Study on the Application Trend of Artificial Intelligence to New Media Communication

Hu Xing, Huang Junwei, Sheng Yinghong

Xiamen Huaxia University, Xiamen, 361024, China

Keywords: Artificial Intelligence, new media communication, application trend

Abstract: In new media communication, the application of artificial intelligence (AI) is mainly embodied in two aspects: intelligent recommendation and machine writing. In fact, speech image recognition, data processing, machine learning and algorithms of AI have been widely used in new media communication. This paper deeply analyses the application of AI to new media communication, discusses the general direction of AI in new media communication, and finally puts forward the development trend of new media under the background of AI.

1. Introduction

With the uprising of AI, various types of new technologies are gradually reshaping the overall pattern of the media industry. Media + AI has effectively promoted the restructuring and reform of the new media ecology. Therefore, in this context, the impact of the application of media + AI in the era of intelligence on the media industry needs further analysis, constant in-depth thinking and exploration of the trend of AI application in new media communication, which is propitious to providing reference and ideas for the future development of new media communication.

2. The Application of Artificial Intelligence in New Media Communication

The concept of AI was formed along with the birth of computer. At the same time, AI is also regarded as an extension of human intelligence. AI technology belongs to a new scientific kind which imitates human thinking mode and intelligence, and effectively aggregates new scientific technology and all human intelligent behaviors. Meanwhile, new media is a way that integrates the traditional media communication methods and symbols. With the emergence of new technologies such as AI, big data as well as cloud computing, traditional media are constantly transformed under this background, and have gradually become the mainstream in the media industry at this stage for the development of new media. Especially the apps about all kinds of information and express news on the internet reflect the impact of AI technology on the field of new media incisively and vividly. In the era of AI development, new media also keep pace with the times, so that AI + media can fully play theirs roles in the field of communication. In new media communication, AI technology is effectively integrated, and its advantages are explored. On this basis, the latest evolution way of new media and AI is found, and the ecological mode of scientific and technological communication which combines these two is effectively created.

In recent years, AI has begun to involve in medical industry and education, as well as business and other industries. Nowadays, the application of AI to new media communication is mainly reflected in the individualized mode of communication and information content, as well as the intelligent information production. In the aspect of personalized communication mode and content, AI applies big data technology according to the preferences of each audience, develops some homepages that meet preferences, and pushes interesting information to users, for example, various news apps in the network which promote news to users as well as personalized pages of apps. These AI technologies have been effectively penetrated in all aspects of society.

In addition, the intelligence of information production is fully embodied in the application of AI technology to the field of news. One of the most representative is Xinhua News Agency's news robot. The actual speed of publishing has been accelerated to a certain extent, which reduces the

DOI: 10.25236/isaicn.2019.020

workload of relevant workers. Even though the machine news writing in our country is only involved in the fields of finance, economics and sports, it has obvious advantages. The improvement of writing speed and the realization of data accuracy can be accomplished by robots according to the relevant news information.

3. Universal Direction of Artificial Intelligence in New Media Communication

3.1 Data Processing

Nowadays is an era of information explosion. Every day, a huge amount of data will be generated. With the development of society, these data gradually penetrate into all walks of life and become a key factor in production. In the era of big data, new media is one of the main beneficiaries. While in new media, data is of important advantages. Data management and collection, as well as data analysis and utilization can be made use of by new media, based on which, considerable benefits will be produced. But for the content of new media, whether its audiences or producers, in fact, are various. However, they are unable to deal with complex and tedious data well. Therefore, it is essential to make AI deal with a variety of data, which is the most important element of AI. Whether in the aspect of its quality or quantity, to a certain extent, data determines the actual development level of AI.

3.2 Image and Speech Recognition

Image and speech recognition can be compared to AI imitation of human vision and hearing. They also have some other basic language functions. With the continuous development, new media no longer stays at the level of text at this stage. The audio and video have become the symbol of communication. Nowadays, with the popularity of smart phones, everyone can produce audio and video content and pass the auditing more conveniently, which is more complicated compared with that of image and text. Meanwhile, whether in the field of image recognition or language recognition, AI has gradually become so mature that it has been widely applied in people's lives, such as voice navigation in map software and voice recognition in input method. There is a multi-dimensional combination between new media and these AI technologies.

4. Potential of Artificial Intelligence in New Media Communication

4.1 Improve Efficiency of New Media

4.1.1 Produce content

Since there exists fierce competition in new media, the requirements for the accuracy and timeliness of news gradually become more and more strict. At this time, the application of AI can be greatly helpful. Firstly, the rapid search and collation of required information as well as the examination of mistyped words and grammar problems can be achieved through AI, which even can validate the legitimacy and authenticity of content through effective analysis of data logic. Secondly, the relevant text content can be transformed into audio form through AI which makes the content more diverse. AI is also performing well in some fields with good structure and standardization, such as sports news we often come into contact with. Let's take the NBA as an example. Because of jet lag and other reasons, games can not be reported in time at the very beginning. But the reasonable application of AI will realize the tracking report without dead angle all day. Moreover, some wonderful scenes of the competition are also inserted into the report.

4.1.2 Audit content

The traditional news media is usually managed by specially-assigned person, so the scale and quality of the actual communication content are strictly controlled. But at this stage, the daily output of content is so large that the relevant network auditor becomes unable to achieve real-time follow-up. In this case, the scientific and rational application of AI can fully play its role. For example, when the keywords of articles are shielded such as civil engineering, many content

producers are capable of bypassing such filtering by using network derivatives. But the application of AI can mark the information of violation in the articles and send it to the relevant auditors for processing.

After dealing with labeled articles, the processing behavior of auditors can be fully learned by AI, so that its processing ability is to be strengthened in the process of continuous learning. In the future, its efficiency of auditing can be improved.

4.1.3 Feedback data

At this stage, data of new media mainly include click-through rate, reading volume, collection and forwarding volume, etc. To a certain extent, it also involves the gender of fans and their geographical distribution. But in all links, in fact, data collection is not the most important link. If the collected data has not been used and processed, its real value will not be better generated. Therefore, for new media, the most important thing at this stage is the processing method and feedback of the collected data and information.

Although the screen position of new media platform can be infinitely downgraded and refreshed when people read, the priority order is still very limited. Through large amount of calculation, related platforms display most of the audience's favorite content more clearly and reasonably to each audience. For example, on Huya Platform, the barrage number and playback volume of contents, as well as collections and actual sharing times are calculated, and finally a comprehensive score is obtained. When the actual display is performed, the audience will be shown the content with a higher score, based on which, continuous feedback will be achieved. In addition, data related to users can also be recorded by AI. Through this measure, we can clearly judge most of the audience's attention is focused on which direction of the screen. Moreover, all kinds of content need to be promoted will be focused on the corresponding position in the screen, so that the click-through rate will be continuously improved.

4.2 Improve the Experience of New Media Audience

4.2.1 Reading style

With the continuous development of intelligent devices, people's accesses to information are becoming more and more, such as smart watches and smart phones, as well as smart TV and Virtual Reality. Many enterprises that used to rely on PC terminal are now gradually introducing smart mobile terminal devices. The purpose is to seize the traffic of mobile terminal in the market and improve users' reading experience. According to the relevant survey, there are four equipments per capita in China, and they can be switched at any time.

AI is actually a very large system, which is connected to every intelligent device, regardless of which device the user switches to. For example, people use mobile phones to read articles on buses. When they get off the bus, they can translate these words into voice playback, so that the whole reading process will not be interrupted.

4.2.2 Reading records

Many people will collect articles that are good for themselves and read them again when they want to read them. But nowadays, in the era of information technology, the amount of information is quite huge every day. Limited by memory, many contents can not be recalled in a short time. At this time, AI is suggested to be applied to manage this information and give some hints in the actual searching. For example, a student collects an article about tourism. When he arrives at the destination, he is unable to recall it. But the intelligence locates the student's position, judges that the article is likely to be what he needs, and then gives some hints. Therefore, from another level, the humanized service experience is an intelligent innovation of AI for new media.

5. Conclusion

With the continuous development of network and science and technology, the application trend of AI to new media communication has become more obvious. Therefore, it is essential to analyze

the potential of AI in various aspects to improve efficiency of new media as well as improve users' experience from the aspects of Internet users' reading preferences, reading methods, and data feedback, so as to make the combination of new media and AI better and enhance their development.

References

- [1] Annual Conference of New Media Communication in China in 2017 [J]. Journal of Shantou University (Humanities and Social Sciences Edition), 2017, 33 (03): 126.
- [2] Chen Jiayan. Application of Big Data and AI Technology in New Media Communication Channel [J]. Media Forum, 2018,1(05): 23+25.
- [3] Hou Cheng. Discussion on the Application of Big Data and AI Technology in New Media Communication Channel [J]. Science and Technology Communication, 2018,10(10): 98-99.
- [4] Liu Xuemei, Yang Chenxi. Application Trend of Artificial Intelligence in New Media Communication [J]. Contemporary Communication, 2017 (05): 83-86.
- [5] Luo Wanli. Analysis of New Media Communication Trend in the Age of Artificial Intelligence [J]. News Editing, 2018 (03): 57-59.
- [6] Song Ying. Application of Artificial Intelligence in New Media Communication [J]. Journalism Research Guide, 2019 (06): 1+9.
- [7] Zhao Zimeng. Application of Big Data and AI Technology in New Media Communication Channels [J]. New Media Research, 2017,3(22): 26-27.