China’s Livestreaming Market Depicting the New Normal

One emerging role
Three business models
Six limelight players

2020 May
EqualOcean is an information service provider and investment research firm that aims to become a global platform for industrial innovation. We strive to make technology inclusive, accessible and transparent.

Founded in October 2018, EqualOcean is an international branch of EO Company, a leading Chinese tech media and investment research organization that is headquartered in Beijing and has offices in Shanghai, Shenzhen and New York.
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Introduction

Undoubtedly, livestreaming in contemporary China has gone viral. Penetrating everyone’s life, bringing instant contact from far away, creating overnight celebrities out of urban amateurs and village farmers. Although it is no longer a new invention, it has just started to revolutionize people’s modern lifestyle into a brand-new normal.

In 2019 the user scale in China’s livestreaming market hit over 504 million, at a 10.6% annual growth rate. The fast-growing number of users has birthed a multi-billion-dollar market, projected to reach CNY 100 billion by 2023.

Two engines have created this promising market: one is the MCN industry, the professional content producers. They are creating a cyber civilization in livestreaming, in a joint effort with KOLs (Key Opinion Leaders). From text to animation, video, from static images to 3D streaming, VR interactive experience, MCNs have been generating high-quality content based on ever progressive technologies such as 5G and virtual reality.

The other pulling force comes from the commercial derivative market of livestreaming, a market worth trillions in potential value with three major heavyweight online businesses: e-commerce, short-video platforms and e-sports.

Take live commerce, for example. Two of the most celebrated live e-commerce KOLs, Viya and Li Jiaqi, who attracted 30 million viewers last Double 11, have raked in CNY 2.7 billion (USD 389 million) and CNY 1 billion (USD 144 million) in online sales respectively.

The COVID-19 pandemic is causing an economic slump worldwide but, paradoxically, is considered a golden time for livestreamers. In the future, it seems that no B2C business will be able to win without entering into the livestreaming broadcast.

Starting from analyzing the rising role of MCNs, this report dissects the three major ‘livestreaming +’ e-businesses models, followed by three pairs of corresponding contrasts in e-commerce, short-video platforms and e-sports. From a practical perspective, EqualOcean hopes to enlighten our readers with unique angles and independent research.

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Highlights

The livestreaming-derived market in China grew to CNY 61 billion in 2019, with a projection of a 12% CAGR till 2023.

Multi-channel networks (MCNs) are the ‘pushing hand’ behind the rising market, with 6,500 active platforms in 2019. As some categories reach saturation point, they are attracting flocks of eager users to an entirely new branch of China’s online ecosystem.

Livestreaming is a medium that can be blended into numerous kinds of businesses, which makes it hard to classify it as an independent industry.

But it has had a widespread impact on nearly all B2C businesses, adding sizeable value to the consumer market.

Thus EqualOcean here focuses on three industries that are most affected by and intertwined with livestreaming: e-commerce, short-video streaming and e-sports.

Chinese livestreaming market is projected to reach over CNY 100 billion in 2023, at an expected 12% CAGR*, with live gaming owning over 40% share

Market size in CNY billion and user scale in million

<table>
<thead>
<tr>
<th>Year</th>
<th>User scale</th>
<th>Live gaming</th>
<th>Livestreaming in other business</th>
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<tbody>
<tr>
<td>2016</td>
<td>23</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>2019</td>
<td>52</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>2020</td>
<td>61</td>
<td>53</td>
<td>43</td>
</tr>
<tr>
<td>2021E</td>
<td>73</td>
<td>49</td>
<td>43</td>
</tr>
<tr>
<td>2022E</td>
<td>82</td>
<td>53</td>
<td>58</td>
</tr>
<tr>
<td>2023E</td>
<td>92</td>
<td>58</td>
<td>63</td>
</tr>
</tbody>
</table>

Note: *Compound annual growth rate. The live-streaming market size refers to direct deal value created on the livestreaming shows, including monetary value of virtual gifts, advertising activities and other incomes. Livestreaming gaming refers to game-themed live-streaming shows, covering cyber game commentaries and live game broadcast. The market size data excludes the market size of lives-stream e-commerce.

Source: Qianzhan Research, iiMedia Research, Leading Industry Research, EqualOcean analysis
Live e-commerce is by far the most effective monetization mechanism for livestreamers. Taobao Live (the livestreaming service under Alibaba’s e-commerce platform) is an independent platform serving online shopping.

Pinduoduo, a USD 58 billion upstart that is nipping at Alibaba’s heels, has added a livestreaming function on its e-commerce app.

Short video platforms benefit from an overlapping user group with livestreaming apps, but face more intense traffic competition.

Kuaishou anchors the KOL-centered online culture; meanwhile, Douyin is accelerating various livestreaming products.

Livestreaming video-game players rely more on virtual gifts in the livestreaming shows. Douyu and Huya have dominated the market, owning over 90% of it. Huya had more willing-to-pay users than Douyu till 2019 Q2, based on a highly-engaging and interactive community.

The business outlines of three major ‘livestreaming +’ e-businesses

- E-business institutions
  - ‘Livestreaming +’
  - Content providers
  - Traffic generation
  - Revenue models
  - Monetization
  - Live e-commerce
  - Advertising
  - Virtual gifts
  - Users

- E-commerce
  - KOLs
    - Professional
    - Amateurs
    - Video-gamers
  - MCNs

- Short-video
  - KOLs
  - Professional
  - Amateurs
  - Video-gamers

- E-sports
  - KOLs
  - Professional
  - Amateurs
  - Video-gamers

- Professional
- Amateurs
- Video-gamers
# Q1 2020 Livestreaming Industry Landscape

## Applications

<table>
<thead>
<tr>
<th>E-commerce</th>
<th>Short-video</th>
<th>E-sports</th>
<th>Pan-entertainment</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="E-commerce App" /></td>
<td><img src="image2" alt="Short-video App" /></td>
<td><img src="image3" alt="E-sports App" /></td>
<td><img src="image4" alt="Pan-entertainment App" /></td>
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</table>

## Content production

<table>
<thead>
<tr>
<th>Hosts</th>
<th>Agencies</th>
<th>UGC / PUGC / PGC</th>
<th>Copyrights</th>
</tr>
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<tbody>
<tr>
<td>Celebrities</td>
<td>Amateurs</td>
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<td><img src="image6" alt="Copyright App" /></td>
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<td>Video-gamers</td>
<td>KOLs</td>
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## Infrastructure

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<th>Telecommunications</th>
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<td><img src="image16" alt="Lenovo" /></td>
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<td></td>
<td><img src="image18" alt="OPPO" /></td>
<td></td>
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</tbody>
</table>
Chapter 1

What’s behind China’s livestreaming craze?

A dig into China’s Multi-Channel Networks (MCNs) craze

MCNs are the pushing hand behind the momentum of China’s short video platform players.

How’s this imported concept able to gain stronger growth than its overseas counterparts? Will this trend benefit all parties, or it will eventually turn out to be a giants’ game?
The pushing hand behind China’s livestreaming industry

Livestreaming e-commerce has been the most buzzing topic in China’s consumer market in recent years. Giant players like Taobao, Pinduoduo, JD.com, RED, Douyin and Kuaishou are joining the trend, one after another.

Though a nascent market, live e-commerce in China has been showing such enormous potential that 2020 is considered likely to be the ‘normalization’ year for this practice.

However, the whole industry chain is more complicated than a livestreaming studio. Factories, brand merchants, KOLs, multi-channel networks (MCNs), e-commerce and UGC PGC platforms have together created an ecosystem behind the shows.

UGC refers to User Generated Content and PGC means Professionally Generated Content.

In this section, we will look into the MCNs, which bridge all these parties into an industry chain.

What is MCN?

The phrase ‘multi-channel network’ was first used by YouTube to describe an organization which works with video platforms and channel owners, offering assistance for the latter in areas such as cross-promotion, capitalization, funding and partner management.

China’s MCN industry evolved to a new growth stage, with over 6,500 participants in 2019

Development of China’s MCNs

Emerging Stage
Many advertising companies transferred to MCNs, few were from We-media*

Growing Stage
We-media matured; e-commerce related MCNs started to incubate influencer brands; Taobao launched live e-commerce.

Blooming Stage
E-commerce and content platforms supported MCNs’ expansion; short videos and livestreaming surged.

Evolving Stage
Diversified MCNs and live e-commerce gained traction.

Note: * We-media refers to the utilization of real-time communication platforms in China by the general public to build impact.

Source: Guosheng Securities, EqualOcean analysis
Despite an imported concept, MCNs in China have been growing at a remarkable speed. In 2012, there were fewer than 100 MCNs in China but the number surged to 6,500 by the end of 2019, by Guosheng Securities.

What makes the Chinese case unique is that, besides monetization for KOLs, MCNs in China also train livestreamers themselves and are involved in content development. During the process, they take responsibilities including technical support, user management, platform resource management and daily operations.

More than a professional high-quality content provider, MCNs also play an indispensable role in monetizing livestreaming traffic. Take live e-commerce as an example, they connect brands, factories, platforms and KOLs.

Despite the vital role they play in the entire livestreaming value chain, the rising upstream and downstream divisions also fuel tremendous growth power for the MCN. From the downstream or consumer end, China’s online livestreaming users reached 504 million by 2019, with an increase of 10.6%, by iiMedia.

In response to this surging user base, many companies tried to integrate livestreaming into their businesses. Among them, short video and e-commerce platforms are two of the most effective tools. According to Everbright Securities, the live e-commerce gross merchandise value (GMV) totals generated by Taobao, Kuaishou and Douyin were worth CNY 250 billion, CNY 300 billion and CNY 40 billion in 2019 respectively.

Moreover, the rapid growth of short video platforms has bred a large group of users as well as KOLs.

In China, around 90% of KOLs work from the supply end and generate countless content items for the brand merchants contracted under MCNs, accelerating the momentum of the latter.

**MCNs play an indispensable role in the live e-commerce industry chain**

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*The industry chain of livestreaming can be associated with businesses including online game, social networking, education, etc. Here we are demonstrating the case in live e-commerce.

Note: The orange arrows are scenarios happen in short video platforms; the grey arrow is the scenario happens in e-commerce platforms.

Source: Everbright Securities, EqualOcean analysis
Livestreaming channels share an increasingly larger user base with short-video platforms

User scale and forecast of China’s online livestreaming market, 2016-2020e (in millions)

Notation: IoT = Internet of Things. The data on 48 financing rounds ranging from angel/seed investment to late-stage funding were used; the dollar volumes raised in 11 of these events remain undisclosed as of January 22, 2020.

Source: iiMedia.cn, EqualOcean analysis

What is the MCN business model?

MCNs are evolving at an unprecedented speed. They have been focusing more on internal operation efficiency and building core competency, trying to diversify their services and to gain more monetization channels.

The MCN business model in China has developed into three types: e-commerce focused, advertising & marketing oriented and extensive content production.

The advertising and content-anchored types of businesses provide various capitalization channels, which include product promotions, IP licensing and copyright management, as well as paying for the content. E-commerce - focused MCNs, on the other hand, are more reliant on the commissions generated from the sales during the livestreaming shows. The supply chain management capability is crucial in terms of product selection, promotion and after-sale management. Currently, as MCNs are still at an early stage, it’s hard to say which business model has more potential for growth than another.

However, the monetization efficiency of live e-commerce MCNs is significantly higher than that of advertising focused players. Moreover, the scale of GMV single users generated during live e-commerce shows is far more significant than that of other approaches. Therefore, we will focus on the MCNs in the live e-commerce industry and dig deeper.
An MCN case study: Yowant Network

**Why to keep tabs on Yowant?**

Two of the most celebrated KOLs, Viya and Li Jiaqi, who attracted 30 million viewers last Double 11, have raked in CNY 2.7 billion (USD 389 million) and CNY 1 billion (USD 144 million) in sales respectively.

The MCNs who possess (have signed contracts with) over 90% of the KOLs are the real force that generates hype and sales to support the rising medium.

It is one of the most representative MCNs in China.

On Kuaishou’s platform, the MCN company named Yowant stands out, having retained the number one ranking since May 2019.

At present, Yowant has built co-operations with Douyin (the Chinese version of TikTok), Kuaishou, Taobao Live and other well-known streaming platforms.

It has more than 50 influencers and has signed more than 10 celebrities, including Wang Zulan and Zhang Bozhi – two well-known Hong Kong movie stars. As of 2019, the company boasts 150 million fans, over 10 billion accumulated video views and more than 2.5 billion monthly exposures.

Besides, the company began to monetize its short video content in September 2019 and had achieved CNY 3 million in average daily sales by December.

**How does Yowant grow?**

Founded in November 2010, Yowant positioned itself as a digital marketing solution provider and has been improvising its business to keep surfing the top of the market wave.

From 2013 to 2014, its main business was Internet-based advertising distribution. It served Baidu, Tencent, NetEase and other Internet players, matching different marketing needs to the right resources.

In the following two years, it entered into the mobile game market, serving as third-party operator and advertiser, leveraging its advantage in distributing channels.

Two years after that, Yowant established a matrix WeChat official account, covering e-commerce on consumer products, beauty and skincare education and others from 2017 to 2018. The business model of ‘pay for content’ started to come out in revenue.

After 2019, the company started to concentrate on social e-commerce and to train Internet influencers though short video platforms and other e-commerce platforms.

These rapidly evolving business strategies of Yowant coincided with the development of the MCNs in China recent years, which is one of the reasons for its current leading position among 6,500 counterparts.

**How are Yowant’s numbers?**

In March 2018, the Shenzhen-based listed company Saturday acquired 88.57% of the shares of Yowant for CNY 1.8 billion (USD 284 million). Saturday paid CNY 474 million in cash and the rest of the CNY 1.314 billion in shares.

An announcement from Saturday also showed that the two parties signed an agreement promising that the recurring net profit of Yowant attributable to shareholders of the parent company in 2018, 2019 and 2020 should be no less than CNY 160 million, CNY 210 million, and CNY 260 million, respectively.

In 2018, the recurring net profit of Yowant exceeded the promised amount of CNY 8.369 million, with a completion rate of 105.23%.
WeChat-related revenue caught up in the revenue share in 2017

Revenue structure of Yowant (in CNY million)

<table>
<thead>
<tr>
<th>Year</th>
<th>Advertising</th>
<th>Game distribution and promotion</th>
<th>WeChat accounts to operation</th>
<th>WeChat distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>116</td>
<td>396</td>
<td>895</td>
<td>16</td>
</tr>
<tr>
<td>2014</td>
<td>14</td>
<td>126</td>
<td>270</td>
<td>20</td>
</tr>
<tr>
<td>2015</td>
<td>15</td>
<td>106</td>
<td>773</td>
<td>16</td>
</tr>
<tr>
<td>2016</td>
<td>16</td>
<td>55</td>
<td>418</td>
<td>112</td>
</tr>
<tr>
<td>2017</td>
<td>17</td>
<td>30</td>
<td>300</td>
<td>30</td>
</tr>
<tr>
<td>2018</td>
<td>18.1-10</td>
<td>656</td>
<td>153</td>
<td>173</td>
</tr>
</tbody>
</table>

Note: "Yoshan Saturday Shoes (002291:SZ) acquired Hangzhou Yowant Network in October 2018 and closed the deal in 2019. The public data shows Yowant’s financials till October 2018.

Source: Yowant, EqualOcean analysis

Yowant is projected to achieve CNY 260 million in 2020, at a 23.8% Y-o-Y* rate

Recurrent net profit of Yowant (in CNY millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Net profit</th>
<th>Increase rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>25</td>
<td>92.3%</td>
</tr>
<tr>
<td>2016</td>
<td>35</td>
<td>40.0%</td>
</tr>
<tr>
<td>2017</td>
<td>59</td>
<td>68.6%</td>
</tr>
<tr>
<td>2018</td>
<td>168</td>
<td>184.7%</td>
</tr>
<tr>
<td>2019</td>
<td>216</td>
<td>25.0%</td>
</tr>
<tr>
<td>2020E</td>
<td>260</td>
<td>23.8%</td>
</tr>
</tbody>
</table>

Note: *Y-o-Y – year-on-year

Source: Yowant, EqualOcean analysis
Any worries?

The rapid development of short video platforms in China has fostered a large number of users who are accustomed to watching live broadcasts and short videos; meanwhile, it has incubated thousands of influencers who can turn their Internet traffic into profits. These individual influencers are more agile and flexible to innovate new businesses, by taking the advantage of their own aggregated traffic.

But risks coexist with opportunities. From the development experiences in other countries, the bargaining power of MCNs is low on both sides. That makes MCNs a weak link in the whole industry chain, especially compared with the Internet content juggernaut as a whole.

Therefore, when the competition between the platforms ends, the reshuffle of the MCN industry will accelerate.

More importantly, the capability of producing good content is the core competitiveness of an MCN. Winners will stand out by constantly providing quality content. Current MCNs are facing the conundrum of a lack of talent, as the top KOLs are a scarce resource for all players. The cost of attracting influencers or training them will also be crucial for an MCN’s future.

Last but not least, as the live e-commerce model is exploding, problems have surfaced, especially in terms of the quality and after-sales service of the goods brought through the live-streaming show period. EqualOcean believes that in the future, MCNs with more resources and connections with suppliers and brand merchants will be more advantageous.

MCNs that dig into one or several product verticals, such as apparel, jewelry or cosmetics, will possess more bargaining power and will be more likely to profit.

Despite all the risks, there will be at least some leading companies that emerge from the crowd.

In November 2019, the company set up a CNY 5 million fund called ‘Cradle’ (which is homophonic with the company’s Chinese name) to ensure that consumers can buy goods via its live broadcasts. If the products are problematic, the fund will be applied in compensation.

In addition, Yowant set up a special live broadcast customer service team to ensure a trouble-free after-sales service for consumers. The fund is the first such venture among players in their sector.
Chapter 2

Is livestreaming a ‘gold rush’ for everyone?

An overview of popular livestreaming profit models

Livestreaming has found its way into e-commerce, online gaming and entertainment, impacting B-players and consumers.

Taobao Live, Kuaishou, Douyin, Huya, etc. These online businesses develop in diverse manners.
Live e-commerce

KOLs are generating new layers of the e-commerce market

Live e-commerce is a new term coined to describe the combination of livestreaming and e-commerce, characterized by customized shopping experience, decentralized traffic and frequent real-time interactions.

Compared to traditional e-commerce, live e-commerce brings social property and rich content, transforming a simple buyer-vendor virtual relation platform into an influencer-centered ecosystem.

These influencers, or key opinion leaders (KOLs), are raising waves in a new economy. In China's KOL economy, KOL e-commerce is one of the most promising segments. According to EqualOcean analysis, the e-commerce GMV driven by KOLs attached to all these online platforms grew at a compound annual growth rate of 119.8%, from CNY 700 million in 2013 to CNY 79 billion in 2019, and is projected to grow at 35% from 2019 to 2022.

The market size of KOL-based e-commerce is projected to grow at a 35% CAGR*, to reach CNY 194 billion in 2022, over 35% of total Internet KOL economy

Market size in segments of Internet KOL economy, CNY billion

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<td>KOL-based E-commerce</td>
<td>2</td>
<td>7</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20E</td>
<td>144</td>
<td>194</td>
</tr>
<tr>
<td>Other KOL business</td>
<td>33</td>
<td>53</td>
<td>79</td>
<td>107</td>
<td>144</td>
<td>194</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note: *Compound annual growth rate. The Internet KOL economy covers various business modes, including e-commerce, advertising and marketing services, virtual gifts from fans and knowledge sharing and etc.. KOLs here refer to those professional KOLs.

Source: Frost & Sullivan, Qianzhan Research, EqualOcean analysis
Key drivers behind livestreaming e-commerce

Extant short-video platforms have cultivated a content-anchored virtual community with high volume traffic and a sophisticated telecommunication industry. One major push comes from the steadily growing trend of live-streaming audience, with a four-year 14% CAGR adding up to a user amount of 524 million in 2020 from 2016, according to iiMedia and Everbright Securities.

The other game-changing driver resides in the disruption of the marketing and distribution chain in e-commerce. The product suppliers are most likely one livestreaming show away from target consumers. A simplified selling channel brings consumers monetary discounts and product vendors more prospect buyers, on the other hand. From the user perspective, livestreaming e-commerce generates not only monetary values but also intangible ones through high-quality content and entertainment satisfaction.

Last but not least, livestreaming e-commerce is an optimal solution for most MCNs to monetize content resources. Besides online commerce, they can profit from advertising and selling IPs (intellectual properties). Traditional MCNs may still heavyweight advertising based on the to-B networks, while most livestreaming MCNs have pivoted to e-commerce as the primary revenue source.

Live e-commerce creates monetary values by simplifying distribution channels

The value creation of live e-commerce and the mechanism of cost-effectiveness in live e-commerce

Source: Everbright Securities Research, EqualOcean analysis
An escalated people-goods-scenario relationship

E-commerce transfers offline selling scenarios to online, making buying happen everywhere at any time. It is a move from space to surface that makes the purchase easier while losing part of the information. The livestreaming can preserve the merits of the online model while creating a chance for interactions.

Another update is the emerging role of MCNs as traffic centers in the consumption circle. The total number of registered MCNs exceeded 5,000 in 2018, but only fewer than 6% generated over CNY 100 million each in their 2018 revenue, according to Topklout Data. They export professional content and improve the shopping experience, gaining a private fan pool.

Increasingly relying on KOLs, consumers are getting less active in product research. For all livestreamed e-commerce, a more intense tussle has been arising in the supply chain. All players are not seriously lagging each other in the traffic splits, an arena dominated by live streaming platforms and MCNs. The supply chain service providers deliver the right goods to the right KOLs, profiting from commissions.

On the other side, the offline showrooms where KOLs broadcast essentially constitute a commercial real-estate business. As more KOLs become professional MCN-backed, the offline showroom supply and selection of goods are more significant for operating performance.

The year of 2019 saw a GMV of over CNY 300 billion on livestreaming e-commerce. The e-commerce generic type is facing frequent challenges from aggressive traffic-rich Internet giants.

Fighting for traffic is only the start; a robust deployment on the supply chain will be needed for many players, keeping them competitive till the next transformation.

China’s live e-commerce market size is expected to target CNY 23.6 billion, on a 520 million live-show app user scale in 2020

Market size in CNY billion and user scale in million

<table>
<thead>
<tr>
<th>Year</th>
<th>User scale</th>
<th>Live e-commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>2.8</td>
<td>8.1</td>
</tr>
<tr>
<td>2018</td>
<td>460</td>
<td>504</td>
</tr>
<tr>
<td>2019</td>
<td>520</td>
<td>23.6</td>
</tr>
<tr>
<td>20E</td>
<td>23.6</td>
<td>520</td>
</tr>
</tbody>
</table>

Note: *Compound annual growth rate.

Source: Everbright Securities Research, EqualOcean analysis
Livestreaming on short-video platforms

The rise of the short video industry is bringing the knowledge economy to a new peak. It also provokes creators to provide more valuable and informative content. To occupy one’s mind in a fragmented time, watching short videos is an optimal format, consuming only a few minutes, while entertaining audiences sufficiently.

FastData and Questmobile, two data monitor applications, show that short videos generally cost 22.3 hours per monitored user in June 2019, taking a mean total of 1.8 hours from other entertainment activities such as online videos, music, reading and mobile games.

A soft landing on the livestream arena

The incorporation of livestreaming is not regarded as a technical challenge or strategic turn-around for players in China’s short-video industry. The rationale to promote this technique is more to consider. Kuaishou, the live-show pioneer, experienced an astonishing traffic boost after 2016. So did other players - Douyin and Xigua (also known as ‘Watermelon’) Video followed the suit.

Undoubtedly, the short-video market has educated a large potential user group on livestreaming – it has created an ‘indifferent user group.’ Chinese short-video platforms have become the third-largest traffic gateway to the Internet world, with a 71.5% penetration rate in September 2019 by Questmobile.

A fast-growing short video user pool is driving the short-video market size to grow to CNY 211 billion in 2021, nearly threefold the livestreaming size

Market size in CNY billion and user scale in million

Note: *Compound annual growth rate. **The pan-video refers to those online videos excluded from short videos and livestreaming. The livestreaming market size covers livestreaming-related businesses from various e-platforms, including e-commerce, e-sports, short-video platforms and etc. The short-video market size cover all short-video platforms, such as Kuaishou and Douyin.

Source: iiMedia Research, Questmobile, Founder Securities, EqualOcean analysis
From virtual to real: industry chain

The platform economy connects demand and supply. In the case of the short-video platform, as a form of the knowledge economy, content creators on the upstream consist of MCN institutions, cyber celebrities and media. The core role of these platforms is to regulate all these contents and monetize the aggregated traffic. As the graph seen below, there are typical four transformations to monetize traffic.

In the current business scenarios, advertising and e-commerce are two heavyweights and the latter is growing fast. It is easy for platforms to orient traffic into game-themed business since mobile game apps share a similar user base with short-video platforms. But the pressure from the livestream gaming platforms is not easy to ignore. Virtual gifts in live-streaming shows are getting more popular due to a KOL-centered culture. These virtual gifts will be converted to real money split between live-broadcast anchors and the platform.

Indeed, for content platforms, obtaining and operating is just the start. Only with a sophisticated traffic ecology can they seek more business opportunities to unleash the consumption potentials.

Advertising and e-commerce are the most effective ways to monetize traffic on the short-video platform

Source: Founder Securities Research, EqualOcean analysis
A battle for people, for content

On this heated short video playing field, over 30 relevant streaming apps in eleven factions are sparing no effort, with the widely known factions of Tencent, ByteDance, Alibaba and Baidu all in play.

As more Internet giants continuously join in this scuffle, the focus of the competition shifts from dynamic traffic to static core users, or retention rate and user stickiness.

Douyin and Kuaishou took the lead in DAU (Daily Active Users) in January 2020, far surpassing their peers in the BAT (Baidu, Alibaba and Tencent) factions.

Obviously, Kuaishou is the best at user activation and retention, with an 84.4% seven-day retention rate, closely followed by 81.7% for Douyin and other ByteDance-school apps.

As illustrated in the industry chain before, the upstream content creation is the competition focus behind all those dazzling videos and flashy live-stream shows.

Regardless of the detailed marketing tricks and particular content distribution mechanisms, original and quality content injects new blood and attracts traffic to the platform. This aspect can be measured by the MCN quantity and the KOL quality.

MCN institutions in China’s Internet industry totaled 6,500 in 2019, over 40 times the amount in 2015. Now they are the most crucial content producers in the short-video business.

The years of 2018 and 2019 saw fast MCNs and KOLs sprawling to conquer major streaming sites. This year, 2020, is expected to see the fittest survive in the reshuffle time.

**ByteDance apps and Kuaishou have more active and loyal users than rivals backed by Tencent and Baidu**

<table>
<thead>
<tr>
<th>App</th>
<th>MAU</th>
<th>One-week retention rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douyin</td>
<td>551</td>
<td>82%</td>
</tr>
<tr>
<td>Xigua</td>
<td>271</td>
<td>71%</td>
</tr>
<tr>
<td>Huoshan</td>
<td>172</td>
<td>72%</td>
</tr>
<tr>
<td>Kuaishou</td>
<td>493</td>
<td>84%</td>
</tr>
<tr>
<td>Wesee</td>
<td>119</td>
<td>34%</td>
</tr>
<tr>
<td>Haokan</td>
<td>66</td>
<td>52%</td>
</tr>
<tr>
<td>Quanmin</td>
<td>14</td>
<td>51%</td>
</tr>
</tbody>
</table>

Note: One-week retention rate is the percentage of people who continue using the app over a week. Douyin, Xigua Video (also known as Watermelon Video), Huoshan are Apps in the ByteDance product portfolio. Haokan and Quanmin, two short-video Apps, are launched by Baidu. Wesee is backed up by Tencent.

Source: Founder Securities, EqualOcean analysis
Douyin has the greatest potential for content production with access to over 60 thousand KOLs and 1 thousand MCNs, closely followed by Kuaishou

The number of KOLs (in units) on top short-video platform, 2019 April

<table>
<thead>
<tr>
<th>Platform</th>
<th>KOLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douyin</td>
<td>60,484</td>
</tr>
<tr>
<td>Kuaishou</td>
<td>52,362</td>
</tr>
<tr>
<td>Miaopai</td>
<td>20,024</td>
</tr>
<tr>
<td>Huhoshan</td>
<td>10,012</td>
</tr>
</tbody>
</table>

China’s MCNs split, by short-video platform

<table>
<thead>
<tr>
<th>Platform</th>
<th>MCNs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douyin</td>
<td>1,000 +</td>
</tr>
<tr>
<td>Kuaishou</td>
<td>600 +</td>
</tr>
<tr>
<td>Wesee</td>
<td>280 +</td>
</tr>
<tr>
<td>Miaopai</td>
<td>240 +</td>
</tr>
</tbody>
</table>

Note: KOL = Key opinion leader, MCN = Multi-channel network. China’s short-video MCNs are projected to outnumber 5000 in 2020.

Source: iiMedia Research, EqualOcean analysis

In the pyramid KOL structure of traffic distribution, the few flagship KOLs run a traffic pool of over 100 million fans.

The middle-class KOLs (with fans of between 300 thousand and 3 million) are the most aggressive participants, growing at the fastest pace.

Over half of KOLs are unfortunately at the bottom of the ‘food chain’ – i.e. in danger of losing traffic at any moment and being kicked out with a low fan number.

Super KOLs with the largest fans pool (over 10 million), accounted only 0.38% of total KOLs, grew 52.08% in number during the first half of 2019

The number percentage of differently-ranked KOLs and their seven-month growth rates in July 2019

<table>
<thead>
<tr>
<th>KOL Category</th>
<th>Percentage</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super KOLs (&gt;10M)</td>
<td>0.38%</td>
<td>+52.08%</td>
</tr>
<tr>
<td>Top KOLs (3-10M)</td>
<td>2.51%</td>
<td>+58.2%</td>
</tr>
<tr>
<td>Above-average KOLs (1-3M)</td>
<td>10.88%</td>
<td>+62.61%</td>
</tr>
<tr>
<td>Below-average KOLs (0.3-1M)</td>
<td>31.42%</td>
<td>+73.22%</td>
</tr>
<tr>
<td>Tail KOLs (&lt;0.3M)</td>
<td>54.61%</td>
<td>+55.49%</td>
</tr>
</tbody>
</table>

Note: KOLs are ranked by the size of their fan pool.

Source: CaasData, Founder Securities, EqualOcean analysis
Livestreaming gaming

The video game livestreaming market overview

Video game livestreaming in China has been through four stages.

Starting from 2013, this new form of livestreaming made its appearance via the hot multiplayer online battle arena (MOBA) games such as DOTA 2 and League of Legends. At the same time, relatively mature online chatting apps like YY and video platforms such as ACFUN in China assisted its emergence.

From 2013 to 2014, the infrastructure policy in China enabled the livestreaming industry with high brand quality, accelerating this video game sector’s revenue to grow with a three-digit percentage speed.

The two most significant players in China – Huya and Douyu – were separated from YY and ACFUN respectively and became independent platforms. Meanwhile, the US e-sports and video livestreaming player Twitch was acquired by Amazon in 2014 for USD 940 million, encouraging China’s capital to invest deeply in the game-based livestreaming sector.

The following three years (2015-2018) witnessed the burst of video game livestreaming. With the help of capital firms, over 120 streaming platforms were competing at the same time. The excess platforms drove up the video streamers’ price and the market entered a feverish stage.

Since 2018, this industry has gradually matured. The competition and departure of platforms also brought vitality to the market. Tencent has invested in Douyu and Huya, and the rapid growth of the two has effectively driven the growth of the overall market scale. The industry is more standardized and regulated, heading in the direction of healthy competition.

Market size

According to Analysys, the market scale of China’s livestreaming will reach CNY 73 billion in 2020, while video game livestreaming will occupy a CNY 24 billion market share, accounting for 33% of the total.

Video game livestreaming’s market size is projected to represent over one third of the total livestreaming market

Percentage of live-streaming gaming of total livestreaming market size (in CNY billion)

<table>
<thead>
<tr>
<th>Year</th>
<th>Gaming</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>23</td>
<td>87</td>
</tr>
<tr>
<td>2017</td>
<td>44</td>
<td>82</td>
</tr>
<tr>
<td>2018</td>
<td>51</td>
<td>75</td>
</tr>
<tr>
<td>2019</td>
<td>61</td>
<td>70</td>
</tr>
<tr>
<td>2020</td>
<td>73</td>
<td>67</td>
</tr>
<tr>
<td>2021</td>
<td>82</td>
<td>65</td>
</tr>
<tr>
<td>2022</td>
<td>92</td>
<td>63</td>
</tr>
<tr>
<td>2023</td>
<td>103</td>
<td>61</td>
</tr>
</tbody>
</table>

Source: Qianzhan Research, iiMedia Research, Leading Industry Research, Analysys, EqualOcean analysis
Who are the video game livestreaming users?

In 2019, the number of livestreaming users reached 506 million. 320 million were video game livestreaming users, according to Analysys. Examining their distribution in China, we find that first and newly first-tier cities in China represented over 50% of total users. Of the 10 provinces that have the most users, Guangdong province ranked first while Beijing and Shanghai were not in the Top 10 list.

The driving force for the growth of live broadcast users is the flow of continuously updated online games such as MOBA, multiplying E-sports events and the up-trending short video platforms that are nipping Huya and Douyu’s heels.

User distribution of video game livestreaming in China, 2018

First and the newly first-tier cities’ users take over 50% of the total game livestreaming users

<table>
<thead>
<tr>
<th>Tier 1* cities</th>
<th>New tier 1</th>
<th>Tier 2</th>
<th>Tier 3</th>
<th>Tier 4 and below</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.54%</td>
<td>10.73%</td>
<td>18.35%</td>
<td>17.50%</td>
<td>41.88%</td>
</tr>
</tbody>
</table>

Top 10 provinces with the largest game livestreaming users

1. Guangdong 13.51%
2. Zhejiang 6.40%
3. Sichuan 6.13%
4. Shandong 5.59%
5. Jiangsu 5.25%
6. Hunan 4.99%
7. Henan 4.59%
8. Hubei 4.45%
9. Hebei 4.15%
10. Liaoning 3.93%

China’s city-tier classification evaluates Chinese cities in GDP, political administration and population. Tier-1 cities are Beijing, Shanghai, Guangzhou and Shenzhen, directly-controlled municipalities and provincial capital cities, each with an over USD 300 billion GDP and population of over 15 million.

Source: Analysys data
The increase rate is slowing down as the user number reaches the ceiling

Number of video game livestreaming users in China, in million, 2014-2020e

<table>
<thead>
<tr>
<th>Year</th>
<th>Users</th>
<th>Increase rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>60</td>
<td>200.0%</td>
</tr>
<tr>
<td>2016</td>
<td>140</td>
<td>133.3%</td>
</tr>
<tr>
<td>2017</td>
<td>220</td>
<td>7.1%</td>
</tr>
<tr>
<td>2018</td>
<td>260</td>
<td>13.2%</td>
</tr>
<tr>
<td>2019</td>
<td>310</td>
<td>7.7%</td>
</tr>
<tr>
<td>2020e</td>
<td>340</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

Source: iResearch, Shengang Securities, EqualOcean analysis

What’s the role of video game livestreaming in the whole industry chain?

For video game livestreaming platforms, their role in the industry chain is to gather content and distribute it to target users.

The main upstream suppliers – or content generators – include video game developers & operators, e-sports events and livestreaming hosts.

They provide video game-related content, making it into videos and livestreaming shows for the platforms. Platforms then pay them in the form of intellectual property (IP) fees, livestreaming authorization fees and revenue sharing fees, etc.

The downstream players, which are quite simple in this case, are the users of the platform – since the platforms are doing to C business. Users will watch live broadcast to learn game techniques or follow some star players they like; in return, they will buy virtual gifts provided by the platform to reward their streamers.

Viewers’ virtual-gifts donation or user contribution is one of the most critical revenues of both the streamers and the platform.

One thing that needs to be mentioned is the evolving relationship between China’s video game livestreaming platforms and video game developers. Frequent IP infringement is still an important factor that restricts the healthy development of the livestreaming industry. However, few game developers and operators have proactively sued over the violation of the platform or the live streamers.

Most of the video game developers in China are not hugely concerned over litigation – they value the traffic brought by the livestreaming platform users more. Even if they are watching an uncopyrighted video, they can still benefit from the platform’s popularity.

Tencent announced cooperation with Chusho, a Shanghai-based video game livestreaming platform, in November 2019, making Chushou the first of its kind to launch a content-based partnership with Tencent through a licensing agreement. From ignoring copyright to seeking cooperation, one can see the gradual transformation of the industry in a healthy direction.
The profitability or monetization ability is more related to the company’s development strategy and operation level.

After feverish competition among hundreds of video game livestreaming platforms, Douyu and Huya stand out due to the two above-mentioned reasons.

In the next section, we will unveil the enigma behind these two players that form the duopoly in the sector.

What’s the core competency?

As content gatherers and distributors, the key competence of video game livestreaming platforms lies in two aspects: the capability of attracting traffic and the ability to transfer traffic into profit.

The traffic increase essentially lies in the quality of the content one’s platform provides. Whether it is diversified in its categories, rich in performing format and able to differentiate itself from other platforms are all significant.

Source: EqualOcean analysis
A comparative insight into three pairs of live streamers

This chapter looks into six livestreaming e-businesses, contrasting their histories, business models and performance.

- E-commerce: Taobao and Pinduoduo
- Short-video platform: Douyin and Kuaishou
- Video gaming: Douyu and Huya
Live e-commerce: Taobao vs. Pinduoduo

In China’s e-commerce industry, Taobao has been in an impregnable position since its inception in 2003. Boasting many ‘first-ever’ titles, it is never shy of testing innovative business ideas to provide the next boost. Meanwhile a younger game-disrupter, Pinduoduo, which showed up in the arena in 2015, cut into the e-commerce qualifying competition by redefining the role of social factor in the value chain.

As the two e-commerce giants are eyeing the next mainstream breakthrough, some livestreaming-based fusions are taking shape. Focusing on ‘livestreaming + ecommerce,’ this analysis starts from the history and market position and moves down to the contrast between their livestreaming approaches.

The start in the early 2016

The very first combination of livestreaming and e-commerce in China was introduced by Taobao in March 2016 when the giant was undertaking a content-oriented marketing strategy. In the following two to three years, more popular e-commerce outfits, such as Mogujie, Suning and JD, joined this traffic-booming initiative.

A direct benefit brought by this new alive element is a clear rise of user stickiness and activity, resulting in a higher conversion of liquidity.

After a first attempt at livestreaming, Taobao officially launched a ‘Taobao Livestreaming Platform’ in May 2016, featuring celebrities and stars for more online visits. The promotional festival ‘Double 12’, a Chinese year-end online shopping festival, in 2018 took the craze to a new level, in which over 70,000 live--streaming shows that year generated over a doubled GMV compared to 2017’s amount.

The 2019 Spring Festival witnessed the arrival of the app ‘Taobao Live’ on major app stores, which became the primary channel on ‘Double 11’ (an online shopping festival initiated by Taobao, followed by other e-commerce giants) with a new record of over CNY 20 billion GMV on a single day.

The livestreaming industry matures as e-commerce and social media players keep joining in

The livestreaming evolutionary driven by continued participation of e-commerce and social media players

<table>
<thead>
<tr>
<th>E-commerce</th>
<th>Taobao Live</th>
<th>Suning</th>
<th>JD.com</th>
<th>Pinduoduo</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Started trial operation of live streaming in March</td>
<td>Launched built-in livestreaming function on the app in July</td>
<td>Started to promote goods in live streaming in August</td>
<td>Made an attempt of real-time online selling in November</td>
</tr>
<tr>
<td>Social media</td>
<td>Mogujie</td>
<td>Kuaishou</td>
<td>Douyin</td>
<td>Tencent</td>
</tr>
<tr>
<td>2016</td>
<td>Launched the livestreaming mode in March</td>
<td>Integrated online selling with its livestreaming community</td>
<td>Opened online shopping cart function in December</td>
<td>Opened a WeChat-based livestreaming service ‘Kandian’ in November</td>
</tr>
</tbody>
</table>

Source: 2020 White Paper of Taobao Vendors, Everbright Securities
**Operation data**

Taobao is still in a dominating position in China’s e-commerce with an unbeatable GMV of CNY 5.73 trillion and annual active users 711 million as of 2019. The group-buying-centered Pinduoduo also performed well last year with over CNY 1 trillion annual GMV and second highest annual active user amount of 585.2 million, with over 90% GMV annual growth rate.

This young e-commerce is challenging the other two titans: Taobao and JD.com.

When it comes to livestream-driven online shopping, the two players show different poses. The live-streaming model of Taobao is now a very mature traffic-aggregating platform vis-a-vis other peers’ livestreaming efforts, orienting a constant stream to the e-commerce site and resulting a contribution of CNY 100 billion in 2018, around 1.81% of Taobao’s total GMV.

Taobao now houses the most popular anchors in the livestreaming field, including individuals and the institution-backed names. As of February 2020, on the platform are over 1,000 MCN institutions registered, covering 4,800 KOLs. Top 20% MCN institutions (around 140) contributed almost 75% of Taobao Live’s traffic and 80% of GMV, showing a clear Pareto Principle-like tendency. The leading anchor Viya backed by the MCN organization Qianxun drove a CNY 2.8 billion GMV in 2018, as the white paper states.

According to Taobao’s Live-streaming New Economy 2020 Report, the live channel served over 400 million online users, including 40% more users who spent over one hour in watching live streaming on average.

In February 2020, the new registered online shops based on live-stream shows outnumbered the amount in January by 719%, a soaring increase impacted by the COVID-19 pandemic.

**Taobao Live is projected to grow GMV at a 73% CAGR* to CNY 300 billion in 2020, nearly tenfold the scale of Duoduo Live**

<table>
<thead>
<tr>
<th></th>
<th>CAGR* 18-20E</th>
<th>Taobao 13%</th>
<th>Pinduoduo 82%</th>
<th>Taobao Live 73%</th>
<th>Duouo Live N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taobao’s GMV without Taobao Live</td>
<td>5,523 1.3%</td>
<td>5,423 1.3%</td>
<td>472 0.0%</td>
<td>6,200 3.1%</td>
<td></td>
</tr>
<tr>
<td>Pinduoduo’s non-livestreaming GMV</td>
<td>6,700 4.3%</td>
<td>6,200 4.3%</td>
<td>946 0.0%</td>
<td>1,007 0.0%</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>2019</td>
<td>2020E</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *Compound annual growth rate. Taobao Live is a livestreaming APP embedded with e-commerce service, a stand-alone product in Alibaba’s e-commerce ecosystem. Duoduo Live is a built-in function channel on Pinduoduo APP, providing live-streamed videos to promote goods. Duoduo Live is assumed 2% penetration rate of Pinduoduo’s total deal value in 2020.

Source: 2020 White Paper of Taobao Vendors, Pinduoduo’s financial report, LatePost, EqualOcean analysis
Over 80% streamers on Taobao Live engaged in e-commerce in 2019 December

Live streamers split on Taobao Live, December 2019

The almost doubled penetration rate (the ratio of livestreaming-driven GMV to the platform GMV) drove a gross merchandise value of over CNY 200 billion in 2019.

The later entrant Pinduoduo takes a different strategy by utilizing its unique advantages on the supply end. Unlike Taobao which puts a heavy emphasis on KOLs, celebrities and MCN-backed profiles, Pinduoduo invites symbolic models or even government officials relevant to the recommended products or target industry.

In April 2020, the NBA star Stephon Marbury gave his first live-stream show on Duoduo Live channel during the ‘10 Billion RMB Subsidies’ promotion period. The ‘Civic Governor Live-show’ for the fresh product livestreaming brought up over 180 million completed deals, resulting in a figure of over 16.7 million online consumers following the local small-medium enterprises.

Different business logics behind one similar model

As illustrated in Chapter 2, the ‘livestreaming + e-commerce’ business exhibits a unique pattern that pivots to three core elements: the people, the goods and the scenarios. Taobao Live and Pinduoduo choose a different traffic-cored model according to their own strengths. Besides a built-in livestreaming function on its e-commerce app, Alibaba has a stand-alone live-stream platform.

Taobao Live is an independent app in cooperation with its e-commerce peer Taobao. This product portfolio structure indicates that Taobao Live is a traffic-centered platform that generates traffic, distributes accumulated traffic and converts traffic to merchandise value. In Taobao Live’s value model, KOLs are the main engine that keeps the chain running to generate revenues.

The KOLs are not necessarily attached to certain goods or an online shop, but it is flexible to choose what products to recommend. One KOL has direct exposure to a group of online shoppers who share similar considerations before making the buying decision. KOLs on Taobao Live have evolved into a pyramid structure, with a peak of influential 22 anchors, a middle layer of between one to two thousand and bottom part of over 15 thousand as of 2019, as reported by CaasData.
Pinduoduo defines the role of livestreaming in its customer journey as a traffic aggregator and a decision booster. Duoduo Live, the live-streaming channel of Pinduoduo, is only an add-on built on the original e-commerce app, instead of a centralized entry for a traffic pool. It is designed to be a traffic distributor with decentralized access to the online shops providing live-streaming shows.

The rationale behind this design is that the built-in function can better serve Pinduoduo’s C2M (customer-to-manufacturers) as its essential business logic. The success of the online traffic harvester can be credited for two strategies different from all others: firstly, the social network for demand creation. Secondly, the simplified supply on the value chain. A form of real-time interaction improves communications between consumers and sellers.

The livestreaming is more an option for Pinduoduo’s shops because businesses of different scales see the trade-off between traffic boosting and competition cost differently. If opening a virtual area for traffic competition, it is very likely to end up with online shoppers investing huge amount in MCN agency fees. Then the so-called C2M-based e-commerce will be less attractive to those source suppliers.

Thus, online users experience quite different customer journeys on these two platforms. On Taobao Live, viewers - mostly fans of KOLs - first see the professional MCN anchors introduce a variety of goods. Crammed with full-screen reviews and real-time interactions, they may press the button and buy some things they previously didn’t want. To achieve a higher conversion, Taobao Live needs to not only have more access to the initial audience, but also maintain increasing shopping stimulus during the livestreaming rooms. To obtain wider initial exposure, this is where Douyin and Kuaishou join in, which this report will assess in the next section.

On Pinduoduo, some group-buying discounts or social referrals may have already triggered potential shoppers to search relevant goods before watching promotional livestreaming. The anchors, or amateur KOLs, are mostly product-relevant or even sellers themselves.

**Taobao Live and Duoduo Live show a different logic chain in connecting their business elements**

![Diagram](image)

*Note: Professional KOLs refer to popular anchors backed by MCN institutions and famous celebrities invited to promote products on Taobao Live. Most professional KOLs don’t have online vendors. Pinduoduo’s amateur KOLs are generally represent the benefits of online vendors, with some vendors themselves, local farmers and country officials.*

*Source: Qianzhan Research, HKExnews, CIC, EqualOcean analysis*
For example, county chiefs or farmers promote local specialties and farming goods, or young mothers introduce baby cradles and milk powder. Pinduoduo uses livestreaming simply as a decision-making facilitator by bridging buyers and sellers. Compared to Taobao Live, Pinduoduo’s livestreaming by default cannot bring extra traffic, but can accelerate the decision-making process for extant users, resulting in a higher conversion rate at less cost.

A comparison of Taobao Live and Pinduoduo Live in a SWOT matrix

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capability to establish an independent app and operation</td>
<td>Online stores face increased cost on MCNs, forced to leverage professional MCNs</td>
<td>More traffic (higher volume and stability), easier access to third-party MCNs</td>
<td>Fierce MCN competition (losing small-medium MCNs, who later move to PDD)</td>
</tr>
<tr>
<td>C2M strategy (less cost for both buyers and sellers), 10 Billion RMB Subsidies (consumer-friendly profile)</td>
<td>Lagging behind the livestreaming trend, insufficient capability to establish own traffic pool</td>
<td>Livestreaming won’t conflict with its own unique traffic-oriented model (social network), won’t directly face suppression from aggressive peers</td>
<td>Facing escalated challenges for online traffic (uprising livestreaming and MCNs can bring virality-like craze)</td>
</tr>
</tbody>
</table>

Source: EqualOcean analysis

What is next?

In the ‘livestreaming + e-commerce’ model, it is worth considering two topics: online traffic and consumption conversion. At the advantage of an influential social base, Pinduoduo is trying to solve intra-platform live communication to escalate purchasing rates. Taobao is seeking all-in-one solutions, starting from expanding traffic. The increasingly fierce competition may bring pains for online malls who are forced to consider investing in livestreaming, and middle-bottom KOLs who are at risk of losing traffic.

Taobao is expected to further weigh in on the role of livestreaming. To improve conversion rates, Taobao Live may further diversify the product categories in live streaming to reach out to target customers more efficiently. It also released its 2020 annual strategy, supporting small-medium live rooms with resources worth of CNY 50 billion, to establish over 100 MCNs with over CNY 100 million GMV each.

Based on the robust advantage of suppliers, Pinduoduo may deepen its C2M strategy, by cooperating with governments, local manufacturers and farmers. Though it has a successful group-buying mechanism, the livestreaming momentum seemingly outperforms the group-buying mode.

Faced with ongoing challenges in traffic competition, Pinduoduo should either follow its peers to survive in a KOL-anchored e-commerce arena, or experiment with another traffic-imported logic before it is too late.
From videos to live streaming: Douyin vs. Kuaishou

As illustrated in Chapter 2, the content platform in the wind of knowledge economy has yielded short video platforms, including most known as Douyin and Kuaishou. Livestreaming even further catalyzes these platform business to traffic pools of considerable online users. Douyin and Kuaishou adopt different strategies to transform these traffic into monetary values via multiple business channels.

**How did live-shows evolve on the content platform?**

As two major content platforms in the short-video industry, Douyin and Kuaishou are placed at different positions from the content style, which determines their user-profiles and the conversion models at the next stage.

**The livestreaming industry matures as e-commerce and social media players keep joining in**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Kuaishou launched its livestreaming function.</td>
</tr>
<tr>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>August</td>
</tr>
<tr>
<td></td>
<td>Kuaishou opened Live PK mode, supported voice comments in the live-stream shows. The livestreaming deal value reached over CNY 20 billion.</td>
</tr>
<tr>
<td>2019</td>
<td>October</td>
</tr>
<tr>
<td></td>
<td>Live broadcast 2019 League of Legends World Championship with over 74 million audience</td>
</tr>
<tr>
<td></td>
<td>December</td>
</tr>
<tr>
<td></td>
<td>Live-streaming DAU exceeded 100 million, live gaming over 510 million. Fully opened Live-show Guild access.</td>
</tr>
<tr>
<td>2016</td>
<td>November</td>
</tr>
<tr>
<td></td>
<td>Douyin launched live-streaming function.</td>
</tr>
<tr>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>July</td>
</tr>
<tr>
<td></td>
<td>Douyin added PK games and hourly ranking, accessing videos to livestreaming.</td>
</tr>
<tr>
<td>2019</td>
<td>April</td>
</tr>
<tr>
<td></td>
<td>Douyin planned to embrace 1000 guilds.</td>
</tr>
<tr>
<td></td>
<td>June</td>
</tr>
<tr>
<td></td>
<td>ByteDance built a universal middle stage for live-streaming.</td>
</tr>
</tbody>
</table>

Source: Founder Securities, EqualOcean analysis
In 2016, Douyin first entered the public sight as a video-editing APP crowned with the shimmers of famous celebrities. Before the middle of 2017, it had focused on optimizing the product experience and attracting new users. When Douyin launched the livestreaming function in November 2017, it was already one year lag behind its competitor Kuaishou.

However, it accelerated inbound promotions and outbound expansion. Still, it did not put a heavyweight on this sub-business until 2019, when Kuaishou, Douyu and Huya proved a vast market potential of live-stream shows.

Kuaishou joined the short-video industry in 2011, pivoting a major function of an online community. After cementing an initial social base, it enriched its content portfolio with short videos in 2013 and applied distribution algorithms in 2014 to reach a new high record of over 1 million.

The 2016 launch of livestreaming was a milestone, growing new registered users to over 300 million and driving the enterprise value to nearly USD 2 billion in 2017.

**How does livestreaming drive traffic in Douyin and Kuaishou?**

One reason why this livestreaming competition is so fierce is that the two giant Douyin and Kuaishou are attracting similar target groups, in terms of almost the same gender and age distribution- 52% males and 48% females, 53% under 30 and 47% over 30. But the two groups still slightly differ on the city distribution, an aspect indicating users’ potential buying power.

The Pirate Funnel (also known as the ‘AARRR model’) by Dave McClure defines five phases for user growth hacking and community optimization: acquisition, activation, retention, revenue and refer.

Since Douyin and Kuaishou share similar user groups, the key difference of their traffic-generating design lies in the activation phase and retention phase.

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**The user distribution of Kuaishou and Douyin in 2019, by China’s City-Tier Classification**

User distribution (%)

- Tier 1*: 7.0%
- New tier 1: 12.0%
- Tier 2: 16.8%
- Tier 3: 24.8%
- Tier 4 and below: 31.1%
- Tier 2: 23.0%
- Tier 4 and below: 20.4%

**Note:** China’s city-tier classification evaluates Chinese cities in GDP, political administration and population. Tier-1 cities are Beijing, Shanghai, Guangzhou and Shenzhen, directly-controlled municipalities and provincial capital cities, each with an over USD 300 billion GDP and population of over 15 million.

**Source:** QuestMobile, Founders Securities, EqualOcean analysis
Douyin adopts a centralized content distribution model, similar to a filtering process. Viewers are fed with popular content first on the main page, and their responses such as ‘like, comment, forward’ help select the hottest topics that will be delivered to other users.

This scheme is hugely beneficial to high-quality content, with top videos played over seven times of others. Apparently, live-stream shows are not the theme focus here.

Kuaishou leverages the fan connections derived from community culture in a decentralized distribution model. Its algorithm supports the users to look up content providers via relevant labels. Once matched, Kuaishou stays back and leaves enough room for the two-way interaction within communities. Thus, the livestreaming can tighten the social bond between fans and anchors, enhancing the user stickiness.

**Revenue model: monetary conversion**

Douyin and Kuaishou are substantially content platforms. What they are doing is first to obtain massive traffic with priority, and second to monetize dynamic traffic.

Generally, there are three primary solutions to realize latent traffic value: first, advertisement; second, virtual rewards in live-stream shows; third, e-commerce. Based on traffic characteristics, the two constitute different business models, demonstrating opposing revenue splits.

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**Over 80% of Kuaishou’s 2019 revenue came from livestreaming shows and e-commerce while Douyin heavily relies on advertising**

Revenue composition of Kuaishou and Douyin, 2019

![Revenue composition chart](chart.png)

- **Livestreaming**: 60%
- **Advertising**: 6%
- **Live e-commerce**: 19%
- **Extended business**: 7%
- **Others**: 6.5%
- **Other revenue distributions**

CNY 55 billion

CNY 140 billion

Note: Douyin’s extended business covers gaming, paid knowledge sharing and e-commerce. It charges commission fees and platform fees for virtual gifts in livestreaming shows, live e-commerce and KOL’s content production. Companies may define their business segments slightly different.

Source: CaasData, Founder Securities, EqualOcean analysis
The chase in the livestreaming shows

As illustrated before, one key step in its traffic-generating mechanism is to filter quality videos after massive plays, which doesn’t apply to live-stream shows. Driven by this inevitable trend, Douyin mainly integrates livestreaming into the monetization metrics for Douyin Talents, including popular anchors with millions of fans, professional MCNs/guilds and high-quality short-video producers. However, Kuaishou pivots to livestreaming, adding this element into all categories covering shows, e-commerce, gaming, education and advertisements.

For live-stream show business, Douyin and Kuaishou introduce different compensation plans. Douyin, the platform itself, averagely takes a between 35% and 50% from the total turnover, while Kuaishou generally charges 40%-50% of the users’ payout as of 2020 April.

Specifically, while most anchors are similarly compensated, the incentive plan for guilds on Douyin differs from that on Kuaishou. Kuaishou first equally shares the gross income with guild-based anchors, and then gives reimbursement of up to 10% to guild institutions.

In this way, Kuaishou can enjoy at least a 40% benefit in the guild live-shows. On the contrary, guilds on Douyin have a slightly higher inventive ratio of 15%.

This pattern conveys a message that Douyin tries to raise its livestreaming business with higher inventive ratios for guilds to boost traffic, an institution that provides in-house anchors in the livestreaming industry. Meanwhile, Kuaishou, at the top in livestreaming, raises the hurdle bar of guild qualifications, aiming to improve the quality of livestreaming shows.

Live e-commerce: content-driven vs. KOL-driven

It deployed the social radiation by cooperating with Pinduoduo and WeChat in 2019 and enhanced supply varieties in a joint effort with the JD league.

E-commerce is one of the most effective ways to monetize platform traffic. In 2018 Kuaishou launched an online shop embedded with live-stream shows, connecting to other e-commerce platforms such as Taobao, Youzan.

Kuaishou keeps a thorough livestreaming impact on all platform users, while Douyin selects fine quality to boost traffic before monetization

The traffic-generating models of Kuaishou and Douyin

Sources: EqualOcean analysis
As a late entrant in livestreaming in 2018, Douyin now encourages its in-house KOLs to transfer their accumulated fans from short videos to livestreaming, further orienting to online consumption.

The key factor that drives users to engage in the deal circle from following to purchasing is consistent with their traffic-generating logic. On Douyin, whether a product can catch viewers’ attention largely depends on the quality of short videos and the intrinsic value of the goods, not the relationship to the content providers.

Contrarily, Kuaishou nurtures a KOL-based community culture by coining a new role called ‘old chap’ to showcase deep fans’ loyalty to KOLs and communities. With extremely high-level trust and frequent interactions in livestreaming, it is relatively easier for KOLs to promote goods within their radius. Kuaishou data shows that around 12% of Kuaishou consumers shopped only to support the KOLs, and nearly one-third of Kuaishou users trust the recommendations from KOLs.

Another observation is that the demography of the existing users determines the product portfolio and impacts the profit margins. As mentioned before, Douyin targets young people from tier-one and tier-two cities, or averagely higher-income groups. So it promotes products at a wider price range and brand-name goods, generating a GMV of CNY 10 billion levels.

Kuaishou attracts more youngsters from low-tired cities. Its KOLs tend to choose products priced below CNY 50, featuring the ‘family workshop’ theme and the ‘source of top goods.’ As shown in the graph below, less than 6% of products sold on Kuaishou are priced over CNY 100, compared to over 30% on Douyin.

In terms of online vendors, they pay the platform for the high volume of visits. Douyin vendors usually pay over 5% of the deal value for the platform service, a ratio varying from 5% to 10% according to the product type. Aiming to improve higher-quality goods and services, Kuaishou raised its commission rate from 1% to 5% for its in-house vendors and charged 50% of actual promotion fees* as commission for vendors based on other e-commerce. (Actual promotion fees* = Total promotion – Service fee paid to the third-party e-commerce).

Live e-commerce users search for more lower-priced goods on Kuaishou than on Douyin

The compositions of sold goods Kuaishou and Douyin, by price, March 2020

Source: CaasData, EqualOcean analysis
Future:

Moving forward into the middle of a turbulent 2020, the ever-dynamic e-life brought by the quarantine amid the COVID-19 has facilitated short-video providers to deploy their talents in the livestreaming market. In the next stage, Douyin will release the potential of its talent pool full of KOLs and Internet celebrities to enhance e-commerce performance.

As for Kuaishou, the pioneer in livestreaming, there is more flexibility in cross-segment business experiments. Undoubtedly, it will continue cultivating the newly established ‘old chap’ culture unique to online communities. Besides, it has eyed on live gaming, another enormous themed market. Kuaishou released over 500 million pieces of gaming-related content forwarded over 120 million times only during the first half-year in 2019 and targeted 510 million DAU in December that outnumbered the total of Douyu and Huya.
Live gaming ventures: Douyu vs. Huya

The impregnable position of the two

China’s video game livestreaming market is dominated by Huya and Douyu, whose success leaves other players far behind. The once third-ranking player, Panda TV, announced bankruptcy in March 2019.

After that, over 70% of Panda’s game streamers have transferred to the top two remaining platforms, making it improbable for other upstarts to from another decent assault on the duopoly.

In the last four years, the added-up market value of Huya and Douyu versus the total market size increased from 52.3% in 2016 to 87.1% in 2019. The rising concentration rate also implies the above-average revenue growth of the two.

Huya and Douyu occupied nearly 90% of the livestreaming video game market in 2019

Video game livestreaming market size (in CNY billion) and the percentage of Huya and Douyu

Huya and Douyu's MAUs dominate the game livestreaming market

Monthly active users (MAU), in billion

Note: Huya and Douyu’s market shares are ratios of their revenues over total market size. The livestreaming video game market grew at a CAGR (compound annual growth rate) of 81.7% from 2016 to 2019, with Huya at 119.7% and Douyu at 196.5% during the same period.

Source: Huya prospectus, Douyu prospectus, EqualOcean analysis

Huya and Douyu's MAUs dominate the game livestreaming market

Monthly active users (MAU), in billion

Source: Huya prospectus, Douyu prospectus, Shengang Securities, South China Morning Post, EqualOcean analysis
Besides, the MAUs of Huya and Douyu are increasing at a speed of 32.8% and 23.8% CAGR from 2016 to 2019 respectively.

From the perspective of streamers, the two have gained the coveted resources of top streamers over other peers.

According to Xiaohulu, Huya and Douyu owned 5.17 million and 4.7 million streamers respectively by April 2019. It’s also expected that the game streamers of the two will surpass 50% of all game-centric streamers in China. In fact, they have already occupied over 50% of top streamers across the country.

**Huya and Douyu used by over 50% of top game streamers in China**

The share split of above-average live game streamers, by livestreaming platforms, as of April 2019

<table>
<thead>
<tr>
<th>Platform</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huya</td>
<td>30.1%</td>
</tr>
<tr>
<td>Douyu</td>
<td>24.4%</td>
</tr>
<tr>
<td>Netease CC</td>
<td>12.8%</td>
</tr>
<tr>
<td>Chushou</td>
<td>12.8%</td>
</tr>
<tr>
<td>Bilibili</td>
<td>20.5%</td>
</tr>
<tr>
<td>Kuaishou Game</td>
<td>20.5%</td>
</tr>
</tbody>
</table>

Number of live game streamers in China (in million)

- **2015**: 6
- **2016**: 11
- **2017**: 14
- **2018**: 18
- **2019**: 21
- **2020E**: 23
- **2021E**: 25

Note: *Top streamers have large following bases who regularly support them with virtual gifts, and they also tend to attract many integrated promotion activities compared to self-registered streamers*

Source: Huya prospectus, Douyu prospectus, Shengang Securities
Development brief

From 2013 to 2014, Chinese government supported the livestreaming industry to grow, with high brand quality helping the process along, accelerating this video game sector’s revenue to grow with a three-digit percentage speed. Huya and Douyu were separated from YY (an online chatting app) and ACFUN (a video platform) respectively and became independent platforms.

As two of the first game-centric livestreaming platforms to make the foray into eSports, Huya and Douyu strategically focused on the proliferation of the eSports industry. By providing highly attractive game-centric content and investing in top game streamers as their exclusive contracted streamers, the two platforms have accumulated an engaged and vibrant gamer community. The strong sense of belonging in the community effectively increases the user stickiness and the time spent, which in the end, boosts users’ paying habits to realize the platform’s monetization.

Moreover, the revenue-sharing agreement and incentive mechanism encourage streamers’ health competition and good performance, forming a good environment to attract top streamers and talent agencies.

After four to five years’ development, Huya made its initial public offering on May 11, 2018, closely followed by Douyu, which was listed on NASDAQ on July 17, 2019 as well.

Financing history of Huya and Douyu

![Financing history chart]

**Note:** “X” indicates one-digit numbers, “XX” is for two-digit numbers and so on. Used when the amount of funding is unknown; Exchange rate = 7.08 USD/CNY, as of April 30, 2020, 4:36 AM, UTC.

**Source:** Tianyancha, EqualOcean analysis
Livestreaming is the major revenue source for Huya and Douyu

Revenue split of Huya and Douyu, in CNY millions

<table>
<thead>
<tr>
<th></th>
<th>Huya's livestreaming revenue</th>
<th>Huya's revenues of advertising and other businesses</th>
<th>Douyu's livestreaming revenue</th>
<th>Douyu's revenues of advertising and other businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>797</td>
<td>99.4%</td>
<td>787</td>
<td>77.7%</td>
</tr>
<tr>
<td>2017</td>
<td>2,185</td>
<td>94.7%</td>
<td>1,886</td>
<td>80.7%</td>
</tr>
<tr>
<td>2018</td>
<td>4,663</td>
<td>95.3%</td>
<td>3,654</td>
<td>86.1%</td>
</tr>
<tr>
<td>2019</td>
<td>8,375</td>
<td>95.2%</td>
<td>7,300</td>
<td>90.6%</td>
</tr>
</tbody>
</table>

Source: Huya, Douyu

Two giants raised by virtual gifts

The business models of Huya and Douyu are quite similar. They monetize the user base mainly through two ways: livestreaming and advertising services.

Revenue from livestreaming primarily consists of the sales of virtual gifts that viewers give to streamers during the broadcast to show appreciation and support. Revenue from advertising is mainly attributed to the sale of advertisement services.

In addition, a small portion of our revenue is gained from game distribution, which involves revenue-sharing arrangements with game developers and publishers.

Differences in development strategies

Though identical in revenue structure, we can still observe preferential patterns in each from their prospectuses as well as their development tracks – these divergences have affected their financial performances.

Both Huya and Douyu diversely cover livestreaming shows, including talent shows, music, anime and outdoor activities, to better serve a broad user base. However, they are more identified as game-centric livestreaming platforms.

We think the key competence of video game livestreaming players lies in two aspects: the capability of providing good content and the ability to transfer traffic into profit.

From the perspective of providing quality content, Douyu outruns Huya in two ways.

Firstly, Douyu has a deeper pool of top streamers empowered by its streamer development system. According to iResearch, Douyu ranked first in terms of the number of China’s top 100 and top 10 game streamers it contracted with – 50 out of 100 and eight out of 10, respectively.
According to Douyu's prospectus, its top streamers tend to have large user bases who regularly support these streamers with virtual gifts, and they also tend to attract many integrated promotion activities during livestreaming compared to self-registered streamers. Their believed-charisma and the high-quality content that they create are primary contributors to user stickiness and are hard to replicate with self-registered streamers. In 2016, 2017 and 2018, the company's exclusive streamers accounted for 34.8%, 46.1% and 50.3% of total livestreaming revenue.

Secondly, Douyu has strategically focused on eSports since its inception. The company continues to source and promote eSports content to obtain more broadcast rights, invest in eSports sponsorships and organize high-profile eSports events, which eventually help to attract and retain users.

From the perspective of keeping users engaged and increasing the proportion of paying users, Huya has an advantage over Douyu. Since 2016, Huya has stayed ahead in livestreaming revenue despite lower MAU data shown above. It benefits from the operation ability inherited from its former parent company YY, an online chatting application.

According to Huya, one of the competitive strengths is its highly engaged and interactive community. Through a wide array of social functions, including bullet chatting, real-time commenting and gifting, the platform gives users a strong sense of belonging, which effectively increases their paying habits.

Besides, Huya also has kept higher ARPPU (Average Revenue per Paying User). Douyu's ARPPU grew to CNY 259 in 2019 Q4, 24.5% higher than that in 2018, but still CNY 200 lower than Huya's CNY 460.

Moreover, as for the paying ratio, the other decisive indicators explaining why Huya outperforms Douyu in revenue with lower MAU, Huya used to be ahead of Douyu until 2019 Q2.

**Douyu's paying ratio outnumbers Huya's in 2019 Q2**

Paying ratio of Huya and Douyu, 2016-2019

Source: Huya, Douyu
Our services

EqualOcean is positioned at the forefront of the global economic paradigm shift. We leverage a rich understanding of business processes across multiple technology-driven industries.

Combining deep expertise and systematic approach, we help our clients meet challenges and capture value in the ever-changing market environment in China and beyond. Our services include:

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