Vol.5 Iss.5 2024 Communication & Education Review
https://doi.org/10.37420/j.cer.2024.059

A Comparative Study of Short Video Digital News Platforms from the Perspective of Affordance -- Based on Douyin and China Media Group Mobile

Qinxuan Li
School of creative media, City university of Hongkong, China
***Corresponding author E-mail: 626834573@qq.com**

Abstract:
In the digital age, with the empowerment of technical conditions, the production and delivery methods of digital news have changed rapidly, especially the short video platform, which has gradually become the main way of information transmission by virtue of its advantages. The affordance of short video platform has also injected new emotional orientation and potential into news production and circulation, creating a broader space and framework for this field. This paper explores the new features of short video platform in digital news production, content expression, value realization and so on through the comparative study of Douyin and China Media Group Mobile(CMGM), and discusses the concrete practice path of short video platform digital news from three aspects: technical affordance of the two platforms, text analysis of news cases and social functions, so as to provide new ideas and references for the development of short video news in the digital age.

Keywords:
digital news, Affordance, Douyin, China Media Group Mobile

1 Introduction

In the era of mobile Internet, short video platforms have risen rapidly. In addition to providing entertainment, short videos occupy an important niche in the practice of digital news by virtue of their advantages in content presentation and emotional arousal. We have observed that the affordance of short video platform has injected new emotional orientation and potential into news production and circulation, creating a broader space and framework for this field.

Studying digital news from the perspective of affordance has brought new problems to the research: what are the new features of short video platform in digital news production, content expression and value realization? In the field of digital news, what are the similarities and differences between the short video platforms of technology companies represented by Douyin and those of official media represented by CMGM? These problems deserve our further study and discussion.

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

2 Literature Review

2.1 Affordance study

American ecological psychologist James Gibso first put forward the concept of affordance, which was originally applied in the field of biology. Subsequently, in China, scholar Pan Zhongdang introduced the concept of communication affordance in 2017, and elaborated the specific connotation of media affordance, including information production affordance, mobile affordance and social affordance.

With the rapid development of the Internet, the current research on affordance has gradually focused on new media platforms. Scholars such as Wu Huiyue proposed that different types of Internet platforms should be classified, and the affordance and user behavior should be compared. In addition, Huang Miao deeply analyzed the text content in e-commerce short video platform from the perspective of affordance, in order to explore the interactive habits of users in social media. It is worth noting that the current research is mostly from the user's point of view, while the research on the new media platform itself is relatively insufficient.

2.2 Research on Short Video Digital News Platform

Short video news, as an emerging news form in recent years, is favored by users of all platforms. Its development in foreign markets has stabilized. According to the 2021 Digital News Report released by Reuters Journalism Research Institute, as many as 66% of the respondents surveyed in 12 countries indicated that they obtained news information through social media platforms. As early as 2017, the research report "Platform News: How Silicon Valley Reshapes Journalism" released by the Digital News Center of Columbia University revealed the deep integration between news organizations and social platforms and the steady development of digital news.

On the other hand, in China, short video news is still in the exploratory stage, and digital news is profoundly changing the creation and communication mode of short video news. Chang Jiang further emphasized that in the context of digital news, the value of emotional factors on the news platform is increasingly prominent. Zhang Qiujing took the People's Daily Douyin as an example to deeply analyze the phenomenon of emotional turn in short video news of mainstream media. Zhan Yao and others discussed the construction of media emotional discourse from the perspective of digital journalism through narrative analysis of award-winning integrated media news. In addition, Jun-jian Liang, based on the theory of digital journalism and news emotion, made a detailed inquiry into the practice of journalist Vlog on short video platform and its conceptual influence.

To sum up, the rise of short video not only reshapes the pattern of journalism, but also gives birth to digital news based on digital logic. On the one hand, users' information acquisition habits have changed. From reading news to watching news, and then to perceiving news, short videos have become the forefront of news reaching users. On the other hand, the news industry also regards short video as a key content product, and some new media organizations even completely abandon written reports and turn to audio-visual reports. Short video has become a new benchmark for digital news production. However, in China, the research on short video digital news platform is still insufficient, and most of them focus on emotional practice, lacking a diversified analysis framework.

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

2.3 Douyin and CMGM Research

The research on the integration of mainstream news media and short video platforms, especially for the media Douyin and CMGM, has shown a significant growth trend since 2019.

As far as the Douyin platform is concerned, Yang Fengjiao and others analyzed the internal relationship between the short video content and the user's interactive behavior in the article "A Study on the User's Participation in the Short Video of the Mainstream Media Douyin -- An Empirical Analysis Based on the People's Daily's Douyin", and deeply studied the specific impact of news texts on the user's emotions. At the same time, Chang Jiang and others, in "Short Video Culture from the Perspective of Memetics -- A Case Study Based on Douyin", used memetics theory to deeply analyze the formation mechanism of hot content on vibrato platform and the cultural motivation behind it, and systematically summarized the communication mode of Douyin.

As for the CMGM platform, scholars such as Chen Miao made an in-depth study of " CMGM " from the strategic height of the integration and development of new mainstream media. Focusing on its positioning as a "new mainstream media", they discussed the new model formed by the CMGM and Television General Station in the process of deep integration and development, which provided valuable reference for the industry. In addition, Yang Xue and other scholars pointed out that CMGM has made fruitful reports on major public events by adopting the innovative mode of slow live broadcast, which has a milestone significance in the development of the media industry and set a new benchmark for promoting the innovative development of the media industry.

Up to now, most of the existing literatures in the field of Douyin short videos focus on case studies closely related to Douyin, or take Douyin as a research tool to deeply analyze the short video culture and its industry ecology. However, in the research field of digital news in Douyin, we have observed an obvious blank state, and the related research results are still scarce. At the same time, for the research of CMGM, the current research focuses on the case analysis of specific accounts, which profoundly reveals the significance and value of the platform in government communication. However, it is worth noting that the current research still has some limitations in building a clearer production framework and exploring multiple perspectives.

To sum up, the path of "technology-culture symbiosis theory" followed by digital journalism research institute coincides with the analytical framework of affordance. We focus on how short video media technology provides a solid material foundation for digital news and enables it to obtain concrete practical forms. This perspective has important reference value for deeply understanding the development model of digital journalism. Therefore, from the perspective of affordance, this paper explores the following issues:

Q1: What are the new features of short video platform in digital news production, content expression and value realization?

Q2: In the field of digital news, what are the similarities and differences between the short video platforms of technology companies, such as Douyin, and those of official media, such as Central Video?

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

3 Research method

From the perspective of application-centered, this paper comprehensively adopts the methods of interface analysis, text analysis and in-depth interview, and comprehensively studies the materials such as the researcher's own experience, the introduction and publicity text about the platform, and the interviewee's experience and evaluation.

3.1 Interface analysis

Combined with the author's own experience, this paper analyzes the browsing guidance, function setting and button design of Douyin and CMGM Interface. Researchers have also collected a wide range of materials and files related to video digital news in Douyin and Central China, mainly including users' evaluation of digital news and market research reports in app stores.

3.2 Text analysis method

In this study, the text analysis method is selected, and the representative digital news cases on Douyin and CMGM video platforms are carefully selected. Then, from the topics, narrative techniques and text structure and other dimensions, this paper makes a thorough and detailed comparative analysis of the two platforms, aiming at revealing the main differences between them.

3.3 In-depth interviews

In this study, 13 digital news enthusiasts between the ages of 16 and 45 were interviewed in a semi-structured depth with a total duration of 15 minutes. The interview was officially launched on June 25th, 2024 and successfully concluded on July 7th, 2024. The interviewees who participated in the interview covered students, teachers, journalists and other professional backgrounds. Through the two platforms of Xiaohongshu and Douban, the collection scope of research samples was expanded.

Following the principle of maximum sampling in qualitative research methods, when the interview data of the 11th interviewee was included in the analysis, it fully met the needs of answering research questions, so the sample collection work was ended immediately. The respondents in this study showed significant differences in age, occupation, education level and geographical distribution, which ensured the low homogeneity of the samples, thus enhancing the universality and representativeness of the research results.

The interview process was conducted by telephone, which ensured smooth communication and accurate recording of information. Subsequently, we carefully arranged all the interview contents into a verbatim form, with a total of 7819 words, which laid a solid foundation for further analysis. The basic information of the respondents has been arranged in tabular form, as shown in Table 1.

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

Table 1 Basic Information of Respondents

Number	Gender	Age	Occupation	Number	Gender	Age	Occupation
S1	woman	29	journalist	S8	woman	24	edit
S2	woman	19	college student	S9	man	25	Media blogger
S3	man	34	Media blogger	S10	man	33	doctor
S4	woman	45	teacher	S11	woman	27	teacher
S5	man	22	journalist	S12	woman	26	civil servant
S6	woman	22	Operational intern	S13	woman	37	Planning supervisor
S7	woman	27	postgraduate	S14	woman	23	postgraduate

Interview questions can be divided into three main sections. The first section focuses on the basic information level of the interviewee, covering key elements such as gender, age and occupation. Subsequently, we divided the research topic into specific interview questions, aiming at discussing the respondents' overall cognition of short video digital news, especially their views on digital news content on Douyin and CMGM, including the advantages and disadvantages of the two platforms in the field of digital news, and how these characteristics shaped the respondents' digital news consumption habits. Finally, we preset a series of questions that may be explored in depth in case of emergency.

In the whole process of interview and research, we strictly follow the academic ethics, and resolutely avoid the four kinds of ethical problems and misconduct warned by scholar Allen Bleiman. Specifically, we ensure that we will not cause any harm to the research participants; Adhere to the use of standardized informed consent license documents or materials; Strictly respect and protect the privacy of research participants; Resolutely put an end to any form of deception to ensure the fairness, transparency and ethics of research.

4 Study Found

4.1 Douyin and CMGM Technology Affordance Comparison

4.1.1 Technology Affordance Analysis of Douyin

Douyin's human-computer interaction system is mainly composed of hardware layer, data layer and application layer, which will be analyzed one by one.

First, the hardware layer. The hardware layer includes the screen, processor and camera of the mobile phone, as well as the external wireless communication system, props, clothing, shooting equipment and so on. In order to adapt to the characteristics of mobile phone hardware, Douyin digital news innovatively adopted the vertical screen broadcasting mode, which subverted the horizontal screen broadcasting convention generally adopted by traditional news programs. Therefore, users can easily create and consume video content by using the vertical screen mode, which not only highly conforms to the natural habit of users watching handheld devices, but also significantly enhances the convenient use and flexible editing ability of content products.

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

Second, the data layer. Douyin's algorithm system aims to provide users with content recommendations that are more in line with their personal interests. Compared with the intuitive and easy-to-understand interface interaction design, the algorithm mechanism at the data level is more complicated and difficult to directly understand, and it is often difficult for ordinary users to deeply understand its specific operation mode. However, through continuous learning and trying, users can gradually reverse optimize the algorithm of video software and guide it to push the content that users are interested in more accurately, so as to realize personalized and customized "My Daily" push service.

Third, the application layer. The application layer is the part that users can directly touch and feel. Douyin has developed a variety of human-computer interaction interface designs to meet the needs of users to watch digital news. The following three dimensions, visibility, sociality and editability, are selected to analyze the application layer of Douyin.

(1) Visibility: Douyin platform is equipped with intelligent identification and keyword capture functions. In the process of users browsing short video news and commenting, Douyin system can use advanced algorithm technology to accurately extract the core keywords in users' comments. When the video is being played, its search bar will immediately show the related topics that are caused by the video content and are of interest to the majority of users. With simple operation, users can reach the search results of these topics with one click and quickly jump to the corresponding content pages. This function significantly improves users' search efficiency, and at the same time enhances the wide spread and influence of news content.

(2) Sociality: Users can build an online community to promote communication and sharing through interactive ways such as likes and comments. Users can also choose to spread their favorite news content widely through social networking platforms to expand the coverage of information. However, it is worth noting that at present, Douyin can't directly implement the one-click sharing function on WeChat, the largest social networking platform in China. Users need to download the content locally and then upload it to WeChat, which undoubtedly increases the operational complexity of users. Therefore, most users prefer to complete interactive behaviors such as likes and comments within Douyin APP to simplify the operation process.

In addition, the digital media platform relies on advanced intelligent algorithms to push content, and every feedback from users, including likes and comments, will be accurately captured by the algorithm and taken into account in calculation. In view of this, mainstream media have followed the media development trend of short video platform and adjusted and optimized the creative strategy of news content to better meet the personalized needs and preferences of users.

The live broadcast function is a characteristic function of Douyin. The anchors that users pay attention to will be listed in a separate line for the audience to choose, and the accounts that are being broadcast live will be arranged at the forefront of the attention list. Users can also quickly switch between different live broadcast rooms by sliding the screen. Barrage is the main communication method in the live broadcast room, and the barrage tool generates the connectivity between the anchor and the audience. For example, "national business daily" has designed a 365-day *24-hour AI live broadcast room to continuously broadcast financial news. The audience can communicate with their peers with words and expressions through the barrage. Another example is to pay attention to the slow live broadcast of the flood in the middle and lower reaches of the

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

Yangtze River, and the fixed plane shows the live broadcast of the flood in real time, so that users can know the news in the first time and conveniently.

(3)Editability: In Douyin's interface design, there are two core parts: direct speech and video content. The direct speech part is composed of topics and tags, which play a vital role in short video content. Compared with traditional media, the clever use of tags in short video content greatly stimulates users' interest in information acquisition, which not only successfully attracts the attention of the target audience and promotes their active browsing, but also makes the information content on the short video platform more standardized and systematic.

Take the official account of News Network on the Douyin platform as an example. This account makes full use of the topic mechanism, and carefully constructs a number of distinctive content sections in the Douyin platform, such as "The anchor said the network broadcast". When publishing related short video news, the account will skillfully set a clear topic label through the "#" symbol before the text content of the video, such as "# anchor said simulcast #". This method provides great convenience for users. They can quickly obtain and browse the relevant short video news content by simply searching or clicking on the topic tag, which realizes the convenient acquisition and browsing of information.

Table 2 Technical Affordance in Douyin

Mobility	Visibility	Editability	Sociality	Personalization
Smartphone Mobile network Cloud computing	Vertical screen Single screen Sliding screen Sound Scene	Shoot Montage Source material Beauty filter Sound Special effect	Bullet comment Comment Give the thumbs-up Share	Algorithm recommendation Accurate advertisement City model Geographical location

4.1.2 Technical Affordance Analysis of CMGM

The man-machine interaction system of CMGM is also composed of hardware layer, data layer and application layer, which will be analyzed one by one below.

First, the hardware layer. Compared with other platforms such as Douyin, CMGM video is obviously inclined to horizontal screen design in digital news production. The aspect ratio of the horizontal screen is 16:9 or 4:3. By compressing the vertical space, the horizontal field of vision is broadened. This design is helpful to show the environment and background of news events more comprehensively, effectively highlight the grand and dynamic changes of news scenes, and at the same time strengthen the association and interaction between different things and elements, thus improving the audience's visual experience and information reception effect.

The second is the data layer. Douyin and other short video platforms, relying on an efficient algorithm recommendation mechanism, are committed to accurately capturing users' needs and pushing personalized content to fully satisfy users' media consumption preferences. However, if this model runs for a long time, it may lead to users' limited vision in their existing areas of interest, reduce the opportunity to contact diversified

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

information, and then face the risk of building an "information cocoon room".

In order to meet this challenge, CMGM innovatively introduced the total station algorithm, which skillfully integrated mainstream values into the algorithm recommendation process. On the basis of fully respecting and satisfying users' personalized information needs, the main desk algorithm aims to correct users' "information partiality" and try to minimize the risk of users falling into "information cocoon". Specifically, the CMGM's main station algorithm has strong content perception ability, and can automatically identify the promotional content and boutique content that need to be promoted in the platform. By using advanced multi-modal hybrid recommendation technology, the algorithm can intelligently integrate the above contents with users' interest preferences, and realize the harmonious unity of ideology, artistry and commerce driven by the algorithm.

Third, the application layer. The interface design of video social software is mainly divided into two modes. Different from the stage mode in Douyin, the CMGM mainly adopts the square mode, that is, as soon as the video software is opened, there will be several news covers arranged in front of users, and users can choose the news they are interested in. The following two dimensions of visibility and sociality are selected to analyze the application layer of CMGM.

(1) Visibility: Similar to Douyin platform, CMGM also has the function of setting up collections. However, unlike Douyin,CMGM is richer in content presentation, covering not only short video news, but also long video news to meet the needs of different user groups. In order to make it easier for users to distinguish, the words "full version" are clearly marked in the upper left corner of the video, which is used as a logo to help users judge whether they are currently watching the abridged version of the news overview or the full version of the news record. In addition, at the bottom of the video playing interface, the CMGM also has a video recommendation function, so that users can easily jump to the full version or the essence version of the corresponding news, further improving the user's viewing experience and information acquisition efficiency.

(2) Sociality: CMGM is committed to functional innovation in user relations in order to achieve more extensive user aggregation and retention on the platform. For example, during the European Cup, a specific circle in the circle of Central Friends, "World Football & European Cup", cooperated closely with the column group of "World Football" and launched the "Host Airborne Central Friends Circle" activity, inviting well-known CMGM hosts to share their experience with users in the circle. In addition, many columns and channels of the main station have also settled in the "Central Friends Circle", realizing the seamless connection between large and small screens.

Relying on its rich content resources, such as live events, self-made programs and copyrighted movies, CMGM has built a good content ecology and laid a solid foundation for the opening of member-paid services. Taking the Tokyo Olympic Games as an example, the platform provides a variety of novel interactive ways for members, such as launching a self-made program "Please Answer Members", in which the host enjoys the Olympic Games with the audience through live broadcast and invites users to participate in the prize-winning activities. In the process of answering questions, the platform also provides users with rich benefits and subsidies. This not only promoted the win-win situation between the platform and users, but also opened up a new path for the brand promotion of the platform during the Olympic Games.

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

Table 3 Technical Affordance of CMGM

Mobility	Visibility	Editability	Sociality	Personalization
Smartphone Mobile network	Vertical screen Horizontal screen Sound Scene		Bullet Comment Collect Social community VIP Link	Total -station algorithm

Table 4 Comparison of video technology affordance between Douyin and CMGM

	Platform	Douyin	CMGM
Production affordance	shoot	√	√
	montage	√	×
	beauty filter	√	×
	special effect	√	×
	User publishing	√	×
Social affordance	give the thumbs-up	√	×
	collect	√	√
	comment	√	√
	share	√	√
	official community	×	√
	user group	√	×
	friends follow and chat.	√	×
Mobile affordance	movable terminal	√	√
	positioning perception	√	×
	instant messaging	√	√

4.2 Douyin and CMGM Digital News Case Comparison

4.2.1 Douyin's Digital News Text Analysis

4.2.1.1 Topic selection and narrative: pay attention to emotional particle narrative

In the context of digital news, digital technology has built a solid cornerstone of a new news ecology, which drives the profound transformation of news actors' behaviors and concepts. This transformation process is carried out with emotion as the core logic. Emotion, as a force that cannot be ignored, is increasingly becoming the key driving force for the production, dissemination and reception of digital news. In view of this, emotional factors have gained unprecedented attention and emphasis in the current digital news context.

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

Compared with the grand perspective and hard news topics often used in traditional TV news, the digital news era calls for more delicate and humanized narrative methods. In this context, the narrative technique based on individual emotions has become an important part of the grand narrative. Taking the Douyin account of CMGM News as an example, the platform actively adopts individual stories that pay attention to emotional expression, depicts the details of life with delicate strokes, and shows the extraordinary in the ordinary. Especially on special festivals such as Father's Day, through video works such as "My Almighty Dad", we focus on the warm moments between ordinary fathers and children, and vividly interpret the depth and greatness of fatherly love with a relaxed and humorous language style.

4.2.1.2 Text: Emotional text constructs communication situation

The traditional TV news headlines are serious in style, aiming at summarizing the news theme and content. In contrast, the digital news media, represented by the People's Daily Douyin, adopt colloquial news headlines and incorporate short sentences to express emotions, and often strengthen emotional expression through exclamation marks or attach topic labels with "#". For example, "at the moment of the earthquake, teachers rushed into the classroom to organize the evacuation of children." This scene of the monitoring record is touching! Like the teachers! " Such news headlines effectively promote the emotional resonance of users and guide their emotions into emotional feedback such as forwarding, likes and comments.

In the use of subtitles, as Li Xiaoyu said, short video news generally adopts the arrangement of "actual sound+music+salient subtitles+pictures", in which "salient subtitles" as a unique element of short video news, through distinctive fonts and color matching, puts the core elements of news in an eye-catching position, which is convenient for users to quickly capture key information in the mobile environment. CCTV in Douyin skillfully incorporated style subtitles with simple icons into "27th anniversary of Hong Kong's return to China" and "Wake up to Hong Kong!" Such as digital news videos, the information transmission efficiency and the viewing experience of users are further improved.

4.2.2 Digital News Text Analysis of CMGM

4.2.2.1 Topic selection and narrative: personal ip shaping full of network sense

In order to enhance the connection with young users, CMGM carefully planned and launched the "Central Young" series. While adhering to the mainstream values, this series of programs skillfully incorporates appropriate entertainment elements to meet the aesthetic preferences of users. In addition, CMGM has also made full use of the influence of popular IP, and carefully created a series of personalized IP projects. For example, the "Watching the World" program hosted by the reality anchor Wang Guan and AI Wang Guan, as well as the "Kang Hui Spelling Words" column specially designed for Kang Hui, a well-known host of CCTV, etc. The shaping of these personal IPS adds unique charm to digital news through core elements such as personalization, authenticity, emotional resonance, empowerment, interactivity and narrative. The "empathy" strategy of journalists further stimulated the emotional resonance of the audience and enhanced the attraction and appeal of the program.

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

4.2.2.2 Text: the sense of network and profound conception coexist

Compared with Douyin platform, CMGM video has significantly enriched the content types of digital news and endowed it with unique charm by virtue of the presence of official hosts and the introduction of IP. In addition, the small-screen communication mode has greatly narrowed the physical and psychological distance between the audience and the program, prompting the host to actively respond to the changes in the relationship between transmission and reception, and pay attention to the accuracy and appropriateness of discourse expression in order to build an equal exchange and interaction atmosphere with the audience.

Taking the "9 Minutes in the Museum" series of digital news products as an example, the host skillfully used the "Six Dynasties Food List" as the introduction in the program, which led to the humorous words of Nanjing people that "no duck can fly out of Nanjing alive", and took this as an opportunity to stimulate the audience's enthusiasm and encourage them to ask interactive questions about Nanjing classic cuisine. In the narrative structure, the host carefully designed a number of "blank spaces" to leave room for the audience to think and imagine. At the end of the program, the host profoundly expounded the significance of cultural relics for cultural inheritance and emotional connection, which not only realized creative expression, but also brought far-reaching thinking and aftertaste to the audience.

4.3 Douyin and CMGM Social Function Comparison

Regarding the evaluation of digital news on the two platforms, each interviewee provided unique insights. However, it is worth noting that seven interviewees have reached a consensus on the advantages and disadvantages of digital news on the two platforms, that is, Douyin platform can present diversified viewpoints and perspectives because of its broad audience base, but relatively speaking, its news content is insufficient in-depth reporting. On the contrary, theCMGM mainly attracts the attention of digital news enthusiasts. Although there is less interaction in the comment area and the viewpoint may be single, it also reflects the specific preferences and professionalism of its audience.

"Anyone in Douyin can send videos for news broadcast and communication, including marketing numbers and ordinary people who want to comment on news. Douyin is undoubtedly more conducive to the exchange of views, but the qualifications of the subjects who broadcast news are uneven, and it is more likely to cause the spread of fake news. " (S1)

"There are many exclusive digital news series reports on CMGM, which are more interesting and grounded than traditional news. Compared with Douyin, it is not so convenient to communicate with colleagues, which makes me feel very sorry. However, its news quality is far greater than Douyin digital news, which is also related to the positioning of the two apps. " (S8)

"Generally on Douyin, I just want to see other people's comments on this news. On theCMGM, I am used to watching my favorite, long-term series by myself. " (S13)

As for the differences and characteristics of the two contents, eight interviewees mentioned the slow live broadcast of CMGM and sports news, which impressed them. Four interviewees mentioned the personal IP of news on Douyin, while three interviewees thought that there was no particularly impressive digital news

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

series products on the vibrato platform.

4.3.1 Douyin: Digitalization and Emotionalization of Media Environment

China's press has formed a unique practical style for a long time, that is, journalists directly expound their views and positions in news texts, so as to realize the function of leading public opinion. However, with the advent of the social media era, the news industry is facing many challenges, including the competition of audience's attention, the guidance of discourse power and the construction of political identity. In order to meet these challenges, the news media gradually adopt clear-cut, emotional and infectious expressions as an important tool resource to improve the communication effect.

In this context, four interviewees expressed their recognition and love for the personal news IP "News Sister" on the vibrato platform, thinking that its form is closer to the audience's emotions and easy to stimulate emotional resonance. They pointed out that compared with traditional platforms such as CMGM, Douyin has shown more diversified features in news production mode, and realized the transformation from professional generated content (PGC) to user-generated content (UGC) and professional user-generated content (PUGC). This change not only enriches the sources of news content, but also makes user interaction and comments more convenient. Douyin Platform makes rational use of emotional factors, which effectively stimulates users' positive emotional feedback, thus significantly enhancing the power of news dissemination and public opinion guidance.

4.3.2 CMGM: New Mainstream Media Construct Social Memory

Short video platform is a place where young people gather. The narrative strategy of mainstream media on this platform needs to pay special attention to the tendency of language youthfulness and popularization, aiming at weakening the sense of estrangement and formal atmosphere between the two sides, and adopting popular language elements on the Internet to dilute the didactic color of short video news. Specifically, three interviewees made special mention of the digital news product "anchor said simulcast", which widely used common sayings, dialects, online hot words and online popular stalks in almost every program.

In the current digital media ecology, the mainstream media actively integrate into the digital platform and start a dialogue with the public. During this period, emotion has become an important bridge connecting the two sides. It is particularly noteworthy that the emotional value of slow live broadcast, which emerged during the epidemic, was emphasized by three respondents. Combined with the advanced digital technology that CMGM video relies on, slow live broadcast not only allows netizens to participate in media ceremonies in an immersive way, but also builds a core field for audience to watch and interact with live footage in the comment area.

Take "Twenty-four Hours of Epidemic" as an example, this slow live broadcast product not only focuses on the real-time live broadcast and playback of hospitals in "Vulcan Mountain" and "Raytheon Mountain", but also covers a wide range of news information and knowledge popularization in the process of "anti-epidemic". Through the lens and comment area of slow live broadcast, the network audience experienced the participatory media consumption together, and shared the self-confidence of China, the speed of China and the profound cultural connotation of China carried by the identity of "cloud supervisor". This process not only

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

enriches personal experience, but also invisibly shapes the common collective memory of China people.

5 Summary

For the digital news ecology, the metaphor of technical affordance is an extension of the infrastructure theory, and the platform and global broadband Internet have become a new generation of infrastructure. The material basis of short video news is algorithm system. Douyin recommends content by collaborative filtering mechanism, but it inhibits the acquisition of complete information, and the recommendation is based on group samples, which is not conducive to the publicity of news. As the mainstream media, CMGM video uses the total station algorithm, integrates multiple value standards, and provides high-level differentiated content. Unlike "My Daily" in Douyin,CMGM shapes "Our Daily".

Traditional journalism attaches importance to the elements of news value, but ignores "humanization" and "emotionalization". In the era of digital news, we need to consider the interaction between technology and other cultural and emotional factors. With the emergence of multiple actors in news production, Douyin's digital news creation has multiple subjects, and the narrative is granular, but it is easy to "collapse".CMGM has high credibility and serious discourse system.CMGM to create IP products is more attractive to users, emotional logic based on credibility, shaping social collective memory.

Digital news practice is also the practice of the relationship between the platform and users. The social function of Douyin platform is becoming more and more complete, which aims to further enhance users' sense of belonging, effectively enhance the stickiness of the platform, and further strengthen the social interaction between acquaintances. The social strategy of CMGM focuses on the weak relationship social model guided by the platform, and enhances the interaction between users by setting up official communities and organizing various activities. However, in order to closely fit the image and positioning of the official reception desk, the platform does not open up functions such as private chat and personal community, so as to ensure that all traffic can be effectively gathered under the management of the platform and realize the centralized and efficient use of resources.

References

[1].Gibson J.(2014).The ecological approach to visual perception: classic edition.Psychology Press.
[2].Pan Zhongdang, Liu Yusi. (2017). What is "new"? Power Trap in the Discourse of "New Media" and Theoretical Introspection of Researchers -- Interview with Professor Pan Zhongdang. News and Communication Review, (01), 2,19.(in Chinese)
[3].Wu Huiyue,Cai Tong, Luo Dan, Liu Yingxin &Zhang Zhian. (2021). Immersive virtual reality news: A study of user experience and media effects. International Journal of Human - Computer Studies.
[4].Huang Miao. (2020). Media Affordance Analysis of E-commerce Short Video -- Text Mining Based on Aauto Quicker Beauty Anchor. Journal of Beijing University of Posts and Telecommunications (Social Science Edition), 22 (05): 1-9.(in Chinese)
[5].Zhang Qiujing. (2023). Emotional Turn of Short Video News in the Mainstream Media in the Context of Digital News -- Taking Douyin of People's Daily as an Example. Southeast Communication, (03), 46-48.(in

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

Chinese)
[6].Zhan Yao&Zhu Danwen. (2022). Emotional Discourse Construction of Mainstream Media Integration News from the Perspective of Digital Journalism--Narrative Research Based on the Media Integration Award of the 28th-31st China Journalism Prize. Journalism, (04), 15-22+41.(in Chinese)
[7].Jun-jian Liang, Huang Yiyang & Yang Xudong. (2022). Innovation of Digital News Production: A Sociological Study of Journalism on Journalist Vlog. Journalism, (02), 4-11+20.(in Chinese)
[8].Yang Fengjiao & Sun Yuting. (2019). A Study on User Participation of Short Video of Douyin, the Mainstream Media-- Based on the Empirical Analysis of Douyin, People's Daily. Modern Communication (Journal of Communication University of China), (05), 42-46.(in Chinese)
[9].Chang, J. , and Ding, R. (2022). Theories of journalism in the digital era: Knowledge, value, and conceptual framework. In S. Zhang (ed.). Digital Journalism in China, (pp. 8-22), New York: Routledge.
[10].Chen Miao & Tang Bing. (2021). Exploration on the integration development path of CMGM App. Young Journalists, (04), 94-95. (in Chinese)
[11].Yang Xue & Wang Tianhao. (2021). The innovative practice of reporting major public events under the background of media convergence --Taking the slow live broadcast of CMGM "24 Hours of Epidemic" as an example. Media, (06), 33-35. (in Chinese)
[12].Chang, Jiang, He, R., and Ren, H. (2021). The semiotic guerrilla: Internet subcultures as political resistance in China. Journal of Media and Communication Studies, 13(4), 110-120.
[13].Reuters Institute, (2021), 2021 Digital News Report.
[14].Emily Bell, Taylor Owen. (2017). The Platform Press: How Silicon Valley Reengineered Journalism, Columbia University Center for Digital Journalism.

© 2024 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)