From Traffic “Enclosure” to Cash Realization: Market Patterns and Investment Insights of China’s Digital Content Industry in 2020–2021

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Abstract
This paper selects the core content of recently released Market Patterns and Investment Insights of China’s Digital Content Industry in 2020–2021, and this series of reports has been published in four consecutive volumes (2015, 2017–2018, 2019–2020, 2021–2022). Based on the latest developments of the digital content industry in China, this paper probes into the market development, competitive landscape, investment and financing volume, investment hotspots, policies and public opinion environment of 10 sub-sectors, including online games, animation, online videos, short videos, live streaming, online music, digital reading, news & information apps, online education, and knowledge payment, provides an insight into the status quo of China’s digital content industry in 2020–2021 and ten major development trends of the industry. Furthermore, the investment value of 10 sub-sectors is assessed from two dimensions—internal factors and external factors, with a total of 7 primary indicators and 11 secondary indicators, and the results are compared with those of the previous two editions to observe market changes. Research conclusions are as follows: (1) From the perspective of development trends: the scale expansion of China’s digital content industry has slowed down; short videos continue to increase; user value operation becomes a new test under routine pandemic prevention and control; the competitive landscape among sub-sectors tends to be stable; leading enterprises expand their business territory via investment, merger and acquisition (M&A) for the integration of upstream and downstream industrial chain. (2) From the results of investment value assessment and investment trends: live streaming and online games lead the way of investment forward in the digital content industry, thanks to their mature cash realization model and huge market space, with the investment value ranking rising to the top two; in the video field, vertical content creation of short video, online video-related intelligent technology and digital marketing are worthy of attention; and in the digital reading field, focus can be placed on original content creation and novel/comic reading platforms.
Keywords  Digital content industry · Investment value · Development trend · Competitive landscape

With the global digital economic boom in recent years, data resources and digital content are becoming crucial factor resources that drive the global economic restructuring and the competitive landscape changes. The development of new technologies and new infrastructure, such as 5G, big data, artificial intelligence (AI), cloud computing, Internet of Things and blockchain, strongly underlies the advent of a new round of scientific and technological revolution and industrial revolution represented by the digital economy. China’s digital content industry has ushered in opportunities of growth, following the rapid deployment of digital infrastructure. As of June 2021, the number of Internet users in China had been over one billion and Internet penetration rate reached 71.6%. The huge number of Internet users has become a powerful endogenous engine for the high-quality development of China’s digital economy. China has made rapid progress in the commercial applications of 5G. More than 650,000 5G base stations were newly built in China in 2021, while a total of 1.425 million 5G base stations were opened up and 5G network covered cities above prefecture level and key county-level cities, according to the Statistical Bulletin on Communications 2021 released by the Ministry of Industry and Information (MII).

The digital content industry, a new type of knowledge-integrated industry that combines new technologies and new concepts and relies on technological innovation, is in continuous development and changes. Based on the concept understanding and the traditional classification for the industry, this paper probes into the market development, competitive landscape, investment and financing volume, investment hotspots, policies and public opinion environment of 10 sub-sectors, including online games, animation, online videos, short videos, live streaming, online music, digital reading, news & information Apps, online education, and knowledge payment, provides an insight into the status quo of China’s digital content industry in 2020–2021 and ten major development trends of the industry in the next few years.

Ten Market Development Trends of Digital Content Industry in China

The Market Expansion Slows Down and Short Videos Continue to Lead the Digital Content Industry of China

China’s digital content industry continued to expand its market size in 2020. Among the 10 sub-sectors concerned in this research, six had a market size over RMB100 billion, i.e., online games, online education, animation, short videos, online videos and live streaming. Compared with 2018, short videos and live streaming were

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1 CNNIC. The 48th Statistical Report on China’s Internet Development. [EB/OL]. Cyberspace Administration of China. http://www.cac.gov.cn/2019zt/cnnic43/index.htm
newly added with skyrocketing growth. That being said, the overall growth rate slowed down, as the growth rate of market size of most sub-sectors in 2019–2020 was below that in 2017–2018, as shown in Fig. 1, indicating that the scale of China’s digital content industry had entered a steadily growing period.

In particular, short videos registered the fastest growth and continued to take the lead. The growth rate still remained high at 60% even though it had dropped a lot compared with the previous years, and its market size exceeded RMB200 billion in 2020. The knowledge payment sector also rose rapidly as an emerging business model in the era of knowledge economy, but its total market volume was small. Notably, the market sizes of online games and online education grew at a higher rate on a yearly basis in 2020 than in 2018, being two few sectors with accelerated growth, mainly for the prolonged time of online games as a result of people’s long-period quarantine at home and for a short-term explosive growth of online education market stimulated by the policy of “school suspension to online classes”. With the post-pandemic recovery of social life, this high-growth model would return to normal, and the two sub-sectors would go back to their respective value ranges.

**The Dividend of “Stay-at-Home Economy” Fades and User Value Operation is a New Test Under Routine Pandemic Prevention and Control**

Stimulated by the COVID-19 outbreak at the end of 2019 and the beginning of 2020, the “stay-at-home economy” erupted, and the number of users in China’s digital content industry surged. With online education as an example, according to CNNIC, in March 2020, the number of online education users in China rose by 110.45% compared with 2018 and that of live streaming by over 40% on a yearly basis. However, as China continued its routine pandemic prevention and control measures, social life gradually recovered. By the end of 2020, the number of users in several sub-sectors had experienced sluggish growth or even a fallback (see Fig. 2), e.g., a decline of
nearly 20% year on year in the online education sector and the negative growth of online videos and online games.

The online dividend brought by the pandemic faded rapidly, and the next step for Chinese digital content enterprises would be how to retain users and realize the conversion of user value. The implications of user value operations are as follows: first, it is to raise the conversion rate of users paying for content or placing orders to directly grow the revenue; second, it is to enhance users’ stickiness, making them spend more hours online to increase the exposure and click-through of commercial advertisements. Currently, the value orientation of China’s digital content industry has shifted from traffic “enclosure” to commercial realization. In the previous two reports (2017–2018 and 2019–2020), short videos and online videos were highly appraised based on their large user base and rapid growth momentum; in 2020 and beyond, live streaming and online games, with mature cash realization and high conversion of user value, received the most attention, marking that the Chinese digital content industry market has entered the adjustment period, from simply pursuing user expansion to maximizing user value, achieving a leap in the industrial development stages.

**Payment Conversion Rate Rises Generally and Content Becomes a Growth Driver and Competition Point**

User payment is one of the important sources of revenue in the digital content industry. The payment conversion rate is a measure of the ratio of paying users to the total, which reveals the degree to which content products or services are recognized by users.

In general, the payment conversion rate in sub-sectors of the digital content industry in China was low in 2020, but it showed a good momentum for growth. Basically, all sub-sectors raised to varying degrees (see Fig. 3). As the number of users in the digital content industry of China reaches a bottleneck period, the focus...
of market competition will be on stimulating the activity and conversion rate of existing users with high-quality content resources. The users’ payment habit is being formed, as is observed from the ever-rising conversion rate of payment, and provides strong support for content payment and creative power for original content. Content products are the core of the digital content industry and creativity the core of content products. Users’ respect for original works and raising payment willingness stimulate creators to make richer high-quality works, the content of which spread out to a wider audience and attract a larger paying population, and then a virtuous cycle is formed. Taking Himalaya FM as an example, figures showed that the payment penetration rate of post-60 s and post-00 s users has gradually strengthened, as content categories and audio scenarios were enriched, with the number of post-60 s and post-00 s users increasing by 154% and 94% respectively in 2020. Potentials for expanding user payment are still large in the future, following the progress in content stratification and the improvement of the copyright protection environment.

The Top Players of Sub-sectors Tend to be Stable and Livestreaming Marketing Broadens the Competition Track

Generally, the market concentration of China’s digital content industry is high, the competitive landscape tends to be stable, and the market share of leading enterprises remains nearly the same. As shown in Fig. 4, among the ten sub-sectors, five, including online music, short videos, online games, news & information apps and online videos, exceeded 75% as to the market concentration. It is a highly oligopolistic

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2 Wenhui Daily. 2020 Audio Pan-knowledge Payment Market Insight Released and User Payment Habits Formed. [EB/OL]. https://www.sohu.com/a/444462893_120244154, 2021-1-14, Oct. 22, 2021.

3 The market concentration in this research is obtained by selecting the top four leading enterprises with large revenue in a certain sector in the current year, and calculating the proportion of the sum of the business revenues of these four leading enterprises in that sector in the current year to the overall market size in that year.
market when the market concentration is over 75%, and is not good for new entrants, according to Bain Capital’s classification of industry monopolies and competition types.

Regarding the market concentration, the competitive landscape of most subsectors in China’s digital content industry tends to be stable. Live streaming and knowledge payment fluctuated the most. Online education and animation fluctuated greatly but the change in absolute value was not big due to their small base. Specifically, in 2020, the market concentration of live streaming decreased by 39% on a yearly basis, mainly for the booming livestreaming marketing under the influence of COVID-19 which lifted the market “ceiling”. The category of livestreaming marketing has extended from food, cosmetics, mother and infant supplies and agricultural produce to books. Chinese traditional publishing groups rode with the live-streaming wave, and expanded channels of book sales through brand self-streaming and partnership with influencers and KOL. The co-live streaming of people’s publishing house and Weiya and that of CITIC Press Group and Fan Deng, for example, handed in brilliant reports of millions of sales. The market competition on knowledge payment was scattered, while leading platforms rapidly grew their territory. In 2020, the concentration of China’s knowledge payment market increased largely on a yearly basis, mainly because of the rise in market share of leading platforms such as Himalaya FM and Dragonfly FM as a result of the significant rise in their revenue. It is expected that the voice of leading platforms continues to raise as content resources are further concentrated at the tip.

China’s Venture Capital Investment Market of Digital Content Continues to Cool Down and Unicorn Enterprises are Powerful in Earnings

China’s domestic financing environment has been grim since 2018, with financing issues and financing amount falling continuously. Domestic financing issues in 2018 reduced by 23% on a yearly basis, and financing volume and amount in the first
half of 2019 fell by 47.66% and 59.79% year on year respectively. To be specific, the financing frequency in the culture, living services, finance and real estate industries dropped by 50%.4 The financing volume in the domestic primary market fell by 24.4% on a yearly basis and the total financing amount disclosed decreased by 9.9% in 2020.5 Compared with the sharp drop in 2019, the decline in 2020 slowed down, but it did not change the severe domestic financing environment.

Affected by the domestic venture capital investment market, venture capital investment activity of the digital content industry in China continued to decline. In 2020, the number of newly established enterprises in the 10 sub-sectors continued the decline of the previous 2 years, with most of them falling by more than 15% on a yearly basis (see Fig. 5), and online music and digital reading fell by over 60%. From the absolute number, the number of new enterprises of live streaming increased the largest, reaching 104 in 2020, followed by 102 of online games. The two sub-sectors with strong earning power became the landing shore for new content players to make money, which was also revealed by the investment volume. In 2020, the investment volume in 10 sub-sectors only saw a positive growth in live streaming and online games (see Fig. 6), while other sectors all experienced a year-on-year decline, mostly over 30%. In particular, despite the traffic advantage, animation, online music, news & information apps and knowledge payment were facing great risks for incapability for earning money or uncertainty of business models.

In view of the investment amount, online education was far superior to others in both absolute value and growth rate. On the one hand, it was related to the erupt of online education investment driven by online teaching caused by COVID-19

4 Meng Jia. 2019 H1 China Corporate Venture Capital Investment Report, Financing Volume Falls by 48% and the Total Financing Amount Drops by 60%. [EB/OL]. https://www.iyiou.com/analysis/20190701104251, July 1st, 2019, Oct. 22, 2021.
5 Chinanews. Tigerobo Releases 2020 China Primary Market Overview. [EB/OL]. http://www.sh.chinanews.com/jinrong/2021-01-13/84409.shtml, Jan. 13, 2021, Oct. 22, 2021.
pandemic; on the other hand, a small number of unicorn enterprises have been favored by capital and are becoming important targets to attract investment. For examples, Zuoyebang received E + round of financing of USD1.6 billion by Sequoia Capital China and Alibaba in December 2020; Yuanfudao obtained F round of financing of USD1 billion by IDG Capital, Tencent and other organizations in March 2020. The rise in investment amount and the drop in investment volume for online education in 2020 indicated that capital was being concentrated in a small number of enterprises at the tip.

The Operation/Marketing Capacity of Content Enterprises Attracts More Capital and the Number of Related Investments is Large

From the investment hotspots in the venture capital investment market of China's digital content industry, compared with 2018, the marketing/operation business of invested enterprises received more attention and became the investment hotspots in multiple sub-sectors in 2019–2020.

The performance of online games, online videos, short videos, live streaming and digital reading was marked (see Table 1). From the point of view of investment hotspots in these sub-sectors during 2019–2020: online games contained investments for 54 “operations” and 25 “overseas/global businesses”, or roughly 80% of the total investments; online videos saw 38 investments for “operation” or “marketing”, or more than 60% of the total; short videos had 38 investments for “operation” or “marketing”, or over 90% of the total; the live streaming made 31 investments for “operation” or “marketing”, or over 70% of the total... Among them, Internet influencers/celebrities/KOL/talents/live-streamers have become key operation modes of video

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6 Investment hotspots are counted from the high-frequency words in descriptions of business directions of investees in the 10 sub-sectors.
| Sub-sectors            | Investment Hotspots in 2019–2020                                                | Investment Hotspots in 2018                                                                 |
|-----------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Online games          | R&D/development, mobile games, operation, distribution, overseas/global           | R&D/development, mobile games, operation, blockchain, distribution                         |
| Online videos         | Technology/R&D, operation/marketing, production/creation, service providers/solutions | Production/creation, live streaming, service providers/solutions, social community/social media |
| Short VIDEOS          | Content, operation/marketing, Internet influencers/celebrities/KOL/talents/live streamers, IP/incubation | Content production, social community/social media platforms for short videos, (IP/Internet influencers) incubation, MCN |
| Live streaming        | Operation/marketing, live streamers/Internet influencers/talents/KOL/celebrities, e-commerce, service providers/solutions | Entertainment, interaction, social media/community, short videos                           |
| Digital reading       | Internet, novel/literature, reading platforms, originality/creation                | Novel/literature, creation/originality, publication, cartoon                               |
| News and information apps | Media/information, science and technology, We media/social community              | Science and technology, investment, finance/finance and economics, blockchain               |
| Knowledge payment     | Social groups, science and technology, live streaming, audio                      | Mini programs, education, social groups, finance/investment                               |
content enterprises, and social communities/social groups/We Media the important running modes of graphic content enterprises.

Compared with the investment hotspots of China’s digital content industry in 2018, content creation and technology R&D remain the business direction and core capabilities that investors focus on. However, the weight of operation/marketing seems to be on the rise to be a new battlefield for enterprises to compete in the era of residual economy after traffic dividend. This means that digital content enterprises must create quality content and be equipped with operation abilities to promote content products and turn them into value.

**Business Giants Expand Their Business Territory by Investment and M&A and Integrate Upstream and Downstream Businesses of the Industrial Chain**

In the era of digital content and rich media, high-quality content resources or original content creation capabilities have become the core competitiveness. High-quality content tends to gather, and then it is natural for business giants to exert the content scale effect and extend their business territory to a more far-reaching place on the industrial chain. With animation as an example, the leading company Guangdong Alpha Animation and Culture Co., Ltd., owns well-known IPs such as the *Pleasant Goat and Big Big Wolf* and the *Super Wings*. Besides the animation, it has diversified its operations around content IPs, developing derivative businesses on toys, babies and children and offline parks and big animation movies, to integrate upstream and downstream businesses on the industrial chain.

In addition to expanding their own businesses, business giants such as Tencent, ByteDance and Baidu have expanded their business territory through investment and M&A. This research sorts out outbound investments of typical business giants in China’s digital content in 2019–2020 (see Fig. 7 (Left)). Statistics showed the five business giants have engaged in a total of 82 investments in content, among which Tencent still remains a big investor for the digital content industry, with 43 investments (including participation), or more than half of the total, followed by Bilibili with 14 investments (including participation). Baidu and ByteDance were equal in
strength and Alibaba had only a few investment in the content sector. In terms of the investment rounds, the number of strategic investments was the most with a total of 47; and the early investments of A–C rounds were the most of alphabet rounds. Looking at the sub-sectors involved (see Fig. 7(Right)), the investment volume of online games accounted for nearly half the total to 49%, followed by videos/live streaming and online education at 16% and 14%, respectively. Online games and live streaming, with the most cash realizable value in the digital content industry, have been the priorities of investment layout of business giants.

**Entertainment Content Takes the Largest Proportion and Leads the Upgrading of Industrial Economic Value**

If the 10 sub-sectors are divided by content attributes, they roughly belong to two categories: pan-entertainment and pan-knowledge. For the purpose of content consumption, pan-entertainment content, represented by animation, games, music and short videos, is for leisure and relaxation, while pan-knowledge, represented by online education and knowledge payment, is mainly used to acquire knowledge.

Entertainment content is a major part of the digital content industry in China, and is the largest and the most economically valuable in the industry. As shown in Fig. 8, the light-colored bubbles represent the pan-entertainment content and the dark-colored the pan-knowledge content, and the bubble size reveals the market size. First of all, in the number of sub-sectors, the pan-entertainment category obviously overwhelms the pan-knowledge, as online education, knowledge payment and digital reading are of strong knowledge attributes and the others are mainly about entertainment. What’s more, the market size and the number of users of pan-entertainment are larger. If the market sizes are simply added up, the consolidated market size of online education, knowledge payment and digital reading would be RMB331.66 billion in 2020, while that of other sub-sectors was RMB1,068.857 billion in total, over three times that of the former. Short videos and live streaming markets were still
expanding rapidly. The number of users in each sub-sector of the pan-entertainment category had exceeded 500 million except for animation, which was in sharp contrast to that of the pan-knowledge category with no more than 500 million users. Finally, in terms of growth momentum, compared with most of pan-entertainment sectors, the three pan-knowledge sectors had kept a high growth, revealing the development potential of knowledge content that was to take a place in the digital content industry of China. However, all sub-sectors are not as outstanding as the short video sub-sector that has become the mainstream of entertainment content. Entertainment content in the form of videos and live streaming will continue to lead the growth in the industrial economic value.

**Short Videos**\(^7\) are Getting Longer and Long Video Platforms Launch Short Video Services

In the previous edition of the report,\(^8\) it is said that long and short videos were moving towards integration, as short videos were getting longer and long videos exploring short content. After nearly two years of development, China’s short video market has maintained its momentum of growth. Compared with the previous two years, mainstream short video platforms have officially entered the long video market. Currently, short videos have become the basic application of China mobile Internet and even an important way for new Internet users to access the Internet in China. As of July 2021, short video apps had harvested the highest utilization of Internet users in China, with the number of domestic users reaching 873 million. With the user growth approaching the ceiling, short video platforms continued to expand their business boundary, from 15 s to 1 min, to 5 min or even 15 min, and short videos are getting longer. Short video platforms represented by TikTok, Kuaishou and Watermelon Video have been working on long videos, medium videos, and self-produced dramas. In August 2021, TikTok added a long-video zone on its homepage offering more space for content creators; Bilibili’s long video projects *Run for Young* and *Rap for Youth* attracted wide attention; and Kuaishou co-produced and launched the movie *The Empty Nest* on its platform.

At the same time, to cope with the encroachment of short videos on users’ time, China’s long video platforms made active moves on deploying medium and short video services, and launched related products after two-year efforts. iQiyi rolled out short video products to compete with Youtube and grew its video community in April 2020. In November of the same year, iQiyi app officially launched Huala for promoting original short videos, whose content mainly came from iQiyi’s TV series, movies, variety shows, cartoons, documentaries and wonderful clips after AI

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7 For the definition of long, medium and short videos, it is most common in the industry to divide them according to the video duration. Generally, videos with a duration of less than 5 min are defined as short videos (or less than 1 min is defined as short videos), and videos with a duration of 5–30 min are defined as medium videos, and then those with more than 30 min belong to the category of long videos.

8 Zhang Li, Wu Suping. China Digital Content Industry Market Structure and Investment Observation 2019–2020 [M]. Social Sciences Academic Press (China), 2020.
editing. Tencent Video’s IP costume drama *Chang Ge Xing* was launched in March 2021 with its MicroVision as a release channel. Compared with iQiyi and Tencent Video, Youku integrated long and short videos instead of launching a separate short video product. It entered the short video market by reinforcing interactive experience of short videos in its updated version, launching Youku Channel for video creators and investing resources to support originality. In general, long video platforms rely on advantages of content copyright resources. On the one side, it attracts users of medium and short videos through comprehensively edited and derivative content of long videos of movies, dramas and variety shows; on the other, it attracts users to long-video content platforms by the publicity of short videos. Long, medium and short video platforms penetrate into each other’s hinterland and form differentiated strategies, which deeply influences the competitive landscape and development trends of the video indust4y. As the boundaries of video content are disappearing, content copyrights will be of greater prominence.

**Application of 5G and UHD Technologies Drives the Diversification of Content Products and Service Scenarios**

As 5G entered the stage of application, UHD video application was the first market to explode, and is ushering in the prime of growth. At the 5G Mobile UHD Video Innovation Forum of the 2020 World Ultra HD Video (4 K/8 K) Industry Development Conference, the China UHD Video Industry Alliance (CUVA) published the *White Paper on 5G UHD New Scenarios* that listed fourteen typical UHD new scenarios of three categories, including 4 K UHD live streaming, telemedicine operations and remote traffic command.

Emerging technologies such as 5G, UHD and cloud computing are driving the diversification of product forms and service scenarios in the digital content industry. In the sector of games, with the progress of cloud-net integration, cloud games will be the mainstream form of online games in the next stage. Cloud games are stored, loaded in the cloud with rendered pictures, and are essentially online interactive videos, so the development of UHD technology will help a lot with game experience. Tencent launched the cloud game version of its mobile game called *Tianya Mingyue Dao* in 2021 and *miHoYo* opened up its cloud game testing platform *Cloud miHoYo* (*Miha Yunyou*). With the help of technology and the leadership of business giants, the huge potential of cloud games market is being discovered. Entering the post-pandemic era, offline entertainment businesses such as music concerts, movies and theme parks have been hit seriously, while online businesses have developed rapidly to create opportunities for cloud performances. 5G access provides a high-speed, smooth network foundation for live streaming and improves the image quality and user experience. With the popularity of live-streaming economy, more apps have added the function of live streaming, hence innovative and boundary-breaking business models such as “Live Streaming Plus Games”, “Live Streaming Plus E-commerce” and “Live Streaming Plus Tourism” are maturing, and this “Live Streaming Plus” initiative enables traditional industries to find diversified channels of revenue. Live streaming is becoming the communication infrastructure that plays a crucial
role in multiple business forms. Online education has been one of the first beneficiaries of technology development. Following the rapid deployment of 5G network and the application of 4K/8K UHD video technology, XR facilities will be well supported in network speed and immersive teaching scenarios will truly come true in the future.

**China’s Digital Content Industry Investment Value Assessment and Investment Trend**

**Summary of Investment Value Assessment Methods and Results**

To understand the development differences and investment value in the digital content industry, this book assesses the investment value of each sub-sector from the perspective of internal factors and external factors, including 7 primary indicators and 11 secondary indicators (see Table 2 for details).

The data of each secondary indicator of internal factors are numerical (except for “competition degree”\(^9\)) and positive, i.e., they follow the rule that the higher the value is, the higher the score is, so the min–max normalization may be adopted. First, the actual value of secondary indicators is converted to the range of \([0,1]\) \((y)\) by normalization to make aggregate calculations among indicators with different dimensions. Then, the normalized score is divided into ranges and assessed by stars, i.e. \([0,1]\) is divided into five ranges equally, corresponding to 1–5 stars respectively \((k)\). The normalization conversion formula is:

\[
y = \frac{X - X_{\text{min}}}{X_{\text{max}} - X_{\text{min}}}
\]

In which \(X\) is the actual value of a secondary indicator, \(X_{\text{min}}\) is the indicator’s minimum value of the 10 sub-sectors and \(X_{\text{max}}\) is the indicator’s maximum value of the 10 sub-sectors.

Please refer to the corresponding data description in Table 2 for the judgment of external factors. The related policy guidance and traditional mainstream media’s coverage inclination are divided into five levels: strong negative, negative, neutral, positive and strong positive, which correspond to 1–5 stars \((k)\) respectively, from which the weighted total score of each indicator will be calculated.

\[
\text{Score} = \sum_{i=1}^{7} f_i \ast a_i \text{ and } f_i = \frac{1}{n} \sum_{j=1}^{n} k_j
\]

In which \(f\) is the score of a primary indicator, \(a\) is the weight of the primary indicator (the weight of “related policy guidance” is 0.7, that of “traditional mainstream media’s coverage inclination” is 0.3, and that of others is 1), \(k\) is the

\(^9\) Competition degree is a moderate indicator, i.e., it is not the higher or the lower the value, the higher the score, but has the highest score at a moderate medium level.
### Table 2: Assessment indicator table

| Primary indicator          | Secondary indicator          | Meaning of indicator                                                                                     | Description of data                                                                 |
|---------------------------|------------------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Base scale                | Market size                  | Scale of sales revenue or output value in the market                                                      | Scale of sales revenue or output value in 2020                                        |
|                           | Number of users              | Total number of users                                                                                     | Number of users in 2020                                                              |
| Development speed         | Growth rate of market size   | Ratio of market size growth to the base data                                                              | Year-on-year growth rate of market size in 2020                                       |
|                           | Growth rate of users         | Ratio of user growth to the base data                                                                      | Year-on-year growth rate of users in 2020                                             |
| Conversion degree         | Payment conversion rate      | Proportion of paying users to the total                                                                     | Proportion of paying users to the total in 2020                                       |
| Competition degree        | Market concentration         | Proportion of consolidated market size of leading enterprises to the total                                 | Proportion of consolidated revenues of four business giants in this sector to the total |
| Activity degree           | Growth rate of investment volume | Ratio of the increase in investment volume to the base data                                             | Year-on-year growth rate of investment volume in 2020                                |
|                           | Growth rate of investment amount | Ratio of the increase in investment amount to the base data                                              | Year-on-year growth rate of investment amount in 2020                                 |
|                           | Growth rate of new enterprise volume | Ratio of the increase in the number of newly registered enterprises to the base data | Year-on-year growth rate of new enterprise volume in 2020                             |
| Related policy guidance   | Support from relevant policies | Related policies’ attitudes towards development of the sector, incentive and supportive or strong control? | Judging the inclination degree, such as strong positive or negative, etc., expressed by keywords revealing attitudes in the primary content of related policies since 2020 |
| Traditional mainstream media inclination | Inclination degree of traditional mainstream media | Attitude inclination of traditional mainstream media in covering this sector, positive or negative? | Referring to related coverage titles and content published by the traditional mainstream media, Xinhua, People’s Daily Online and GMW.CN from January to July 2021, it judges whether the inclination of each coverage is positive, negative or neutral, and assesses the general inclination degree according to the difference between the numbers of positive and negative coverage, such as strong positive, partial negative, etc |
number of stars corresponding to the secondary indicator, and $n$ is the number of secondary indicators under each primary indicator.

Finally, to visualize the results, the weighted scores of the 10 sub-sectors are divided into 5 intervals equally, corresponding to 1 star to 5 stars, respectively. The final results are shown in Table 3 below. The assessment results are as follows: the sub-sector with the highest investment value is live streaming, assessed at 5 stars; the sub-sectors with high investment value are: online games, digital reading and short videos, assessed at 4 stars; the sub-sectors with moderate investment value are: animation and online videos, assessed at 3 stars; the sub-sectors with low investment value are knowledge payment, online education and online music, assessed at 2 stars; and the sub-sector with the lowest investment value is news & information apps, assessed at 1 star.

It is arranged according to the descending order of weighted total results. For example, although the final assessment results of both short videos and online videos are five stars, the weighted total results of short videos are higher than online videos.

**Comparison of Investment Value in 2017–2020: From Traffic “Enclosure” to Cash Realization**

This research compares the results of assessing the investment value in the digital content industry with the ranking results of the previous two editions (2017–2018 and 2019–2020) to observe the development and changes of sub-sectors in recent years (see Tables 3, 4, 5). As shown in Table 6 below, from the ranking results, compared with the 2017–2018 edition, short videos, digital reading and online games ranked forward significantly, while animation, online education, knowledge payment and live streaming ranked backward in 2019–2020; compared with the 2019–2020 edition, live streaming, online games and animation ranked forward significantly, while short videos, online videos, knowledge payment and online education ranked backward in 2020–2021.

In 2018, short videos experienced explosive-growing period when the market size and number of users were rapidly expanding, the venture capital investment market was hot, and leading platforms rapidly harvested the traffic. After the Internet traffic peaked since 2020, live streaming and online games with clear models of cash realization showed good prospects. The increasingly tightening policies and supervision had frustrated the markets in a short term, but it would help regulate the industry for steady progress in the long term. From the ranking changes of the 10 sub-sectors in recent years, it is observed that the era of traffic “enclosure” has passed and cash realization is the new competition direction for the digital content industry, and the market competition will focus on exploiting residual market value.

To sum up, based on the assessment results of the investment value of the 10 sub-sectors and in combination with ten major development trends of the industry, conclusions are drawn as follows:
Live Streaming’s Investment Value Ranks First to Lead the Investment Direction of the Digital Content Industry

The investment value of live streaming was assessed with the highest score of ★★★★★, and ranked from sixth to first, making it the wind vane for investment in the digital content industry. Live streaming developed vigorously in 2020. For one thing, it rose from the industrial development and experience over years; for another, it benefited from the online economic growth caused by the COVID-19, especially the popularity of livestreaming marketing. As the demand for online shopping erupted during the pandemic, the advantage of Internet influencers selling goods became prominent, and short video platforms such as TikTok and Kuaishou moved fast to strengthen their live-streaming business and local governments were taking actions to push local produce sales by livestreaming marketing, thus boosting the live-streaming growth. In the post-pandemic era when the sudden increase caused by the pandemic gradually disappears, the habit of live-streaming shopping remains to stay, and the market still enjoys great potentials for growth.

Online Games’ Ranking of Investment Value Continues to Rise with a Large Market and Strong Operation, and Attention Should be Paid to Polices for Risk Control

Online games are assessed with high investment value of ★ ★ ★, which have relatively mature business models, strong revenue capacity and large market size and ride with the wave of domestic enterprises’ going abroad. In 2020, the market size of China’s online games reached RMB278.687 billion. It was in a leading position of the digital content industry, and still maintained a growth rate of about 20%. Online games are ahead of other sub-sectors in aspects of user value conversion and payment conversion rate and have strong cash realization ability. However, many problems exposed in the development of online games have been highly concerned by all walks of life, especially those involving the protection of minors, so close attention must be paid to the policy guidance.

Short Videos’ Ranking of Investment Value Falls After a Rise and with Stable Top Players, Vertical Content may be Expanded

Short videos are assessed with high investment value of ★ ★ ★, whose market size has exceeded that of online videos after a few years of rapid expansion, and a stable structure dominated by Toutiao, Kuaishou and Tencent MicroVision came into being. The competition among integrated video platforms is fierce, but there is space for expansion of vertical content on science and technology and financial information, social interaction, overseas market, life encyclopedia, agricultural knowledge, beauty and fashion, etc. Platforms of short videos and e-commerce drive
| Sub-sectors          | Base scale          | Development speed | Conversion degree | Competition degree | Activity degree | Related policy guidance | Traditional mainstream media inclination | Consolidated results |
|----------------------|---------------------|-------------------|-------------------|-------------------|----------------|-------------------------|------------------------------------------|---------------------|
|                      | Market size         | Number of users   | Growth rate of market size | Growth rate of users | Payment conversion rate | Market concentration | New enterprise volume | Growth rate of investment volume | Growth rate of investment amount | Support inclination of relevant policies | Coverage inclination of traditional mainstream media |                      |
| Live streaming       | ★★                  | ★★                | ★★                | ★★                | ★★             | ★★                       | ★★                         | ★★                           | ★★                           | ★★                         | ★★                           | ★★                       |
| Online games         | ★★★★                | ★★                | ★★                | ★★★★              | ★★             | ★★                       | ★★                         | ★★                           | ★★                           | ★★                         | ★★                           | ★★                       |
| Digital reading      | ★                    | ★★                | ★★                | ★★★★              | ★★             | ★★                       | ★★                         | ★★                           | ★★                           | ★★                         | ★★                           | ★★                       |
| Short videos         | ★★★★                | ★★★★              | ★★★★              | ★★★★              | ★★             | ★★                       | ★★                         | ★★                           | ★★                           | ★★                         | ★★                           | ★★                       |
| Animation            | ★★                   | ★                 | ★★                | ★★                | ★★             | ★★                       | ★★                         | ★★                           | ★★                           | ★★                         | ★★                           | ★★                       |
| Online videos        | ★                    | ★★★★              | ★★★★              | ★★★★              | ★★             | ★★                       | ★★                         | ★★                           | ★★                           | ★★                         | ★★                           | ★★                       |
| Knowledge payment    | ★                    | ★                 | ★★★★              | ★★★★              | ★★             | ★★                       | ★★                         | ★★                           | ★★                           | ★★                         | ★★                           | ★★                       |
| Online education     | ★★★★                | ★★★               | ★★★               | ★★★               | ★★             | ★★                       | ★★                         | ★★                           | ★★                           | ★★                         | ★★                           | ★★                       |
| Online music         | ★                    | ★★★               | ★★★               | ★★★               | ★★             | ★★                       | ★★                         | ★★                           | ★★                           | ★★                         | ★★                           | ★★                       |
| Sub-sectors | Market size | Number of users | Growth rate of market size | Growth rate of users | Payment conversion rate | Market concentration | New enterprise volume | Growth rate of investment volume | Growth rate of investment amount | Support inclination of relevant policies | Traditional mainstream media inclination | Coverage inclination of traditional mainstream media |
|-------------|-------------|----------------|-----------------------------|---------------------|-------------------------|----------------------|----------------------|-------------------------------|-------------------------------|--------------------------------|---------------------------------|--------------------------------|
| News and information Apps | ★ | ★★★★★ | ★ | ★★★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ |
| Sub-sectors          | Base scale | Development speed | Conversion degree | Competition degree | Activity degree | Related policy guidance | Traditional mainstream media inclination | Consolidated results |
|----------------------|------------|-------------------|-------------------|-------------------|----------------|-------------------------|------------------------------------------|---------------------|
|                      |            | Number of users   | Number of users   | Growth rate of market size | Growth rate of users | Payment conversion rate | Market concentration | New enterprise volume | Growth rate of investment volume | Growth rate of investment amount | Support inclination of relevant policies | Coverage inclination of traditional mainstream media | |
| Short videos         | ★          | ★★★★★★ ★★★★★☆ ★★★★★☆ ★★ ★★★ ★★ ★★★★★ ★★★★ ★★★★★ ★★★★★ ★★★★★★ | |
| Online videos        | ★★★★★☆ ★★★★★★ ☆ ★★★☆ ★★★★ ★★★★ ★★★★ ★★★★★ ★★★★ ★★★★★ ★★★★ ★★★★★ ★★★★★★ | |
| Digital reading      | ★          | ★★★★ ★★★★★★ ★★★★ ★★★★★ ★★★★ ★★★★ ★★★★ ★★★★★ ★★★★ ★★★★★ ★★★★★★ | |
| Knowledge payment    | ★          | ★★★★★☆ ★★★★★ ☆ ★★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★★ | |
| Online games         | ★★★★★☆ ★★★★★★ ★★★★ ★★★★★ ★★★★ ★★★★ ★★★★ ★★★★★ ★★★★★ ★★★★★★ | |
| Live streaming       | ★★ ★★★★★ ★★★★ ★★★★ ★★★★ ★★★★ ★★★★ ★★★★★ ★★★★ ★★★★★★ | |
| Online education     | ★★★★★☆ ★★★★★★ ★★★★ ★★★★★ ★★★★ ★★★★ ★★★★ ★★★★★ ★★★★ ★★★★★★ | |
| Online music         | ★          | ★★★★★★ ★★★★★★ ★★★★ ★★★★★ ★★★★ ★★★★ ★★★★ ★★★★★ ★★★★ ★★★★★★ | |
| Animation            | ★★★★★☆ ★★★★★★ ★★★★ ★★★★★ ★★★★ ★★★★ ★★★★ ★★★★★ ★★★★ ★★★★★★ | |
**Table 4** (continued)

| Assessment indicators | Base scale | Development speed | Conversion degree | Competition degree | Activity degree | Related policy guidance | Traditional mainstream media inclination | Consolidated results |
|------------------------|------------|-------------------|-------------------|--------------------|-----------------|------------------------|----------------------------------------|---------------------|
| **Sub-sectors**        | **Number of users** | **Number of users** | **Growth rate of market size** | **Growth rate of users** | **Payment conversion rate** | **Market concentration** | **New enterprise volume** | **Growth rate of investment volume** | **Growth rate of investment amount** | **Support inclination of relevant policies** | **Coverage inclination of traditional mainstream media** |

| **News & Information Apps** | ★ | ★★★★★ | ★★ | ★ | ★ | ★★ | ★★★ | ★★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ |★
Table 5  Summary of sub-sectors’ investment value assessment results in China’s digital content industry 2017–2018

| Sub-sectors       | Base scale x1 | Development speed x1 | Activity degree x1 | Competition degree x1 | Conversion degree x1 | Related policy guidance x0.7 | Traditional mainstream media’s coverage inclination x0.3 | Consolidated results |
|-------------------|---------------|----------------------|--------------------|-----------------------|---------------------|----------------------------|--------------------------------|--------------------|
| Online videos     | ****     | *****                | ******             | *******               | *******             | **                         | *                              | *****               |
| Knowledge payment | ******       | ******               | ******             | ******               | **                  | **                         | *                              | ****               |
| Short videos      | ****         | ****                 | ******             | *******               | **                  | **                         | *                              | ****               |
| Online games      | ******       | ******               | ******             | *******               | **                  | **                         | *                              | ****               |
| Live streaming    | ******       | ******               | ******             | *******               | **                  | **                         | *                              | ****               |
| Online education  | ******       | ******               | ******             | *******               | **                  | **                         | *                              | ****               |
| Animation         | ******       | ******               | ******             | *******               | **                  | **                         | *                              | ****               |
| Online literature | ******       | ******               | ******             | *******               | **                  | **                         | *                              | ****               |
| Online music      | ******       | ******               | ******             | *******               | **                  | **                         | *                              | ****               |
| We media          | ******       | ******               | ******             | *******               | **                  | **                         | *                              | ****               |
| News and Information apps | ****** | ******               | ******             | *******               | **                  | **                         | *                              | ****               |
| Internet journals | ******       | ******               | ******             | *******               | **                  | **                         | *                              | ****               |

Table 6  Comparison of assessment results of investment value of digital content industry in 2017–2020

| No. | Sub-sectors       | Consolidated results (2017–2018) | Consolidated results (2019–2020) | Consolidated results (2020–2021) | Ranking changes |
|-----|-------------------|----------------------------------|----------------------------------|----------------------------------|-----------------|
| 1   | Live streaming    | *****                            | *****                            | ******                           | 5→6 19          |
| 2   | Online games      | ******                           | *****                            | ******                           | 4→5             |
| 3   | Digital reading   | ******                           | ******                           | ******                           | 8→3             |
| 4   | Short videos      | ******                           | ******                           | ******                           | 3→1             |
| 5   | Animation         | ******                           | *****                            | ******                           | 7→9             |
| 6   | Online videos     | ******                           | ******                           | ******                           | 1→2             |
| 7   | Knowledge payment | ******                           | *****                            | **                              | 2→4             |
| 8   | Online education  | ******                           | *****                            | **                              | 6→7             |
| 9   | Online music      | ******                           | *****                            | **                              | 9→8             |
| 10  | News and Information apps | ***** | *                           | *                              | 10→10           |

The name for digital reading in the 2017–2018 edition was online literature and the name for news & information apps was news & information apps and We Media.
e-commerce sales with the carrier of Internet influencers, and have clear business models and development potential.

**Online Videos’ Ranking of Investment Value Drops to the 6th and may Focus on Intelligent Audio-Visual Technology and Digital Marketing**

Online videos are assessed with medium investment value of ★★★. The competition among integrated video platforms is fierce, which is similar to the short videos, with stable top players and high concentration. As the homogeneity of video content grows, the competition of online video platforms will focus on intelligent video technology and big data-based digital marketing, including cloud-based interactive video platforms, cloud-based on-demand service/cloud-based live streaming, image processing and identification, in-depth learning, intelligent audio-visual hardware, audio-visual communication, and video AI technology, with attention paid to enterprises devoted to intelligent video technology and those with digital marketing capabilities.

**Animation Rises After a Drop, Digital Reading Remains Stable, Online Music Falls After a Rise, and Knowledge Payment and Online Education Constantly Falls, in Terms of Investment Value Rankings**

Digital reading and animation may focus on original content creation, novel/comic reading platforms, IP incubation, authorization and peripheral derivatives. However, knowledge payment, online education and online music are facing uncertainties and blurring prospects, and the investment must be prudent.

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