studies show that users gravitate toward content with high social proof, leading to a self-reinforcing cycle of visibility (Zeng & Kaye, 2022). YouTube's algorithm, for example, prioritizes high-engagement videos, creating additional challenges for new creators (Covington et al., 2016; Watiktinnakorn et al., 2023). The first 10 to 30 minutes after publication are critical, as engagement during this window determines whether content appears in recommended lists (Jacques, 2024).

To address these disparities, proposed interventions include enforcing algorithmic transparency, offering analytics tools for creators (Reynolds & Hallinan, 2024), and implementing "exploration-first" models that provide initial exposure to new content before ranking it based on engagement (Bonadio, Lucchi, & Mazziotti, 2022). Web3 decentralization could also enhance content visibility by reducing reliance on centralized recommendation systems (Garcia, 2024).

6.3. The Role of Artificial Intelligence in Creative Industries

The integration of AI into content production has transformed creative industries by streamlining workflows, reducing costs, and enhancing content visibility through AI-driven recommendation systems (Fenwick & Jurcys, 2023; Wagan & Sidra, 2024). However, AI raises significant legal and ethical concerns, particularly regarding copyright and ownership of AI-generated works (Peukert & Windisch, 2024).

The legal status of AI content is still unresolved, with differing jurisdictions pursuing different legal angles. The EU acknowledges the need for regulatory frameworks considering human contributions (Bonadio, Lucchi, & Mazziotti, 2022). In addition to the legal questions, AI also introduces ethical concerns such as algorithmic discrimination, authorship, and potential unemployment. As blended by Chung et al., 2023, AI systems built with prejudiced data replicate inequalities regarding the representation of content. The growing presence of AI-generated content raises transparency concerns, with calls for explicit labeling (Garcia, 2024). Furthermore, automation endangers jobs in the arts and culture industries since AI applications take over the work of human creators (Peukert & Windisch, 2024).

6.4. Sustainability and Environmental Impact of Digital Platforms

The massive expansion of online service platforms has resulted in a corresponding rise in their energy usageas well as emmission of greenhouse gases. Streaming platforms such as Netflix and YouTube consume large amounts of electricity, with estimates indicating that each hour of streamed content produces 55gCO_2e (Stephens et al., 2021; Marks & Przedpełski, 2022). Although companies like Google and Netflix have committed to adopting 100% renewable energy by 2030, smaller platforms face significant barriers to implementing sustainable practices (Shehabi et al., 2018).

Blockchain-based sustainability models offer potential solutions, including energy-efficient smart contracts and the transition to Proof-of-Stake blockchain mechanisms, which significantly reduce energy consumption (Sun, 2023). However, regulatory policies must encourage the adoption of green technologies as digital creative industries continue to grow.

6.5 Key Findings

The data analysis revealed critical findings regarding the economic impact, social inequalities, AI challenges and environmental impacts on digital platforms. Table 2 presents a concise overview of the main findings, challenges identified and proposed solutions.

Table 2. Summary of Key Findings and Policy Recommendations

Thematic Area	**Key Findings**	**Challenges**	**Recommendations**
Economic Growth	Digital platforms allow creators to bypass intermediaries and directly reach their audience.	Economic inequality: 90% of revenue goes to the top 10% of creators.	Create fair economic models and support small creators through subsidies.
Social Equity	Platforms offer access to global markets and increased visibility opportunities.	Algorithms reinforce existing inequalities, limiting the visibility of smaller creators.	Ensure algorithmic transparency and implement policies for equitable content promotion.
Artificial Intelligence (AI)	AI tools like DALL-E and Adobe Sensei enhance efficiency and foster innovation.	Intellectual property concerns and ethical challenges due to algorithmic biases.	Establish legal frameworks for AI intellectual property and conduct independent algorithm audits.
Environmental Sustainability	Data centers have a high energy footprint.	CO_2 emissions from streaming content are significant.	Invest in renewable energy sources and adopt data compression technologies.

7. Challenges in Digital Creative Industries

Economic inequality, algorithmic governance problems, the ethical implications of AI, and ecological sustainability are some of the major challenges of the digital creative industry. Solving these challenges is required in order to promote a just and equitable digital environment.

7.1 Economic Disparities and Market Concentration

Income on digital platforms is highly concentrated, with 90% of YouTube and TikTok revenue going to the top 10% of creators (Jacques, 2024). Algorithm-driven content promotion reinforces this inequality by favoring high-engagement creators while limiting visibility for newcomers (Ma, Gui, & Kou, 2023).

High platform fees and revenue-sharing models further disadvantage independent creators. Platforms like YouTube and Patreon take significant portions of earnings, prompting calls for regulatory measures to ensure fairer revenue distribution and financial transparency (Lazić, 2023). While blockchain-based models offer direct creator-audience transactions, adoption is hindered by cryptocurrency volatility, regulatory uncertainty, and high transaction costs (Wan et al., 2024; Sun, 2023).

7.2 Algorithmic Governance and Ethical Issues

In Garcia's (2024) view, the growing dependence on AI for the moderation and curation of content automatically brings up issues of bias, opacity, and even more worrying, content distortion. Many platforms do not advertise the methods they utilize for ranking content, meaning most creators have no control over how visible their content is.

Algorithmic bias further limits diversity in content distribution, reinforcing existing social and cultural disparities (Watiktinnakorn et al., 2023). Studies show YouTube's algorithms are less likely to recommend content from marginalized communities (Cakmak & Agarwal, 2025).

AI-generated content also introduces complexities in copyright and intellectual property. The use of AI applications also raises legal issues related to copyright and intellectual property. With the use of increasingly sophisticated AI tools, such as DALL-E and ChatGPT, issues of ownership rights and protection arise (Peukert & Windisch, 2024). It is important to have more comprehensive regulations to properly give attribution and provide equitable policies.

7.3 Digital Divide and Accessibility Barriers

As much new technology is made available, exclusion brings about still a major challenge. Creators from underdeveloped geographical regions do not possess the basic enabling tools, skills, and funds to take part in the digital economy (Lazić, 2023). The complexity of AI, Web3, and decentralized applications further disadvantages less tech-savvy creators (Wagan & Sidra, 2024).

Bridging this digital divide requires investment in digital literacy programs and accessibility initiatives. Public-private partnerships between governments, universities, and tech firms can expand training opportunities, while subsidies for self-employed creatives can help them access AI-powered tools (Salamon, 2025; Chung et al., 2023). If such measures are not implemented, then the technology gets better, and richer users and big businesses have the luxury of enjoying the benefits.

7.4 Environmental Sustainability and Energy Consumption

The environmental impact of digital platforms is increasingly concerning, particularly due to the high energy consumption of data centers and blockchain networks. Streaming services like YouTube and Netflix contribute significantly to carbon emissions, with one hour of streaming producing 55g CO_2e—comparable to gasoline-powered vehicle emissions (Stephens et al., 2021; Marks & Przedpełski, 2022).

Blockchain networks relying on Proof-of-Work (PoW), such as Bitcoin further intensify energy use, while Proof-of-Stake (PoS) systems offer a 99% reduction in energy consumption, adoption which remains slow due to technical and regulatory challenges (Sun, 2023; Wan et al., 2024).

To mitigate these environmental impacts, stricter regulations, renewable energy adoption, and the deployment of energy-efficient blockchain technologies are necessary. Investment in carbon-neutral data centers and sustainable energy sources will be critical in reducing digital platforms' ecological footprint (Nathaniela, Princes, & Wang, 2024).

8. Policy Recommendations

Tackling the issues captured woven in the fabric of a digital creative economy will require spatial policy intervention on economic equity, AI policy, digital access, and environmental impact. The new era of dominant platform dictates the introduction of alternative monetization options like blockchain mediated revenue sharing and smart contracts to reduce the overall cost of the service and bring required transparency while also eliminating super platform cuts on smaller creators (Wan et al., 2024). Regulating high platform fees can prevent disadvantages for smaller creators (Sun, 2023), while tax incentives for Web3 platforms implementing transparent compensation models may encourage fairer revenue distribution (Nathaniela, Princes, & Wang, 2024).

Ensuring fairness in content visibility requires stricter algorithmic transparency. Current recommendation systems reinforce economic inequalities through opaque decision-making (Garcia, 2024). Platforms should disclose ranking methodologies and offer explainability tools (Bonadio, Lucchi, & Mazziotti, 2022). Independent AI audits can mitigate biases (Cakmak & Agarwal, 2025), while global adoption of regulatory frameworks like the EU's Digital Services Act (European Commission, 2023) could enhance fairness. Decentralized AI governance, allowing creator participation in decision-making, could further reduce corporate control over content visibility (Reynolds & Hallinan, 2024).

Web3 offers new revenue opportunities but introduces legal uncertainties in content ownership and financial governance. Governments should define intellectual property rights for blockchain-based content (Garcia, 2024). Regulatory sandboxes could test Web3 financial structures while ensuring compliance with consumer protection laws.

Digital accessibility is another issue, especially for underdeveloped countries, as creators there have to deal with a lack of infrastructure and resources (Lazić, 2023). Public and private investments in digital literacy programs, in collaboration with universities and tech firms, can equip creators with essential skills (Salamon, 2025). Subsidies for independent creators could improve access to AI-driven tools and promote inclusivity (Chung et al., 2023).

As digital platforms expand, energy consumption from data centers, blockchain, and AI systems grows. Platforms should disclose carbon emissions and implement energy-efficient blockchain models like Proof-of-Stake (Sun, 2023). Tax incentives for green data centers and

renewable energy-powered infrastructures can minimize environmental impact (The Economist Intelligence Unit, 2021).

Because of the worldwide nature of digital platforms, international cooperation for regulation is needed. There should be international standards on the governance of AI, decentralized finance, and the transparency of platforms that need the cooperation of government and technology and creative industries. Regulatory bodies with multiple stakeholders can provide balance, sustainability, and adherence with fast-changing standards for the industry. There will need to be ongoing policy changes to cope with issues such as AI content creation, decentralized monetization, and energy consumption.

The policies can achieve justice in the economy, answer the question of responsibility regarding the use of AI, Web3 platform oversight, and concern for climate change from the use of the platforms. But there is space for active change anticipating the speed of technological advancements. The next subsection will highlight the results and offer suggestions to expand platform regulation and digital economies for the creative industry.

9. Conclusion and Future Research Directions

The emergence of new digital platforms has resulted in a reorganization of the creative economy, in particular in how revenue is distributed, content created, and audiences engaged. New digital platforms such as YouTube, TikTok, and Patreon have removed many entry-level barriers, enabling creators to access global markets directly without the need of traditional middlemen. At the same time, however, the monetization structures of digital platforms have increased economic inequality by concentrating the majority of revenue to a small percentage of creators. Financial success is contingent on algorithmic content recommendation and high-engagement content, which makes it very difficult for emerging creators to gain visibility. While subscription-based platforms like Patreon provide alternative revenue models, sustaining an audience without algorithmic boost remains a challenge.

Web3 systems provide a different solution. They enable direct interaction through blockchain-enabled micropayments and decentralized payments to audiences. Although these frameworks minimize reliance on big businesses' monetization, their implementation is still limited due to indecision in regard to policy and the technical complexity associated with it. Lesser-known creators are still struggling with issues regarding the visibility of their content, getting paid for their work, and control of the platform. The algorithmic-driven winner takes all system privileges to older creators at the expense of new ones making it hard for newcomers to gain any momentum. There is also the threshold effect that states information is only promoted to a wide audience if it has a high engagement rate within a short period after it is published. Moreover, the economic uncertainty is compounded by fluctuating advertising rates, high platform fees, and lack of payment visibility. Apart from this, these creators face high levels of digital illiteracy and geographical differences which only serve to widen the lack of access for these marginalized creators to the technology-based infrastructure and educational materials required.

The shift toward employing AI in creative fields is accompanied by new legal and ethical challenges with regard to originality, algorithms discrimination, and job loss. For example, ownership and revenue sharing issues arise from automated content creation from DALL-E and Adobe Sensei. In different parts of the world, the legal regime regarding ownership rights for AI works differ, as jurisdiction deals with copyright laws in an incoherent manner. Concerns include biases propagation through recommendation content and employment

erosion in the creative industries. Regulation must contain innovation but, at the same time, protect human creativity, IP as well as algorithms and plagiarism free.

Related to this is the issue of Environmental sustainability. The increase in energy spent on data centers, blockchain transactions, and AI infrastructure is tremendous. Sustainability policies that mandate Environmental Reporting and the use of energy-efficient infrastructure are a must to curb the high CO_2 emissions streaming services like Netflix and Youtube put out. Lowering the carbon footprint of digital platforms may also be achieved through powering data centers with renewable energy and better energy management of AI. Restructuring the blockchain from a Proof of Work to a Proof of Stake and integrating green blockchain technology provides a more sustainable option for an energy intensive industry.

This study offers great angles that need additional research such as primary data collection and a more extensive analysis for the effectiveness of the intervention policies. The creators and executives of the platforms as well as the policymakers could provide insightful ideas on the governance issues and challenges. The shift from Web2 to Web3 offers an opportunity for comparison studies of the decentralization monetization concept. With the fast-changing landscape of AI, blockchain, and digital labour, there is a need for constant policy change to guarantee equity, clarity, and sustainability of the digital economy.

Future research should explore how AI and blockchain governance models impact creators, audiences, and platform economies. There are platforms that offer an open market, but they also widen the gap in economic inequality, discrimination, sustainability and bias. These issues can only be solved by clear regulation, decentralized governance and sustainable policies. Future research should focus on the ethical, economic and environmental implications of the governance of digital platforms, with the aim of creating a fair and inclusive creative ecosystem.

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