

A Study of the Impact and Application of Artificial Intelligence in the Field of Journalism and Communication

Dapeng Ning, Zhiqing Fu

Sichuan University of Media and Communications, Chengdu, 412006, China.

Abstract: With the development of artificial intelligence technology, it is increasingly applied to the field of news dissemination. Although the application of AI technology has greatly promoted the development of news dissemination, there are still many hidden dangers behind it. For the media and journalists, AI should be properly recognized and utilized, rather than being reduced to the appendage of technology, which should not lead the industry astray. The article analyzes the impact of the application of artificial intelligence technology in news communication, and discusses the research on its application in news communication, in order to play a certain role in promoting the healthy development of China's news communication industry.

Keywords: News Communication; Artificial Intelligence; Technology Impact; Application Research

Introduction

The concept of artificial intelligence has long been put forward, but in recent years, it has only been used in a small number of applications in the field of news dissemination, and the application is not very mature. The emergence of artificial intelligence has brought the field of news dissemination into the era of intelligence, and has had a profound impact on all aspects of this field. From collecting news information to producing news content, from product release to reception and feedback, artificial intelligence can be seen everywhere. In this case, news communication practitioners need to make scientific application of artificial intelligence, explore their own advantages, enhance the positive impact, so as to better promote the development of the field of news communication.

1. the impact of the application of artificial intelligence in the field of news dissemination

1.1 Improve news production efficiency and promote media intelligence

In the traditional news industry, news production mainly relies on journalists to actively collect or receive manuscripts submitted by the public, conduct in-depth interviews and exploration of hot social events, and finally form news information. The process is mainly manual and has a low productivity. The second artificial intelligence technology has a strong information retrieval function, which can automatically screen out the current hot topics and the most valuable news materials for journalists, thus greatly expanding the scope of journalists' topic selection. At the same time, the use of natural language processing technology, so that artificial intelligence can realize automatic writing.

1.2 Accelerating the speed of news dissemination and revolutionizing the way of news distribution

From the perspective of news dissemination and distribution, artificial intelligence can accurately push and distribute messages through algorithmic data according to the type, characteristics, and user groups of the message, which greatly improves the efficiency of information resource allocation and accelerates the speed of news dissemination. First, the use of artificial intelligence technology can automatically push the news to the user. Through the analysis of user behavior, combined with predictive learning and other methods, the user's reading preferences are mined, so as to make personalized recommendations for them, and this method greatly improves the speed and efficiency of news publishing. Second, artificial intelligence can send information to multiple platforms at the same time. Artificial intelligence realizes cross-platform information dissemination through automatic identification of news content and format conversion.

1.3 Enhance news interactivity, enhance user experience and stickiness

The application of artificial intelligence technology in news dissemination, personalized news push and virtual anchor information push

can accelerate the dissemination of news, but also open up a new mode of news release, enhance news interactivity, and enhance user experience and stickiness. In addition, the user's browsing history can also reflect the user's preference for messages. Artificial intelligence analyzes the user's browsing history to provide personalized information recommendations, so that he or she can better access the information he or she is interested in, thus enhancing the user experience. Intelligent virtual hosts can interact with users who leave messages and answer their questions.

2. the application of artificial intelligence in the field of news dissemination

2.1 application in content production

2.1.1 machine intelligent production of news content

The intelligent information of the machine is based on the collected news information, and the machine uses image recognition technology to interpret the news information and evaluate its value. On this basis, it combines big data processing, intelligent algorithms and other technologies to correlate, retrieve and semantically sort new data to realize the generation of text content. Machine writing is a computer program-based news content generation, which can generate personalized and rich news content in a timely manner through the analysis and processing of big data, and is very suitable for data analysis in news production fields such as finance and sports.

2.1.2 Direction of machine writing application

In the view of journalists, machine writing is a repetitive task, such as recognition, processing, storage and analysis, which enables journalists to spend more effort and time on in-depth reporting and to establish multiple media distribution platforms to realize news reports written by machines. Machine writing can last for a long period of time and can produce 24 hours of news content in seconds. Based on this, artificial intelligence, big data processing, corpus and other technologies and methods are combined to realize multiple types of news information. It is important for the development of the news communication industry by establishing user profiles, accurately targeting user needs, and realizing accurate marketing.

2.2 applications in news distribution

2.2.1 machine algorithm

In the current field of news distribution, intelligent recommendation has become a mainstream distribution method, effectively combining the advantages of Internet editing, search engines, social media and other advantages, and reconfiguring the traditional matching and distribution methods with machine arithmetic. Artificial intelligence can precisely enable users to adjust the content of information to better meet their personalized needs. In terms of information distribution, the use of machine algorithms instead of manual distribution provides strict quality control of information and challenges the original guidelines for selecting the value of information. The algorithms of machines are not limited to the release of information, but include the capture, integration, analysis and discovery of information. For the traditional news media, this is a change from "information dissemination" to "knowledge dissemination", and extends the computational power of computers to the realm of public opinion.

2.2.2 machine algorithm application direction

In terms of network rumor management, a special rumor prevention mechanism is constructed, a digital model of rumors is constructed, and specific educational strategies are proposed. On this basis, based on user behavior data, a model library for predicting rumors is constructed to realize the identification and prediction of rumors. Computer simulation technology is used to simulate the process of rumor evolution, determine the dynamics law of rumor evolution, and propose response strategies to deal with rumors. On this basis, a corresponding credit rating management mechanism is established for rumor mongers and easy-believers on the platform, and a corresponding rumor database is set up to realize real-time dynamic management of rumors. Public opinion monitoring adopts machine algorithms to intelligently distribute news information, push for hotspots that users care about, and dynamically monitor public opinion through new data and methods. In the field of information communication, machine algorithms have various application directions. Intelligent distribution pays attention to human sensory needs, meets the basic requirements of users for the authenticity and timeliness of news content, improves the presentation of

news, and raises the attention of users to mainstream news.

2.3 Application in user reception and feedback

2.3.1 Application in user reception

The terminal application based on artificial intelligence technology serves as the user receiving end, and based on machine algorithms, it realizes personalized and scenario-based information recommendation through the analysis of product release patterns. The algorithm accurately locates the user's need to get more attention through the accurate search of social media in the social network to get more attention. Intelligent terminal establishes a link between the user and information generation for the user to receive. Currently, virtual reality and augmented reality technologies bring users an immersive feeling and are applied to news dissemination to realize good human-computer interaction, such as intelligent voice interaction, somatosensory interaction and virtual reality.

2.3.2 Application in User Feedback

The main features of the intelligent comment review system are: accurate identification, permission setting, instant interception, intelligent shielding, and intelligent error correction, which uses webpage crawling technology to obtain comment and message data, identifies the content of the platform and the content forwarded through algorithms, and accurately demonstrates the access permission setting of users to users according to the big data of the users and intelligently captures and shields the abnormal information, and it can also messages to correct spelling errors. In the field of news dissemination, it can receive the opinions of netizens as well as provide feedback on public opinions, and play a certain purifying role.

2.4 applications in information gathering

2.4.1 News Intelligent Sensor

In the era of artificial intelligence, news information collection is a kind of information collection based on artificial intelligence, which combines big data with intelligent, automated and real-time collection of information. A sensor is essentially an information acquisition and access device to monitor, acquire, and convert measurement data into electrical or other signals. It is a device that extends human senses with multiple functions such as recording, storing, displaying, controlling, and transmitting.

2.4.2 Sensor application direction

First, as a news source, the main task of the sensor is to collect news information, expand the collection dimension, expand the intelligent sensing scope of information collection, and ensure the comprehensiveness, integrity and reliability of data collection. On this basis, through the analysis and mining of big data, the development trend of the event is predicted, so as to realize the prediction of news events. Based on the analysis of user demand, user feedback, reading habits, basic information, reading behavior, etc., a complete user portrait is established, which can provide accurate user information for news creation, thus realizing personalized news creation.

Secondly, flexible portable sensors with mixed behavior detection, biofeedback, and effective and flexible analysis capabilities can collect data on users' psychology, physiology, and emotions, thus obtaining more in-depth and accurate user data, which is the key to realizing the transformation of news production into intelligence. Utilizing utility sensors, media-owned sensing systems and user sensors, data are automatically collected, processed and analyzed, and deeply mined to distill valuable news clues, point journalists in the direction of their work, and enhance the authenticity of news.

3. Conclusion

To summarize, artificial intelligence is a representative new generation of information technology, whose application field is increasingly expanding, the depth of application is deepening, and the application effect is becoming more and more prominent. In the field of news dissemination, the application of artificial intelligence has produced different degrees of impact and change on the traditional industry ecology, reconfigured the news production mode, realized the intelligent collection of information, broke the limitations of time and space, and brought more comprehensive, accurate and timely information to news production. With the continuous progress of science and technology, artificial intelligence will gradually penetrate into all aspects of news dissemination, and will be a new, sustainable and creative source of de-

velopment power and technology.

References

[1] Xue Yaoyao. Application of Artificial Intelligence Technology in the Field of News Communication [J]. Journalist's Cradle, 2023, (10): 93-95.

[2] Song Qichen. Reflections on the Application of Artificial Intelligence Technology in the Field of Journalism and Communication [J]. China Communication Technology, 2023, (05): 109-112.

[3] Feng Changlin. Research on the Application of Artificial Intelligence Technology in the Field of News and Communication [J]. Television Technology, 2022, 46 (06): 161-164.

[4] Yi Minghui. Application Analysis of Artificial Intelligence in News Communication [J]. News Research Guide, 2022, 13 (06): 1-3.