The Transformation and Upgrading Path of Jiangxi Publishing Industry in the Age of Intelligence

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ABSTRACT

The combination of artificial intelligence and publishing industry has forced the change and reengineering of traditional publishing concept and publishing process. Through interviews and research with publishing practitioners in central provinces, we explore the main problems and feasible paths they face in the process of intelligent publishing transformation. The study finds that there are problems such as insufficient capital investment, low degree of intelligent technology application, lack of intelligent composite talents, and weak intelligent product development capability in the intelligent process of Jiangxi publishing industry. To this end, the traditional publishing industry should, on the basis of detecting content advantages, adapt to the requirements of the intelligent era, update publishing concepts, strengthen cooperation with intelligent industry sectors, train intelligent composite talents, and develop diversified intelligent products.

Keywords: Intelligent Publishing, Jiangxi Publishing, Industry Transformation

1. INTRODUCTION

With the development of artificial intelligence technology and mobile Internet, traditional publishing faces the risk of declining sales and market share, and the traditional publishing industry is facing various challenges in the process of intelligence. In July 2017, China's State Council officially promulgated the "Notice on the Development Plan of a New Generation of Artificial Intelligence", and the country continues to increase its investment in the field of artificial intelligence in terms of funds, technology and talents, and the policy dividend continues to be released. 2019, Premier Li Keqiang further put forward the concept of "intelligence+" at the national two sessions. The concept of "intelligence +" to promote the transformation and upgrading of industries from "Internet +" to "intelligence +", to seize the major strategic opportunities for the development of artificial intelligence, to accelerate the construction of an innovative country The concept of "Intelligence+" is to promote the transformation and upgrading of industries from "Internet+" to "Intelligence+", seize the major strategic opportunities of AI development, and accelerate the building of an innovative country and a world science and technology power. 2019 National "Two Sessions": Premier Li Keqiang's Government Work Report.[1]Artificial

intelligence has been officially promoted as a national development strategy.

Smart publishing refers to the application of artificial intelligence technology to the traditional publishing process to achieve the reengineering of the publishing process. It is foreseeable that AI technology will become the core technical force leading the development of digital publishing industry in the future. Thus, the purpose of this paper is to examine the current situation of the intelligent transformation of the traditional publishing industry in Jiangxi, analyze the main problems it faces, and propose practical transformation and upgrading paths to help promote the sustainable development of the publishing industry.

2. CHARACTERISTICS OF THE PUBLISHING INDUSTRY IN THE AGE OF INTELLIGENCE

2.1. Intelligent content production

In the era of artificial intelligence, collecting user information through device terminals, analyzing the preferences of potential users and the classification of users, establishing a database of potential user information, statistical data and eventually giving accurate analysis results, one can see at a glance the

preferences of readers as well as their rankings, effectively assisting in the formation of selection planning programs. Intelligent authoring and creation is one of the main features of the publishing industry in the era of artificial intelligence. Applications of AI-based autonomous content production are also emerging, and robot writing has become a new mode of content production in fields such as news, reporting, and literature. Machine text generation is able to output relevant content based on different conditions and situations under a certain corpus and machine instructions according to predefined grammar rules and creative ideas. For example, in 2016, someone used AI technology to create four novels for the Hoshin-ichi Literary Award in Japan, and two of them passed the preliminary screening for the literary award.

2.2. Intelligent book editing

While the traditional publishing industry requires three reviews and three proofs for manuscripts, artificial intelligence technology can optimize and improve the traditional complex editing process. In the review of manuscripts, editors no longer need to check the font, phrase, grammar and format of the manuscript, but AI technology can record the grammatical errors, font errors and format errors in the manuscript according to the set formatting procedures, and make basic corrections, such as the typos, elimination of language errors, and adjustment of the format of the article, to complete the editing of the entire book. It can be seen that the intelligent technology has greatly improved the efficiency of manuscript review, reduced the workload of the editorial staff, and facilitated the editorial staff to increase the gate-keeping of the manuscript content to ensure the quality of the manuscript.

2.3. Intelligent book printing

Smart printing mainly includes new green printing consumables, IoT and efficient equipment, automated printing processes, networked technical services and information management systems, which help solve the problems of serious homogenization of publications, risk of inventory backlog and high storage costs. At drupa 2016, Heidelberg Germany put forward the slogan "Simply Smart", which means that the future printing industry can be as simple as driving a car autonomously and completing the production of all customer orders with one click. This means that the future direction of the printing industry is digital, green and intelligent.

2.4. Intelligent book distribution

Through a series of monitoring and optimization processes such as content analysis, audience insight, market analysis and competitive ability analysis, artificial intelligence can understand readers' preferences

for publications and users' spending power, etc., and be informed of its own advantages in communication, so as to clarify the focus of publication distribution, realize accurate user portraits and personalized recommendations, fully grasp the inventory of publications and reduce the possibility of returns, and ensure that the publication distribution and promotion can be carried out smoothly.

3. THE DILEMMA OF JIANGXI PUBLISHING IN THE ERA OF "INTELLIGENCE+"

As a core component of the cultural industry, the publishing industry has an irreplaceable role in building a strong socialist cultural state. The overall economic scale of Jiangxi publishing industry has always remained in the first echelon in China, and it has continued to make efforts in the field of VR, AR and other intelligent industries, and famous VR enterprises such as Huawei, KDDI, Ali, NetDragon, HTC, Siapu and so on have settled in Jiangxi, and now it has become the leader of domestic VR industry. With the advantages of location such as Yangtze River Economic Belt, Poyang Lake Ecological Economic Zone and technology such as VR industry, Jiangxi Publishing has made rich practice and exploration in topic planning, content production, editing and processing, printing and distribution. For example, in intelligent editing and proofreading, Beijing Black Horse Feiteng proofreading software is introduced, which can realize Chinese information processing technologies such as high-fold information compression, fast retrieval, high-precision and high-speed cutting of Chinese characters, and optimal Chinese dependency analysis, etc. Using big data collection, we have accumulated hundreds of billions of Chinese characters of various kinds of original language materials and tens of millions of massive Chinese knowledge base, forming a massive level corpus. [3]

3.1. Intelligent publishing process is not perfect

Artificial intelligence technology in the field of publishing is still at an initial stage, and its intelligence in all aspects still needs to be further improved, but because of the rapid update and upgrade of artificial intelligence technology, there is a big gap in the proficiency of Jiangxi publishing industry in intelligent technology and hardware equipment, especially in the publishing process, the application of intelligence only stays in certain publishing links, such as the aforementioned selection planning, editing and distribution are only In the publishing industry in Jiangxi, a complete publishing process has not been formed. For example, Twenty-first Century Press launched "Different Carmela" 3D modeling hand-painted book and "Jiangxi Daily" in the 2019 World VR Conference unveiled the VR live newspaper for the application of intelligent technology

more in the presentation of the publication content and enhance the interactive experience of readers, but no automated production of diverse content, not for individual readers to achieve personalization, personalization, social role identity and other intelligent. The newspaper is not automated to produce diverse content, and does not target individual readers to achieve personalization, social role identity, and other intelligence.

3.2. Insufficient financial investment in intelligent technology.

To introduce artificial intelligence technology into the publishing industry, a large amount of human and material resources are required. Jiangxi's economic development level and overall economic scale are still limited, resulting in insufficient investment in the process of transformation and upgrading of Jiangxi's publishing industry. In the era of content is king, Jiangxi publishing industry will mainly invest in publications, pay more attention to the quality of the publications themselves, and invest a small portion of the funds in the research and development of technology. For example, the main business of Jiangxi Publishing Group is traditional publishing business, with the continuous development of network technology, Jiangxi Publishing Group has added new media and online education, Internet games, digital publishing, Internet of Things technology application, international copyright trading and other new business modes. [4]However, the group's investment expenses for technology research and development in 2019 are significantly lower compared to 2018.

3.3. Intelligent technology-based talents are scarce.

For the Jiangxi publishing industry in the transition stage, talents with intelligent information quality are the first task. At present, both in Jiangxi province and domestic artificial intelligence, big data, digital publishing and other professional development lags behind, and the talents cultivated by universities and related research institutes are unable to meet the needs of the intelligent publishing industry, both in terms of quantity and quality. Therefore, publishing units need to strengthen the training of intelligent information technology talents, improve publishing personnel's understanding of artificial intelligence technology, improve innovation ability, form intelligent thinking, and better realize human-machine collaboration.

3.4. Intelligent publication in a single form.

Although domestic intelligent technology and the publishing industry continue to integrate and develop, due to the lack of R&D funds and intelligent talents in the traditional publishing industry, and the lack of market for intelligent publications due to their high prices, most of Jiangxi's publications are still mainly traditional paper-based, and only Jiangxi Publishing Group has established R&D projects for 3D modeling, AR, VR and other intelligent technologies. For example, Jiangxi Publishing Group's Twenty-first Century Publishing House launched 3D animation and comic picture books, Jiangxi Chinese Media Network Technology Co., Ltd. launched AR/VR intelligent publications, shaping virtual scenes, virtualization mode experience for users, so that users experience immersive and realistic feelings. However, today's readers' reading needs are diversified and diverse, and Jiangxi publishing industry to achieve intelligent publishing, it is necessary to use diversified intelligent publications that can meet the diversified needs of readers on the basis of content as king.

4. JIANGXI PUBLISHING INDUSTRY TRANSFORMATION MEASURES IN THE ERA OF "INTELLIGENCE +"

4.1. Providing intelligent technology to improve the publishing process

The future of publishing will be the main mode of "artificial intelligence + publishing". At present, Jiangxi publishing industry in the planning, editing, proofreading, printing, storage, distribution and other publishing processes still requires a large number of human resources investment. Therefore, in the era of "intelligence +", Jiangxi publishing industry to achieve intelligent transformation and upgrading, under the guidance of the concept of group intelligence, in the selection and distribution of topics, the use of big data, algorithmic recommendation technology to obtain audience market information, tracking reader information, and can be informed of the sales of different publications, which is conducive to the publication of timely We can make price adjustments and make different distribution models for different readers. For example, klangoo uses artificial intelligence technology to help editors generate articles in the content creation and editing process; The Washington Post uses artificial intelligence heliogtaf to spontaneously simulate humans to publish at least 850 news stories per year and get hundreds of thousands of hits per year; in the review process, The New York Times uses perspective in the review process, the New York Times has used Perspective's intelligent tools to detect misspelled words or malicious comments, reducing the workload of reviewers. Therefore, Jiangxi's publishing industry should accelerate the pace of publishing and intelligent integration, improve the planning of intelligent publishing industry, and promote the transformation and upgrading of Jiangxi's publishing industry with a more digital and intelligent production process.

4.2. Deepen cross-border cooperation and broaden development channels

With the development of high technology, the single industrial chain in the traditional publishing industry has been extended in the horizontal aspect and deepened in the vertical aspect, and a new model of multi-dimensional, three-dimensional and net-like industrial chain has been formed. [[[] Wang Yanlong; Qiu Zihao. Research on the reconfiguration of publishing industry chain in the era of artificial intelligence [J]. Editor's Friend. 2019:29-33

]]The intelligent publishing industry chain is a complete publishing industry chain with readers as the main focus, consisting of several segments such as content creators, publishers who produce content, and operators and third-party network technology companies who are responsible for sales. In the process of achieving intelligent transformation, Jiangxi's publishing industry should fully recognize its own problems, give full play to its own advantages and plan for its future development. Strengthen cooperation with third-party network technology companies to find the development direction of Jiangxi's intelligent publishing and enhance the vitality of publishing. For example, the daily news push of Today's Headlines is a traditional publishing industry that puts its own high-quality content on a third-party network service platform and accurately delivers and recommends demanded products for users with the support of artificial intelligence technology. In order to better promote the development of intelligent publishing in Jiangxi, cross-border cooperation is necessary to strengthen integration with other industries, expand the spatial scope of the publishing industry, and reduce publishing industry in time processes.

4.3. Enhance management system and train intelligent talents

The State Administration of Publications issued the "13th Five-Year Plan for the Development of Science and Technology in the Press and Publishing Industry" in the general idea of encouraging the press and publishing industry to improve the human resources system of science and technology, and strengthen the training of high-end complex scientific and technological innovation talents and practitioners of scientific and technological literacy. Therefore, Jiangxi publishing industry on the exploration of intelligent transformation of publishing, must strengthen the "artificial intelligence + publishing" composite talent team construction. On the one hand, it is necessary to vigorously train a group of intelligent thinking, all-round publishing talent, on the other hand, it is necessary to have basic political literacy and market-oriented thinking of business managers, to adapt to the trend of intelligent publishing today. Enterprise managers should always pay attention to the

development of artificial intelligence, consider the feasibility of applying artificial intelligence technology to the publishing field, be brave enough to try intelligent publishing, adjust the existing business model, introduce intelligent technical talents with analytical, creative and practical abilities, and build a new type of "intelligent + publishing" talent team. Become an innovator and leader of intelligent publishing.

4.4. Insist on content as king and realize diversified intelligent products

In the development of artificial intelligence, the publishing industry should uphold the spirit of craftsmanship, improve the professional quality and the reserve of intelligent technology complex talents, pay attention to copyright protection and content innovation, make good content the core competitiveness of the publishing industry, and provide users with high-quality content resources and high-quality knowledge services. During the "two sessions" in 2019, People's Daily, Guangming Daily and other media use artificial intelligence to report the "two sessions" to readers from a new perspective, and use VR technology to highly restore the "two sessions "AR technology enhances the user's sense of sight, hearing and touch, creating a virtual "two sessions" scene for the majority of users, allowing them to have an exclusive experience, and is welcomed by the majority of readers. In addition to ultra-media AR and VR smart products, intelligent robots and voice recognition databases can also be widely used in the publishing industry, enabling publishers to produce personalized and immersive audiobooks for readers, providing a surreal audio-visual experience for users. For example, the "Himalaya" reading channel uses artificial intelligence to interact with users and enhance the fun of audiobooks and readers' experience. Therefore, the publishing industry in Jiangxi should increase the investment in intelligent technology, enhance the protection of original content, increase the expression of publishing content, and strive to provide users with diversified products to meet the current diversified needs of users.

5. CONCLUSION

Artificial intelligence technology has been widely used in all walks of life and profoundly affects people's daily life, and the traditional publishing industry must be intelligent out of transformation if it wants to maintain its competitiveness in society. Based on this field in Jiangxi, this paper sorts out the problems of imperfect intelligent publishing process, less intelligent composite talents, less investment in R&D of intelligent technology, and single form of publication presentation in Jiangxi publishing industry in the process of intelligence. Combining with research methods such as case study method and interview method, the paper puts forward

countermeasures to these problems such as improving intelligent publishing process, strengthening cooperation between different industries, building intelligent talents team, and developing We propose countermeasures such as improving the process of intelligent publishing, strengthening the cooperation between different industries, building a team of intelligent talents, and developing diversified intelligent products. Due to my own lack of talent and academic level, there may be many flaws and shortcomings in the sorting out of problems and countermeasures, and many research methods cannot be carried out due to the epidemic, which to a certain extent affects the research of the reform paper. In the context of the times, artificial intelligence technology will be widely used in the publishing industry in the future, playing an important role in improving the efficiency of publishing, obtaining user information, and carrying out a variety of marketing methods, which will reshape the relationship between publishing producers and readers and facilitate the formation of a benign development of the publishing industry, better promote cultural content and inherit human civilization.

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