Fengchao Intelligent Media System Launched to Build a New-Type Media Convergence Platform for the Artificial Intelligence Era (Postprint)

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Abstract

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Full Text

The Fengchao Smart Media System: An AI-Driven Platform for Next-Generation Media Convergence

On October 28, Cover Media officially launched version 1.0 of its independently developed "Fengchao Smart Media System," a novel media convergence support platform built on artificial intelligence. Positioned at the intersection of AI and media, this system represents another milestone in Cover Media's exploration of intelligent media. Designed to continuously evolve in management, decision-making, and operational efficiency, Fengchao aims to deliver a comprehensive SaaS-based solution integrating mobile apps, websites, and workstations. The platform fundamentally transforms traditional content production workflows, enabling interactive convergence among media, technology, and users in the AI era.

1. Building an Intelligent Extension Platform: Breaking Barriers with "AI + Media"

The Fengchao Smart Media System features robust intelligent extension capabilities through modular and integrated functionalities, coupled with AI integration

for limitless upgrade potential. Its modular design allows for simple, sustainable feature additions, while the "intelligent triple-screen convergence" architecture offers substantial operational potential.

A prime example is the integration of Microsoft Xiaoice into the Cover News app. Xiaoice constructs conversational news scenarios, enabling user interactions where it not only retrieves and recommends news based on user requests but also proactively suggests relevant articles by analyzing conversational context and user intent. This approach significantly increases article exposure and boosts user engagement. By incorporating Xiaoice into the user ecosystem, the system also enables the AI to actively participate in article comments, further enhancing overall content vitality. The connection with Xiaoice extends to diverse capabilities such as poetry composition, facial attractiveness analysis, and voice news broadcasting. Campaigns like "Compare Your Looks with Giant Pandas," "Write a Poem for My Family Dinner," and "Compose Verse for My Hometown Scenery" attracted over one million participants within three days of launch.

During the 2017 National Day holiday, Xiaoice emerged as a "traffic driver" for convergent reporting: it broadcast real-time traffic conditions for 16 highways in Chengdu, generating over 2 million views; patrolled with police officers to protect 11 newborn panda cubs, garnering 1.32 million online supporters; and conducted a five-day live broadcast following 100 couples on their romantic journeys in Thailand, marking the first truly transnational live stream. By the conclusion of these activities at midnight on October 8, more than 3 million netizens had witnessed Xiaoice's capabilities.

According to Professor Zhang Hongzhong, Vice Dean of the School of Journalism and Communication at Beijing Normal University, these remarkable figures symbolize how media is evolving into a lifestyle format in the AI era, where new media prioritizes "experience"—and AI serves as a crucial means to deliver that experience. Xiaoice's intervention provides users with novel experiences, making it an exemplary case of media convergence that offers valuable lessons for traditional media seeking to attract and retain audiences.

2. Innovating a Smart Content Platform: Reconstructing Production Workflows

In the era of data centralization, dynamic data monitoring reveals not only the present but also portends the future. Consequently, data-driven insights have become a critical reference for accelerating decentralization in the media industry. As a data-centric platform combining intelligence and wisdom, Fengchao implements disruptive changes for journalists, editors, and the entire editorial workflow.

2.1 Four Systems Constituting a Full-Cycle Media Center Centered on data, Fengchao's Smart Media System incorporates four core systems to pre-

cisely evaluate dissemination effectiveness through big data, support content production process reconstruction oriented toward mobile internet propagation, and guide the entire workflow from planning to collection, editing, review, and distribution—creating a one-stop media convergence workstation that enhances efficiency across all stages. These systems include: (1) a hotspot monitoring system that captures leads from tens of thousands of sources across the web and enables one-click assignment; (2) a web-wide collection system with minute-level crawling, customized on-demand services, and one-second competitor notifications; (3) a content management system enabling single production, one-click multi-platform distribution, precise targeting, and comprehensive management; and (4) a dissemination analysis system that monitors traffic across the entire network, production processes around dissemination metrics, and automates data assessment modeling.

These four systems connect the upstream and downstream of news production, constructing a full-cycle media convergence center spanning content production, creation, distribution, and effect monitoring.

2.2 Machine Writing: Enhancing Media Efficiency Kevin Roose of *New York* magazine has argued that "automated writing will be the best development trend for the future news industry," while Narrative Science forecasts that by around 2020, over 90% of news reports will be machine-generated. Machine writing, characterized by its templatability and data richness, can replace certain editorial functions in segmented, simple, and highly repetitive news domains such as natural disasters, traffic conditions, and flight information. Through partnerships with relevant authoritative information departments, these systems can independently complete news editing, review, and publication, achieving automated news release.

As a crucial functional module of Fengchao, Cover News's robot reporter "Xiaofeng" demonstrated its capabilities as early as December 20, 2016, by publishing "December 20 Discount Information Recommendations"—China's first lifestyle information service article written by a robot. Its rapid and accurate reporting also proved valuable in earthquake coverage. On September 30, 2017, when an earthquake struck Qingchuan County, Sichuan, Xiaofeng produced a comprehensive report in just 8.09 seconds, including emergency parameters, epicenter topography, surrounding villages and counties, historical seismic data, epicenter profiles, and weather conditions, complete with relevant images. Leveraging Fengchao's big data core algorithm technology and knowledge graph construction, Xiaofeng compresses search, copy, paste, and image insertion into an extremely short timeframe, significantly saving time while producing richer, more humanized content.

During the Jiuzhaigou earthquake on August 8, 2017, Cover News deployed eight frontline journalists who uncovered rescue stories around the epicenter at a rate of four reports per hour, presenting a wide-angle view of the scene. On August 9, the outlet launched two long-duration live streams totaling 6.5

hours, attracting 17 million viewers across multiple platforms. The studio-plus-field-reporting-plus-short-video approach presented multiple core scenes simultaneously: disaster area rescue operations, blocked roads, the Sichuan Seismological Bureau's command center, and West China Hospital receiving the first batch of injured patients. This multi-scene cross-broadcasting delivered a three-dimensional, multi-perspective live broadcast of the earthquake rescue efforts.

2.3 Convergent Live Streaming: A New Broadcasting System Li Peng, Chairman of Cover Media, observes that the internet, mobile internet, and smart devices have created entirely new interactive reading experiences for traditional media audiences, who have gradually grown accustomed to these novel interactions. To retain readers and provide better news services, traditional media must adapt to these evolving information consumption habits. In the social media era, establishing connections with readers requires convergent reporting that integrates live streaming, text, images, and short videos—precisely the robust technical support that Fengchao provides.

According to Fengchao's technical team monitoring data, Cover News's live streaming consistently ranks among the top three media outlets on platforms including Penguin Account, Toutiao, and UC in terms of both production volume and dissemination reach. To date, Cover News's video live streaming department has produced over 700 live programs totaling more than 1,500 hours, accumulating over 50 million views. Notable successes include the May 24 live broadcast "A Bird's-Eye View of the 'First Bridge of Sichuan-Tibet Highway'," which attracted 717,000 online viewers through its powerful immersive experience.

2.4 Intelligent Triple-Screen Convergence and Multi-System Integration Beyond content production, Cover and Fengchao continue exploring additional possibilities within the production chain—incorporating roles such as journalists, news assistants, and domain experts—allowing users to seamlessly switch identities while the platform's functional extensions continuously expand.

Furthermore, Fengchao's Smart Media System is advancing toward app-based integration to enable mobile intelligent office capabilities anytime, anywhere. The system integrates multi-directional operations and functions, achieving micro-level convergence of mobile phones, PCs, and large-screen command systems into a "triple-screen unity," creating a distinctive Fengchao Smart Media Command Center.

3. Establishing a Knowledge Management Platform: Visualized Copyright and Dissemination Management

Beyond providing novel content production models and powerful intelligent extension support, Fengchao directly addresses industry pain points by offering monitoring data and technical support for content distribution and copyright protection—particularly significant in today's intellectual property landscape.

The system also provides an intelligent evaluation system based on dissemination metrics, offering content producers compensation standards and solving the traditional media challenge of "difficult performance scoring."

3.1 Monitoring Network-Wide Dissemination Data to Safeguard Copyright Since August 11, Cover News has published a series of "Anti-Infringement Announcements," demonstrating the maturity of its network-wide traceability and comparison technologies that protect media data security. Fengchao provides Cover News and West China Metropolis Daily with services including original content rights confirmation, dissemination data tracking, and copyright protection. Through novel, convenient, and precise data, the system meets diverse, personalized, and targeted data needs, enabling copyright revenue growth, improving operational performance, and safeguarding content property rights.

According to Fengchao's data monitoring, over the past three months, 287 original articles from Cover News-West China Metropolis Daily were reposted more than 30,000 times. Using technologies such as original manuscript network-wide monitoring, text/image/video comparative analysis, source tracking, dissemination path analysis, and media whitelist/blacklist screening, the system has tracked infringement across 76 media outlets involving 173 articles since the first anti-infringement announcement on August 11, 2017. The announcements have proven highly effective: 63 media outlets promptly removed infringing links and actively sought content licensing partnerships, significantly enhancing original copyright protection and effectively increasing copyright value and revenue.

3.2 Farewell to Manual Scoring: Intelligent Performance Calculation The challenge of scientifically and fairly evaluating journalists and editors has long plagued traditional media. Fengchao's Smart Media System promises to overcome this pain point by integrating an evaluation system that uses dissemination data as its foundation, combined with scientific computational analysis and manual parameter intervention, to achieve relatively fair and scientific compensation calculation.

In practice, simply entering a content producer's name will display all their authored or edited products, corresponding dissemination data and effectiveness metrics, and an AI-calculated compensation value.

3.3 Comprehensive Functionality and Vast Potential for Smart Media Convergence Contemporary media face numerous contradictions: traditional content distribution systems no longer satisfy increasingly discerning user demands; network-wide dissemination is essential for capturing public opinion territory but management costs continue rising; and content production lacks user interaction. Content, costs, and user engagement all require urgent solutions.

Cover News's experience demonstrates that Fengchao's Smart Media System offers advantages including rapid deployment, low investment, strong media business orientation, reliability, ease of use, and continuous upgradeability. With comprehensive data warehouses encompassing content data, business data, external data, and operational data, the system provides full coverage of the content production chain—from initial lead collection through planning, editing, review, distribution, and final evaluation—serving as a technical support platform for media convergence in the AI era.

Moving forward, the Fengchao Smart Media System will continue to upgrade and optimize, and we anticipate it will deliver even more remarkable innovations.

Note: Figure translations are in progress. See original paper for figures.