The development of China's online livestreaming industry and comparative analysis between China and other countries

China's online livestreaming industry

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Abstract

Purpose – The purpose of this study is to discover the uniqueness of China's online livestreaming industry and to make preliminary predictions about its future.

Design/methodology/approach – Providing a panoramic description of China's online livestreaming industry and a comparative analysis with other countries' online livestreaming industries.

Findings – China's online livestreaming industry is world leader in general. In terms of user size and age structure, although China has a high proportion of online livestreaming users, the proportion of anchors is not high, while the age structure of users in both China and other countries shows the characteristics of younger users. In terms of policy, the difference between China and foreign support in online livestreaming is small, but developed countries have stricter regulations.

Originality/value – The research in this paper has great significance in gaining an in-depth understanding of the development status and trends of China's online livestreaming industry and in designing accurate support policies.

Keywords Digital economy, Online livestreaming, Chinese and other countries' contrast **Paper type** Research paper

1. Introduction

China's online livestreaming started in 2005. Although it appeared relatively late, online livestreaming in China developed rapidly and reached wide audience. According to the "50th Statistical Reports on Internet Development in China" released by the China Internet Network Information Center (CNNIC), by the end of 2021, there were 703 million online livestreaming users in China, accounting for 68.2% of Internet users as a whole. In fact, the development of digital technology has provided technical support for the rise of the online livestreaming industry. With the continuous enrichment of online livestreaming content, online livestreaming has become a new popular track. Moreover, the outbreak of COVID-19 at the end of 2019 has made online livestreaming rise to prominence. The "14th Five-Year Plan" for the development of the digital economy points out that during the "13th Five-Year Plan"

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period, digital technology accelerated its integration with various industries. New ways of production and life such as livestreaming have also been accelerated and promoted. As a new industry generated by the digital economy, the development of online livestreaming not only enriches people's entertainment life, but also provides jobs covering all walks of life with the gradual improvement of the live industry chain and promotes the deep integration of the digital economy and the real economy (Zhou *et al.*, 2018). It is worth mentioning that e-commerce online livestreaming is a bridge between the supply side and the demand side, becoming a new engine to pull the economy.

The online livestreaming industry is an industry characterized by a platform economy. A typical online livestreaming platform serves as the core of a multilateral market, connecting consumers (viewers) on one side, businesses on the other sideand anchors on the other side. All three sides are connected to the platform and have cross-network externalities. See Figure 1 for the economic linkages between them.

The development of the online livestreaming industry has attracted the attention of the government at all levels in China. The "Work Plan for Enhancing the Digital Consumption Energy Level in Beijing", introduced in June 2022, clearly states that an e-commerce livestreaming professional talent system should be built. For example, it is necessary to include urgently needed professions in the e-commerce livestreaming field in the relevant human resources catalogue of this city. However, compared with the booming online livestreaming industry, relevant academic studies are still scarce. Scholars have yet to provide a panoramic description of the development history, current situation and trends of online livestreaming in China. This makes subsequent in-depth studies particularly difficult. Thus, this paper seeks to fill this gap and to explore the characteristics of Chinese online livestreaming through comparative analysis between China and other countries. This will lay a factual foundation for subsequent academic research and provide a decision-making reference for the formulation of precise guidance and regulatory policies.

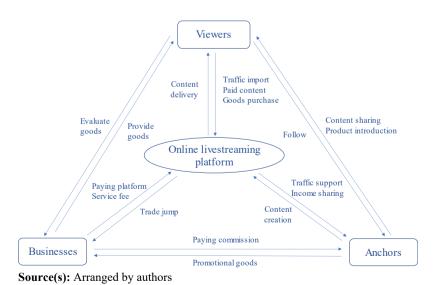


Figure 1. Relationship diagram of online livestreaming platform participants

China's online

2. Definition and classification of online livestreaming

2.1 Definition of online livestreaming

What is online livestreaming? The definition of online livestreaming in academic circles has different understandings. Therefore, there is still no consensus (Table 1). In 2016, the Cyber Administration of China issued "the Regulations on the Administration of Internet Live Streaming Services", which explains online livestreaming as an activity based on the internet network that continuously releases real-time information to the public in the form of video, audio, graphics, etc. From the actual operation of online livestreaming, online livestreaming mainly relies on Internet technology and tools such as smartphones and computers, connecting anchors (supply side) and viewers (demand side) through applications with online livestreaming functions. The anchor provides real-time video and sound content, while the viewer interacts with anchors through comments, bullet subtitles and user contribution behaviors (purchase gifts, props and other rewards to the anchor). Because it is "live" and the audience can participate at any time, online livestreaming is very real-time and interactive.

2.2 Classification of online livestreaming

Source(s): Arranged by authors

Overall, online livestreaming can be divided into three major categories. They are pan entertainment livestreaming, vertical livestreaming and e-commerce livestreaming. Of course, further division can be made internally. Table 2 shows a more detailed classification of online livestreaming and lists the corresponding online livestreaming platforms.

With the popularization of smartphones, the online livestreaming industry has developed rapidly. According to the previous "Statistical Reports on Internet Development in China" issued by the CNNIC, the number of online livestreaming users in China has increased from nearly 400 million to more than 1.4 billion in the past five years. Among them, the user scale of e-commerce livestreaming gradually occupied the leading position in the entire online livestreaming industry after 2020, increasing from 29.3% to 44.6%. Second, the user scale of game livestreaming and sports livestreaming has increased from 28.7 and 23.5% to 29.0 and 29.1%, respectively, accounting for approximately one-third of the online livestreaming industry. Finally, the proportion of online livestreaming users for reality shows and concerts has decreased, from 22.9 and 16.6% to 17.7% and 15.4%, respectively (Figures 2–7).

| Definition | Source |
|--|-----------------------|
| Online livestreaming is a web content service form provided by the anchor without audio or video recording, relying on the internet and live tools such as cell phones or computers on the online livestreaming platform, simultaneous live broadcast, multiparty display and instant interaction with the viewer through bullet subtitles or comments | Tan et al. (2018) |
| By building a virtual platform to realize the interaction between anchors and viewers, anchors can perform, create and freely display on the network platform, while interactive rewards and other activities can also be conducted between anchors and viewers | Su and Feng (2022) |
| Broad sense online livestreaming: it utilizes Internet instant messaging technology to demonstrate its strong interactivity, intuitive viewing, rich content format and freedom from time and location limitations. This is mainly achieved through livestreaming on the Internet and publishing the live content on the Internet | Xu (2022) |
| Narrow sense online livestreaming: it is an interactive video with entertainment nature. The anchor conducts talent livestreaming or electronic sports livestreaming through video livestreaming software and interacts with the audience. The audience can also purchase online virtual props for rewards | |

Table 1. Definition of online livestreaming

| Classification of online livestreaming | | Online livestreaming platforms | |
|--|---|--|--|
| Pan entertainment livestreaming | Reality show livestreaming Concert livestreaming | Six rooms, YY, 9xiu, Inkeverse, Showself, Laifeng etc. QQ music, Kuwo. live.kugou, We Sing etc. | |
| | Game livestreaming | Huya, DouYu, Panda TV, NetEase CC, Longzhu, Zhanqi, Tentacle etc. | |
| Vertical livestreaming | Live + Sports Live + Socialize Live + Finance Live + Education | Tencent Sports, live QQ, zhibo8, 90tiyu, uuqiu etc. NOW, MOMO etc. Straight Flush, Zhiniu8 etc. LYCHEER, Tencent Classroom etc. | |
| | Live + Medical | Tencent News, NetEase News, TouTiao etc. Tencent Medpedia, Good Doctor Online etc. | |
| E-commerce livestreaming | 41 | TikTok, Kuaishou, Temu, Amazon etc. | |
| | Pan entertainment livestreaming Vertical livestreaming E-commerce livestreaming | Pan entertainment livestreaming Reality show livestreaming Concert livestreaming Game livestreaming Vertical livestreaming Live + Sports Live + Socialize Live + Finance Live + Education Live + News Live + Medical | |

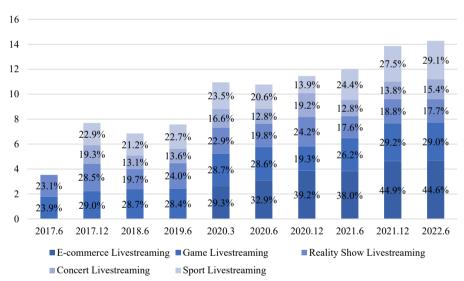


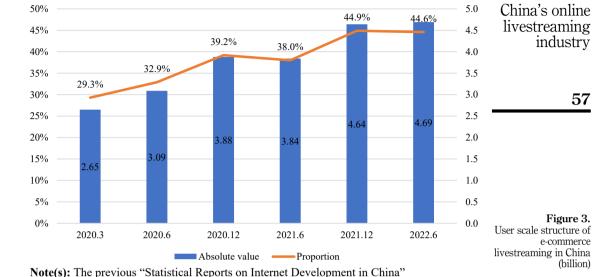
Figure 2. User scale structure of online livestreaming in China (billion)

Note(s): The previous "Statistical Reports on Internet Development in China"

2.3 The development history of the online livestreaming industry in China

2.3.1 The 1.0 era of online livestreaming (2005–2015) [1]. Online livestreaming began in 2005. With the rapid development of Internet technology, Personal Computer (PC)-based reality showing livestreaming, represented by 9,158, Six Rooms and YY, has emerged continuously. After 2012, PC-based game livestreaming platforms emerged, and online livestreaming content was not just about reality shows. Represented by electronic games such as League of Legends and Dota, game livestreaming has been widely welcomed by users. Therefore, with the help of numerous game players, online livestreaming became an overnight sensation.

2.3.2 The 2.0 era of online livestreaming (2016–2018). 2016 is the first year of China's online livestreaming. From then on, online livestreaming ushered in a blowout of



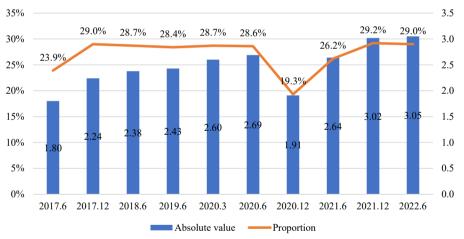


Figure 4.

China (billion)

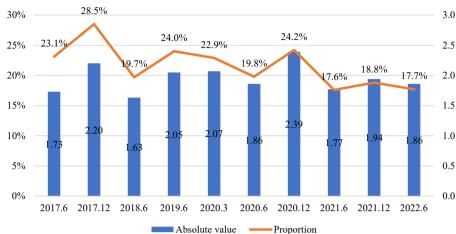
User scale structure of game livestreaming in

Note(s): The previous "Statistical Reports on Internet Development in China"

development. First, in terms of online livestreaming media, mobile devices have successfully integrated with online livestreaming. Therefore, numerous mobile online livestreaming platforms such as Huya and DouYu have emerged. This has broken the situation of relying solely on PC online livestreaming, laying a solid foundation for achieving nationwide online livestreaming. Second, in terms of online livestreaming content, it has shifted from reality show livestreaming and game livestreaming to pan entertainment livestreaming and "Live+". This has made the types of online livestreaming more diverse, resulting in more vertical segmentation areas. Third, in terms of the policy environment, the National Radio and Television Administration of the People's Republic of China formulated the first



Figure 5. User scale structure of real livestreaming in China (billion)



Note(s): The previous "Statistical Reports on Internet Development in China"

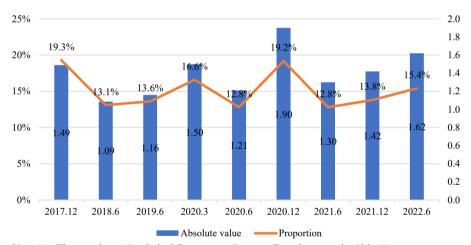
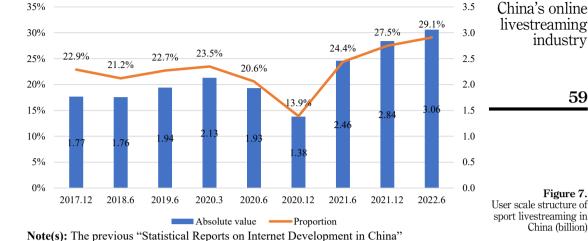


Figure 6. User scale structure of concert livestreaming in China (billion)

Note(s): The previous "Statistical Reports on Internet Development in China"

regulatory policy in the field of online livestreaming in 2016. Subsequently, corresponding regulatory rules were introduced, and the online livestreaming market entered a consolidation stage.

2.3.3 The 3.0 era of online livestreaming (2019-now). Since 2019, the online livestreaming industry has developed rapidly and entered a mature period. Due to the expansion of the online livestreaming industry and the spread of COVID-19, the number of online livestreaming users has increased significantly. In terms of the industry market size pattern, after continuous competition and elimination, a group of leading enterprises with a larger market size emerged in the online livestreaming industry, and the Matthew effect between platforms in the industry emerged. In terms of online livestreaming content, e-commerce livestreaming has developed rapidly since major short video platforms laid out livestream commerce, allowing sellers to



show products by livestreaming in 2018 (Bründl and Hess, 2016). Especially during COVID-19, when offline shopping was impacted, e-commerce livestreaming entered an outbreak period. In the postpandemic era, the explosive growth of e-commerce livestreaming has laid a solid foundation for the prevalence of the "live+" model, promoting the integration of the online livestreaming industry with other industries. In terms of the industrial chain, the expansion of the online livestreaming industry has expanded the midstream and downstream industrial chain, driving an increase in related job opportunities and promoting the improvement of the quality of online livestreaming content.

3. Comparative analysis of the development of the online livestreaming industry in China and other countries

3.1 Development speed comparison

From the perspective of the global online livestreaming industry. South Korea is the first country where online livestreaming became popular, while China's online livestreaming development started slightly later than South Korea's but developed rapidly. Since the emergence of YY livestreaming, China's online livestreaming began to grow wildly. With the introduction of policies and industry regulation to strengthen, the online livestreaming industry began to develop benignly, and the growth rate remained resilient. The driving forces for its rapid development mainly include technological progress, investment and COVID-19. First, technological progress is the direct cause. At the early stage of the development of online livestreaming, that is, between 2005 and 2015, 4G technology had just started, and the PC terminal was the main traffic entrance, which limited the wide use of online livestreaming to a certain extent. In 2013, China entered the era of smartphone popularity, and the percentage of mobile smart terminal shipments exceeded 70% (Wei, 2017). Along with the transition of traffic entrance from the PC terminal to the mobile terminal, online livestreaming developed rapidly. At the same stage, the common application of 4G technology improved the network speed and hardware performance, optimized the user's entertainment experience and broke venue restrictions, and competition in the communication industry also lowered the usage threshold, i.e. the data charge, promoting the emergence of the era of China's national online livestreaming. Now, 5G technology has entered the era of 5G technology for the development of the online

livestreaming industry to provide a more convenient environment. Second, capital entry also promoted the development of the online livestreaming industry. A large amount of capital influx for profit in the current known 116 live platforms has been 108 to obtain financing to promote the expansion of the online livestreaming industry reproduction. Finally, the outbreak of COVID-19 has driven a dramatic increase in demand for online livestreaming. Moreover, online livestreaming is integrated with a variety of industries, thus driving the joint growth of the digital economy and the real economy. According to the "Development Report of China's Online Live Performance (Streaming) Industry (2021–2022)", China's online live performance (streaming) industry market size in 2021 has reached ¥184.442 billion, and the Foresight Industry Research Institute data show that the global 2021 live platform market size is approximately ¥260.282 billion [2]. Although there is a certain difference in the statistical caliber, the perception that the Chinese online livestreaming industry market has a high market share in the global online livestreaming industry market and is a major global market is largely uncontroversial.

At present, other countries also attach great importance to online livestreaming platforms, but their development is not as fast as that of China. In the United States (US), for example, as the entrepreneur who attaches the most importance to online livestreaming platforms [3], Zuckerberg launched a related product, Facebook Live, but its development is much slower than that of the Chinese online livestreaming platform. The reason for this is not unrelated to the different interest orientations of domestic and other countries' viewers. Chinese online livestreaming content is numerous, mostly sports livestreaming and game livestreaming, and e-commerce livestreaming is the rising star; other countries' viewers prefer life livestreaming and are keen to share life through online livestreaming. In addition, another major difference between Chinese and other countries' online livestreaming platforms is the virtual gift-giving function, where Chinese online livestreaming platforms attach importance to the user contribution model and the virtual gifts of rewards can be converted into cash, which has potential monetary value (Long and Tefertiller, 2020). For Chinese anchors, in addition to e-commerce and advertising realizations, most of the revenue comes directly from the virtual gift drawn from fans shared with the platform (Wohn and Freeman, 2019; Yu et al., 2018). Compared to content, Chinese viewers watching online livestreaming pay more attention to the feedback of the anchor, and positive feedback from the anchor after user contribution rewarding satisfies the need for respect and psychological satisfaction of the viewer. Twoway positive feedback from the anchor and the viewer forms the popular style of user contribution (Zhang et al., 2022). American online livestreaming anchors are more likely to profit from advertising, endorsements and subscription fees (paid content). Taking switching as an example, when the number of subscribers reaches a certain level, the share increases and more ads can be received, so for American anchors, the number of subscribers is fundamental, and there is a stronger incentive to ensure the quality of content to guarantee the number of subscribers. Although other countries' online livestreaming platforms have since discovered the commercial potential of virtual gifts as user contributions (Guan et al., 2021), they are not as widely used as they are in China. The possibility of user contribution being the main source of income for American anchors is also affected to some extent by the tax system, which is strict, complex and regulated, limiting anchor income to some extent. Moreover, other countries' platforms pay more attention to "political correctness", as Chinese reality shows that livestreaming mostly uses filters to beautify the image of anchors to attract user contributions, while other countries are prone to public opposition and criticism if the use of this feature involves discrimination in appearance and skin color.

In summary, the Chinese market and cultural characteristics make it easier to generate the influencer effect and fan economy, which drive the development of the online livestreaming industry (Meng *et al.*, 2021). Therefore, the development of other countries' online livestreaming is slower than that of China.

China's online

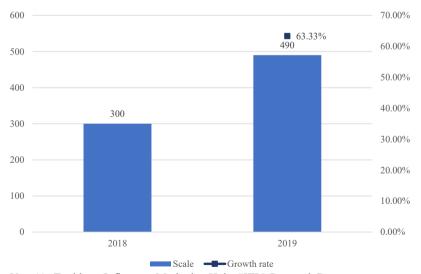
livestreaming

industry

3.2.1 Market scale comparison. In this part, we choose the US, which has the largest digital economy, for comparison. Due to the lack of relevant data and differences in statistical caliber, this paper does not make a direct comparison of the market size of the online livestreaming industry in China and the US. Based on the main revenue components of the online livestreaming industry, this paper compares the three major components of advertising, e-commerce and user contribution. Internet influencer advertising marketing means that upstream brands promote their products through key opinion leaders (KOLs), who are usually more active on the platform and have numerous fans. The size of the Internet influencer advertising marketing market can be used as the main representative of the advertising industry. Statistics show that the size of China's Internet influencer marketing market was ¥30 billion and ¥49 billion in 2018 and 2019, respectively, compared with \$2.3 billion and \$3.3 billion in the US, respectively (Figures 8 and 9). The volume and growth rate of the U.S. Internet influencer advertising marketing market size are slightly inferior to those of China.

From the perspective of e-commerce livestreaming, e-commerce livestreaming in China has entered a mature stage, but e-commerce livestreaming in Europe and the US is still in its infancy. According to Coresight and iiMediaResearch, through the size of the e-commerce livestreaming industry related to the main companies, China's e-commerce livestreaming market size in 2019 was more than ¥400 billion, with a growth rate of more than 100%. However, the U.S. e-commerce livestreaming market size in 2019 was less than \$1 billion. In 2020, the U.S. e-commerce livestreaming scale of \$6 billion, a growth rate of 500%, the volume is relatively small relative to the ¥961 billion Chinese market size [4]. China's and the US' e-commerce livestreaming market gap is mainly affected by the degree of development of the e-commerce industry, according to the U.S. and China Ministry of Commerce data, United States e-commerce accounted for approximately 10% of all retail sales ratios, while China reached 37% (Figures 10 and 11).

In terms of user contribution, according to the previous content, the user contribution function is not widely applied in the US online livestreaming platform. What's more, the



Note(s): Topklout, Influencer Marketing Hub, CITIC Research Department

Figure 8.
Chinese Internet

influencer advertising marketing market (one

hundred million RMB)

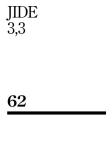
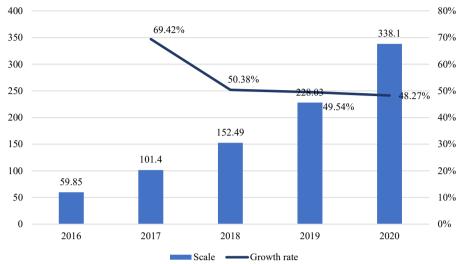


Figure 9. The United States Internet influencer advertising marketing market (one hundred million RMB)



Note(s): Topklout, Influencer Marketing Hub, CITIC Research Department

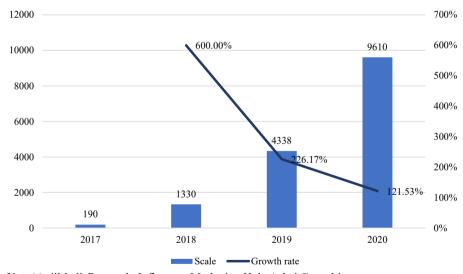
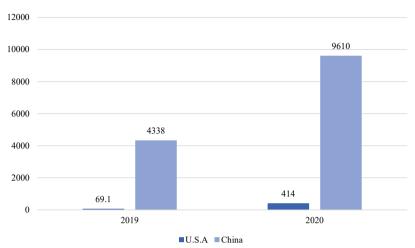


Figure 10. China's e-commerce livestreaming market scale and growth rate, 2017–2020 (one hundred million RMB)

Note(s): iiMediaResearch, Influencer Marketing Hub, Askci Consulting

number of people using the Chinese outbound online livestreaming platform is less than that using the local online livestreaming platform. So the Chinese online livestreaming user contribution scale is larger.

In summary, according to the analysis of the three main online livestreaming components, China's online livestreaming industry has a large and more mature market scale volume. With the innovation of Chinese digital enterprises, new technologies and industrial policies, China's online livestreaming platform and industry will have better development prospects.



China's online livestreaming industry

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Figure 11.
Comparison of the scale of the e-commerce livestreaming market between China and the United States (one hundred million RMB)

Note(s): iiMediaResearch, Influencer Marketing Hub, Askci Consulting

3.2.2 User size comparison. In terms of the scale of online livestreaming users, as of December 2021, China had 703 million online livestreaming users, and the penetration rate of Internet users was 68.2%. In addition, except for 2018, which showed negative growth, the scale of China's online livestreaming users has been positive since 2017, with the online livestreaming user community expanding and the penetration rate of Internet users deepening. According to statista's access survey, while the proportion of the US adult Internet users who watched online livestreaming on social media in September 2016 was only 22% (Figure 12).

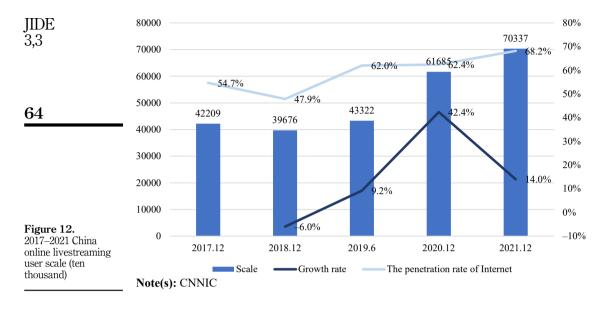
In terms of anchor scale, the cumulative number of anchor accounts in the online livestreaming industry in China was approximately 140 million by December 2021, up 7.7% from 130 million in 2020. According to the statistics data, the Middle East and Africa had the highest percentage of online livestreaming anchors in the world in 2020, followed by the Asia Pacific, Latin America, North America and Europe, while 10% of Internet users in China engaged in online livestreaming. It can be inferred that the proportion of online livestreaming anchors in China is not high compared to other countries (Figure 13).

China and the U.S. have similar characteristics in user age structure: younger users. According to iiMedia Research, 49% of Chinese online livestreaming users are 24 years old or younger, and nearly 80% of users are 30 years old or younger. This phenomenon also appears in the US, as the early online livestreaming platform in the US, the You Now platform, has more than 70% of users younger than 24 years old (Figure 14).

3.3 Policy comparison

3.3.1 Supportive policies. In recent years, the online livestreaming industry has been advancing rapidly, and the industry chain ecology has become increasingly perfect in China, which is closely related to policy guidance and support (Table 3).

Chinese government departments at all levels have vigorously developed the digital economy and launched favorable policies for online livestreaming to assist in the development of the online livestreaming industry. In 2020, "Internet marketer" was included in the "National Occupational Classification Dictionary", and "online livestreaming salesperson" became a new job. According to statistics from the Ministry of Human Resources and Social Security of the People's Republic of China, the number of Internet



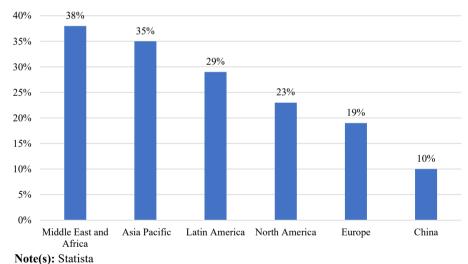


Figure 13. Global proportion of Internet users online livestreaming on social media platforms in 2020

marketing professionals is rapidly increasing at a monthly rate of 8.8%, injecting vitality into the online livestreaming industry. In addition, as a digital business model, e-commerce livestreaming has become an important way to empower rural revitalization and postpandemic economic recovery (Pan et al., 2022). Numerous "mayors" and "county heads" have emerged in many places to participate in livestream commerce, greatly promoting the development of e-commerce livestreaming.

In other countries, governments have also introduced different supportive policies for the online livestreaming industry. The US government revised the tax bill in 2017 to allow online



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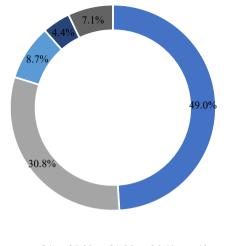


Figure 14.
Distribution of online livestreaming user age attributes in China in the first quarter of 2021

• <=24 • 25-30 • 31-35 • 36-40 • >40

Note(s): iiMedia Research

livestreaming companies to receive tax and fee reduction benefits. In addition, the US government established a specialized agency called the Office of Online Broadcasting to promote the development of the online livestreaming industry. The Japanese government has formulated a copyright protection bill for the online livestreaming industry to safeguard the legitimate rights and interests of copyright owners. At the same time, the Japanese government also encourages enterprises to innovate and invest in the development of the online live streaming industry. The South Korean government released the "Digital New Deal Promotion Plan" in 2020, proposing a series of policy measures targeting the online livestreaming industry, including strengthening copyright protection and providing financial support.

3.3.2 Regulatory policies. With the rapid development of online livestreaming, industry chaos has also emerged. For example, there is a lack of an access system in the online livestreaming industry, tax evasion occurs frequently, false publicity of livestreaming commerce is suspected to be illegal, and the rights and interests of consumers are infringed upon. In terms of regulatory practice, countries around the world have attached great importance to the social problems caused by online livestreaming and have introduced a series of measures.

However, based on the actual regulatory situation in China, as of now, there are only departmental rules and normative documents (Table 4) related to online livestreaming, which have relatively low legal effect and have not yet been clearly defined as the regulatory subject and blame. In addition, many government departments in China have regulatory responsibilities for online livestreaming, and there is a phenomenon of cross supervision and multiple supervision. This not only weakens the effectiveness of regulation but also increases the cost of regulation, leading to government regulatory failure to some extent.

The regulatory model of online livestreaming in the US can be summarized as governmental supervision, market regulation and industry self-discipline. As one of the most developed countries in the world in terms of Internet technology, the US has enacted multiple laws to regulate the online livestreaming industry, mainly focusing on copyright protection, privacy protection, minors protection, consumer protection, tax regulation and other aspects

| 3,3 | Issuance time | Issuance department | Effectiveness level | Policy name | Main content |
|--|------------------|--|--------------------------|--|---|
| oc. | April 2017 | Ministry of Culture | departmental rule [5] | "Guiding Opinions on Promoting the Innovative Development of Digital Culture Industry" | Promote the healthy and orderly development of new models such as electronic sports and livestreaming |
| 66 | September 2018 | National Development and Reform Commission, Ministry of Education and seventeen other departments | departmental rule | "Guiding Opinions on Developing a Stable Digital Economy and Expanding Employment" | Vigorously develop "Internet+" teaching and skills training, actively use digital teaching and training means such as mobile technology, the internet, virtual reality and augmented reality, human- computer interaction, and promote new teaching and training models such as micro courses, online and offline hybrid teaching, and online livestreaming |
| | March 2020 | General Office of the Ministry of Industry and Information Technology | departmental rule | "Special Action Plan for Digital Empowerment of Small and Medium Enterprises" | Through online livestreaming, video exhibition and online docking, digital products and services can be displayed, interacted and traded, guiding enterprises to scientifically develop deployment models and reasonably allocate resource services |
| | May 2020 | General Office of the Ministry of Human Resources and Social Security, Comprehensive Department of the Poverty Alleviation Office of the State Council | departmental rule | "Action Plan for Promoting Employment and Poverty Alleviation through Digital Platform Economy" | The business sinking is carried out by Alibaba's "Ele.me" platform under local living, helping impoverished counties to upgrade digitalization, stabilizing catering employment by supporting businesses to resume work and production, and expanding agricultural product sales channels through livestreaming and other means |
| Table 3. Relevant supportive policies for China's online livestreaming | July 2020 | General Office of the Ministry of Culture and Tourism | departmental rule | "Notice on Coordinating the Normalization of Rural Tourism, Epidemic Prevention and Control, and Accelerating Market Recovery" | Pay attention to cultivating a group of local and local online livestreaming and sales experts, expand the live sales of rural local products, and strengthen cooperation with e-commerce platforms |

| Issuance time | Issuance department | Effectiveness level | Policy name | Main content | China's online livestreaming |
|------------------|--|-------------------------------|---|--|------------------------------|
| September 2020 | General Office of the State Council | administrative regulation [6] | "Opinions on Accelerating the Development of New Consumption with New Business Forms and Models" | Guide physical enterprises to develop more digital products and services, and encourage physical businesses to start new models such as "cloud shopping" through e-commerce livestreaming | industry 67 |
| March 2021 | National Development and Reform Commission and seventeen other 27 departments | departmental rule | "Implementation Plan for Accelerating the Cultivation of New Types of Consumption" | and social marketing Develop the livestreaming economy, encourage cooperation between government and enterprises to build livestreaming bases, and strengthen the cultivation of live streaming talents | |
| May 2021 | General Office of the Ministry of Finance, General Office of the State Council, The National Rural Revitalization Administration | departmental rule | "Notice on Carrying out the Comprehensive Demonstration Work of E-commerce in Rural Areas in 2021" | It requires relying on the county-level e-commerce public service system, improving courses such as product packaging, photography and art, livestreaming and sales, and online store operation, strengthening practical skills training for eligible returning migrant workers, college students, veterans and cooperative members, and leveraging the exemplary and leading role of e-commerce in achieving wealth | |
| September 2021 | Ministry of Commerce | departmental rule | "Notice on Further Improving the Key Work of Promoting Consumption in the Current Business Field" | Promote the standardized, healthy and sustainable development of new formats and models such as e-commerce livestreaming and social e-commerce, guide enterprises to use big data and other technologies, carry out personalized customization and flexible production, and cultivate more "small and beautiful" online brands | |
| | | | | (continued) | Table 3. |

| JIDE 3,3 | Issuance time | Issuance department | Effectiveness level | Policy name | Main content |
|-------------|------------------|---|------------------------------|---|--|
| 68 | October 2021 | Ministry of Commerce, Cyberspace Administration of China, National Development and Reform Commission | departmental rule | "The 14th Five-Year Plan(2021–2025) for the Development of E-commerce" | It is proposed that in terms of strengthening e-commerce governance system and governance capability, it is necessary to focus on the development of new business standards such as e-commerce livestreaming, social e-commerce, rural e-commerce and overseas warehouses, strengthen the coordination of e-commerce regulatory governance, explore the establishment of a new regulatory model of "Internet + credit", and guide the e-commerce livestreaming platform to establish a credit evaluation mechanism |
| | December 2021 | State Council | administrative regulation | "The 14th Five-Year Plan(2021–2025) for the Development of Digital Economy" | Emphasis is placed on the accelerated integration of digital technology with various industries, the flourishing development of e-commerce, the widespread popularity of mobile payments, the accelerated promotion of new ways of production and life such as online learning, remote conferences, online shopping and video livestreaming, and the growing strength of Internet platforms |
| | April 2022 | General Office of the State Council | administrative regulation | "The 14th Five-Year Plan(2021–2025) for the National Health Plan" | Support the development of "Internet + childcare services", create a batch of key common technology network platforms and live classrooms, support high-quality institutions and industry associations to develop public welfare courses, and enhance the scientific childcare ability of families |
| | April 2022 | General Office of the State Council | administrative regulation | "Opinions on Further Releasing Consumption Potential and Promoting Sustainable Recovery of Consumption" | Innovate consumption formats and models, and guide the standardized development of online livestreaming in an orderly manner |
| Table 3. | | | | | (continued) |

| Issuance time | Issuance department | Effectiveness level | Policy name | Main content | China's online livestreaming |
|------------------|--|----------------------|---|--|------------------------------|
| April 2022 | General Office of the Ministry of Industry and Information Technology | departmental rule | "Notice on Organizing the Application Work for the 2022 New Information Consumption Demonstration Project" | Encourage the development of new e-commerce platforms such as social e-commerce, e-commerce livestreaming and short video e-commerce for agriculture and rural areas, promote the extension of digital and industrial resources to rural areas, expand the effectiveness of e-commerce poverty alleviation and fully utilize information technology to help solve the "three rural" problems. Encourage the use of self-media, short videos, online livestreaming and other means to accelerate the diversified and high-quality development of digital creative content and services such as digital audio and video, knowledge sharing, and online entertainment | industry 69 |
| August 2022 | Ministry of Science and Technology, Publicity Department of the Communist Party of China, China Association for Science and Technology | departmental rule | "The 14th Five-Year Plan(2021–2025) for the National Science and Technology Popularization and Development Plan" | entertainment Encourage and support the popularization of science through new media network platforms through short videos, livestreaming and other means, and cultivate a group of online science popularization brands with strong social influence | T-11- 2 |
| Note(s): Ar | ranged by authors | | | | Table 3. |

of online livestreaming content. Examples include the "Communications Decency Act", "Children's Online Privacy Protection Act", and "Children's Internet Protection Act". In addition, the Federal Trade Commission (FTC) of the US conducts sampling tests on commodities in livestreaming to protect conzsumers' legitimate rights. In terms of tax regulation, the Internal Revenue Service grasps the remuneration of online anchors through platform big data and shares data with various federal tax departments to improve tax efficiency. For example, the Internal Revenue Service classifies the remuneration paid by YouTube to content creators as royalties and has the authority to impose a 24% withholding tax rate. In addition to being punished for illegal acts in accordance with the law, other behaviors mainly rely on market regulation and industry self-discipline, and the law is only an auxiliary means. For example, related companies in the US have developed parental control software that can filter harmful content in mobile online livestreaming.

| JIDE 3,3 | Issuance time | Issuance department | Effectiveness level | Policy name | Main content | |
|---|------------------|--------------------------------------|---------------------------|--|---|--|
| 70 | November 2016 | State Internet Information Office | normative document [7] | "Regulations on the Management of Internet Livestreaming Services" | It is prohibited for online livestreaming service providers and users to use online livestreaming services to engage in activities that endanger national security, disrupt social stability, disrupt social order, infringe on the legitimate rights and interests of others, and disseminate obscene pornography | |
| | June 2020 | China Advertising Association | departmental rule | "Code of Conduct for Online Live Marketing" | The operators of online livestreaming marketing platforms related to e-commerce platforms should strengthen the qualification standards for merchants who enter this platform, and urge merchants to disclose their business licenses and administrative licensing information related to their business operations The operators of online livestreaming marketing platforms related to content platforms should strengthen the regulation of the trading behavior of merchants and anchors who enter this platform, and prevent anchors from using methods such as link jumping to induce users to engage in offline transactions The operators of online livestreaming marketing platforms related to social media platforms should regulate internal trading order and prohibit broadcasters from inducing users to bypass legal trading procedures | |
| Table 4. Relevant regulatory policies for China's online livestreaming industry (partial) | | | | | and engage in offline transactions on social groups (continued) | |

| Issuance time | Issuance department | Effectiveness level | Policy name | Main content | China's online livestreaming |
|------------------|---|----------------------|---|--|------------------------------|
| March 2021 | China Advertising Association | departmental rule | "Selection specifications for online livestreaming marketing products" | It involves merchants, product qualifications, quality inspection and control, livestreaming descriptions of products, consumer rights remedies for quality issues after livestreaming, and basic requirements and guidance for broadcasters and institutions in product selection | industry 71 |
| April 2021 | State Internet Information Office and six other departments | departmental rule | "Measures for marketing management of Webcast (Trial)" | It requires standardizing the order of the online market, safeguarding the legitimate rights and interests of the people, promoting the healthy and orderly development of new business formats and creating a clear and | |
| March 2022 | State Internet Information Office, State Taxation Administration, State Administration of Market Regulation | departmental rule | "Opinions on Further Regulating the Profit Making Behavior of Online Livestreaming and Promoting the Healthy Development of the Industry" | and creating a clear and clear online space Better implementation of management responsibilities for online livestreaming platforms: strengthening the | |
| Source(s). | Arranged by authors | | | | Table 4. |

4. Prospect and policy recommendations

4.1 Prospect

Through comparison between China and other countries, this paper finds that China's online livestreaming industry is generally in a leading position in the world. The main reason for this is the significant differences in viewing interests between Chinese and other countries' audiences, the widespread use of online livestreaming platform reward functions (user contribution) in China, and the fast development of e-commerce livestreaming. In terms of user size and age structure, although China has a higher number of online livestreaming users and Internet user penetration compared to other countries, the proportion of anchors is not high and the age structure of users both domestically and in other countries shows a feature of younger users. In terms of policy support, there is not much difference between China and other countries, but in terms of policy regulation, other developed countries have stricter regulations and higher law-based.

Now, the development of online livestreaming has become more mature. With the expansion of market demand and the policy tone of the Chinese government encouraging standardized development, there will be more stable development in the future. First, from the point of view of the audience, the coming into view of "live+" will integrate the emerging livestreaming industry with other traditional industries, providing new revenue channels for other industries. While enriching livestreaming content, it also further expands its audience, attracting other audience groups besides pan entertainment, sports and e-commerce livestreaming, opening up a window for users to understand various fields. Second, the continuous innovation of new technologies will further promote the development of the livestreaming industry. The widespread use of 5G technology and Virtual Reality/ Augmented Reality (VR/AR) technology can enhance user engagement, provide viewers with more realistic livestreaming scenes, and facilitate interaction between anchors and other users. Third, the professionalization of livestreaming content will also help drive industry development. With the maturity of the livestreaming industry chain, specialized multichannel network (MCN) institutions provide empowering support for content production, distribution, commercial monetization and other aspects of anchors, enabling them to focus on the creation and output of livestreaming content and improving the professionalism and innovation of new things of content. However, it should be noted that although the size of the livestreaming industry and the number of users will continue to grow on the basis of the above, the growth rate may decline because the industry is in a mature stage of development, and the era of COVID-19 has become past tense.

4.2 Policy recommendations

Based on the above comparative analysis between China and other countries, this paper proposes the following policy recommendations. First, the legal system construction of online livestreaming should be improved. The government should increase the illegal costs of tax evasion, false advertising and other negative behaviors to guide the healthy development of online livestreaming. Second, the collaborative cooperation of multiple regulatory entities should be guided. The government needs to clarify the regulatory body and responsibilities to improve regulatory efficiency and reduce regulatory costs. Furthermore, the government should guide the regulatory form of online livestreaming to shift from heteronomy to self-discipline and encourage industry associations and livestreaming platforms to actively assume the regulatory responsibilities assigned by government departments to promote the self-discipline development of the industry. Third, the behavioral norms of livestreaming subjects should be strengthened. The government should establish corresponding industry standards around livestreaming platforms, broadcasters and producers. For example, the government needs to do a good job in the real name authentication, credit evaluation,

qualification review and other work of anchors, conduct irregular spot checks and consumer satisfaction surveys, and implement corresponding exit mechanisms to purify the ecological environment of online livestreaming.

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Notes

- Time division refers to the "Development Report of China's Online Live Performance (Streaming) Industry (2021–2022)".
- "Report of Commercial Model Innovation and Investment Opportunities Analysis on China Webcast Industry(2023–2028)".
- Domestic and foreign live industry status comparison (https://www.hizcn.com/thread-1-3342.html).
- "Report of Commerical Model Innovation and Investment Opportunities Analysis on China Webcast Industry(2023–2028)".
- 5. Departmental rules are formulated by various departments and committees of the State Council, the People's Bank of China, the Audit Office and directly affiliated institutions with administrative management functions. This is formulated within the authority of this department in accordance with laws, administrative regulations, decisions and orders of the State Council.
- 6. Administrative regulations are formulated by the State Council in accordance with the Constitution and laws, and have the force of law. Administrative regulations' effectiveness is second only to the Constitution and laws, and higher than departmental rules and normative documents.
- Except for laws, regulations and rules, normative documents are generally binding documents formulated by state organs within their scope of authority in accordance with the law.

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