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# The Development of Media Convergence in the All-Media Era from the Perspective of Information Technology: Postprint

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## Abstract

With the continuous development of China's social economy and the rapid advancement of information technology, the progress of information technology has exerted significant driving effects on multiple industries and sectors in Chinese society, particularly in the field of media communication. From the perspective of information technology, media convergence has become an inevitable trend in media development. This paper conducts in-depth research and analysis on the development of media convergence in the all-media era from the perspective of information technology, and proposes some reasonable suggestions, aiming to further promote the development of media convergence in China and enhance the development level of China's media industry.

## Full Text

### Preamble

**Title:** The Development of Media Convergence in the All-Media Era from the Perspective of Information Technology

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**Abstract:** With the continuous development of China's social economy and the rapid advancement of information technology, technological progress has exerted a significant driving force on multiple industries and sectors in Chinese society, particularly in the field of media communication. From the perspective of information technology, media convergence has become an inevitable trend in media development. This paper conducts an in-depth study and analysis of media convergence development in the all-media era from an information technology viewpoint, and proposes several reasonable recommendations aimed at

further promoting the development of media convergence in China and enhancing the overall level of the country's media industry.

**Keywords:** information technology perspective; all-media era; information technology; media communication field; media convergence

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With the continuous updating of information technology, various new media forms have emerged. Compared with traditional media methods, these new media offer faster dissemination speeds and broader audience reach, better aligning with modern society's needs for information transmission and reception. Media convergence has become the primary development direction for the media industry. In this context, media organizations must grasp the trends of media convergence, strengthen technological capabilities, seize opportunities presented by the times, and facilitate better integration among different media forms.

## 2. Approaches to Media Convergence in the All-Media Era from the Perspective of Information Technology

From an information technology perspective, media convergence in the all-media era represents not a simple combination of different media forms, but rather a deeper and more comprehensive integration that fully leverages the strengths of each medium while compensating for their weaknesses, creating a complementary advantage scenario that effectively promotes the joint development and progress of multiple media forms.

### 2.1 The Necessity of Media Convergence in the All-Media Era from the Perspective of Information Technology

Against the backdrop of the all-media era, media convergence has become an inevitable trend. All-media refers to the dissemination of media information through various forms including television, radio, internet, newspapers, and other channels. Since China entered the all-media era, different forms of media have achieved substantial development, breaking previous monopolies and barriers within the traditional media industry and enabling faster information dissemination.

New media differs significantly from traditional media. Traditional media employs relatively single communication methods with slower information transmission speeds. Meanwhile, rising printing costs and changing audience reading habits have gradually reduced demand for newspapers as a medium. Leverag-

ing the power of networks, new media has substantially reduced both the cost and speed of information dissemination. New media technologies have broken the temporal and spatial constraints of media information transmission while offering real-time interactive capabilities with users.

Consequently, China's traditional media industry must find new development paths to better respond to market trends. This has gradually given rise to the current state of media convergence, which specifically refers to the integration of new media with traditional media or the merging of different media types. In this converged environment, traditional media can harness the multiple advantages of new media and utilize the high efficiency of network transmission to solve existing problems in traditional media development. Such integration fosters complementary relationships among different media: traditional media can leverage new media's advantages of fast dissemination and broad audience reach, while new media can enhance its information accuracy by drawing on traditional media's authority and social recognition. This trend of media convergence has played a crucial role in promoting China's media market development and has become a significant driving force for both the media industry and the era's progress.

## **2.2 Reintegration of Content Resources Between New and Traditional Media in the All-Media Era**

With the arrival of the all-media era, major media organizations across China have launched their own all-media products. For instance, Zhejiang Daily developed the "Zhejiang News" mobile app, Shanghai United Media Group created "The Paper" app, and Nanfang Media Group introduced the "Bingdu News" client. However, these news clients do not simply relocate news websites to mobile internet platforms. Instead, they segment users for offline scenario adaptation and ultimately achieve monetization through various value-added activities.

When "The Paper" client launched in July 2014, this internet news platform integrated the latest news information with the most objective analytical perspectives, achieving a fusion of traditional journalism and advanced information technology. It introduced innovative formats such as Q&A-style news and news tracking. Similarly, Nanfang Media Group's "Bingdu News" app, the world's first "reader profit" news software with the slogan "Interesting, Useful, and Profitable," combined the latest news with different social scenarios, allowing readers to earn actual cash rewards while reading news. This app also represents a vision for traditional media's transition toward all-media, revolutionizing traditional reading patterns and providing readers with numerous novel experiences and reading pleasures that have been well-received by the news-reading public.

### 2.3 New Integration Between Media and E-Commerce Platforms in the All-Media Era

In the context of information technology, traditional media faces enormous challenges and impacts, making integration with new media imperative. Many traditional news organizations have begun developing toward all-media, exploring new development pathways and formats, and even cooperating with e-commerce platforms to create a “traditional media + e-commerce” profit model.

As early as 2014, traditional media such as *The Beijing News* began cooperating with e-commerce giant Alibaba to develop the innovative “Scan and Shop” feature, enabling readers to scan QR codes in newspapers to purchase needed items online. Some traditional media organizations have even established their own e-commerce institutions, leveraging their resources to develop new converged media development models. For example, *Qianjiang Evening News* established the e-commerce platform “Qianbao Youli” in 2013, which not only attracted numerous readers but also generated annual revenue of 80 million yuan.

## 3. Technical Analysis of Media Convergence Development in the All-Media Era from the Perspective of Information Technology

Traditional media and new media differ not only in communication channels and content but also fundamentally in their information transmission technologies. Therefore, the integration of traditional and new media requires strengthening technological research and development to improve the practicality of media convergence technologies and ensure that no critical technical mismatches occur during the integration process.

### 3.1 Strengthening the Application of 5G Communication Network Technology in Media Convergence

5G communication network technology represents the main development direction for future global communication networks, and China’s research in this field leads the world. 5G technology plays a crucial role in promoting the media industry’s development by comprehensively improving the speed of media information transmission. Consequently, media convergence processes must strengthen the application of 5G communication network technology. In today’s all-media era, only 5G technology can meet the needs of rapid data updates, enabling swift data replacement. Furthermore, 5G communication network technology can accelerate news information collection rates. Combined with artificial intelligence, big data, cloud computing, and other information technologies, it enables rapid and accurate collection of news information and data while providing journalists with substantial information and news clues, thereby improving the efficiency of news gathering and interviewing. China’s future media convergence development will greatly benefit from 5G communication network technology, whose

continuous advancement will exert tremendous impetus on media convergence development.

### **3.2 Strengthening the Application of Public Opinion Monitoring Technology in Media Convergence**

All-media news platforms are no longer limited to traditional media, which places higher demands on news public opinion monitoring. Traditional public opinion monitoring methods are no longer suitable for the all-media era. Mass communication methods are undergoing profound changes: people can now both produce and transmit information themselves. New media platforms such as Weibo, WeChat, and news clients have become primary channels for obtaining and releasing information. Compared with traditional media, the greatest characteristic of network information dissemination in the all-media era is convenience and speed—everyone is a “self-media” capable of transmitting and exchanging information anytime and anywhere. Users can also interact and communicate through network platforms. Unlike traditional media such as newspapers, where communication was unidirectional and audiences could only passively receive news information without directly expressing their demands and opinions, all-media platforms like Weibo, WeChat, news clients, Douyin, and video channels are completely different. Users can freely express their views on news, “like” or “dislike” content to show their opinions, and even become “opinion leaders” who guide public opinion trends. This results in online news public opinion exhibiting characteristics of sudden outbreak, multi-directional transmission, and variability.

Concurrently, it is essential to recruit and cultivate a regulatory team sensitive to public sentiment and skilled in handling it. Such teams should deeply engage with different new media platforms, extensively collect ideas from netizens and readers, and utilize big data technology for analysis and judgment. Effective countermeasures should be implemented before public opinion forms to effectively prevent the expansion of negative sentiment. It is important to note that in the all-media era, when managing news public opinion, one must avoid “one-size-fits-all” approaches such as disabling comment functions to control public opinion. Instead, a good interactive system and communication mechanism should be established between readers and media. Moreover, transparency of news information should be proactively enhanced to guide public opinion in the correct direction.

## **4. Overall Development Trends of News Media in the All-Media Era from the Perspective of Information Technology**

With the continuous development of information technology, media convergence has become an inevitable trend that brings more opportunities. However, many Chinese media organizations have not yet formed effective convergence mechanisms during the integration process. Media convergence remains overly formal

and superficial, lacking deep-level integration, which has created numerous adverse effects on media convergence development. Therefore, it is necessary to broaden the depth of media convergence and promote better development of different media forms.

#### 4.1 Traditional Media Needs to Innovate Media Communication Channels

Communication channels are crucial factors affecting media information dissemination. “Media convergence” has become the “main theme” and “keyword” of China’s current media development. In recent years, domestic media organizations have been striving to promote deep integration of content, channels, platforms, operations, and management, continuously advancing convergence toward greater depth. Many news organizations have made innovations during media convergence development, expanding from breakthroughs at multiple points to overall advancement.

In the all-media era, traditional media must seize the opportunities presented by media convergence. While maintaining their own advantages and characteristics, they should broaden communication channels to achieve multi-channel dissemination. By leveraging the high-speed advantages of new media network transmission, traditional news media can expand their audience scope and inject new vitality into their development. For example, the Zhejiang Agricultural and Rural Publicity Center is specifically responsible for external publicity work for the Zhejiang Provincial Department of Agriculture and Rural Affairs, managing external publicity carriers including newspapers, WeChat, and Douyin. These platforms previously suffered from several shortcomings: outdated editing systems accessible only through internal networks resulting in low efficiency; isolated backend systems for different channels that could not support multi-channel, full-process work through a unified platform, making it difficult to form an all-media pattern; relatively rigid and closed editing processes with low resource utilization; and traditional communication channels with insufficient content reporting and diffusion capabilities that could not generate substantial influence. Therefore, there was an urgent need to utilize converged media technology support services to promote platform upgrades and resource integration to meet the requirements of agricultural and rural external publicity work under new circumstances.

Consequently, in 2020, the Zhejiang Agricultural and Rural Publicity Center cooperated with Zhejiang Tianmu Smart Technology Co., Ltd. to establish a “central kitchen” news gathering model using the Tianmu Converged Media Intelligent Service Cloud Platform. This integrated editorial forces and implemented a content production mechanism of “one collection, multiple generation.” After journalists submit initial drafts to a shared database, editors for newspapers, WeChat, and news clients can simultaneously preview and edit content. Based on communication characteristics, the same news can be disseminated simultaneously across multiple platforms—including print media, WeChat, Weibo, Douyin,

and news clients—using different communication modes and presentation forms to achieve synchronized resonance in news publicity with good promotional effects.

For instance, the “Zhejiang Agriculture and Rural Affairs” official Douyin account was established on the Douyin new media platform. In an era where short videos serve as an important news dissemination method, the account’s content focuses on “Zhejiang” cuisine, countryside, scenery, and nostalgia, comprehensively showcasing the characteristics and highlights of Zhejiang’s agricultural and rural development. This has attracted widespread attention from netizens, with the account currently having over 400,000 followers, having published 252 videos with nearly ten million total views. Additionally, the “Zhejiang Agriculture and Rural Affairs” official WeChat account has been established, currently having over 530,000 followers.

#### **4.2 Transforming the Service Concept of Media Convergence**

In the information age, the integration of traditional and new media must be based on users’ fundamental information needs, focusing on the actual living needs of the public. Media organizations should actively collect public opinions and feedback, adjusting their services and innovating media products accordingly. The service concept determines media development prospects; therefore, both traditional and new media must satisfy public information needs during convergence without creating obstacles to information access, providing convenience for users.

For example, at the beginning of the COVID-19 outbreak in 2020, to help the public better understand local and national epidemic information and development situations and to protect public health and safety, XS New Media Company cooperated with China’s Center for Disease Control and Prevention to launch a “real-time epidemic map” information service on its map app. This service helped the public quickly and accurately understand epidemic changes in China, with detailed annotations of cumulative and daily new infection numbers and activity trajectories for provinces, autonomous regions, and municipalities directly under the central government, greatly satisfying public demand for epidemic information. This represents an important transformation in service concept during the media convergence process.

#### **4.3 Strengthening Supervision and Management of Media Convergence**

Although media convergence in the all-media era brings many benefits to media information dissemination, it inevitably also introduces corresponding problems. In today’s rapidly developing network environment, people receive massive amounts of media information daily, including false information that can cause significant social harm. Some new media organizations, seeking to improve economic benefits, exploit opportunities to integrate with traditional authoritative

media to disseminate false information through these channels, making it more difficult for the public to identify misinformation. Therefore, during media convergence, it is necessary to strengthen supervision of information authenticity to prevent false information from spreading through authoritative media, which would not only diminish the social credibility of authoritative media but also impact social stability and harmony. Consequently, enhanced supervision and management of media convergence is essential.

## Conclusion

This paper first elaborated on the necessity of media convergence in the all-media era, provided detailed introductions to approaches for media convergence, and proposed effective strategies for its implementation. It is hoped that this will serve as a reference for China's media industry development. To establish a long-term media convergence mechanism and promote better development of China's media industry, media organizations must strengthen deep integration across multiple dimensions and levels, enabling China's media industry to reach new heights.

## References

- [1] Zhu Jianguo. The Development of Media Convergence in the All-Media Era from the Perspective of Information Technology[J]. Satellite TV and Broadband Multimedia, 2020, 517(12): 300-301.
- [2] Sheng Jinju. Integration Strategies for New Media and Traditional Media from an All-Media Perspective[J]. China Cable TV, 2020, 416(03): 45-47.
- [3] Cheng Guocan. Discussion on the Converged Development of Radio and Television Media in the All-Media Era[J]. Science and Informatization, 2019(026): 194-194.
- [4] Tao Qing. How Traditional Print Media Can Achieve Deep Integration and Innovation in the All-Media Era[J]. News Research Guide, 2020, 011(001): 139-140, 142.
- [5] [Additional reference about epidemic map service - citation details not fully provided in original]

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

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