

Digital Transformation Dilemma and Path of Agricultural Science Journals —Take "Rural Know-all" For Example

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ABSTRACT

With the continuous sinking of mobile Internet and the digital turn of user reading, mass paper journals have completed the digital and mobile transformation. "Rural Know-all", which focuses on agriculture, rural areas and farmers and has made brilliant achievements in the paper media era, has also been trying to transform digitalization in recent years. Article based on case research and interview method, combing the "Rural Know-all" in recent years to build WeChat public platform, electricity platform, mobile phone and other digital to practice, but limited by the concept, profit model, audience media literacy, editor digital skills, transformation has not achieved the ideal effect. Based on this, the bottom-up change of ideas, expand profit channels, enhance profitability, clear positioning, achieve precision communication, the introduction of digital talent, outsourcing digital links and other countermeasures may help its transformation.

Keywords: Agricultural Science Popularization Journal, "Rural Know-all", Journal Digital Transformation

1. INTRODUCTION

Digital transformation of periodicals refers to the implementation of industrial upgrading and business innovation in the traditional periodical publishing industry by using digital technology, so as to achieve a smooth transition from traditional paper publications to digital publications. [1] With the development of digital, intelligent and mobile technologies, domestic and foreign popular periodicals have undergone digital transformation since the 1980s and 1990s. This is of great significance to enhance the communication and influence of periodicals. However, due to the low digital literacy of user groups, the digital transformation of agricultural science journals, whose main user group is farmers and whose main mission is to serve the "agriculture, rural and farmer areas", has lagged behind. Among them, "Rural Know-all", one of the "Top 100 Newspapers" in China, is the most typical. The purpose of this study is to sort out the current situation and dilemma of digital transformation of "Rural Know-all" and propose targeted countermeasures for the transformation and development of agricultural science periodicals, so as to promote the sustainable

development of "three agricultural" periodicals.

It is a bimonthly journal for farmers to popularize agricultural knowledge and serve rural development, with the editorial policy of "scientific, practical, novel, and timely" and "seeking new, pragmatic, and effective". The editorial policy is "scientific, practical, novel and timely", the principle of selecting articles is "seeking new, pragmatic and benefit priority", and the distinctive feature is "understand at a glance, learn at a glance, use at a glance, and understand at a glance". [2] Since its establishment in 1982, "Rural Know-all" has become a national agricultural journal with a large number of mailings, high visibility and wide brand influence, and has more than one million readers, and has been honored by the Party and the government for many times. In 2019, it was selected as one of the "Fine Periodicals Exhibition to Celebrate the 70th Anniversary of the Founding of the People's Republic of China". [3]

2. THE DILEMMA OF DIGITAL TRANSFORMATION OF AGRICULTURAL SCIENCE JOURNALS

2.1. Conceptual dilemma

The concept of digital transformation is the first intrinsic factor that hinders the transformation of journals. The digital awareness and execution ability of journal management and operation personnel, as well as the courage to be the first to break the stereotypes, are the prerequisites to determine whether traditional journals can undergo digital transformation. Since 2002, "Rural Know-all" started to set up its website, it is easy to see that the leadership of the journal has a keen digital awareness and can keep up with the digitalization process in time. Subsequently, "Rural Know-all" also followed the wave of digitalization and carried out a series of digital platforms, such as the website, SMS consultation platform, WeChat public account and cell phone station, etc., which have achieved certain results. However, the above platforms are only used as display platforms for the paper version of the content, and have not been reconstructed with digital and networked thinking, and thus have not achieved the desired effect.

As the oldest brother of domestic periodicals in the field of "three agriculture", "Rural Know-all" has created countless industry uniquenesses and made countless achievements, but it is also these historical achievements that make "Rural Know-all" reluctant to go beyond the traditional concept, which leads to less investment in digitization and slow digitization process. In addition, the main editors and reporters of the journal are older and unable to master the more technological operation mode of digital publishing, which to a certain extent also leads to the slow development of digital transformation and lags behind, and it is very difficult to change their editorial mode in a short period of time.

2.2. Profit model dilemma

The profit model is an important factor and challenge for the digital transformation of traditional media. In the digital era, the media structure and ecology have changed, and the "secondary sale" theory of selling content before advertising, on which traditional media rely, is not enough to support the survival of media, requiring the media industry to rethink the media management model.

"Rural Know-all" has been using the traditional "second sale" profit model. During its digital transformation, it established the WeChat public platform, hoping to expand its turnover by means of online subscriptions on WeChat. However, since most of the readers of "Rural Know-all" are farmers with low literacy and digital literacy, it is difficult to realize online profit. In addition, since "Rural Know-all" is a

semi-monthly magazine and most of the readers subscribe to it throughout the year, it takes a long time to update and issue the periodical. The slow update speed is easily eliminated in today's fast-paced digital society, so this is also a point where "Rural Know-all" is in urgent need of innovation.

2.3. Audience media literacy dilemma

Media literacy refers to people's ability to choose, understand, question, evaluate, create and produce, and think and react when faced with various information from the media. This ability includes the motivation of Internet users to use Internet resources, the ways and means and attitudes of using Internet resources, the degree of effectiveness of using Internet resources and the ability to criticize Internet information. [4]

The audience group of "Rural Know-all" is mainly some farmers who have a certain level of education, but with the development of urbanization in recent years, more and more rural young adults have migrated to cities, and with the popularity of smartphones, it makes their demand for paper periodicals decline rapidly, which directly leads to the loss of a large number of old readers of "Rural Know-all". At the same time, "Rural Know-all" did not focus on cooperation with emerging digital short video platforms, such as Jitterbug and Racer, etc. It still operates in the inherent way and does not catch up with the pace of social progress, thus the business effect becomes more and more unsatisfactory.

2.4. Digital Talent Dilemma

The lack of digital technology talent has also posed difficulties for the current transformation. As we all know, under the impetus of digital reform, digital editors with computer operation ability, digital thinking and interactive design ability have become a scarce resource in the industry. However, at present, there are not enough digital editing talents cultivated in colleges and universities, and there are only a few universities with professional talents cultivation bases for digital publishing. This further aggravates the shortage of digital talents.

"Rural Know-all" also suffers from a shortage of relevant talents, and although their WeChat public number has been launched, it is operated by only one person. Although it has adopted a series of recruitment activities to attract digital talents, it is difficult to attract talents due to insufficient efforts and financial investment. Every year during the recruitment season, it is difficult for "Rural Know-all" to compete with other periodicals, and the majority of its staff are still engaged in the traditional publishing industry.

3. THE DIGITAL TRANSFORMATION PATH OF AGRICULTURAL SCIENCE POPULARIZATION PERIODICALS

Digital transformation of traditional journals, need the transformation of operating subject concept, also need to improve profitability, on the basis of accurate communication, vigorously cultivate the introduction of digital talents, to achieve the digital of journal content, production mode and operation process of digital, communication carrier of digital and reading consumption, the purpose of digital learning form. [5]

3.1. Change ideas from top to down

The transformation of the concept of running journals is the endogenous motive force to realize the digital transformation of traditional periodicals. In order to realize the change of concept, it is necessary to follow the pace of the times at all times, understand the innovation mode and law, actively adapt to the requirements of digital, intelligent and social media environment, and improve their own user thinking and digital thinking, so as to carry out effective concept innovation. The concept innovation of the digital transformation of periodicals enables publishing institutions to form a good thinking mode of digital publishing products, promote the coordinated development of the culture of digital publishing, digital publishing management and digital publishing, and realize the unity of content and technology. The concept innovation of digital transformation must first have scientific innovative thinking. Under the fixed innovation mode, the steady transition from paper to digital technology, only the determination and idea of innovation is not enough. In order to realize the ideological innovation, we should popularize the concept of digitization for the older and older editors in the magazine, so that they can fully understand and judge the digitization. Secondly, through the digital learning means of social media, the Internet, digital publishing and other ideas and thinking methods can be popularized to journal editors. Finally, it is necessary to break the traditional way of thinking, through further study, joint training, expatriate learning and other ways to select editors to study, promote, understand the advanced digital publishing model and process, and apply it to the actual journal editing work.

3.2. Expand profit channels and improve profitability

The key to the success of the journal digital transformation is whether it can find the appropriate profit channels and models. The core competitiveness of the periodical society changes the traditional "secondary sales" mode of relying on content and advertising, and realizes the innovation of profit mode. First, the

realization ability of high - quality content should be improved. "Content is king" is still the same law of the digital era. The core competitiveness of traditional media institutions also lies in the generation ability of their high - quality content. They should make full use of their content advantages to realize the value appreciation of content. Secondly, we should pay full attention to the core needs of the audience. From the perspective of the audience to the view of the impact of change, at the same time in content form, should also pay attention to the use of the audience, always implement the original content, at all levels advocate high standard mode, can also make use of cross - media publishing, digital composite publishing, the journal content into video, video products, to win the product profits to the maximum extent to meet the readers. In the creation of modern science and technology can be used, through various forms of sound, light, electricity, under the premise of quality content, in the eyes of the audience in various forms, can make the content value of the publication to the greatest extent. Thirdly, expand the source of multi - platform profit. In realizing the diversified mode, the interaction with the mobile phone users can be increased to develop specific and new service forms for the users. Publishing houses can launch an official e - commerce platform to sell products related to agricultural production and transform advertisers into service providers. Through the intermediate platform of "Rural Know-all" Express, it can not only expand the turnover of advertisers, but also broaden the profit channels of periodicals. In the past, the media communication was input communication, the new media form can realize the mutual sharing between users and media, the recipient of content, the creator and publisher. Therefore, in terms of media communication, for traditional media, if we want to achieve more effective communication, we should realize deep cooperation with new media, and improve the efficiency of media communication, so as to maximize profits.

3.3. Clear positioning and achieve precise communication

For now, the most direct way of information dissemination is the network. No matter which country, cannot do without the Internet, but in the use of equipment hobbies are different, which is inseparable from the current national development situation. For Asian countries, mobile phones are more cost-effective than computers, so Asian users prefer to use mobile phones to access the Internet, while Western countries are the opposite. According to the survey, Japan has the highest Internet access rate. Of the Japanese users surveyed, 95% surf the Internet every day, and only 1% of the users under 55 are online. The second is Turkey, where 92% of the population is online. And different countries of the Internet people on the use of

smartphones are also different, Korean users prefer online shopping, Singapore users love to take photos.

Therefore, "Rural Know-all" can cooperate with other agricultural e-commerce platforms, jointly launch Internet columns, combined with their own advantages, enrich their own website content. Committed to their own characteristics, and to combine the characteristics of other platforms, redesign and integrate the content you want to spread. Secondly, with the help of big data platform, we can analyze and customize the readers who visit the website, subdivide different agricultural fields, push relevant information for different user interests and hobbies, and get more attention in this way. Not only that, but also with professional digital operators to maximize the interests of both sides, at the same time, to achieve the goal of transformation. Finally, according to the characteristics of the audience, in the current farmers' favorite short video platform, the concise journal content can be edited and made into 15 seconds short video release. The short video platform is no less popular in rural areas than in cities. Farmers like to watch or even shoot short videos through mobile phones during the leisure period, and there are not a few works on rural areas on the short video platform at present. The new way of information dissemination can also give "Rural Know-all" in the creation of ideas, as for the way of communication can also be based on the current popular video communication software.

3.4. Introduction of digital talent, outsourcing of digital links

In this Internet era, enterprises that cannot keep up with the development of The Times will slowly be marginalized, or even eliminated. Unable to adapt to the changes of society, excellent things will be abandoned by The Times, the development of Rural Know-all " has gone through such a process. The arrival of the Internet makes many information electronic, no longer just relying on past paper reading, and in terms of convenience, electronic reading also beats paper reading. People's reading methods have also changed, and digital talents have also emerged at the historic moment.

First of all, digital talents should have a very solid professional foundation and form their own technical system. To successfully complete the task, it is necessary to be very sensitive to the information, to process the information with a faster reaction speed, and to obtain, integrate and communicate a certain amount of information in the first time. From the experience of successful transformation of other journals, the use of digital talents can integrate their professional knowledge and technology into the development of enterprises, which will help the development of enterprises in the long run. Therefore, the "Rural Know-all" should increase the investment in the recruitment and social recruitment of colleges and universities all over the

country, put forward the talent introduction plan, solve the problems of talent settling down to the greatest extent, and provide good salary, treatment and welfare activities for digital talents. At the same time, to enhance their brand value and visibility, will absorb more excellent digital talent. Secondly, in the periodical magazine, can external specialized digital publishing practitioners or experts and scholars to teach. In this way, it not only solves the shortage of digital publishing talents among college graduates every year, but also solves the phenomenon of insufficient digital ability of publishing personnel in magazines, and will not cause jumbled staff in the society.

4. CONCLUSION

Development of information technology such as mobile Internet, 5G, artificial intelligence provides digital opportunities and technical support for the digital and intelligent transformation of media. The mass media at home and abroad have gradually completed this process since the late 1990s, but the agricultural periodicals with agriculture, rural areas and farmers as the market are depressed by the constraints of user media literacy and market competition environment, and the process of digital transformation is obviously lagging behind. This paper takes "Rural Know-all" as a single case sponsored by Jiangxi Science and Technology Publishing House. Based on the analysis of the concept, profit model, user accomplishment and digital talents, this paper puts forward that agricultural periodicals should carry out digital transformation from top to bottom, from top to bottom, from expanding profit model, from introducing digital talents to outsourcing digital publishing.

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