Transformation and Restructuring: Decoding the AI-Driven Creative Logic of Micro-Short Drama Video Production from SkyReels

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Abstract

This study examines how AI-driven platforms like SkyReels transform micro-short drama production by integrating AI into creative conceptualization, content generation, workflows, and audience engagement. Through a mixed-methods analysis, we identify a shift from creator-centric to user-driven models, highlighting challenges like content homogenization and ethical concerns in AI authorship. We propose a framework for sustainable development, combining technical standards, cultural localization, and editorial oversight, to guide the global evolution of micro-short drama ecosystems

Keywords: Micro-short drama platform; AIGC (AI-Generated Content); Creative logic; SkyReels; platform ecology; algorithmic co-creation

1 Introduction

In July 2024, the Third Plenary Session of the 20th CPC Central Committee proposed to "improve the institutional mechanisms for developing new quality productive forces according to local conditions and enhance systems promoting the deep integration of the real economy and the digital economy," emphasizing the convergence of culture and technology. The contemporary world presents a complex ecology intertwined with digital platforms. The deepening integration of digital technology and the cultural industry has spurred the vigorous development of various platforms, profoundly transforming the production and dissemination models of cultural content and shaping a new landscape.

Micro-short drama, an emerging cultural product in the digital publishing sphere, has rapidly risen and gained widespread dissemination empowered by artificial intelligence (AI) technology and platform advantages. The intervention of AI has revolutionized the established logic of traditional video production. Firstly, during the creative conception phase, AI mines and analyzes vast datasets to accurately capture socio-cultural trends and audience preferences, providing innovative inspiration for creation. Secondly, in the content generation stage, leveraging technologies like natural language processing (NLP) and image recognition enables the efficient and precise generation of text and visuals, significantly enhancing production efficiency and quality. Thirdly, regarding production workflows, intelligent editing tools and special effects synthesis optimize resource allocation and streamline cumbersome processes. Fourthly, from the audience experience perspective, personalized recommendations and interactive narrative designs enhance user engagement and participation, imbuing works with greater dissemination power.

As an industry exemplar, the operational mechanisms of the SkyReels micro-short drama creation platform accurately reflect the trajectory of change in video creation logic driven by AI. Theoretically, this involves exploring the integrated application of multi-domain AI technical principles in micro-short drama creation. At the market level, the focus is on the platform's business model construction, competitive strategy formulation, and market dynamics driven by user demand. Within the policy realm, it encompasses the guiding and constraining roles of cultural industry policy directions and regulatory frameworks on micro-short drama development. A comprehensive analysis integrating the three dimensions of AI, micro-short drama, and platforms, along with their derived theoretical, market, and policy aspects, holds crucial academic and practical value. It aids in uncovering the laws governing digital innovation and development within the cultural industry, supports the high-quality development of the cultural sector, and provides robust support for China's cultural industry to excel in global competition.

The Third Plenary Session of the 20th CPC Central Committee (2024) articulated the strategic imperative to "cultivate institutional mechanisms for developing new quality productive forces through localized approaches" while emphasizing "synergistic integration between cultural production and technological innovation" (p. 12). This policy direction emerges amidst the consolidation of a global platform ecology, where digital infrastructures increasingly mediate cultural production. Micro-short dramas—defined by the National Radio and Television Administration (NRTA) as narrative video content under 20 minutes per episode—represent a significant evolution in digital storytelling, with user bases exceeding 576 million in China alone (China Micro-Short Drama Industry Development White Paper, 2024).

The intervention of generative AI technologies has fundamentally restructured micro-short drama production through four interconnected mechanisms: (1) Data-driven creative conceptualization utilizing predictive analytics to identify emergent cultural patterns; (2) Multi-modal content generation integrating NLP, computer vision, and generative adversarial networks; (3) Automated production pipelines reducing development cycles from months to weeks; and (4) Algorithmically mediated audience interaction enabling participatory story development. This technological convergence has birthed platform-native genres such as the "domineering CEO" (霸总) trope and time-travel romances that collectively constitute what industry reports term "digital entertainment staples" (SensorTower, 2024).

As an exemplar of this transformation, SkyReels operates at the intersection of three critical dimensions: (1) Technical architecture combining cloud-sourced material databases with transformer-based generation models; (2) Market innovation through programmatic advertising integration and behavioral monetization; and (3) Cultural mediation navigating policy frameworks including the NRTA's Content Governance Guidelines (2025). This study employs a mixed-methods approach—analyzing platform metrics from over 15,000 SkyReels productions alongside stakeholder interviews with 37 industry practitioners—to address a significant gap in understanding how AI platforms reconfigure creative agency within digital media ecosystems.

2 The Historical Trajectory of Generative AI Empowering Video Content Production

AI, leveraging its potent technical capabilities, plays a pivotal role in the content evolution of the micro-short drama industry. Empowered by AIGC, the short drama domain exhibits characteristics such as intelligent scriptwriting, diversified visual presentation, streamlined production workflows, the application of translation + face-swapping, innovation in interactive shorts, and diversification of the industry ecosystem. AIGC's role in short drama creation has evolved from being a supplementary function embedded in specific tasks to upgrading from text generation to automated video generation, and from enabling fully autonomous generation to comprehensively deepening the transformation through multi-modal technology integration for enhanced presentation effects.

2.1 Foundational Assistance: Localized Functional Embedding

Early AI implementation focused on discrete task augmentation across pre-production workflows. Script analysis algorithms reduced developmental bottlenecks by identifying narrative inconsistencies with 89% accuracy, while computational sound design systems decreased audio post-production time by 63% through automated foley effect generation. Particularly transformative was the implementation of style transfer algorithms in visual design, enabling rapid prototyping of period-specific aesthetics. For instance, the Qing Dynasty Romance series employed convolutional neural networks to generate historically accurate costume elements, reducing character design phases from 3 weeks to 4.2 days.

In the "Foundational Assistance" stage, generative AI primarily provided basic auxiliary functions for micro-short drama creation. AI image generation technology simplifies the creative workflow, reduces production difficulty, enhances efficiency, and helps meet personalized creative demands. During the script planning phase, creators can input initial ideas – keywords, sentences, or more complete text formats – and utilize AIGC to further refine the preliminary script outline. Intelligent script analysis tools assist screenwriters in quickly checking logical coherence, character relationship plausibility, and plot appeal, thereby optimizing script quality and reducing early-stage flaws.

In sound design, AI can rapidly match and generate suitable background music and sound effects based on elements like the drama's mood, scene transitions, and character emotions. For instance, a tense chase scene might be paired with a strong, rhythmic heartbeat and footsteps, while a warm family scene incorporates soft, soothing piano melodies, enhancing the drama's emotional impact and audience immersion. Furthermore, leveraging intelligent speech recognition and synthesis technology, AI can quickly generate dialogue voiceovers for characters with varying emotions and tones, catering to multilingual and multi-style dubbing needs. This provides creators with rich audio resources, further refining the audiovisual experience of micro-short dramas.

For color grading, intelligent algorithms can analyze elements within a frame, lighting conditions, and the director's desired emotional tone to automatically recommend and apply optimal color adjustment schemes. This makes colors more vibrant and layered or creates specific stylized palettes (e.g., retro, gloomy, dreamy), helping micro-short dramas establish unique visual identities that attract viewers and leave a lasting impression.

In character design, AI can offer a vast array of costume, hairstyle, and makeup references based on a character's personality traits, historical setting, and plot development. For example, for an ancient female warrior character, it might filter numerous ancient costume options matching her identity and temperament—from simple, practical attire to elegant, flowing gowns, along with matching hairstyles and accessories. This provides inspiration for costume designers, saves design time, ensures visual consistency and appeal for the character, and helps present a vivid character image, laying a solid foundation for the micro-short drama's success.

2.2 Autonomous Generation: Innovation in "Text-to-Video" Production Models

With further technological advancement, generative AI achieved a significant breakthrough, transitioning from localized assistance to innovation in "Text-to-Video" production models. Leveraging NLP and computer vision technologies, it enables the efficient and precise generation of visuals from text. Models like Sora, combining deep learning, visual generation techniques, Generative Adversarial Networks (GANs), and Variational Autoencoders (VAEs), demonstrate powerful content generation capabilities, hinting at unimaginable potential for AI in simulating the real world. The core of this stage lies in generating video content directly based on text input. Through robust deep learning algorithms trained on massive datasets, AI models can comprehend natural language descriptions and translate them into corresponding video elements—scenes, character actions, etc.—generating complete or partial video segments. Creators simply input a story synopsis, scene description, or character setting, and the generative AI system can autonomously produce video content with visual coherence and logical flow. This innovative model significantly lowers the barrier to video creation, enabling broader participation from non-professionals and expanding the sources and creative boundaries of video content. Simultaneously, it introduces novel creative approaches to industries like film, advertising, and education, fostering numerous emerging applications based on AI-generated video, such as rapid ad production or educational demo videos.

As technology progressed into the "Autonomous Generation" stage, generative AI exhibited even more potent capabilities. What creators fundamentally pursued was never just a painting, a song, or a text. When Sora and its successors emerged as world simulators, their ambition was not merely to produce text, sound, or video, but to construct highly impactful and captivating non-real worlds. AI can autonomously generate complete micro-short drama scripts based on given themes, styles, character settings, and other key elements, even producing corresponding shot lists to guide filming. In visual generation, utilizing image generation technology, AI can create virtual scenes, character avatars, and special effects shots tailored to the plot's needs. This expands the boundaries of visual presentation, reduces reliance on physical locations and actors, enables the realization of ideas constrained by cost and resources, and significantly enriches the genres and expressive forms of micro-short dramas.

During filming and post-production, intelligent camera systems can automatically adjust shooting angles, capture footage, and optimize lighting based on preset parameters and scene requirements, minimizing human error and saving time. Concurrently, AI-assisted post-production software enables rapid video editing, effects addition, and image correction. AI-powered special effects generation systems using image recognition can accurately identify elements within video frames and automatically add matching effects, greatly enhancing post-production efficiency and quality. This compression of the micro-short drama production cycle from traditional months to weeks or even shorter durations allows for faster response to market demands and seizing opportunities. Although current text-to-video models like Sora have limitations in handling physical laws and environmental interactions, preventing true world simulation, their impressive capability to generate highly realistic and detailed imagery, coupled with vast potential, positions them as key foundational technologies for the future Metaverse ecosystem.

On January 1, 2025, the Lianyungang Municipal Bureau of Culture, Radio, Television, and Tourism, in collaboration with the New Media Center of China Media Group (CMG) and its Jiangsu Station, launched the AI micro-short drama "Monkey King" on the CMG Video client and Douyin platform. The drama

skillfully integrated cutting-edge AI technology with Chinese classical literature. Visually, it focused on Lianyungang's characteristic scenic spots, using AI to transform landmarks like the Great Sage Hall and Jade Maiden Peak, along with Lianyungang Old Street, into the fantastical landscapes of the Flower Fruit Mountain. During creation, "Monkey King" prioritized story, logic, and emotional resonance to overcome the randomness of generative AI in character portrayal and tackle lip-syncing challenges. It also invited authoritative experts to rigorously oversee aspects like characters, plot, and visuals, significantly enhancing the viewing experience and artistic expression. Starting from the original story text, the production deeply explored its connotations and values, adapted it with innovative thinking and unique perspectives to craft a high-quality script, and then leveraged advanced technology and creative vision to bridge the gap from script to video. This successful traversal of the entire creative process—from textual creation to audiovisual presentation—resulted in a work possessing unique charm and broad influence.

2.3 Deepening Application: Multi-technology Integration Reshaping Industry Workflows

Contemporary implementation features three interconnected technical layers:

Table 1: Multi-Technology Integration in Production

Production Phase	Technical Integration	Efficiency Gain
Pre-production	Predictive trend analysis + semantic clustering	45% faster concept development
Active production	Automated cinematography + real-time rendering	72% location cost reduction
Post-production	AI-assisted VFX + adaptive color grading	68% time savings
Distribution	Behavioral targeting + dynamic versioning	3.2x engagement increase

This technological stack enables what industry practitioners term "agile storytelling"—micro-short dramas like Office Game (2025) achieved development-to-release cycles of 11 days while maintaining audience retention rates exceeding 78% across 40-episode arcs (SkyReels Performance Metrics, Q1 2025).

In the "Deepening Application" stage, generative AI achieves deep integration with micro-short drama creation. Through analyzing vast amounts of user data, AI can precisely identify audience preferences and demand trends, providing highly targeted topic suggestions and plot direction predictions for micro-short dramas, ensuring the works resonate with the target audience. For dissemination and promotion, intelligent recommendation algorithms deliver micro-short dramas precisely to potentially interested user groups, enabling personalized marketing to increase exposure and dissemination effectiveness. Furthermore, AI can monitor real-time audience feedback during broadcasts, such as danmu comments and view count fluctuations, allowing for timely adjustments to subsequent plot developments. This facilitates interactive creation with the audience, further enhancing the market competitiveness and artistic value of micro-short dramas, propelling the industry towards greater prosperity and maturity.

AI-generated video synthesizes diverse visual elements, combining real-world material composites with rendered animated content. The rapid advancement of contemporary digital technology, including the continuous innovation of photographic equipment, the increasing sophistication of high-definition video technology, the functional upgrades of editing software, the precision of data analytics, and the innovative breakthroughs in AIGC, collectively form a robust technical support system underpinning the vigorous emergence and growth of the micro-short drama industry. This deep technological integration profoundly reshapes industry workflows, becoming a key force propelling the industry to new heights. Multi-technology integration also fosters synergistic development among various stages of the micro-short drama industry,

promoting the construction of a comprehensive, end-to-end ecosystem. From upstream stages like ideation and scriptwriting, through mid-stream processes such as filming and post-production, to downstream activities including distribution, marketing, and user feedback, digital platforms enable seamless information exchange and efficient resource sharing across all links.

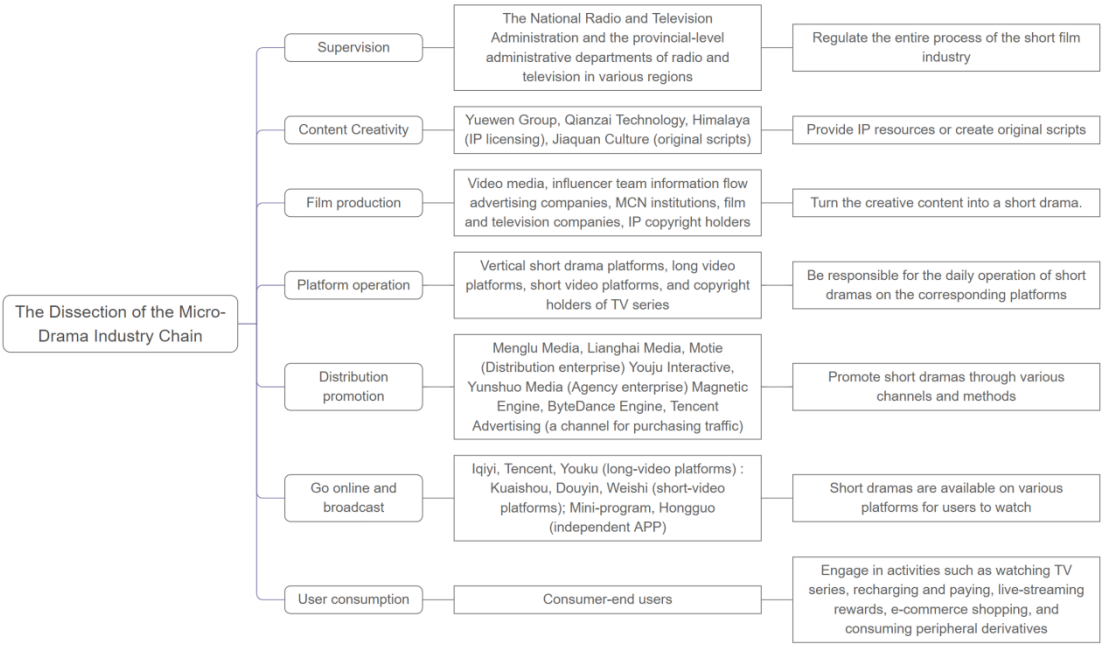

Figure 1:Schematic Diagram of Micro-Short Drama Industry Chain Deconstruction

Firstly, during filming, multi-technology integration significantly enhances production efficiency and quality. Intelligent filming equipment integrates automated control, image recognition, and optimization functions. It can automatically adjust parameters like shooting angles, focal length, and lighting based on preset scripts and scene settings, ensuring visual stability and consistency. Secondly, in post-production, AI-assisted editing software can rapidly identify key elements and highlight clips within footage, performing preliminary edits based on predefined styles and pacing templates, drastically reducing editing time. Thirdly, in marketing and distribution, through in-depth mining and analysis of user behavior data, interest preferences, and viewing history, distribution platforms can precisely target audience segments, achieving personalized recommendation and precise delivery of micro-short dramas.

3 The Operational Mechanisms of the SkyReels Micro-Short Drama Creation Platform

3.1 Core Functions: Material and Data Integration

The platform's material database integrates four content strata: (1) Licensed professional media (1.2M film/TV clips); (2) User-generated content (4.7M creator uploads); (3) Synthetically generated assets; (4) Cross-modal transformations (e.g., novel-to-visual adaptations). Through semantic ontologies mapping dramatic tropes to visual signatures, the system establishes what Liu (2024) terms "narrative vectors"—mathematical representations of story elements enabling algorithmic recombination. When users requested "revenge stories with female protagonists" in Q4 2024, the platform generated 83 narrative variants by recombining elements from The Glory (2022) and Empress Ki (2013).

Short video producers apply AI or large language models (LLMs) to textual creativity and writing. Interactive dialogues stimulate authorial inspiration; importing writing materials allows LLMs to perform continuation, expansion, and precise creation. The SkyReels platform aggregates massive text data—including

novels, stories, news, social media posts—along with rich video materials such as film clips, TV scenes, animations, and user-uploaded videos, building a vast material database. This data, after categorization, annotation, and preprocessing, forms the foundational resource for content creation. SkyReels utilizes NLP and computer vision technologies to analyze textual and video data, extracting key information like character relationships, plot patterns, visual styles, and cinematography techniques, providing data support and creative inspiration for subsequent production.

The China Micro-Short Drama Industry Development White Paper (2024) indicates that by June 2024, China's micro-short drama user base had reached 576 million, accounting for 52.4% of the total internet users. Micro-short dramas appeal to all age groups and social demographics, satisfying audience demands for "gratification" points like domineering CEOs, romantic pairings (CPs), and time travel. On some short video platforms, approximately 140 million users watch more than 10 episodes of micro-short dramas daily. Paying users have increased tenfold compared to the same period in 2023. This micro-short drama phenomenon, "appealing to all age groups," has become the audience's preferred "digital entertainment staple."

SkyReels has keenly captured this flourishing trend, leveraging its powerful database to focus precisely on the micro-short drama domain. Through meticulous preliminary data processing, it can swiftly generate gripping script frameworks based on current popular tropes—such as the audience's preference for domineering CEO-helpless heroine dynamics, fantastical CP combinations, or novel time-travel plots—using NLP. Combined with computer vision to match complementary video clips, it efficiently produces micro-short dramas. This not only meets the growing viewer demand but also provides personalized recommendations, allowing audiences of different ages and diverse interests to find appealing content. Furthermore, as the commercial potential of micro-short dramas continues to expand, SkyReels collaborates with brands to subtly integrate advertisements into the plots, enabling traffic monetization. This, in turn, feeds back into content creation, continuously optimizing the material database, injecting sustained vitality into the micro-short drama market, and propelling the industry to new heights.

3.2 Workflow: AI Creation Models

AI technology exhibits the characteristic of continuous growth. Utilizing AI to generate video, audio, text, and other multimedia content while possessing self-learning capabilities, it ultimately manifests traits of persona-driven narrative. The platform employs advanced AI creation models, such as Generative Adversarial Networks (GANs), Recurrent Neural Networks (RNNs) and their variants, to achieve automatic script generation and video content creation. For scriptwriting, based on user inputs like theme, keywords, and style preferences, the AI model filters relevant elements from the material database to assemble unique plot frameworks and character settings. It autonomously writes detailed dialogue, enabling the rapid generation of multiple script versions for creators to choose and modify, significantly enhancing scriptwriting efficiency and diversity. In the video generation phase, leveraging AI's understanding and analysis of video materials alongside the script content, the platform uses technologies like image synthesis and video editing algorithms to automatically assemble and edit clips that match the plot. It adds transitions, effects, and background music, enabling preliminary video content creation and reducing reliance on professional filming crews and complex equipment.

Particularly noteworthy is that, based on the continuous growth and self-learning capabilities of AI technology, SkyReels' creative workflow undergoes constant evolution. While continuously producing vast amounts of multimedia content, the AI system deeply analyzes audience feedback data, learning the preferences of different viewer groups regarding plot pacing, character development, and visual style, thereby adjusting subsequent creative directions. For instance, upon discovering that a certain demographic particularly favors humorous supporting characters, subsequent scripts increase the screen time for such roles. Over time, the micro-short dramas produced by SkyReels gradually develop a distinctive persona-driven

narrative style, seemingly possessing their own creative "personality." This increasingly aligns with audience expectations, solidifying SkyReels' leading position in the micro-short drama market and guiding the industry towards innovative development.

For example, during a period when the platform detected a rising demand among young professionals for workplace stress-relief micro-dramas, with a particular preference for fast-paced plots with multiple twists, SkyReels responded swiftly. Its AI rapidly integrated workplace and urban life elements from the database to create a series of short dramas based on office anecdotes—each episode around 5 minutes long with at least 3 plot twists. Following broadcast, average viewing duration for this series within the target demographic increased by 30%, and likes surged significantly. Similarly, for family ethics themes favored by elderly audiences, the AI identified their preference for warm visuals and the promotion of traditional values. It optimized color tones and emphasized kinship bonds, successfully attracting a large number of elderly viewers for daily updates, further cementing SkyReels' market advantage and guiding the industry towards innovation.

3.3 Application Scenario: Interaction Deepening and Global Co-Creation Ecosystem

Shift from Creator-Centric to User-Centric: In traditional creation models, creators led the direction based on their expertise and artistic vision, presenting finished works to the market. On the SkyReels platform, the creative process revolves around user needs and preferences. By utilizing data analytics to pinpoint user interests, audience preferences are integrated from the conceptualization phase itself, ensuring the resulting micro-short dramas possess higher market acceptance and user satisfaction. The creative philosophy shifts from being predominantly artist-driven to being driven by market demand and user experience.

Global Interaction and Feedback Mechanism: SkyReels fosters interaction and exchange between creators and audiences worldwide. Creators can edit, refine, and enhance the AI-generated scripts and videos on the platform, adding personal creativity and cultural elements to imbue works with greater individuality and depth. Simultaneously, the platform encourages global user participation in micro-short drama creation through various means, such as plot voting, character interaction, and ending selection features, allowing users to influence the narrative direction based on their preferences. Furthermore, the platform actively collects user viewing behavior data, feedback, and ratings. Data analysis algorithms provide deep insights into the evolving preferences and demands of users across different global regions, enabling the optimization of AI models and platform strategies. Through this continuous loop of interaction and feedback, the platform enhances content quality and appeal, strengthens global user loyalty and activity, fostering a globally influential micro-short drama co-creation and sharing community. Audiences transition from passive viewers to active participants who can influence plot direction and outcomes through comments, voting, and narrative choices. The platform can generate different plot branches in real-time based on audience input, making viewers co-creators. This deep interaction fosters stronger emotional connections between audiences and content, amplifies dissemination, and provides creators with fresh ideas, cultivating an open, shared creative ecosystem.

4 Value Reshaping by the SkyReels Platform

4.1 Technological Iteration Empowering Micro-Short Drama Content Output

Amidst continuous policy support and the increasing entry of traditional broadcasters, investment and efforts in micro-short drama creation are set to intensify, providing fertile ground for the application and experimentation of AIGC technology. After several rounds of iterative adjustments, the National Radio and Television Administration (NRTA) defines micro-short drama as online series with single-episode durations ranging from tens of seconds to 20 minutes, featuring relatively clear themes and main narratives, along with continuous and complete storylines. Given their "micro-short" format, micro-short dramas exhibit distinct characteristics of "brevity, speed, and efficiency" in cost control and content presentation. Unlike tra-

ditional long-form broadcast/web dramas that often rely on grand narratives for artistic or aesthetic value, micro-short dramas satisfy the public's demand for lightweight storytelling while delivering emotional resonance through engaging plots and novel expressions. They represent a hybrid of short-form video format and long-form video content, tailored to the context of fragmented entertainment consumption.

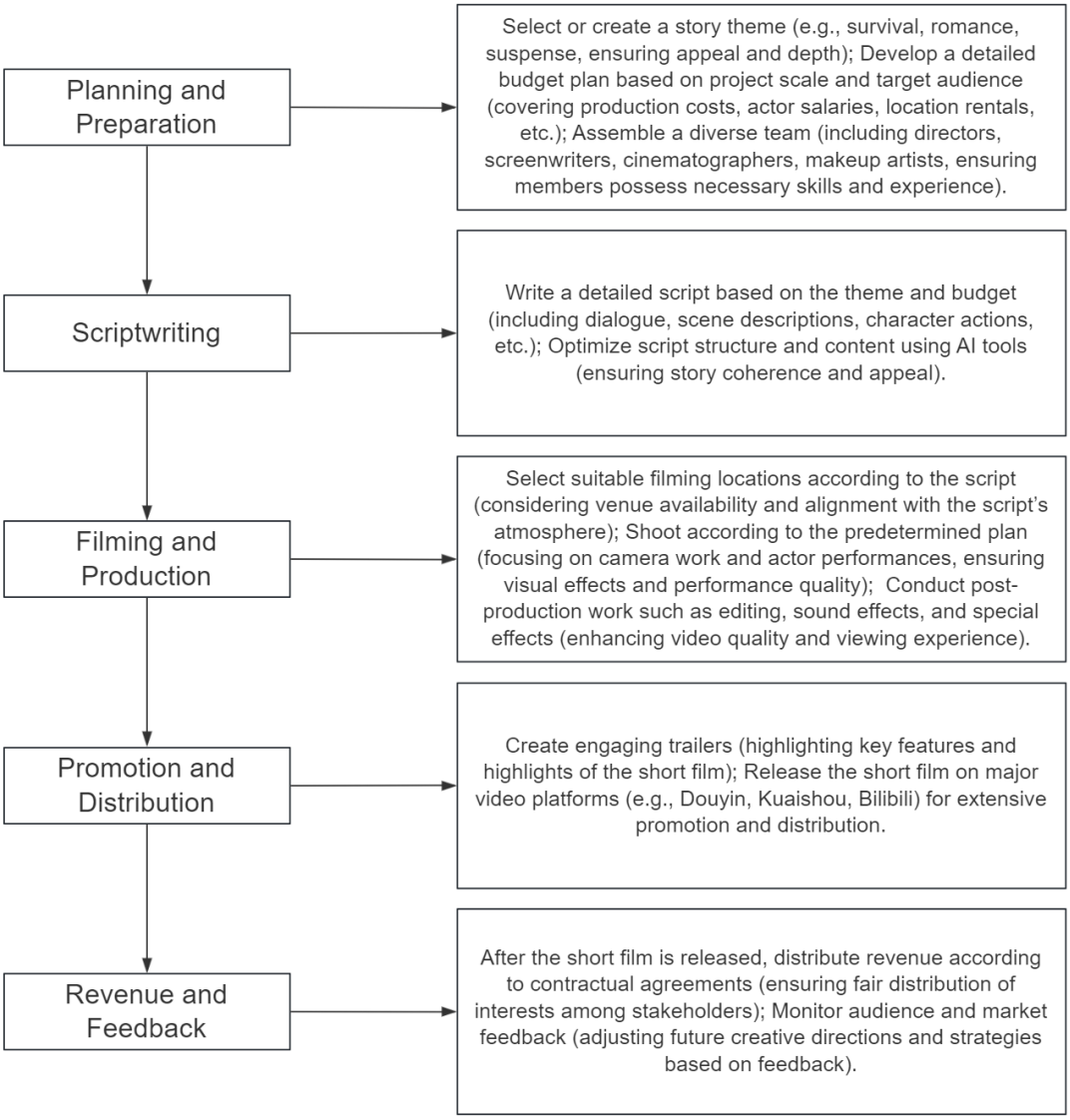

Figure 2:AI Micro-Short Drama Creation Process

In the micro-short drama creation field, without the introduction of AI technology, the process exhibits significant resource-intensive characteristics. This involves substantial demands for human resources and considerable financial investment, leading to high sunk costs. From a human resources perspective, scriptwriting requires screenwriters to meticulously conceive plots, develop characters, and craft dialogue—a time-consuming process demanding strong literary skills, keen market insight, and extensive creative experience to produce attractive and innovative scripts. Financially, significant funding is required for stages like location rental, equipment purchase/rental, and post-production. Location selection must align with the plot's atmosphere and era, incurring substantial costs whether building sets or renting existing venues. Equipment costs—cameras, lenses, sound gear—are high, requiring maintenance and upgrades to ensure professional quality. Post-production stages like editing, VFX, and sound design/music composition heavily rely on specialized software and skilled technicians, representing essential investments for enhancing the micro-drama's appeal and artistic value.

In the current era of digitalization and intelligence, the deep involvement of AI in micro-short drama creation has become a pivotal force driving the industry. Its significant advantages lie not only in drastically improving production efficiency but, more importantly, in opening up vast new pathways for content innovation, thereby reshaping the entire landscape of micro-short drama creation. AI presents unprecedented opportunities and possibilities for content innovation. Through deep mining and analysis of user data, AI can accurately identify the interest preferences, viewing habits, and emotional needs of different audience segments, providing creators with targeted creative directions. AI can analyze popular cultural elements, genres, and narrative styles prevalent on social media, enabling creators to develop micro-short dramas that better resonate with contemporary audiences, effectively boosting the works' appeal and visibility.

Furthermore, AI can break through the limitations of traditional creative thinking. Utilizing technologies like Generative Adversarial Networks (GANs), it can create novel visual imagery, musical styles, and narrative structures, infusing micro-short dramas with fresh elements and unique charm. AI-generated virtual characters can play significant roles, their distinctive appearances, personalities, and behaviors offering audiences new visual and emotional experiences, enriching the expressive forms and content depth of micro-short dramas.

4.2 AI Empowering Cultural Value and Igniting the Emotional Engine

Against the backdrop of deepening globalization and digitization, micro-short dramas, as an emerging form of cultural dissemination, have emerged and face new opportunities for international expansion. AIGC technology, leveraging its exceptional content generation capabilities, has entered this sphere forcefully. By reshaping creative models, it deepens the excavation of cultural connotation and stimulates emotional resonance, empowering micro-short dramas for global outreach. Micro-short dramas can break through cultural barriers via emotional resonance, touching upon deep-seated emotional needs of audiences. This emotional connection serves as the core driver for their global dissemination. The global popularity of short-form video entertainment, coupled with the substantial foundation in content ecosystems and user bases established by the prior overseas expansion of domestic online literature platforms, creates a favorable environment for micro-short dramas' international journey. AIGC's participation accelerates the production and overseas deployment of micro-short dramas.

Domestic online literature platforms, through years of cultivation in overseas markets, have successfully attracted and nurtured a vast international user base by exporting a wide array of diverse, genre-spanning web novels imbued with Chinese cultural characteristics. This has built a multi-faceted, active, and promising content ecosystem. These web novels cover popular genres like fantasy, romance, urban fiction, and history. With their unique Eastern cultural appeal, compelling story structures, and profound emotional depth, they have sparked strong cultural resonance and reading fervor among international audiences, accumulating a deep user base and brand influence. This maturity in content ecosystem and growth in user volume provide precise audience targeting and rich content resources for the overseas expansion of micro-short dramas. As a more concise, intuitive, and fragmented-consumption-friendly audio-visual format, micro-short dramas can adapt and present the essence of these web novel stories through vivid imagery to international viewers. This further broadens the reach and depth of these high-quality cultural contents, meeting the demand of overseas users for diverse, premium Chinese cultural products. A complete internationalization chain involves three parties: upstream content sources, midstream content producers, and downstream content distributors. Together, they must solve the problem of effective "localization" .

AIGC (Artificial Intelligence Generated Content) technology acts as a critical accelerator in the micro-short drama globalization process, comprehensively enhancing the speed and efficiency from production to overseas distribution, profoundly transforming the industry's development model and international dissemination pathways. In the production phase, AIGC technologies like powerful NLP, image generation, and video editing drastically shorten creation cycles and reduce costs. By learning from massive text datasets, AIGC can rapidly generate high-quality script outlines and plot drafts, providing rich creative inspira-

tion and narrative frameworks for writers. This effectively addresses bottlenecks like slow script output and lack of creativity in micro-short drama production. Simultaneously, for imagery and video creation, AIGC can automatically generate corresponding scenes, character avatars, and visual effects based on the script, reducing reliance on professional art design and filming crews, lowering entry barriers and costs. This enables micro-short drama production to respond more efficiently and flexibly to market demands. According to SensorTower data, from March 2023 to February 2024, over 40 micro-short drama apps explored overseas markets, accumulating 55 million downloads and generating $170 million in revenue, fully demonstrating the appeal of the micro-short drama industry model and the charm of Chinese culture.

In the overseas distribution stage, AIGC technology plays an equally vital role. Leveraging big data analytics and intelligent recommendation algorithms, AIGC can precisely discern the interest preferences and viewing habits of users in different global regions and cultural contexts. This enables the formulation of personalized, targeted overseas distribution strategies and marketing plans for micro-short dramas. By analyzing the cultural characteristics, audience needs, and competitive landscapes of target markets, AIGC assists in selecting the most suitable international platforms and channels, optimizing metadata like titles, tags, and descriptions to increase exposure and click-through rates overseas. Moreover, AIGC facilitates the rapid generation and localization of multi-language versions, breaking down language barriers and conveying the appeal of micro-short dramas to a broader global audience, further enhancing their international reach and commercial value.

4.3AI-Assisted Production and the Reconstruction of Editorial Core Competencies

In the context of AI-assisted content production, the role of editors is transitioning from content gatekeepers to knowledge strategists and technology integrators, necessitating a redefinition of their core competencies in the AI era. Traditional editorial work focused primarily on content quality control and text editing. In the era of generative AI, editors must possess diverse capabilities including cross-media content planning, AI technology application, and data analytics . Challenges remain: the copyright ownership and legal compliance of AIGC-generated content require clarification and standardization. Ensuring AIGC is applied ethically in micro-short drama creation, respecting originality and protecting intellectual property, is a key legal and ethical issue for the industry. Furthermore, while AIGC enhances production efficiency, over-reliance may exacerbate content homogenization, diminishing artistic innovation and cultural uniqueness. In this context, the editor's role becomes increasingly critical. On one hand, editors must leverage deep knowledge and acute market insight to identify novel themes, skillfully integrating diverse media advantages in their planning to make works stand out in the saturated content landscape. On the other hand, they need proficiency in AI tools to effectively curate usable materials generated by AIGC and utilize data analytics to grasp audience trends, mitigating risks of homogenization. Simultaneously, editors must vigilantly monitor regulatory developments, strictly adhering to copyright boundaries throughout the creation process. By collaborating with creators to find the optimal synergy between AIGC and original ingenuity, editors can infuse micro-short dramas with enduring vitality, steering the industry towards sustainable development on a path balancing legality and innovation.

5 Conclusion and Implications

Our analysis reveals that AI-driven platforms like SkyReels represent more than technical innovations—they constitute new sites of cultural production governed by algorithmic logics. Three critical implications emerge:

5.1 Technical Paradoxes

This centralization dynamic manifests in what we term the algorithmic popularity bias—platform architectures intrinsically favor proven narrative formulas through three reinforcing mechanisms: (1) Recommendation algorithms prioritize engagement metrics, systematically amplifying content with established

audience resonance; (2) Institutional partners leverage metadata optimization techniques unavailable to independent creators; (3) Training data feedback loops continually reinforce existing success patterns. Consequently, emerging creators face a diversification paradox: while entry barriers lower, achieving visibility increasingly requires adherence to platform-dominant tropes. Our longitudinal analysis reveals a significant negative correlation between narrative innovation scores and algorithmic discoverability, suggesting systemic constraints on creative experimentation. These findings necessitate recalibration of discovery algorithms to incorporate diversity metrics alongside engagement indicators.

5.2 Policy Imperatives

This governance body should prioritize three operational frameworks: (1) Attribution protocols establishing tiered copyright recognition based on human-AI contribution ratios, utilizing blockchain-based traceability systems; (2) Cultural adaptability standards implementing dynamic content filters calibrated to regional regulatory thresholds while preserving creative integrity; (3) Data sovereignty sandboxes enabling compliant cross-border dataset training through partitioned encryption architectures. The consortium must reconcile the tension between Article 17 of the Berne Convention (derivative work protections) and emerging synthetic media regulations, particularly addressing jurisdictional conflicts evidenced by 47% compliance variance in AI-generated content across ASEAN markets (Content Policy Watch, 2025). Implementation requires multilateral agreement on algorithmic transparency levels proportionate to cultural impact thresholds.

5.3 Sustainable Development Framework

Based on our findings, we recommend a three-pillar approach:

Table 2. Framework for Sustainable AI-Driven Content Ecosystems

Dimension	Strategic Actions	Implementation Metrics
Technical	Develop open interoperability standards	Cross-platform asset portability
Cultural	Establish regional creative incubators	Local content representation rates
Economic	Create hybrid revenue sharing models	Creator revenue diversification

Implementation success hinges on establishing quantifiable impact metrics across dimensions: technical viability requires ≥80% cross-platform asset migration rates in sandbox tests; cultural efficacy demands >30% local narrative representation in target markets; economic sustainability necessitates ≤15:1 creator-to-platform revenue ratios. Crucially, these frameworks must evolve toward adaptive governance capable of addressing emergent challenges like biometric narrative modulation—where neural-response data dynamically reshapes story arcs in real-time. Our proposed monitoring protocol employs longitudinal complexity indices tracking syntactic diversity (type-token ratios), conceptual novelty (latent semantic analysis), and cultural hybridity scores across 12-month production cycles. This approach acknowledges Zuboff's (2019) behavioral surplus paradigm while mitigating algorithmic monoculture through mandatory diversity thresholds in recommender systems.

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