



Research on Innovative Development Strategies of Media Industry under the Background of Digital Economy

Ziyan Li^{1*}

¹College of Radio and Television, Communication University of China, Nanjing, Nanjing, 211172, China

**Corresponding author. Email: 1801571905@qq.com*

Abstract. With the rapid development of digital technology, the media industry is undergoing a profound change. The application of the new generation of information technology not only greatly enriches the means of content production, dissemination and consumption in the media industry, but also brings a series of challenges such as content homogenization, copyright infringement and business model innovation. Faced with these challenges, in terms of content production, we should use advanced technology to innovate content to meet the needs of users for high-quality and personalized content. In terms of copyright protection, this paper proposes the use of digital watermarking, block chains, smart contracts and other technical means to strengthen the protection and management of copyright. In terms of business model innovation, diversified strategies such as content payment, value-added services and membership system can be adopted to meet the development needs of the digital economy. This paper summarizes the path of media industry to achieve high-quality development in the era of digital economy, aiming to provide useful reference and guidance for the sustainable development of media industry.

Keywords: Media Industry, Digital Economy, Innovative Development Strategies

1 Introduction

Over the past few years, the swift growth of the digital economy has transformed every facet of our societal economy. The accelerated progression of digital technology has revolutionized and enhanced the dissemination of information in terms of both method and velocity, presenting the cultural and creative sectors with unique windows of opportunity as well as formidable challenges. The swift trajectory of the digital economy has spurred a robust expansion within the cultural and creative industries. The extensive utilization of the Internet, mobile communication technologies, big data analytics, cloud-based solutions, and artificial intelligence, among other innovative technologies, has endowed the media industry with a plethora of tools for content creation, distribution, and consumption. It not only makes information dissemination more rapid and extensive, but also makes the way users

access to information more diversified and personalized. However, this change has also brought about homogenization of content, copyright infringement, lack of business models and other issues, which poses a challenge to the healthy development of the media industry [1]. Concurrently, as technology evolves incessantly, creative media firms are compelled to perpetually engage in technological advancements to sustain their competitive edge. Constituting a vital segment of the cultural and creative sectors, the cultural and creative media industries confront a broadening array of prospects coupled with an increased sense of duty within the digital economy epoch. In the context of the swift technological turnover characterizing contemporary society, the integration of technological innovation with industry growth has emerged as a complex issue confronting the creative media sector. The objective of this study is to delve into the strategies for innovative development within the media industry under the digital economy, with the goal of furnishing theoretical backing and pragmatic direction for the industry's metamorphosis and elevation.

2 Digital Economy and Media Industry

2.1 Digital Economy

Faced with the challenge of sluggish global economic expansion, China, presiding over the Group of Twenty (G20) in 2016, for the first time, incorporated the digital economy into the G20's agenda focused on innovative growth. The G20 Digital Economy Development and Cooperation Initiative delineates the digital economy as an array of economic endeavours that leverage digital knowledge and information as pivotal production elements, rely on modern information networks as a significant conduit, and harness the effective utilization of information and communication technologies as a crucial impetus for enhancing efficiency and optimizing the economic structure. As an important part of the modern economic system, the digital economy is reshaping the global economic pattern at an unprecedented speed and scale. It not only covers traditional e-commerce, online services and other fields, but also extends to intelligent manufacturing, cloud computing, big data, artificial intelligence and other emerging technology fields. The integration and innovation of these technologies have brought far-reaching impact on all walks of life, and promoted the leap of productivity and the transformation of production relations [2]. To foster the robust growth of the digital economy, our government has rolled out an array of policies and initiatives. These include reinforcing the foundation of network infrastructure to enhance both the reach and velocity of the internet, advocating for the advancement and integration of digital technologies, and stimulating corporate investment in technological innovation. Additionally, there is a focus on bolstering the cultivation of digital economy professionals and elevating their digital proficiency. In the recent past, China's digital economy has thrived, emerging as a significant impetus for economic expansion and societal advancement. As depicted in Figure 1, there has been a swift ascent in the scale of China's digital economy, with its share within the GDP consistently climbing between the years 2018 and 2023.

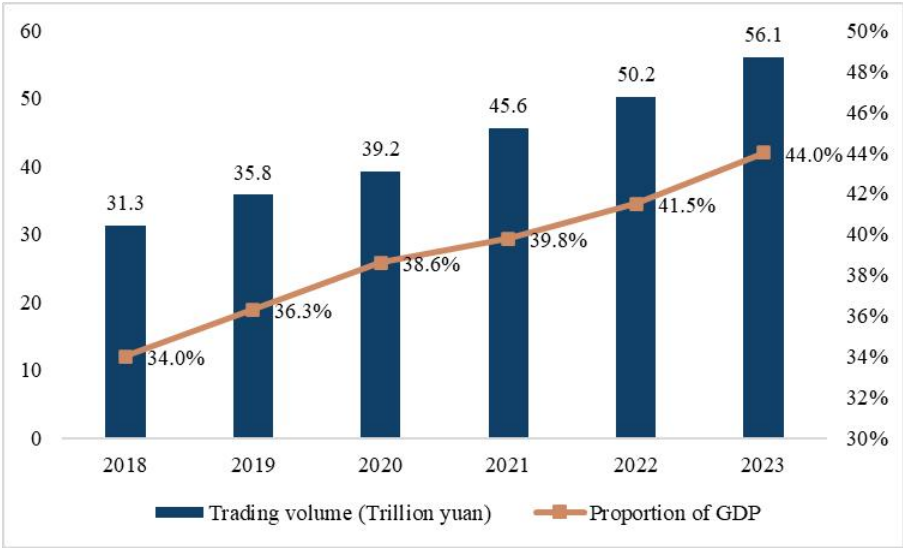


Fig. 1. Scale of China’s digital economy from 2018 to 2023 (figure credit: original)

2.2 Media Industry

The media industry comprises a collective of businesses and organizations that generate and circulate a diverse array of informational content products in formats such as text, visuals, audio, and digital media, as well as offer a variety of services based on market principles. This sector can establish an organizational framework for industry operations, segmented by geographic regions, industry types, or along the supply chain continuum [3]. During the last two decades, propelled by the Internet's swift progression, the media industry's structure and categorization have undergone repeated upheavals and reconstructions, remaining in a state of dynamic evolution. The entirety of the 20th century is often characterized as the age of mass media, with books, periodicals, broadcasts, television, and cinema dominating the primary sources of human information. However, as the 21st century unfolded, the era of mass media waned, giving way to what is now recognized as traditional media, with the Internet emerging as the new media, constituting the dominant force. Data from the research team behind the Media Blue Book: China Media Industry Development Report (2023) indicate that in 2022, the Chinese media industry's total value of output was 290.825 billion yuan, reflecting a 2.11% decrease from the previous year. Studies reveal that by 2023, the global media industry's value had soared to 2.2 trillion US dollars, marking a 6.5% increase year-on-year. The industry's growth has surpassed the global GDP growth rate, signifying its role as a key catalyst in the revival of the world economy. With China's GDP experiencing a 5.2% increase in 2023, it is projected that the media industry's total output value for the same year will be 305.941 billion yuan. Figure 2 illustrates the scale and growth rate of China's media industry from 2018 to 2023.

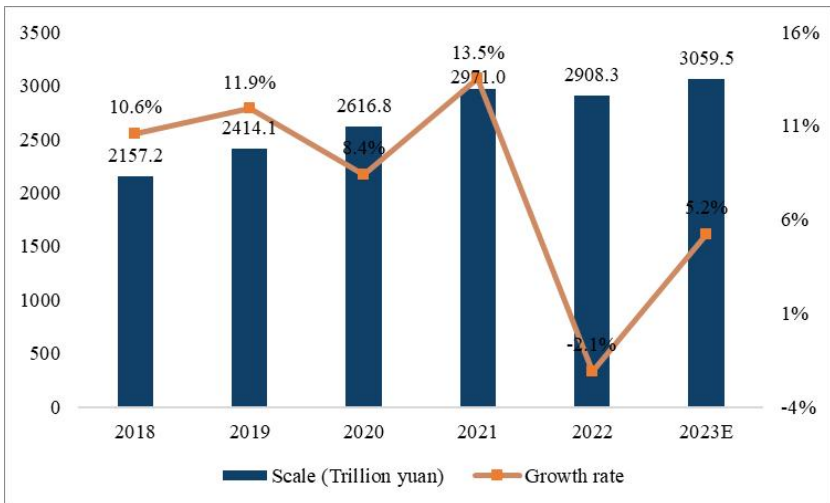


Fig. 2. Scale and growth rate of media industry of China (figure credit: original)

3 Positive Impacts of The Digital Economy on Media Industry

3.1 Expand Market

The rapid development of digital economy has broken the traditional geographical restrictions, making it easier for the media industry to expand to the global market. Through the Internet and digital platform, cultural and creative products can quickly spread to all parts of the world, so that more people can understand and contact works from different cultural backgrounds. Digital platform has opened the door of internationalization for the creative media industry and promoted the international dissemination and exchange of cultural products. Creators and enterprises can use digital technology to translate their works locally and promote them globally to achieve wider audience coverage, thus increasing the influence and competitiveness of the industry. The digital economy has given birth to a variety of new business models, such as paid subscription, advertising support, content crowdsourcing and so on. These models provide diversified revenue sources for the media industry and reduce the dependence on traditional advertising revenue.

3.2 Promote Integration

Digital economy has promoted the integration of different industries, and the media industry can cooperate with technology, education, entertainment and other fields to create new products and services and broaden business areas. The application of digital technology makes the cooperation between all links of the industrial chain closer, the information transmission faster and the cooperation more convenient.

From content creation to dissemination and promotion, to user feedback and product improvement, the development of digital economy provides an efficient and convenient way of cooperation for the creative media industry [4]. For example, digital content distribution and dissemination channels enable cultural products to reach target audiences more quickly, while user feedback and data analysis provide strong support for content creation and product improvement. The coordinated development of the industrial chain has improved the overall efficiency and productivity of the industry, and promoted the rapid development of the creative media industry.

3.3 Enhance Participation

The characteristics of digital platforms make it easier for users to interact with content creators and participate in the process of content discussion and creation. This interaction not only enhances the user's sense of participation, but also provides valuable user feedback and data for the media industry. Users can express their love or opinions about the works by praising, commenting and sharing, and these feedbacks are very important to the creators. At the same time, the user-generated content platform also provides opportunities for ordinary users to create and share, so that more people become participants and promoters of cultural and creative industries. The improvement of user participation not only increases the user's recognition and loyalty to cultural products, but also injects more fresh ideas and ideas into the industry.

4 Main Problems of Contemporary Media Industry

4.1 Problem of Homogenization Content

The era of digital economy has the characteristics of wide sources of information and fast dissemination, which will lead to a large number of information flooding, and then lead to homogenization and problems in the media industry. The media industry belongs to the carrier of information, but the originality and integration of news in the current media industry have not been fully reflected, and the homogenization phenomenon is very obvious, which will bring many adverse effects to the development of the media industry [5]. In order to pursue short-term traffic and attention, many media tend to copy and imitate the proven successful models and content, resulting in a large number of similar information in the market, which is difficult to meet the diverse needs of users. When the media finds that imitating popular content can gain attention quickly, it may reduce the investment and support for original content. This short-sighted behaviour not only limits the development of the media itself, but also hinders the innovation and progress of the whole industry. In addition, the homogenization of content may also lead to aesthetic fatigue of users. Users may feel bored and disappointed when faced with a large amount of similar information, thus reducing their attention and trust in media content. In the long run, this will affect the brand image and market position of the media [6].

4.2 Problem of Infringement Copyright

In the era of digital economy, the media industry is undergoing unprecedented changes, but at the same time, it is also facing severe challenges of copyright infringement. With the rapid development of Internet technology, especially the rise of social media and content sharing platforms, the dissemination of information has become more rapid and widespread. However, this also facilitates copyright infringement, and it is not uncommon for original works to be illegally copied, distributed and used. This kind of infringement not only damages the legitimate rights and interests of creators, but also affects the healthy development of the media industry. The existence of copyright infringement weakens the creative motivation of creators. When the creator's labour achievements cannot be properly protected and rewarded, they may reduce their creative input or even give up their creation. This will not only lead to fewer original works in the market, but also reduce the quality and innovation of the overall content. In addition, copyright infringement may also lead to the loss of profits in the media industry. Illegally copied and disseminated works are often provided to users in a cheap or even freeway, which directly affects the sales and market competitiveness of genuine works.

4.3 Problem of Business Model

Under the background of digital economy, the media industry is experiencing the transformation and challenge of business model. Traditional business models such as advertising revenue, subscription fees and copyright sales are facing the problem of declining revenue and shrinking market under the impact of the digital wave. With the diversification of user's access to information and entertainment, as well as the increasing demand for free, instant and personalized content, the traditional profit model of the media industry has been challenged unprecedentedly. The advertising model is affected by users' increased use of ad blocking techniques and ad content fatigue, resulting in a decrease in advertising revenue [7]. At the same time, user's demand for personalized and customized content makes the traditional way of advertising push no longer effective, and more accurate and intelligent advertising strategies are needed. With the proliferation of digital content, users are less willing to pay for subscription services, and the traditional subscription model is unsustainable. In addition, copyright sales have been hit by the prevalence of digital piracy and illegal dissemination, and copyright protection and revenue distribution have become more complex.

5 Innovation Strategies of Media Industry Development

5.1 Innovate Content Production

With the progress of technology and the diversification of user needs, the traditional content production mode has been difficult to meet the needs of the market. Therefore, the media industry needs to enhance the attractiveness and competitiveness

of content through innovation. Innovative content production means using advanced technological means, such as artificial intelligence, big data analysis, virtual reality, etc., to create richer, more interactive and personalized content. Through artificial intelligence technology, we can realize automatic content generation and improve the efficiency of content production; through big data analysis, we can more accurately grasp user preferences and realize personalized recommendation of content. Through virtual reality technology, it can provide users with immersive experience. Innovative media content often has a sense of scene. The acquisition of the sense of presence depends on the multi-dimensional richness of information. According to the theory of channel effect, the integration of multiple senses helps to arouse the audience's various cognitive experiences and give the audience a sense of immersion in news events [8]. People's Daily micro-blog published "the original voice of the experienced recalls the war of resistance", borrowing the materials of the experienced, enriching the content form of expression from the sense of hearing, promoting the audience to have a stronger sense of substitution, and stimulating the patriotic feelings of "not forgetting the national martyrdom, our generation's self-improvement". With the development of digital technology, the use of multi-sensory fusion to construct real, diverse and immersive news scenes and provide immersive experience for the audience has become an important part of the practice of fusion news reporting. Innovative content production also involves the diversification of content forms. The media industry should constantly explore new forms of content, such as short videos, live broadcasts and interactive dramas, to meet the needs of different user groups. At the same time, we should also pay attention to the depth and quality of content, provide valuable and in-depth reports and analysis, and meet the needs of users for high-quality content.

5.2 Innovate Copyright Production

Copyright protection and rights protection are important guarantees to ensure the healthy development of the creative media industry. In the era of digital economy, the reproduction and dissemination of content has become extremely easy, so copyright protection is particularly important. Cultural and creative enterprises should strengthen copyright awareness and establish and improve copyright protection mechanisms, including applying for copyright, clarifying contract terms, and strengthening information security. It uses digital watermarking, encryption technology and other means to add imperceptible but effective tracking marks to the works. These technologies can help copyright owners prove their ownership and take legal action by providing a basis for tracing and identifying works when they are illegally copied or distributed. Blockchain's untouchability and decentralized nature make it an ideal tool for copyright protection [9]. By recording the creation, publication and transaction information of works on the block chain, a transparent and reliable copyright proof and tracking system can be provided for works. Combined with blockchain technology, smart contracts can automatically enforce the terms of copyright-related agreements. For example, when a work is legally purchased or used, a smart contract can automatically distribute the proceeds to the copyright owner

while ensuring that the user has a legitimate right to use it. Establish an official copyright trading platform to provide users with a legal, safe and convenient copyright trading environment. Through such a platform, creators can more easily license and sell their works, and users can ensure that they get legitimate copyright rights. Copyright laws and regulations should be updated and improved to adapt to the development of digital economy. Law enforcement agencies should step up their efforts to crack down on copyright infringement. This includes strengthening network monitoring, timely detection and investigation of infringement, improving the efficiency of the trial of infringement cases, and shortening the cycle of resolving copyright disputes. As well as increasing penalties to give sufficient deterrence to infringers.

5.3 Innovate Business Models

In order to cope with the lack of business models, the media industry needs to innovate and transform. We can meet the diverse needs of users by developing new business models, such as content payment, value-added services, membership system, etc. We can also use big data and artificial intelligence technology to analyse user behaviour, provide personalized content recommendation and services, and improve user stickiness and willingness to pay. At the same time, the media industry also needs to strengthen cross-border cooperation with other industries such as science and technology, education and entertainment, and explore diversified profit channels and growth points. Advertising is an important source of income for the media industry, but the advertising profit model of the media industry needs to be scientific and reasonable [10]. In the process, we should have a comprehensive understanding of the endorsement products and enterprises, so as to ensure the safety of advertising products and achieve the goal of not misleading consumers. On the basis of creating economic benefits, we also need to give back to the society, create good social benefits for the society, and meet the urgent needs of the construction of social material and spiritual civilization. In addition, we should build a scientific and reasonable payment platform and increase the content of payment. In the context of the continuous improvement and optimization of media industry resources, it has penetrated into the lives of users. Various media platforms in the media industry need to improve free service items to attract users, and then reasonably extend and increase paid items. For some paid network content such as entertainment and news, we should build a good payment method, which can not only protect intellectual property rights, but also bring certain economic benefits to the media industry. The most important thing is to enhance the originality and integration of network content, so as to promote the healthy and stable development of the media industry.

6 Conclusions

Against the backdrop of the digital economy, the media industry is confronted with unique opportunities and challenges. The advancement of the digital economy has

positively influenced the media industry by broadening access to the global market, fostering greater integration across industries, and enhancing the level of user engagement. Nonetheless, the industry grapples with issues like content homogenization, copyright violations, and an absence of diverse business models. To attain high-quality development within the creative media sector, it is imperative to implement a range of strategic measures. By elevating content quality, bolstering copyright safeguards, and diversifying revenue streams through innovative business models, the media industry is poised to not only achieve its own high-quality development but also to contribute significantly to the preservation and advancement of outstanding cultural heritage and the evolution of societal civilization.

References

1. Xia L, Baghaie S, Sajadi S M. The digital economy: Challenges and opportunities in the new era of technology and electronic communications[J]. *Ain Shams Engineering Journal*, 2024, 15(2): 102411.
2. Zhang W, Zhao S, Wan X, et al. Study on the effect of digital economy on high-quality economic development in China[J]. *PloS one*, 2021, 16(9): e0257365.
3. Shahbaz M, Wang J, Dong K, et al. The impact of digital economy on energy transition across the globe: The mediating role of government governance[J]. *Renewable and Sustainable Energy Reviews*, 2022, 166: 112620.
4. Oloyede A A, Faruk N, Noma N, et al. Measuring the impact of the digital economy in developing countries: A systematic review and meta-analysis[J]. *Heliyon*, 2023, 9(7).
5. Miao Z. Digital economy value chain: Concept, model structure, and mechanism[J]. *Applied Economics*, 2021, 53(37): 4342-4357.
6. Li K, Kim D J, Lang K R, et al. How should we understand the digital economy in Asia? Critical assessment and research agenda[J]. *Electronic commerce research and applications*, 2020, 44: 101004.
7. Munger K. All the news that's fit to click: The economics of clickbait media[J]. *Political Communication*, 2020, 37(3): 376-397.
8. Litvinenko V S. Digital economy as a factor in the technological development of the mineral sector[J]. *Natural Resources Research*, 2020, 29(3): 1521-1541.
9. Li J, Chen L, Chen Y, et al. Digital economy, technological innovation, and green economic efficiency—Empirical evidence from 277 cities in China[J]. *Managerial and Decision Economics*, 2022, 43(3): 616-629.
10. Al-Sartawi M. Big data-driven digital economy: artificial and computational intelligence[M]. Cham: Springer, 2021.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

