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Discussion on Editing Mode and Publishing Mode of Sci-Tech Periodicals in Digital Era

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Abstract: With the development of economy and the progress of society, people began to step into the digital society in an all-round way. With the development of computer and Internet science and technology, it will be applied to more and more industries, and will continue to affect our daily life and behavior. Digital society also provides an opportunity and challenge for sci-tech journals. As an important information medium, sci-tech journals have exerted great influence on promoting scientific research. However, at present, the editing and publishing of sci-tech journals are still facing some difficulties, which seriously affect the sustainable development of sci-tech journals. Therefore, this chapter makes an in-depth analysis of the situation and problems in the publishing methods and methods of sci-tech journals in the digital network era, and gives some suggestions for optimization and perfection, hoping to provide some useful guidance for the exploration and implementation of relevant issues at present, so as to promote the sustainable development of editing and publishing of sci-tech journals.

1. Introduction

With the improvement of science and technology, computer network and digital technology have begun to enter public life in an all-round way, which poses a great challenge to the traditional magazine industry. The traditional magazine layout mode and distribution mode are far from meeting the requirements of the market-oriented development of modern magazine industry. It is urgent to break through the limitations of the current management system and operation management mode, and further improve the service quality and efficiency of editing and publishing, so as to meet the diversified needs of the public. Therefore, the sci-tech journals must further innovate the management means of editing and publishing, further optimize the editing and publishing functions, and improve the editing and publishing efficiency and service quality of sci-tech journals, so as to better serve the public and provide important reference support for the development of scientific research and academic exchanges. It is of great significance and practical value to strengthen the research on editing mode and publishing mode of sci-tech journals in the digital age. Therefore, this paper mainly analyzes the editing mode and publishing mode of sci-tech journals in the digital age.

2. Factors Affecting Editorial Work in Digital Publishing Era

2.1 The Influence of Institutional Environment on Editing Work

In the past, the system of selecting materials, writing manuscripts, reviewing and distributing traditional sci-tech journals was regarded as the main yardstick to evaluate the quality of editors' work. These traditional arrangements and management can't adapt to the digital printing era at all. The development goals and policy adjustments of magazines are fundamentally different from those of previous magazines. Therefore, the arrangement system environment should be different from the conventional arrangement system environment. Excellent institutional environment can make editing work play a greater role in digital arrangement and make greater contributions to the work of sci-tech periodicals. However, if the system environment is not ideal, it will easily hinder the editing work, and it is not conducive to the development of editing sci-tech journals.

2.2 The Influence of Resource Allocation on Editing Work

The basic resources of arrangement management in the digital era generally involve talents, science and technology, works, teaching content and network platform. Among them, the superior choice of basic resources is the key prerequisite for the success of arrangement management in the digital age. Therefore, in order to edit sci-tech journals more efficiently, we should not only ensure the sufficiency of network resources, but also optimize the allocation of resources in the editing workflow to increase the rational use of network resources[1]. However, if there is no reasonable resource system for sci-tech journals, it will seriously interfere with the smooth and effective development of sci-tech journal publishing business and make the editing work of sci-tech journals unable to continue. A large number of writing tasks not only make the workers of sci-tech journals unable to work more efficiently, but also limit the benefits of sci-tech journal publishing. On this basis, magazines and press and publication must also attach importance to the rational allocation of talents.

2.3 The Influence of Quality Requirements on Editing Effect

Quality requirement is the key to the editing of sci-tech journals. Therefore, the efficiency of sci-tech periodical editing directly determines the quality of sci-tech periodical editing. Compared with the traditional editing and editing work, the editing and editing work of sci-tech journals in the digital publishing network era puts forward higher requirements for the overall quality of personnel. Editors of sci-tech journals in the digital publishing era should not only have the qualities of editors in the traditional publishing era, but also be familiar with computer technology, have advanced Internet ideas and understand the changes of digital publication market[2].

3. Transformation of Editing Functions and Working Methods of Sci-Tech Journals in the Digital Age

3.1 The Transformation of Editing Functions of Sci-Tech Journals in the Digital Age

In the digital age, the responsibility of compiling sci-tech journals has changed significantly. On the one hand, editors began to change from traditional information content providers to comprehensive information development and service roles. The main responsibility of the editors of traditional sci-tech journals is to process and integrate the collected scientific research articles, which provides important information content and data for building a complete sci-tech journal. In

the digital age, the emphasis is on the integration and application of digital resources. The editor's responsibility is gradually extended to the comprehensive information conversion and service functions. On the basis of realizing the basic editing content, editors can also use the functions of guiding digital media, which provides readers with more convenience and guidance for accessing information. At the same time, editors can also make full use of digital information resources to integrate the information content of journals in depth, thus increasing the technical content and layout characteristics of information content of sci-tech journals. However, the editors' function has expanded from simple text editing and processing to comprehensive arrangement of information content of all sci-tech periodicals. At the same time, it is necessary to know the historical background and cultural background of editors and have a high level of editing skills. Editors' profession has changed substantially, and the requirements for editors' duties of sci-tech journals are more standardized and humanized under the new situation.

3.2 Integration of Editorial Work with New Media

In recent years, the market demand of new media editors is increasing. Based on the timeliness and universality of new media communication, the Internet publishing and editing mode of sci-tech journals has also won the favor of corporate readers[3]. The research shows that if enterprises can gather periodical enterprises in the industry, join the magazine cluster websites in a unified way, expand the content distribution channels, and jointly build the official new media accounts of enterprises, they will be able to effectively enhance the network awareness of magazines, thus expanding the influence of corporate readers, which is better than the effect of advertising. To realize the new media of sci-tech journals, we must first build a good brand image of journals, gather more online reading, and promote the smooth development of new media of journals; Second, pay attention to the quality of periodical content, so as to ensure that it can be widely read by the public. Through regular research on readers' and listeners' reading needs on the Internet, readers' reading preferences can be met while transmitting and publishing information, and the quality level of content itself can be improved, including layout design, internal editing, content processing, content topic selection, etc.

3.3 Establishment of editors' Perfect Sense of Confidentiality

Scientific journals are different from professional contents in other fields. Some research related to national specialties usually has a specific confidentiality attribute. Therefore, editors themselves must establish a corresponding sense of confidentiality, and find out what content can be published and what content involves secrets. Therefore, in the issue of editing sci-tech journals, editors often overemphasize the quality of graphics, while ignoring the confidentiality. Today, with the increasingly fierce competition in technology, it is very necessary to cultivate the confidentiality awareness of editors of sci-tech journals, and to understand and master the laws, regulations and system requirements related to confidentiality regulations. At the same time, the knowledge system of sci-tech journal editors must be constantly enriched, and the theoretical knowledge must be updated in time. In order to ensure that they can judge which content is at the forefront of science and technology or which content is technologically outdated during the review process. However, too sophisticated technology often requires more rigorous examination of confidential information. Once the scientific and technological achievements are leaked, it will lead to serious economic losses. In the pre-trial stage, editors of sci-tech journals need to be keenly aware of whether the manuscripts are confidential or not, and repeatedly screen the confidential manuscripts. After many reviews by editors and review experts, they can decide whether to publish or not. It should be noted that manuscripts with suspicious contents should not be forwarded to foreign reviewers for review.

Therefore, keeping the source secret is one of the main means to protect state secrets from being leaked. As for the confidentiality audit mechanism of sci-tech journals, we must effectively control the content audit of editors according to the actual needs of our legislation. After many arguments, it is still impossible to decide how to keep it confidential, and the manuscript must be sent to the higher authorities for final review. In addition, the quality of classified contents of publications must be monitored accurately. In strict accordance with the provisions of manuscript review records, accurately check the information sources of articles, and ensure the authenticity of published information content in different work links. Even the high-tech journals published in the company, no matter where the authors come from, must conduct a comprehensive audit to minimize the risk of information disclosure with a rigorous working attitude.

4. Discussion on Editing Mode and Publishing Mode of Sci-Tech Journals in Digital Age

4.1 Analysis on the Transformation of Publishing Mode of Sci-Tech Periodicals in Digital Age

In the digital age, the publishing mode of sci-tech journals has also undergone great changes, showing incomparable advantages. On the one hand, it improves the publishing efficiency of sci-tech journals and reduces the operating costs. Compared with paper publications, digital publications are quite different in production process. In the later stage of digital publications, they mainly copy and process documents to improve production efficiency, without consuming paper, ink and other materials. Therefore, it has outstanding advantages in cost and technical quality. In addition, the publishing methods of digital sci-tech journals have also undergone great changes, which have greatly broken the constraints of time and space. Meet the one-stop needs at any time. The computer technology platform can be fully used in the field of distribution and sales. There is no need to install the program in advance to complete product sales and services which facilitates centralized management and monitoring. At the same time, digital sci-tech journals have greatly improved users' reading and shopping experience. Customers only need to select the corresponding digital publications according to their own requirements to obtain information rights, without physical logistics and distribution, with good timeliness, simple content query and real-time interaction[4].

4.2 Exploration of the Publishing Mode and Development Direction of Sci-Tech Journals in the Digital Age

In the new era, in order to comprehensively expand the circulation of sci-tech periodicals and better bring comprehensive, innovative and advanced scientific information to readers, it is necessary to carry out reform and innovation in combination with social reality, so as to explore the distribution methods that are more in line with the characteristics of sci-tech periodicals. The specific method includes:

4.2.1 Change of Ideas in Time and Establishment New Publishing Values of Sci-Tech Journals

In the digital information age, the electronization of scientific journals is not a complete abandonment or replacement of traditional paper journals. But it must be organically integrated with the traditional publishing industry. It is necessary to make full use of the distribution advantages of paper magazines, combine with the actual situation, and make use of digital information technology to copy, reprocess, integrate and transmit the contents of magazines and their own information, so as to reduce production costs and improve output efficiency; At the same time, it is necessary to effectively integrate with the operation mode of publishing enterprises. Through comprehensive

research and data analysis, we can grasp the reading needs, and form a smooth interaction mechanism between readers' reading and magazine distribution, so as to turn more scientific and technological achievements into actual productivity and further promote the industrialization level of Chinese sci-tech journals.

4.2.2 Active Exploration of Integration Mechanisms of Relevant Industrial Chains and Cross-Industry Cooperation

Traditional paper publications and electronic digital publications have their own characteristics. Traditional publishers are gradually absorbing and learning from the advantages of electronic publishing, and electronic publishing is gradually absorbing and integrating the advantages of traditional publications. Under this background, sci-tech journals can integrate resources and formats. According to the development policy of publishing integration and diversification, we can integrate the existing publishing formats with the related formats in the upstream, downstream and upstream of publishing, and establish a brand-new publishing format cluster through merger and integration. At the same time, the publishing industry should also take the initiative to go out, increase cooperation with other fields, further integrate, interact and coordinate, so as to realize resource sharing, further expand market share and social influence, promote publication industrialization, scale and standardization, further promote the sustainable development of traditional publications and electronic publishing, and achieve higher economic and social benefits.

4.3 Market-Oriented Publishing of More Personalized Publications to Meet the Diverse Needs of the Public

Besides innovating and perfecting the traditional way of running journals, sci-tech journals should fully understand the market orientation, take meeting users' needs as the fundamental starting point, and set up innovative service connotations. On the one hand, sci-tech journals should further understand the needs of users of traditional paper books and periodicals and the market demand for electronic publications, so as to create more diversified digital electronic publications for different consumers. On the other hand, sci-tech journals should further process the service connotation of traditional paper journals, not only to strengthen the service connotation, but also to create and highlight novelty in personalized design, so as to gain the favor of more users. In addition, sci-tech journals must also strengthen the cooperative relationship with information service providers, improve the digital publishing service according to the increasingly diversified needs of readers, and further improve the publishing methods by using the network information platform to form a more open information exchange platform for information publishers and readers, further increase and expand the market share and coverage of digital publications, and obtain more economic and social benefits on the basis of meeting the ever-diversified needs of citizens, effectively promote the sustainable development of sci-tech journals, and further improve the social influence and overall market competitiveness[5].

4.4 Conformation to the Development Trend of the Times and Application of Innovation Management System

According to relevant research, China's large-scale sci-tech periodical publishing enterprises have taken the lead in adopting the latest foreign talent management system scheme. In the whole management process, we pay attention to the application of flat management mode, which weakens the barriers of information and work communication between different levels and makes their work more independent. Therefore, according to the above research, we can draw a conclusion that in

order to better enhance the effectiveness of economic management, we must start from the management work. It includes system innovation, supervision innovation, personnel training innovation and work ideas innovation. First of all, establish a set of perfect performance management system within the enterprise to guide the work direction of editors; Secondly, we should establish a set of incentive and evaluation mechanism to improve the performance of editors. Evaluation is the foundation and fundamental link for publishing enterprises to establish crisis awareness. Through the introduction of cross-departmental performance appraisal, a good competitive atmosphere can be formed within the enterprise.

5. Conclusion

In a word, in the digital information age, there are opportunities and challenges for sci-tech journals. In order to achieve comprehensive breakthrough and development, we must actively establish a comprehensive, diversified and normative scientific publishing and reading platform on the basis of absorbing and summarizing the advanced experience and methods of the traditional editing and publishing mode, so as to lay a solid foundation for the healthy, comprehensive and steady development of the sci-tech periodical market.

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