

Research on the Intrinsic Logic and Path of News Dissemination in the Era of Intelligent Media

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Abstract: The advent of the intelligent media era has profoundly changed the landscape of news dissemination. This article delves into the inherent logic of news dissemination in the intelligent media era, elucidating its characteristics from perspectives such as technological empowerment and the transformation of user needs. It analyzes current issues faced by news dissemination, including the proliferation of misinformation and algorithmic biases. The focus is on exploring optimization strategies for news dissemination from aspects such as technological innovation, improvement of content quality, and reconstruction of user relationships. The aim is to provide theoretical support and practical guidance for the healthy development of news dissemination in the intelligent media era, to adapt to the needs of the times, and to better serve society and the audience.

Keywords: Smart media era; News dissemination; Intrinsic logic; Significance of inquiry; Issues; Strategies

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1. Introduction

With the rapid development of emerging technologies such as artificial intelligence, big data, and the Internet of Things, the field of news dissemination has entered the Smart Media Era. Intelligent technologies are deeply integrated into various aspects of news production, distribution, and reception, reshaping the ecological environment of news dissemination. In the Smart Media Era, the speed, breadth, and depth of news dissemination have been expanded to unprecedented levels, yet they also face a series of new challenges and problems. A thorough study of the intrinsic logic and pathways of news dissemination in the Smart Media Era is of significant importance for grasping the trends of news dissemination and for promoting innovation and transformation within the news industry.

2. The significance of research on news communication in the age of intelligent media

2.1. Theoretical significance

Enriching the theoretical system of news communication studies. The intelligent media era has brought about

new news communication models and phenomena, such as algorithmic recommendations and robotic journalism. Research into these new phenomena helps to expand the scope of news communication studies, infuse new connotations into traditional theories, and promote theoretical innovation and development. Analyzing the application mechanisms of intelligent technologies in news communication can deepen the understanding of basic theoretical issues such as the relationship between communicators and recipients, and the laws of information flow^[1].

Providing opportunities for interdisciplinary research. News communication in the intelligent media era involves multiple disciplines, including computer science, data science, and sociology. Studying these aspects can promote cross-disciplinary integration, break down disciplinary barriers, and provide comprehensive theoretical perspectives and research methods for solving complex real-world problems^[2].

2.2. Practical significance

The study of the inherent logic of news in the era of intelligent media can effectively guide news media in achieving their own transformation and development. In the macro perspective of the intelligent media era, traditional news media are generally facing a more intense competitive situation and must seek new “tracks” under the reform of digitization and intelligence. The development of related work can provide more specific practical guidance for news media, helping relevant institutions to further utilize intelligent technology to improve the news production process and enhance the quality and dissemination dimension of core content, thereby effectively enhancing their industry competitiveness.

In addition, related work can also effectively improve the professional quality of news practitioners. In the context of the intelligent media era, the professional abilities of news practitioners are facing more and higher requirements for improvement. On the one hand, they must possess traditional news editing and reporting capabilities, and on the other hand, they must master more technical knowledge and data analysis methods. Through the study of news dissemination in the intelligent media era, news practitioners can further clarify the direction and goals of their own ability development, promote the reform and innovation of related educational activities, and thus cultivate more high-quality news talents who meet the comprehensive needs of the new era^[3].

Protect the information rights and interests of the public. In the information explosion of the intelligent media era, the public is facing problems such as information overload and the proliferation of false information. In-depth research on news dissemination paths helps to regulate the order of news dissemination, improve the quality of information, and protect the rights and interests of the public in accessing true, accurate, and valuable information, promoting social information fairness.

3. Issues in news dissemination in the era of smart media

3.1. False information and decreased information credibility

In the era of smart media, the speed of information dissemination is extremely fast and the threshold for dissemination has been lowered, making it easier for false information to spread rapidly. Some self-media platforms deliberately fabricate false news to attract traffic. Additionally, some intelligent algorithms fail to effectively identify false content during information filtering and recommendation, further promoting the spread of false information. For instance, after some hot events occur, various unverified rumors and false reports often appear on the internet quickly, misleading public perception and damaging the credibility of news media^[4].

3.2. Algorithmic bias and information narrowing

“Algorithmic recommendation” can be considered an important method of news distribution in the context of the intelligent media era. However, different algorithms may exhibit certain biases under various circumstances. Fundamentally, “algorithms” are interpretive logics generated based on a “data” integration model. If the data itself has serious biases or if there is irrationality in the algorithm’s program design, then the recommended results will inevitably be significantly biased. For example, some algorithms may combine the target user’s historical browsing records to push homogenized content with high frequency and precision, thus trapping the user in the cocoon of “information silos,” greatly restricting the user’s access to and internalization of diverse information, and subsequently severely affecting the public’s cognitive horizon and the quality of social information exchange^[5].

3.3. Privacy infringement and data security issues

In the perspective of the intelligent media era, the news dissemination process will inevitably involve the collection, storage, and analysis of a large amount of user data. Some news media and platforms still have significant deficiencies in data management, which could lead to leaks of users’ private information; furthermore, some unscrupulous businesses might illegally obtain users’ private data, providing a breeding ground for illegal marketing and fraud activities. At the same time, the cross-border flow of some data has brought significant data risks to users and related industries, making “how to ensure user data security and privacy” a challenging problem for many news media workers^[6].

3.4. Journalism professionalism is under assault

The application of intelligent technology has made news production more automated and fragmented. Some journalists overly rely on technology, leading to a weakening of basic skills such as news reporting and investigation. In the pursuit of timeliness, some media outlets have neglected the principles of truthfulness and objectivity in journalism, subjecting journalism professionalism to unprecedented challenges. For instance, news articles written by robots can be generated quickly, but they often lack depth and humanistic care, failing to meet the audience’s demand for high-quality news.

4. Optimization strategies for news dissemination in the age of smart media

4.1. Technological innovation and reasonable application

Technological innovation and application are the core “engines” for the vigorous development of the news industry. Based on this, in the context of the smart media era, workers should further strengthen the research and development and application of artificial intelligence technologies. Specifically, news media should continuously improve and expand their investment mechanisms and scale in the field of artificial intelligence, developing and utilizing more advanced and diversified news collection, writing, editing, and distribution technologies based on specific work demands^[7]. For example, workplaces should regularly improve robot writing algorithms to ensure that they can automatically generate news content with greater reading depth and personalized expression paths based on news materials; they can also use artificial intelligence image recognition, video analysis, and other technologies to quickly and accurately screen and process news materials, completing the classification and categorization of material projects and their application, thereby further improving the quality and efficiency of news production^[8].

In addition, workers should also pay attention to the reasonable use of algorithmic recommendation

mechanisms, and when using algorithmic recommendations, they must pay special attention to the normal optimization and parameter adjustment of the algorithm to avoid algorithmic bias as much as possible. In the specific execution of work, workers can combine manual intervention mechanisms to build a review mechanism, conducting a secondary review and manual selection of the results automatically recommended by the algorithm, effectively ensuring the diversity and objectivity of the recommended content. At the same time, relevant units should also give users more autonomy, allowing them to manually adjust the platform's recommendation parameters based on their preferences and demands, helping themselves effectively break through the "information cocoon"^[9].

In addition, staff members should actively explore emerging technologies and promote their organic integration with traditional technologies, focusing on the media communication application paths of emerging technologies such as blockchain, Virtual Reality (VR), and Augmented Reality (AR) to build a multi-dimensional guarantee mechanism. Specifically, staff should rely on blockchain technology to strengthen the traceability of news information, recording the production and dissemination process of news information through a decentralized distributed ledger path, effectively ensuring the objectivity and non-tamperability of news materials; at the same time, by leveraging VR and AR technologies, they can provide users with a more immersive news experience, enhancing the impact and internalization of news information, allowing users to have a "sense of being there" when reading the news^[10].

4.2. Content and quality enhancement

Staff members must further demonstrate the principle of authenticity in news editing and dissemination, always considering "authenticity" as the "first vitality" of news, and continuously strengthening the review and control of news content. Specifically, staff members should establish and improve a more stringent news information verification mechanism, conducting multi-angle cross-verification of news leads and interview content, ensuring news reporting is as accurate as possible to the greatest extent. Moreover, during the application of intelligent technology, staff members should always be vigilant against the potential risks of false information that intelligent technology may bring, avoiding a "superstitious" attitude towards intelligent technology, and always maintaining and improving their industry alertness, professional ethics, and professional judgment standards^[11].

Furthermore, staff members should pay more attention to the optimization design of in-depth reporting and exclusive content. In the rapidly updating information age of smart media, "in-depth reporting" and "exclusive content" can often highlight the core competitiveness of news media at a higher level^[12]. Therefore, staff members should further strengthen the in-depth, multi-dimensional exploration and integration of core hot events and social issues, organize more professional editing and reporting teams to carry out investigations and analyses in deeper fields, and strive to bring more valuable and in-depth news information to users. In addition, staff members should focus on their industry and institutional characteristics to achieve the differentiated design of intelligent media push content, consciously creating more exclusive news, thereby effectively attracting and capturing user attention and establishing a more unique and positive media brand image^[13].

It is worth mentioning that staff members should also strengthen the humanistic care attribute of news content. News is definitely not just a simple report of facts, but should also demonstrate the connotations of humanism and anthropocentrism at a higher dimension^[14]. Therefore, in the process of news writing and dissemination, staff members should pay close attention to the emotions and subjective needs of "people", abandoning the abnormal mindset of excessively pursuing "traffic" and social shock effects. For example, in the reporting of some disaster events, staff members should fully respect the feelings of the affected people, avoid

causing secondary harm to the victims, and spread news information through a warmer and more humanistic perspective and approach, realizing the “appreciation” of news social value ^[15].

4.3. User relationship restructuring

The optimization and construction of user relationships is one of the core projects for news development in the era of intelligent media. Therefore, staff must establish and improve a good user feedback mechanism, further focusing on proactive feedback from users, actively collecting and integrating users’ opinions and suggestions through composite channels such as social media, comment sections, and questionnaires; at the same time, they should adjust and optimize the paths, methods, and projects of news dissemination in a timely manner based on user feedback content, thereby effectively catering to and satisfying the personalized needs of different users. For example, staff can adjust the types of news topics and reporting methods based on users’ levels of attention and comments on different types of news, to increase user engagement and satisfaction ^[16].

Additionally, staff should continuously open up new paths for user participation in the feedback mechanism, actively encouraging users to participate in the production and dissemination of news through online channels, organizing user contribution and interactive live streaming events around different themes, to enrich news content sources and content using user-generated content (UGC), and objectively enhance users’ sense of identification, belonging, and acquisition with news media. For instance, staff can open a “Citizen Journalist” column on media websites, allowing ordinary users to provide hot local materials through “online submissions,” actively sharing fresh stories from their daily lives or personal views on social hotspots, broadening the corresponding perspectives and channels for news media integration ^[17].

Staff can also more precisely target users’ personalized needs, fully utilizing “big data” analysis technology to deeply, comprehensively, and accurately understand the interests, hobbies, behavioral habits, and information acquisition needs of different users, to create precise “profiles” for each user. Following this, staff should combine different users’ “profiles” to develop more personalized news dissemination plans for them, pushing news projects that align with their subjective demands, thereby strengthening the relevance, effectiveness, and service orientation of news dissemination. For example, for younger user groups, staff can adopt more dynamic forms such as short videos and animations to push news, to capture the attention of these users.

4.4. Industry standards and regulatory improvement

“Without rules, there is no square or circle,” staff should formulate and improve corresponding industry standards according to the macro characteristics of the Smart Media era. Specifically, the News Industry Association needs to promulgate news communication industry standards for the Smart Media era in conjunction with existing conventional regulations and statutes, further clarifying the standard items and required criteria for different aspects such as news production, dissemination, and data usage. For instance, relevant personnel should establish industry standards for intelligent algorithm recommendations, entering from perspectives such as parameter design, module design, and macro presets to regulate the construction of the algorithm system, data usage, and the presentation of recommendation results, thereby effectively ensuring a stronger sense of fairness in algorithmic recommendations ^[18].

At the same time, staff must actively strengthen the comprehensive intensity of supervision. Government departments need to further improve the regulatory effectiveness of news media and platforms, establishing and improving comprehensive and cross-cutting regulatory mechanisms. At the same time, relevant departments must also intensify efforts to crack down on illegal activities such as the spread of false information and privacy

violations, imposing serious penalties and public notifications on media and platforms that violate regulations. In addition, departments must continuously improve the regulatory mechanism for data security, further standardizing the collection, storage, transmission, and use of different data, thereby truly ensuring the data security of each user^[19].

Most crucially, the news media industry must also do well in terms of industry self-regulation, actively establishing and improving internal management systems and methods, strictly constraining their own behavior in accordance with relevant requirements and ethical standards. For example, relevant media institutions can establish content review committees to internally review news content collected and released by staff; they can also establish and improve corresponding internal data security management systems, using intelligent keys to strengthen the protection of user data, thereby fully creating a healthier and more orderly environment for news dissemination^[20].

5. Conclusion

In summary, the era of intelligent media has brought tremendous opportunities for the development of news dissemination, while also inevitably generating a series of industry challenges. The vast number of workers should actively clarify the interaction among technology, content, users, and other factors in news dissemination through in-depth research on its internal logic. They should continuously adopt strategies such as technological innovation and reasonable application, improvement of content quality, reconstruction of user relationships, and improvement of industry norms and regulation to further promote the healthy and stable development of news dissemination in the era of intelligent media. They should provide the general public with higher quality and more valuable news information services in a normal and effective manner, thereby allowing themselves to play a more important social function in the new communication landscape and effectively promoting the effective dissemination of information and the harmonious development of society.

Disclosure statement

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