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Research on Development Strategy of News App under the Background of Artificial Intelligence

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ABSTRACT：With the rapid development of the mobile Internet, a large number of Internet users have access to current news through the mobile phone. The market performance of the media Applictipon(referred to as App) is strong, and it has become increasingly prominent in the public opinion. This article analyzes the present situation of the development of media APP by consulting literature, market research, comparative research and other methods, aiming at exploring and studying the future development trend of media APP and its development countermeasures.

1.   Introduction

With the continuous development of China 's mobile Internet, the level of people 's consumption has increased dramatically, and China 's mobile phone user base has continued to expand. In the 44th "Statistical Report on the Development of the Internet in China" released in August 2019, as of June 2019, the number of mobile Internet users in China reached 847 million, an increase of 29.84 million from the end of 2018. The proportion of Internet users using mobile phones to access the Internet reached 99.1%, an increase of 0.5 percentage points from the end of 2018[1]. Internet penetration rate exceeds 60%, and mobile Internet use continues to deepen.

The above data fully proves that with the advent of the smartphone era and the continuous improvement of communication technology, the mobile Internet era is the general trend. In the media field, because a large number of netizens have switched from PC to mobile clients, news media have aimed at the mobile network market and started to develop news Applictipon (referred to as App).

1.1. News media App industry scale

"2019Q1 China Mobile News App Market Monitoring Report" authoritative release by iiMedia Research in May 2019. With the increasing penetration of Internet, mobile news App has gradually become the main source of information for Chinese. According to iiMedia Research, the scale of mobile news App users in China is expected to reach 693 million in 2019, which indicates huge market potential.

In terms of news App, in 2019Q1, the pattern of China's mobile phone news App market remained stable. The monthly active users of Tencent news and Toutiao news both exceeded 200 million, which is at the leading position of the industry. The specific data is shown in 'figure 1'.
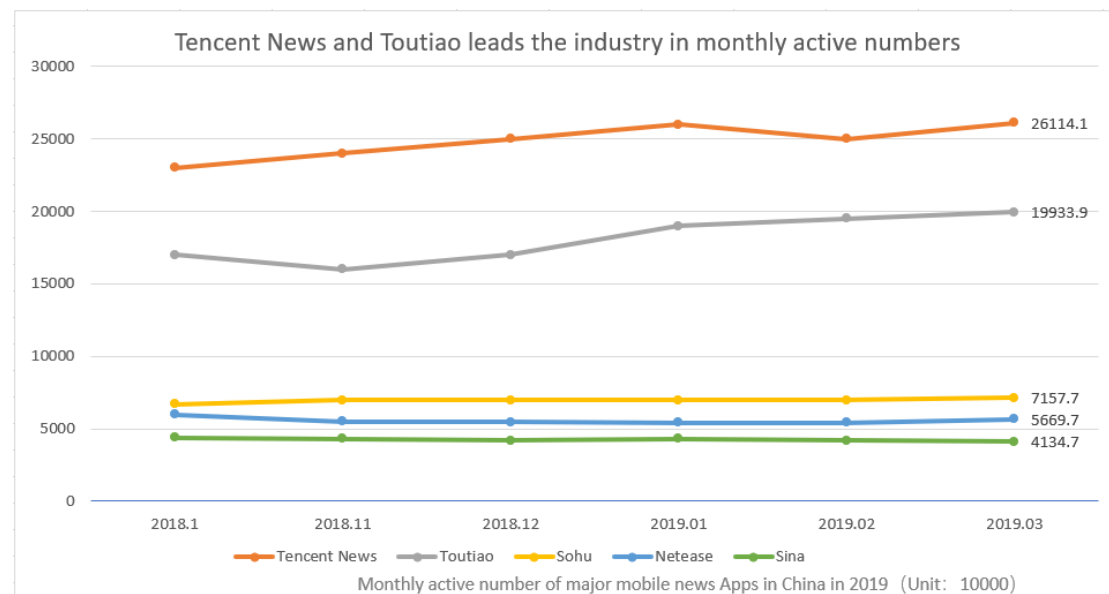
Figure 1. Monthly active number of major mobile news Apps in China in 2019（Unit：10000）
（Data from iiMedia Research）

In terms of users, male accounts for 60% of the news App users, whereas high-income groups prefer traditional media news App. Under the background of strict network supervision, news App will stick to truth and start quality improvement. At the same time, the sinking market began to wake up, news App will present news that is more close to the public life to obtain users in third and fourth tier cities, leading to the intensification of industry competition[2].

1.2. Comprehensive market performance of various news media Apps
According to incomplete statistics, there are more than 1,300 news Apps at the national level. The media App industry is fiercely competitive, and the problems that accompany it are gradually increasing. From the perspective of market share, the three major portals of NetEase, Tencent and Sohu, as well as Toutiao and Surging News occupy most of the market share. News Apps created by traditional portals have an advantage in market traffic, and have been put into practice in cutting-edge areas such as the use of big data, intelligent push, and news customization.

1.3. Tencent News and Toutiao App occupy most of the market share
From the perspective of the industry market, according to statistics from Aurora Big Data in May 2019, in terms of monthly active users, Tencent News and Toutiao performed strongly as the first legion, far exceeding other rivals Sohu, Netease and Sina[3].

In the market competition, traditional media Apps mainly meet different user needs with their rich news resources and high-quality original content. According to data analysis, among information App users, high-income groups prefer traditional media Apps, and high-income groups (average monthly income of more than 10,000 yuan) have a high proportion. The specific data is shown in 'figure 2'.
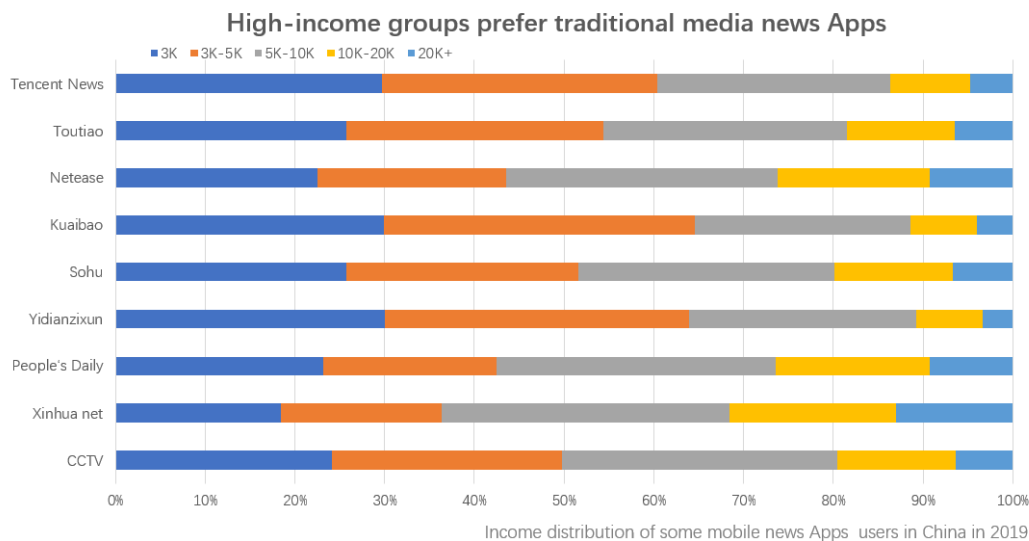
Figure 2. Income distribution of some mobile news Apps users in China in 2019（Data from iiMedia Research）

2.   Development Dilemma of News App under the Background of Artificial Intelligence

Although the emerging online media App has technological and market competitive advantages, there are still many problems that need to be solved urgently: the "title party" phenomenon, the tendency of information content to be vulgar, content disputes, and algorithm recommendations to "filter bubbles" gap and so on.

2.1. Poor journalism

As the current market online media App mainly releases information from the media, in order to ensure that the media can upload information in a timely manner, the audits are mostly machine audits, which are mainly based on sensitive word filtering and content rechecking, and there are fewer manual audits. Without the "gatekeeper" of the manual review type, it is difficult to ensure the professionalism of the news.

In response to the widespread problems of poor professional content of news content and the spread of "yellow news" in information media apps, relevant departments are increasing the supervision and review of information and other applications.

2.2. Algorithm recommendation disadvantages

Algorithmic technology determines what content is recommended to users. One measure is clicks, comments, and retweets.

Toutiao algorithm recommendation mode changes the way information is obtained, allowing information to actively "find" users, greatly improving people's efficiency in obtaining news information, saving time and costs, and helping Toutiao to quickly rank among the top news client industries[4]. However, while the algorithm is prevailing, problems such as headline party, fake news, and information cocoon room exposed by the algorithm are becoming increasingly serious, which not only causes aesthetic fatigue of users, but also damages the image of the platform and hinders the development of the platform. At the same time, the effectiveness of advertisements recommended by algorithms has been repeatedly questioned.

2.3. Content copyright issues

Compared with traditional media Apps, the algorithm-recommended Apps are more biased toward quality and quantity.

Take Toutiao as an example, Toutiao refused to pay reprints to traditional media, writers, independent authors, photographers, etc., which led to a series of conflicts between traditional media and today's headline infringement of rights. Copyright disputes are inevitable.

3. Breakthrough and Innovation of News App

In the future, as users' requirements for information content continue to increase and algorithm technology continues to upgrade, media apps will experience the resurgence of traditional mainstream media and the in-depth cooperation between artificial intelligence and content creators.

3.1. News content expertise will continue to increase

After several years, various industries have gradually completed the digital transformation and entered the era of "big content". The contradiction between the wireless expansion of content and the limited attention of users has become increasingly prominent.

Taking CCTV News App as an example, the product mainly has the following outstanding features to solve the problem of some users' poor professionalism of today's news content and a single way of presenting information by mainstream media.

3.1.1. Deep fusion production

CCTV News App leads other platforms in terms of timeliness and originality of news content. By improving the layout of all media, CCTV news App traffic resources are abundant.

3.1.2. Focus on exclusive authoritative content

CCTV News App focuses on combining powerful resource advantages. CCTV has absolute authority in news content and value, and has a first-rate interview resource in the central media background.[5] Through innovative content creation, the form of news presentation is novel.

3.1.3. News content returns to true

When the market enters the stage of stock competition, meeting the fundamental needs of users to obtain information quickly and efficiently becomes the key to success. This means that news content will return to the true nature, and the news client platform will start the upgrade path from "quantity" to "quality".

3.2. Artificial intelligence assists media industry

The impact of artificial intelligence on the traditional media industry is still relatively small, but its impact may not be limited to the field of content distribution, but fundamentally affects everything from content production to consumption forms.

3.2.1. Content production moves towards human-machine collaboration

In terms of media content production, the future will be the road of human-machine collaboration. The media App industry that pays attention to timeliness, journalists are freed from simple and repetitive event reports, so as to carry out in-depth reports, topic design and other content.

3.2.2. Content distribution moves towards single-user communication

In addition to news professionalism, inaccurate customized content has also become a major problem for users using the App. With the help of artificial intelligence, machine recommendation can extract, sort and transfer large amounts of information to users based on their behaviors, characteristics, and demands, and overcome this big pain point through single-user communication.

4. Conclusion

In the context of the rapid development of the mobile Internet, traditional media in the process of transforming new media urgently need to abandon the original paper media creation methodologies,

fully integrate the contemporary new media context, and develop a unique mainstream media transformation road.

In the future, algorithm recommendation will become the mainstream of the media app industry. From news creation, review, to distribution, people will work alongside artificial intelligence to participate in it. As a result, algorithm-based recommendation of this cutting-edge technology will face numerous tests from journalists, social ethics, laws and regulations. Related technical specifications, regulations and provisions should be gradually improved.

Acknowledgement

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