

# Further Promoting Large-Screen and Small-Screen Interaction: Reflections on County-Level Broadcasters Achieving New Media Feedback to Radio and Television Broadcasting (Postprint)

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## Abstract

Large-screen and small-screen interaction has become the primary approach for county-level television stations to realize new media feeding back to radio and television broadcasting. This approach not only reflects the efforts of traditional media to adapt to the evolving times, but also enhances the broadcasting effectiveness of county-level stations. Accordingly, this article focuses on the renewed impetus in large-screen and small-screen interaction, expounding the concepts, practices, deficiencies, and future prospects of enabling new media to feed back to radio and television broadcasting at the county level, with the aim of providing a reference for the integrated development of county-level stations and new media.

## Full Text

### Preamble

**Title:** Large-Screen + Small-Screen Interaction Gains New Momentum—Reflections on County-Level Stations Using New Media to Feed Back into Radio and Television Broadcasting

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**Abstract:** Large-screen + small-screen interaction has become the primary form for county-level stations to achieve new media feedback into radio and television broadcasting. This approach not only reflects traditional media's efforts to adapt to contemporary development but also enhances broadcasting effectiveness at the county level. This article, centered on strengthening large-screen + small-screen interaction, elaborates on the concepts, practices,

shortcomings, and future prospects of new media feeding back into radio and television broadcasting at county-level stations, aiming to provide reference for the integrated development of county-level stations and new media.

**Keywords:** large screen; small screen; county-level station; new media; radio and television; big data; intelligent applications

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## 1. Conceptual Framework for Strengthening Large-Screen + Small-Screen Interaction

As the all-media era transitions to an intelligent media era, the construction of county-level converged media centers has risen to a national strategic priority for media transformation. Within this context, large-screen + small-screen interaction has gradually emerged as an effective model for county-level stations to achieve new media feedback into radio and television broadcasting. While decades of internet development have laid the technical foundation for this interaction, emerging technologies such as big data, blockchain, 5G, and artificial intelligence have also introduced new requirements for enhancing this model. Therefore, exploring strengthened large-screen + small-screen interaction from the perspective of new media feeding back into broadcasting holds significant importance.

The implementation approach involves three key steps. First, innovate technology integration to establish the foundation for large-screen + small-screen interaction. This includes constructing functional areas such as all-media editing zones, data centers, rapid editing workstations, command and dispatch areas, and recording zones, while configuring servers with over 350TB of storage space. County stations should actively collaborate with technical teams to control R&D costs for large-screen and small-screen interaction platforms and improve effectiveness. Partnerships with well-known mobile platforms should be established to create new media dissemination terminals with cleaner interfaces and richer content sections, enabling rapid launch and facilitating audience access to radio and television program replays [1].

Second, innovate mechanism construction to foster an environment conducive to large-screen + small-screen interaction. Guided by principles of functional completeness, provincial coverage, smooth operation, and interconnectivity, county stations should integrate management methods and media resources to build a regional convergence ecosystem where multiple elements resonate simultaneously. A cloud-based joint reporting mechanism covering mainstream large-screen and small-screen media should be established, with systematic institutional arrangements to facilitate multi-source information collection, diverse

editing, multi-type product integration, and multi-port information distribution.

Third, innovate functional integration to highlight the advantages of large-screen + small-screen interaction. Leveraging dedicated private clouds, county stations should integrate multiple new media platforms and users to break down traditional barriers between large and small screens, enabling broadcasting to transcend static/dynamic or audio/visual limitations. The ultimate goal is to create a comprehensive model encompassing radio and television + live streaming + all-media campaigns + interactive features.

## 2. Main Practices for Strengthening Large-Screen + Small-Screen Interaction

### 2.1 Technology Upgrading

Technology upgrading serves as the prerequisite for large-screen + small-screen interaction and the guarantee for county stations to achieve new media feedback into broadcasting. In the big data era, county stations should commit to exploring the application of broadcasting big data. Relying on the powerful support and data aggregation capabilities of established new media platforms, stations should dynamically aggregate news clues from massive sources, cluster, collect, compile, and correlate resources across the entire station, and establish deep connections between resources and users to lay a data foundation for broadcasting production.

County stations should also proactively move away from fragmented single-scenario intelligent application models and deploy planned big data infrastructure capabilities and application scenarios. Using the new media and traditional broadcasting convergence platform as a foundation, stations should establish a big data PaaS (Platform-as-a-Service) layer covering IPTV user data analysis, speech recognition, App intelligent recommendation, and intelligent media resource tagging [3]. Within the PaaS layer, big data capabilities should be strengthened to support the development of typical applications.

Based on differences in typical application development dimensions, broadcasting big data can be categorized into user service big data and media content big data, real-time and non-real-time data, or structured, semi-structured, and unstructured data. Media content big data centers on content production data—intelligent media resource-like big data applied during production stages—while user service big data refers to user behavior data, encompassing both individual and household data. Traditionally, county-level broadcasters did not interface directly with users, but now both county stations and new media platforms have their own user bases. Therefore, during large-screen + small-screen interaction, county stations can leverage big data technologies to create user profiles based on behavior patterns and user categories, enabling targeted mining of both media content and user data for application across content acquisition,

production, user tracking services, program transmission, recommendation, and public opinion monitoring. This facilitates the construction of proprietary user databases.

By introducing big data intelligent applications into the integrated broadcasting program production workflow, intelligent decision-making can be achieved. Where feasible, county stations can draw inspiration from internet screen interaction models, utilizing big data intelligence technologies to build underlying data processing frameworks, then load different applications such as intelligent tagging at the upper level. This avoids redundant tool capability services while transforming unstructured data into structured formats, ultimately forming a broadcasting production model where upper-level applications make requests and lower-level resources are automatically allocated.

## 2.2 Mechanism Integration

Mechanism integration forms the “hardware” foundation for new media and county stations to collaboratively plan broadcasting programs. In achieving institutional media convergence, county stations can establish a new model of one-time collection, multiple generation, and all-media publication with WeChat public accounts and mobile App clients, thereby dominating county-level public opinion. This should be supported by editorial committee meeting systems and new media-traditional broadcasting linkage systems.

The editorial committee meeting system involves constructing operational mechanisms to ensure effective interaction between new media small screens and county station large screens. Committee members include chief editors, deputy chief editors, division directors, and department heads who hold scheduling meetings on workdays. Based on large-screen + small-screen interaction requirements, they formulate campaign-based, phased, and thematic broadcasting plans. They also coordinate specific broadcasting schedules within set periods according to editorial department proposals, summarize broadcasting experiences, identify problems, and ensure the implementation of collaborative news planning between new media and traditional media.

The new media-traditional broadcasting linkage system manifests primarily through broadcasting publicity coordination mechanisms. Under the leadership of the county station’s publicity department, meetings should be convened with mainstream media heads, program directors, and heads of departments involved in activities to discuss important public opinion issues, meetings, and events within the county jurisdiction. These meetings clarify task division, publicity priorities, and methods to form well-defined, focused, and actionable broadcasting publicity schemes.

## 2.3 Function Plus

Function Plus represents the new manifestation of the county station large-screen + new media small-screen interaction model adapted to the big data

era. Centered on broadcasting program dissemination as the “main business” and closely aligned with people’ s livelihoods, this approach integrates county stations with life services and government affairs resources to enhance the self-sustaining capabilities of broadcasting news + government affairs, broadcasting programs + services, and broadcasting programs + business operation models [5].

**Broadcasting News + Government Affairs** primarily integrates small-screen content publicity with government work, bridging the final link between broadcasting programs and higher-level authorities. The significance of large-screen + small-screen interaction lies not only in optimizing broadcasting effectiveness but also in enabling multi-regional absorption of quality resources to support government social governance. For instance, county stations can plan special columns themed around “industry,” “rural revitalization,” and “business environment” centered on county government work, promptly publicizing county work arrangements and creating a new model of internet + broadcasting + new media + government data disclosure + smart government affairs to support regional development at the ideological and public opinion level. Simultaneously, stations should register accounts on authoritative media platforms such as the People’ s Daily App, Xinhua Net, and The Paper to expand upstream manuscript supply channels and actively connect with higher-level authorities.

**Broadcasting Programs + Services** primarily leverages new media small-screen functions to serve people’ s livelihoods, helping citizens query and pay for gas, water, electricity, and heating fees, make medical appointments, and access tourist attractions and homestays without leaving home. Using big data technologies, stations should collect and aggregate information that the public pays close attention to on small screens, planning special columns to provide information sharing and publishing services that further extend broadcasting program information service reach [6]. For example, to solve the problems of citizens buying vegetables and farmers selling them, stations can specifically plan public welfare programs to help farmers, removing obstacles from “field to table” and earning public trust and support.

**Broadcasting Programs + Business Operation Models** serve as effective means to consolidate the positive image of county stations and support their auxiliary business functions in guiding public opinion. By opening columns such as “Registration Services,” “Tax Services,” “Guidelines,” and “License Processing” on existing large-screen + small-screen service platforms, stations can aggregate over a hundred service information items for small and micro enterprises covering civil affairs, social security, markets, housing, and family planning, helping enterprise users handle related matters while listening to broadcasting programs. Alternatively, stations can connect broadcasting small-screen services with business service networks, encouraging small and micro enterprise users to upload short videos or images of pharmaceuticals, catering, and medical services through “real-scene modules” to provide more intuitive and authentic business resources for broadcasting news program editing, thereby effectively

leveraging new media small-screen feedback into broadcasting.

### **3. Shortcomings and Prospects for Strengthening Large-Screen + Small-Screen Interaction**

#### **3.1 Platforms Operating in Isolation**

While the large-screen + small-screen interaction model has expanded the business scope of county-level broadcasting, new contradictions continue to emerge. For instance, because some county station staff are unfamiliar with new media operations, new media and broadcasting platforms often operate in isolation, resulting in low-value consumption of time and energy. To address this situation, county stations should conduct in-depth exploration, integration, and innovation across platforms, institutions, and operations. They should introduce integrated new media-traditional media editing management systems that move the entire process of planning, editing, publishing, and evaluation online, achieving high-level integration of broadcasting program dissemination channels, content, and technology [7].

On this basis, county stations should align with the requirements of “mobile-first” and “one county, one App” by focusing on business integration to develop converged media Apps and corresponding websites. These platforms should feature sections for news, audio-visual content, and services, with columns covering economy, TV, encyclopedia, current affairs, short videos, and society. By incorporating live windows for major events, TV channels, and radio channels, stations can expand their information dissemination matrix, supporting interconnectivity and mutual promotion between new media platforms and broadcasting program editing management systems. With internal and external network barriers removed, reviewed broadcasting programs can be simultaneously pushed to Apps, websites, and information release platforms in communities, schools, townships, and enterprises, truly achieving resource co-construction and sharing while expanding broadcasting influence.

#### **3.2 Need to Strengthen External Communication Influence**

External communication is a critical link determining the success of county station broadcasting program planning, significantly impacting both influence and dissemination power. In the large-screen + small-screen interaction era, new media has become one of the main battlegrounds for broadcasting program dissemination. However, constrained by traditional thinking, although county stations have made efforts to build new media dissemination matrices centered on mobile cloud platforms, they often neglect maintenance and management of these matrices, resulting in blocked new media communication channels and constraining the feedback role of new media into broadcasting [8].

To prevent further deterioration of this situation, county stations should establish presence on new media platforms of Xinhua News Agency, People’s Daily,

as well as Douyin, WeChat public accounts, Kuaishou, and other short-video platforms to promptly release, update, and improve information. They should integrate new media with social forces to enrich the broadcasting program publicity system and enhance external communication influence. For example, Wulian County used WeChat live streaming to plan multiple events including the 7th International Tai Chi Competition at Daqing Mountain, Government Affairs Q&A, China Mountain Marathon, Wulian County Spring Festival Gala, and the first People's Spring Festival Gala, accumulating over 270,000 followers and 4.38 million visits. A short video titled "Rizhao Wulian's Spectacular Sea of Clouds, Misty Scenery Like a Fairyland" even topped Weibo's hot search list with over 100 million views.

To further improve large-screen + small-screen interaction effects, county stations should, while standardizing templates for new media feedback into broadcasting, abandon the time-consuming multi-platform individual release model. Instead, they should rely on shared back-ends and unified technical deployment to connect back-ends. Using a "1+N" model, they can communicate with large and small screens within the county jurisdiction, extend the communication architecture, and connect ten-thousand-level products with hundred-million-level users. Under this model, a "cloud information repository" drives the sharing of massive unique content products, achieving resonance between large and small screens.

### 3.3 Team Building Needs Upgrading

Talent is crucial for county stations and new media to collaboratively plan, edit, distribute, and publicize broadcasting programs. However, current county station broadcasting talent teams primarily focus on "large-screen" construction, with shortages in "small-screen" construction and "large-screen + small-screen" integration talent, hindering the new media feedback process [9]. To address this, county stations should build all-media communication teams that meet new media development requirements. Starting from fully leveraging human initiative in large-screen + small-screen interaction, they should implement full-staff employment and position management systems, applying a "pragmatic, performance-based" personnel orientation throughout the team upgrading process. Professional title evaluation, performance assessment, and income distribution should be tilted toward talent in "small-screen" construction and "large-screen + small-screen" platform development.

On this foundation, county stations should continue implementing "new media literacy" or "media convergence literacy enhancement year" activities, organizing internal talent to participate in various training programs to cultivate all-media talent, laying a solid foundation for new media feedback into broadcasting.

## Conclusion

In summary, the all-media linkage broadcasting program planning and production model based on large-screen + small-screen interaction has demonstrated significant effectiveness. To ensure smooth operation of this model, county stations should examine current large-screen and small-screen interaction conditions, clarify concepts for new media feedback into broadcasting from technological, mechanism, and functional perspectives, and upgrade technologies, integrate mechanisms, and optimize Function Plus by drawing on big data, cloud technology, intelligent applications, and mobile internet technologies. This will enable the delivery of interactive, holographic, visual, and immersive broadcasting products, providing a basis for simultaneously enriching communication forms and styles.

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