

Effective Pathways for Enhancing Science and Technology News Communication in China in the Context of Media Convergence: Postprint

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Abstract

With the rapid development of information technology, the channels and modes of news information dissemination have undergone significant changes. The maturation of economic markets propels the transformation and upgrading of social structures, while the audio-visual demands of science and technology news audiences for scientific content have also gradually shifted. In the context of media convergence, the development of science and technology news must commence from aspects including dissemination form, speed, and audience, continuously deepening reforms and fostering innovation to adapt to the developmental requirements of modern society. This study primarily investigates effective pathways for enhancing the communication of science and technology news in China under the media convergence backdrop, thereby promoting the continuous deepening of communication content, the progressive expansion of information scale, and the effective dissemination of scientific spirit.

Full Text

Research on Effective Paths for Improving Science and Technology News Communication in China Under the Background of Media Convergence

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modern society. This paper primarily investigates effective paths for improving science and technology news communication in China under the background of media convergence, thereby promoting the continuous deepening of communication content, the continuous expansion of information scale, and the effective dissemination of scientific spirit.

Keywords: media convergence; science and technology news communication; improvement strategies

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Media convergence employs text, images, sound, network, and other information elements to disseminate content through diversified forms. This new communication model expands the scope of information dissemination and can achieve favorable communication effects with relatively low production costs. Traditional science and technology news media such as television, radio, newspapers, and journals suffer from limited communication scope due to constraints in carriers, transmission time, and space. Consequently, how these traditional media can integrate with emerging internet technologies like Weibo and WeChat to pursue innovative development paths has become a critical issue for the science and technology news communication industry.

1. Media Convergence as an Inevitable Trend in Information Media Development

Media convergence primarily utilizes the internet and information dissemination software for news and information transmission. Its communication methods differ significantly from newspapers, television, and radio, offering several notable advantages. First, information dissemination channels are broader, with smartphones, tablets, laptops, televisions, and radios all serving as potential carriers. Second, communication channels are more flexible, enabling easier copying, transferring, and saving of information, allowing audiences to access needed content anytime and anywhere. Finally, transmission speed is faster, with information capable of instant uploading and dissemination through powerful internet pathways. Media convergence represents the integration of content, networks, and receiving terminals, ultimately oriented toward information consumption by providing users with desired information based on their needs.

With the rise of instant communication tools such as Weibo and WeChat, the boundaries between traditional and internet-based media have become increasingly blurred, promoting cross-media and diversified dissemination of news content. Under the tide of rapid market economy development, exchange and interaction between traditional and new media have become more frequent, making the integration of media industries and sharing of resources and information

primary modes of communication. Currently, science and technology news communication employs a trinity of internet, television, and satellite live broadcasting to drive rapid industry development through information integration, transmission, and exchange.

2. The Dilemma of Science and Technology News Communication Under Media Convergence

Despite the influence of internet-based media convergence, China's mass media has undergone significant changes. However, science and technology news communication has not leveraged convenient and efficient information transmission methods to deepen communication reforms, even exhibiting a marginalized development status. This situation arises from two main factors. On one hand, the inherent seriousness of science and technology news means overly specialized content fails to attract broad public attention and may even obstruct audience comprehension. On the other hand, minimal coverage by mass media results in a very narrow dissemination scope for science and technology news.

For instance, major newspapers such as *People's Daily* and *China Youth Daily* focus on political ideology, economic life, and entertainment news, with science and technology news comprising a very small proportion. Similarly, science and technology news is rarely seen on television media. While major satellite TV stations have established specialized channels for film, entertainment, public service, cartoons, and rural content, virtually none have dedicated science and technology news channels. Most media outlets only occasionally insert small amounts of science and technology news when broadcasting economic and political news. Another reason for the small proportion of science and technology news is its low quantity and poor quality. Due to the technical and confidential nature of science and technology, gathering and obtaining such news is extremely difficult, making it challenging for news media to quickly access first-hand information. Addressing this requires collaborative efforts in news content, communication methods, and policy guidance to promote rapid development of science and technology news.

3. Advantages of Media Convergence in Science and Technology News Communication

3.1 Large Information Volume

The internet is a massive information platform dominated by search engines, encompassing news information resources visible worldwide. Therefore, science and technology news relying on internet information technology can leverage network advantages to collect vast amounts of scientific information, comprehensively categorize and organize it, and select original content for publication. Internet information technology can deeply integrate with television, newspapers, and magazines by creating Weibo and WeChat official accounts to attract

traffic, capture audiences through instant information dissemination, and enhance visibility and influence. With the rapid development of communication and internet technologies, information coverage and types will become more diversified, providing more options for science and technology news.

3.2 Diversified Communication

Diversified science and technology news communication includes two aspects: diversified communication perspectives and diversified communication methods. In the context of media convergence, collecting and obtaining the latest science and technology news is no longer difficult, but large amounts of homogeneous information can cause audience reading fatigue. Therefore, selecting communication perspectives for science and technology news has become a primary concern for news reporting. Different entry points for science and technology news can generate different viewpoints and highlights, which is key to attracting continuous audience attention and reading. From another perspective, diversified science and technology news perspectives can generate intense intellectual debate and confrontation, making authentic reports more credible while quickly exposing false ones. Diversified communication methods include various forms such as WeChat official accounts, Weibo, QQ, forums, and bulletin boards, which can effectively expand the dissemination scope and enhance the influence of science and technology news.

3.3 Integrated News Gathering and Editing

Science and technology news communication requires a series of gathering and editing processes, whether for print media like newspapers and journals or broadcast media like radio and television. Traditional science and technology news production involves commissioning articles or conducting on-site interviews for news gathering, then returning to the editorial office to organize collected text, video, and image materials before dissemination can be completed. This production process is slow, yields little output, and cannot meet current instant communication requirements. Moreover, interviews and production require substantial funding, placing high financial demands on news production departments. Media convergence, however, can obtain information resources through the internet, where anyone can become an information publisher or provider, greatly reducing production costs. Production departments can edit online information to form their own science and technology news communication models.

4. Development Path Analysis for Science and Technology News Communication Under Media Convergence

4.1 Creating Personalized and Differentiated Communication Content

With the rapid development of new internet media, various news and market-oriented information flood people's lives, undoubtedly causing severe selective barriers for audiences. Therefore, in the era of burgeoning new media, audience

segmentation has become a trend, and refined audience demands have created a substantial market. Science and technology news communication must create personalized and differentiated content tailored to audience needs. For example, production departments can use tools like Weibo and WeChat official accounts to immediately send messages to users needing science and technology news, satisfying their demand for convenient browsing. For audiences seeking detailed information, more comprehensive analyses can be pushed later, or content can be produced as television programs for broadcast on TV or internet devices to meet leisure and entertainment needs. However, current science and technology news communication still relies on single media like television and newspapers without inter-media exchange, severely restricting its influence.

4.2 Strengthening Interactive Communication

Interactive communication in science and technology news involves exchange between production departments and audiences. To achieve this, program settings must have clear positioning. Current science and technology news communication prioritizes information dissemination while ignoring both the difficulty of effective transmission and audience reception habits, resulting in most viewers failing to comprehend the news. Therefore, science and technology news communication must identify target audiences and develop markets and content according to their viewing habits and information needs, which proves crucial for success. Interactive communication enables news communicators to clearly understand audience needs and existing problems. Using internet-based media, science and technology news communication should strengthen audience interaction, convey information through more accessible methods, and enhance media attractiveness.

4.3 Promoting Information Resource Sharing and Integration

For science and technology news communication, media convergence involves not merely borrowing internet-based communication forms to deliver information, but more importantly, sharing and integrating information resources. This integration encompasses not only traditional and internet news media but also information exchange among traditional media like television, newspapers, and radio. Inter-media information sharing and exchange can produce differentiated communication effects. For example, *Approaching Science* is an excellent science and technology news program, but limited to satellite transmission, only television viewers can watch it. Once removed from this medium, audiences cannot access the information. Therefore, single-channel communication has limited scope, and without sharing and exchange, information resources are wasted. If traditional media forms extensive alliances, they can promote resource sharing and integration, allowing audiences to obtain desired science and technology news through multiple channels. Traditional media should implement multi-development models for information resources, forming complementary advantages through resource exchange to expand dissemination scope.

5. Conclusion

Media convergence in science and technology news communication can expand dissemination scope and enhance influence. Meanwhile, the addition of new media like WeChat official accounts and Weibo also increases the workload for production staff and places higher demands on their technical skills. Therefore, science and technology news communication under media convergence must deepen reforms from multiple aspects to meet users' scientific information needs.

References

- [1] Wang Qiang, Zhao Jiang. Discussion on the Characteristics and Innovation of TV News Communication Under Media Convergence [J]. China Media Technology, 2013(24).
- [2] Yang Liping. Analysis of the Trend of TV News Communication Under Media Convergence [J]. Communication and Copyright, 2014(12).
- [3] Ren Chunying. The Trend of TV News Communication Under Media Convergence [J]. West China Broadcasting TV, 2014(11).
- [4] Li Zhuoying. The Trend of TV News Communication Under Media Convergence [J]. News Dissemination, 2014(05).

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