

# **Profit Patterns of Live-Streaming Platforms in China: A Case Study of Kuaishou**

**Robert Tian**  
Huaihua University

**Jiayin Chen**  
Huaihua University

**Hong Zhu**  
Loyola University

**Shirley Ye Sheng**  
**(Corresponding Author)**  
Barry University

*This paper examines the profit pattern of live stream platforms and their effective operation by taking Kuaishou, a popular Chinese short video app, as a case. With the innovation of Internet technology and the development of online media and live-streaming platforms, live-streaming has surged and injected new resources into the Internet economy. At the same time, the competition among live-streaming platforms has intensified. Behind the fierce competition are business practices of varying qualities and low capital turnover. At present, scholars and practitioners do not thoroughly analyze the profit pattern of online platforms. Based on the review of the available research, this paper examines the current profit pattern of Kuaishou as a live-streaming platform. Moreover, it explores the problems and measures to improve Kuaishou in the fast-developing Internet era and thus provides some reference for other live-streaming platforms.*

*Keywords: Internet era, live-streaming platforms, profit pattern*

## **INTRODUCTION**

Based on the analysis of existing research results, this paper applies literature review and case study methods to study the profit pattern of Kuaishou, a popular Chinese short video app, as an active live-streaming platform in China. It aims to examine the problems of Kuaishou and its measures for improvement in the rapidly developing Internet era to suggest the development of the profit pattern in other live-streaming platforms. With the rapid growth of the global Internet, live streaming is becoming increasingly popular due to its rich content and ease of use. China is the most populous country with the largest Internet users worldwide. As of June 2022, China has 1.051 billion Internet users with an Internet

penetration rate of 74.4%. There are 716 million live-streaming users, accounting for 68.1% of all Internet users. Furthermore, 99.6% of Internet users access the Internet using their mobile phones (China Internet Network Information Center, 2022). With the growing number of Internet users and the development of mobile Internet technology, live-streaming has evolved from PC-based live-streaming to mobile phone-based.

Due to the COVID-19 pandemic, live-streaming in China has gradually evolved into the live-streaming plus e-commerce model or the live-streaming plus content model since the end of 2019. Online influencer marketing, technology iteration, capital reinforcement and other factors have further boosted the rapid development of the live-streaming industry. China's live-streaming market increased in 2020 due to the COVID-19 pandemic and live-streaming e-commerce. By 2021, the development pattern of China's live-streaming industry was gradually stabilized. According to the financial statements and sampling information released by relevant companies, the market size of China's live-streaming industry reached RMB 184.442 billion and is expected to reach RMB 223.4 billion in 2023. Live-streaming platforms have attracted numerous Internet users because of their ease of operation, low threshold and fast realization. Because of this, the whole industry is increasing. It may be driven by more diversified high-quality content on live-streaming platforms and users' stronger payment intentions (China Industry Research Network, 2020).

As an emerging industry, the live-streaming industry has been exposed to risks due to its accelerated development. Some platforms are often reported with negative news, such as broken capital chains and unpaid wages. Regulators are stepping up their efforts to regulate these platforms. Furthermore, live-streaming platforms are plummeting, and most suffer from capital shortages. With such fierce competition, Kuaishou, a platform mainly for sharing short videos and photos, has launched its live-streaming features.

Moreover, it has led the development of live-streaming marketing and won over many competitors. For this reason, Kuaishou has become a leading live-streaming platform. The gap between live-streaming platforms tells us we must analyze the live-streaming business in depth and study its profit pattern.

With the ever-evolving Internet technology, the communication characteristics of live-streaming platforms are different from those of ordinary media. The former features time fragmentation, continuity, instant interaction, bulletin screen culture, fast sharing, and scale-free distribution (Zeng & He, 2017). As the value of information increases and the scale of the information network keeps expanding, more and more information will be generated automatically, and the cost of data will become lower and lower. Thus, the scale effect resulting from the network will get stronger and more robust (Liu, 2003).

The law of increasing marginal returns in the principles of economics is fully reflected in the development of the Internet economy. With the increasing scale of information usage, the profitability and earnings of live-streaming platforms have been on the rise. Therefore, the profit patterns of live-streaming platforms deserve a closer study. However, the academic analysis and exploration of the profit pattern remain on the surface without any thorough analysis. Based on the profit pattern and live-streaming theories, this paper analyzes in detail the internal ecosystem of Kuaishou, the components of its profit pattern and the internal and external environment. Moreover, it presents the problems in Kuaishou's current profit pattern and proposes recommendations. In summary, this study is of theoretical and practical significance to the sustainable development of the live-streaming industry in China.

## LITERATURE REVIEW

As the concept of the profit pattern has received much attention from international economists, it has become the focus of many scholars' research with many significant breakthroughs. In their book *Profit Patterns*, Slywotzky & Morrison (1999) define a firm's profitability as the sum of all the value it can provide its shareholders. In addition to creating value, a firm gains some material foundation and moral wealth by selling its products and services and spreading its influence. Slywotzky divides the components of the profit pattern into the core strategy and strategic resources of the firm, the user interface and the value network of the firm (Wang, Han & Wang, 2020).

### **Research Dynamics on Profit Pattern**

Despite the extensive research on the profit pattern conducted by scholars in China and abroad, the concept of the profit pattern has not been uniformly defined. According to the profit pattern of “one core, five fundamentals” proposed by Slywotzky, Morrison & Andelman (2014), the five elements of the profit pattern are not static but change with the environment, industry, and times. The five elements are profit source, point, target, leverage, and barrier.

The profit target is the object for which the company provides value, and the profit point means that consumers’ unsatisfied needs generate the source of profit. A firm supplies goods or services to consumers to satisfy their needs and achieve profit goals. Profit leverage refers to business activities that maximize profit by producing products or services and attracting customers to buy and use them. Profit source relates to the consumers and users of a firm’s products or services, who are the only source of profit. Profit source is classified into primary profit source, secondary profit source and potential profit source. A profit barrier means a firm’s strategic options to resist competitiveness and protect its profit stream from holding a superior position in the industry.

In recent years, Chinese scholars have conducted adequate research on the profit patterns of firms at different stages of development and presented various views. According to Yu & Duan (2004), every firm experiences the stages of entrepreneurship, growth, maturity and regeneration. In the start-up period, firms are small and weak and can only open up the market by their specialties. Hence, the inflows of economic benefits are unpredictable, and the profit pattern of firms in this period is usually formed spontaneously. Therefore, a firm should formulate the appropriate development strategy and design the profit pattern for any period. With the improvement of its competitiveness, the firm gains stable cash flows and a good reputation. It becomes aware of its internal and external environment and establishes a standardized operating model.

According to Rui et al. (2005), studying firms’ profit patterns requires innovative points, and firms should be oriented to customer needs. In service enhancement, firms should pay special attention to the marketing capacity of live-streaming platforms. They emphasize that firms should transform their profit patterns in various ways in the whole market operation. In addition, Lie (2019), through studying the characteristics and types of the profit pattern, suggests that firms must build the profit pattern to match their realities during economic development. Specifically, firms should analyze their internal and external environments, identify their target customers, and realize customer value. Moreover, they should price their products according to market demand and change or reconstruct their value chains.

### **Research Dynamics on Live-streaming**

The live-streaming platform has not been uniformly defined. It is similar to the conventional TV media. A review of the existing research reveals that live-streaming platforms can be broadly classified into two categories depending on the form of distribution. For the first category, it converts the TV analog signal into a digital signal, inputs it into the computer and uploads it to the website for viewing. For the second category of new live-streaming platforms, the communicator shoots something with audio and video equipment, imports it into the instructor in broadcasting, and then converts it into digital signals through the Internet. Such live-streaming platforms are highly interactive, and the content disseminated is bi-directional. The new live-streaming platforms entirely play to the advantages of the Internet. Furthermore, they feature real-time, efficient, two-way communication and robust interactivity (Ji, 2016).

Depending on the content delivered by live-streaming, live-streaming platforms can be classified into entertainment, game, enterprise and e-commerce platforms (Yu, 2021). Entertainment live-streaming platforms mainly include PC online shows and pan-entertainment live-streaming platforms. Such live-streaming platforms mostly feature personal entertainment and leisure; the content displayed is especially personal activities. The representative platforms include YY Live, TikTok, and Kuaishou Live-streaming. Game live-streaming platforms generally rely on game hosts to attract users by explaining and evaluating games to receive users’ recognition and tips. Besides, there are also official live-streaming platforms for e-sports competitions. These platforms imitate traditional sports events in terms of system and scale, and their audience size and influence are much larger than those of individual-based game live-streaming platforms.

Enterprise live-streaming platforms are widely used for professional content marketing and staff training with rigorous and high-quality content. Furthermore, enterprise live-streaming platforms have sophisticated technology and management, becoming essential tools for enterprise marketing and management.

In the past two years, e-commerce live-streaming has become widely popular. To increase product sales, these platforms allow users to witness how the products are produced and used through live-streaming. Besides, they convey the features and values of the products to users. Based on this, users may decide whether to buy these products. The visual marketing model more directly drives users to choose to make a purchase. The live-streaming e-commerce marketing model has become essential for businesses to open their markets.

In 2010, Google's video-sharing site YouTube launched an online live-streaming service, marking the rise of live-streaming abroad. However, early online live-streaming services were not widely distributed because investors and consumers did not receive them well. In 2014, Amazon acquired the gaming live-streaming platform Twitch, making it the world's largest gaming live-streaming platform. As Twitch gained popularity, Facebook and Twitter also launched their live-streaming services, ushering in a new era of live-streaming. It has also prompted numerous studies on the topic. Tang, Venolia & Inkpen (2016) argued that, unlike previous video-watching models, live-streaming is characterized by real-time, self-produced content and interactivity. According to Deng et al. (2015), live-streaming is a new business model in which hosts attract users with their unique live-streaming content. Hosts and the platform can earn through user tips or their payments to become platform members.

With the rapid development of live-streaming in recent years, more and more studies have been conducted in China. We searched CNKI for "live-streaming platforms" and retrieved 972 papers. The 972 papers were sorted by publication date, of which 95% were published after 2015. We discovered that the number of related documents peaked in 2018.

In the study of live-streaming platform features and content, Shan (2017) concluded that, unlike traditional TV live-streaming, live-streaming allows users to have more autonomy and real-time interaction between users and hosts and among users. Moreover, the live-streaming platform has become a social platform. With the rapid development of the Internet, live-streaming content is no longer limited to games. Wang (2017) pointed out that other commercial attributes of live-streaming are being discovered. JD and Taobao pioneered e-commerce live-streaming to engage buyers deeply in the campaigns with live-streaming. However, as a new industry, live-streaming is not yet stable and faces many problems. Based on this, the industry has paid more attention to predicting the development of the business model of live-streaming platforms. It has also investigated the profit pattern and other related issues. Jiang (2016) believed that the profit patterns of current live-streaming platforms mainly include advertising, live-streaming programs, intermediaries, and tipping for hosts. These four models all involve e-commerce brands. She suggested that live-streaming platforms move from single online shows to multi-genre content live-streaming. In addition, the audience of live-streaming should be expanded, and high-end live-streaming platforms should be developed. According to Yu & Li (2019), live-streaming platforms are becoming more interactive and communicative, reducing the degree of virtualization. Despite the large size of the current live-streaming market, its profit pattern is not as straightforward as that of other industries. Live-streaming platforms have been suffering from a single source of revenue and insufficient profitability. Based on this, live-streaming platforms should further discover universal profit patterns. With the current situation of live-streaming platforms in China as a starting point, Fu (2018) divided the profit pattern of live-streaming platforms into follower tipping, commercial cooperation, content payment, and on-page advertising models.

### **Current Status of Research on Online Platforms**

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As an emerging industry, live streaming has been developed for less than a decade. Scholars in China and abroad have limited access to applications and theoretical research on live streaming. Foreign research on live streaming mainly deals with video transmission and website design. Research on live streaming platforms' profit patterns in China is still being explored. With the continuous development of technology, the potential of the live-streaming industry will be expanded continuously, with broad development prospects. Thus, the profit patterns of live-streaming platforms are precious for research.

However, due to the immature development, the current live-streaming industry is plagued with problems and chaos. It has posed more urgent requirements for academic and industrial research on the profit pattern of live-streaming platforms. Currently, the profit patterns of live-streaming platforms have been studied using single methods. Also, there is no analysis of the firms' internal ecosystem and finance. In this paper, we examine the profit patterns of live-streaming platforms from several aspects by analyzing Kuaishou's profit pattern, expecting to fill the gap in existing studies.

## **CASE STUDY: KUAISHOU LIVE-STREAMING**

The live-streaming platform industry in China is heavily influenced and driven by foreign countries. A review of the development of live-streaming platforms in China reveals that it is divided into three stages (Ai, 2016). First, online shows emerged. In 2005, live-streaming platforms such as YY Voice and 6.cn took online shows and user tips as their core services. Live-streaming took its initial shape. After 2010, these live-streaming platforms became increasingly sophisticated, attracting talented and good-looking hosts. However, most of these live-streaming platforms feature offensive content and weak interactivity. Second, the era of game live-streaming came. In 2008, World of Warcraft, League of Legends and other games became a big hit. YY Voice seized the opportunity to enable many gamers to chat in real time and capture numerous users.

Furthermore, YY Voice was transformed into YY Live in 2009. At that time, game live-streaming was in full swing. Many live-streaming platforms for games were established, including Huya Live and Douyu TV. Third, live entertainment streaming for all people came into being. With the rapid development of Internet technology, short video platforms such as TikTok and Kuaishou emerged and immediately attracted the attention of many young users. Live-streaming moved to mobile live-streaming. The scenes, subjects and contents of live-streaming became more diverse, making the live-streaming format more entertainment-

oriented. In 2019, live-streaming accounts of Internet celebrities such as Jiaqi Li drove the development of e-commerce live-streaming platforms. The live-streaming industry in China developed to a mature stage of the triangular game. The triangle is the live-streaming platforms led by Douyu and Huya, the vertical and original platforms + live-streaming features led by Taobao and Zhihu, and the short video + live-streaming features led by Tik Tok and Kuaishou. On the whole, the category of platforms featuring short video + live-streaming, as a newcomer, is overtaking other live-streaming platforms by scale and volume.

### **Overview of Kuaishou Live-streaming**

Beijing Kuaishou Technology Co., Ltd., founded in 2015, is dedicated to creating user-friendly and easy-to-use experiences, delivering realistic and exciting short video displays. Kuaishou Live-streaming is one of the company's products. Formerly known as GIF Kuaishou, Kuaishou was initially developed as a mobile application for creating and sharing GIF images. In November 2012, Kuaishou transformed itself from a tool-based application into a short video community, a platform for users to record and share their production and life (Xia & Sheng, 2019). Later, with the popularity of smartphones, Kuaishou embraced its popularity in the market after 2015. In March 2017, Kuaishou announced that it had completed a new round of funding of \$350 million. As of November 2017, the number of daily active users of the Kuaishou APP exceeded 100 million, and the total number of registered users exceeded 700 million. On this basis, Kuaishou launched Kuaishou Live-streaming. Thanks to the development and support of the Kuaishou APP, Kuaishou Live-streaming has over 100 million daily live-streaming users. In May 2021, Kuaishou closed at 160.9% on its first day of listing on the Hong Kong Stock Exchange, with a market capitalization of about 1.23 trillion yuan.

In 2017, Kuaishou developed Kuaishou Live-streaming, whose profit pattern mainly relies on the live-streaming hosts and masters signed by the platform. Hosts attract users by delivering live-streaming content. Users give likes and rewards to the hosts according to their preferences. Also, hosts will share the reward proceeds in live-streaming rooms with the platform according to the agreed percentage. Guilds are crucial in the Kuaishou Live-streaming ecosystem. The guild is responsible for recruiting and nurturing hosts, and the most popular hosts create value for the guild and become a talent resource for the guild. Guilds supply different types of hosts for the platform and co-manage them with the platform. In 3Q22, the number of live-streaming guilds signed by Kuaishou increased by 65% year-on-year, and the number of active guild hosts increased by more than 200% year-on-year.

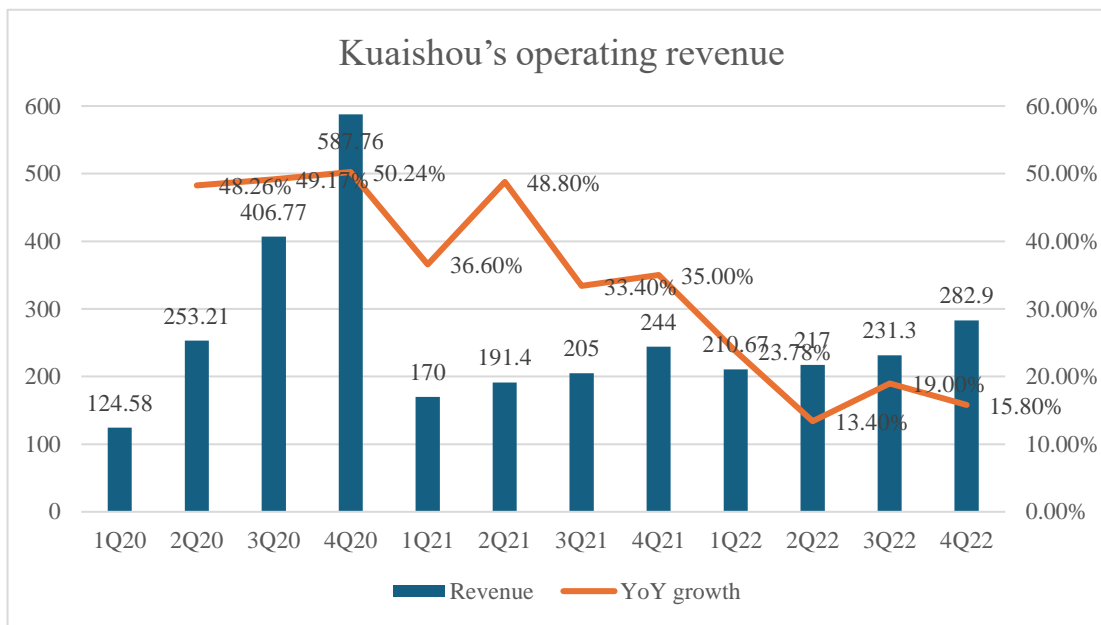
After that, Kuaishou Live-streaming linked with Kuaishou APP to create a new community combining short videos and live-streaming, forming a community characterized by Laotie<sup>1</sup>. With the continuous development of Kuaishou, its platform culture keeps growing and attracting different categories of users. The term Laotie also emerged and crystallized the identity and emotional connection among the community members (Lyu, 2023). In 2018, Kuaishou started live-streaming marketing with its strong user base. Its novel live-streaming marketing model attracted many creators and merchants. With the deep integration of Kuaishou Live-streaming and e-commerce, Kuaishou Live-streaming no longer functions as a simple merchandiser. Using the platform's private domain traffic, Kuaishou can build a bridge between merchants and hosts. It can also drive the development of the industry chain by leveraging live-streaming operations. To better meet the needs of consumers, Kuaishou continuously builds a trust-driven e-commerce ecosystem, forming an efficient "dual-wheel drive" model for the public and private domains. It enhances the conversion efficiency of public domain traffic, enriches and refines the labels of products and users, and improves the accuracy of matching users and products.

### **Analysis of the Profit Pattern of Kuaishou Live-streaming**

Kuaishou Live-streaming's profit pattern is based on business revenue, supplemented by live-streaming marketing, advertising, and content derivatives revenue. At this stage, Kuaishou's revenue comes from online marketing services, live-streaming revenue and other services. According to the financial statements, Kuaishou's revenue for 2022 was 94.18 billion yuan, up 16.2% from the same period in 2021. The net loss for the year was 13.69 billion yuan, compared to a net loss of 78.07 billion yuan for the same period last year. The adjusted net loss was 5.751 billion yuan, down 69.5% year-over-year. Notably, Kuaishou's

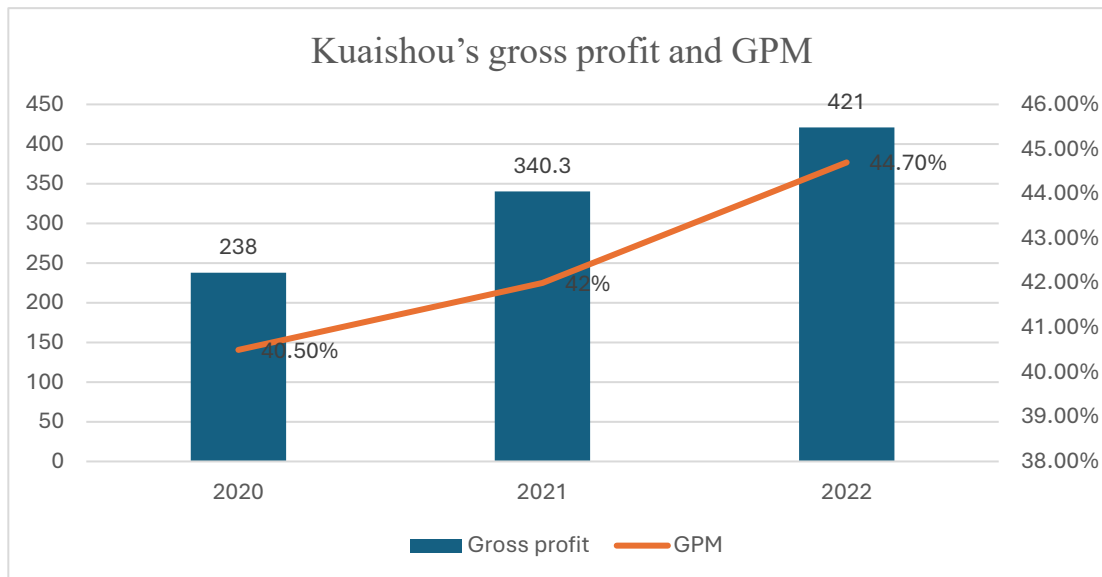
operations in China were profitable in 2022, with an operating profit of 190 million yuan, compared to an operating loss of 8.68 billion yuan in 2021. The adjusted EBITDA for 2022 was 1.815 billion yuan, a change from negative to positive. Kuaishou’s operations in China were profitable in 2022 mainly due to revenue growth, optimized GPM and continued improvement in operating efficiency (Figure 1).

**FIGURE 1**  
**KUAISHOU'S OPERATING REVENUE, 1Q20 - 4Q22 (UNIT: RMB 100 MILLION)**



Kuaishou’s gross profit and GPM have risen in recent years, demonstrating the company’s growing profitability and the healthy and sustainable development of its businesses. According to the financial statements, Kuaishou’s sales and marketing expenses for 2022 were 37.1 billion yuan, down 16% over the same period last year. It is mainly due to Kuaishou’s cost reduction and efficiency enhancement approach. At the same time, Kuaishou’s user base continues to grow, and the growth rate of DAUs (daily active users) exceeds that of MAUs (monthly active users). It also represents the conversion of many stock users into active users, and its user stickiness is increasing (Figure 2).

**FIGURE 2**  
**KUAISHOU'S GROSS PROFIT AND GPM, 2020 - 2022 (UNIT: RMB 100 MILLION)**



Kuaishou's revenue is generated mainly from live streaming, online marketing, and other services. Until 2020, Kuaishou's largest source of revenue remained the live-streaming business. However, in 2021, online marketing services surpassed live streaming as Kuaishou's top revenue source.

The rise in online marketing revenue is primarily attributed to the high traffic growth of the platform and the growing operational capacity, which has attracted many advertisers. According to data released by Kuaishou, the number of advertisers on Kuaishou in 2021 rose by 60% over last year, and brand advertising revenue increased by 150%. Its live-streaming revenue grew substantially in 2020 as many users turned to online social and entertainment activities due to the COVID-19 pandemic. Later, the revenue dropped sharply due to the relevant national regulations and fierce competition in the live-streaming industry. In response, Kuaishou Live-streaming adjusted its profit pattern and operation strategies to attract more users. Thus, its live-streaming revenue rebounded in 2022 (Table 1).

**TABLE 1**  
**KUAISHOU'S REVENUE AND PROPORTION, 2020-2022 (UNIT: RMB 100 MILLION)**

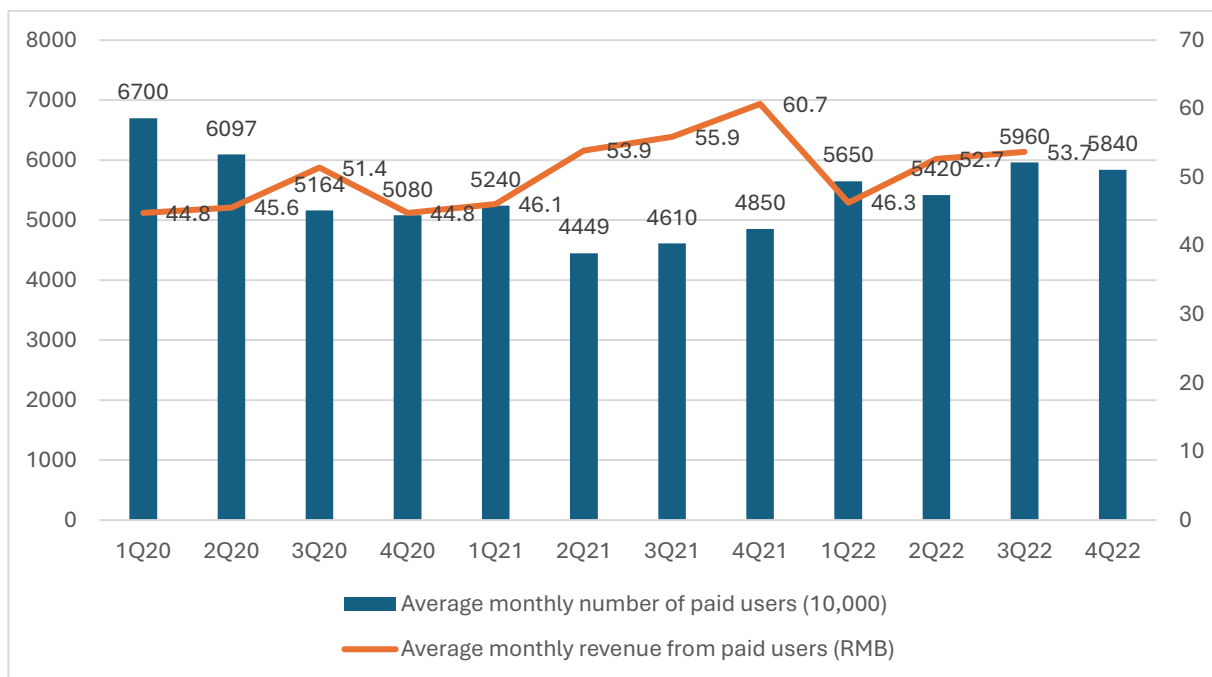
|                           | 2020    |                | 2021    |                | 2022    |                |
|---------------------------|---------|----------------|---------|----------------|---------|----------------|
|                           | Revenue | Proportion (%) | Revenue | Proportion (%) | Revenue | Proportion (%) |
| Live-streaming revenue    | 332     | 56.5%          | 309.95  | 38.2%          | 353.9   | 37.6%          |
| Online marketing services | 219     | 37.2%          | 426.7   | 52.6%          | 490.4   | 52.1%          |
| Other services            | 37      | 6.3%           | 74.2    | 9.2%           | 97.5    | 10.3%          |

According to the financial results, live-streaming revenue in 4Q22 exceeded 10 billion yuan, up 13.7% year-over-year, a record high. Kuaishou Live-streaming averaged 58.4 million monthly paid subscribers, up 20.4% year-over-year. Based on Kuaishou's traffic pool of over 600 million, its penetration rate is about



9%, so its live-streaming business may remain ahead of the industry for some time. It is primarily attributed to Kuaishou Live-streaming's differentiation strategy and continuous optimization in content ecology and algorithms (Figure 3).

**FIGURE 3**  
**AVERAGE MONTHLY NUMBER OF PAID USERS AND AVERAGE MONTHLY REVENUE FROM PAID USERS FOR KUAISHOU LIVE-STREAMING, 1Q20 - 4Q22**



As Kuaishou's performance keeps improving, its cash flow has also increased significantly. According to the financial statements, Kuaishou's net cash flows from operating activities reached approximately 2.2 billion yuan in 2022. Based on Kuaishou's current balance sheet, Kuaishou has little borrowing burden and sufficient cash reserves. As of December 31, 2022, Kuaishou had a near cash-like asset balance of 35 billion yuan, according to the financial results. It comprises financial assets, short-term time deposits, cash and cash equivalents.

### Components of the Profit Pattern of Kuaishou Live-streaming

As a live-streaming platform, Kuaishou Live-streaming generates its main profit from the live-streaming business. Hosts interact with users and their followers on Kuaishou, and users give likes and rewards depending on their preferences. The hosts, the platform and the guild share the revenue in proportion. In recent years, Kuaishou Live-streaming has added live-streaming marketing, advertising revenue, content derivation and other auxiliary profit sources to broaden its profitability.

Live-streaming marketing is a new model of the Internet economy. Kuaishou Live-streaming displays links to products on the live-streaming page and even links them to major e-commerce platforms. Users can easily click on the links to buy their favorite items. Through live-streaming marketing, the platform and hosts build up traffic and word-of-mouth, which improves liquidity and increases user stickiness. Advertising is the agreement between Kuaishou Live-streaming and e-commerce platforms and advertisers. The volume of advertising is one of the most critical factors affecting Kuaishou's profitability (Wang, Su & Li, 2020). Kuaishou's advertising business achieved double-digit growth in 2022, standing out from its competitors. This is mainly due to Kuaishou's focus on the content and format of e-commerce advertising. By using essential marketing nodes and consumer demand as the entry point, it deeply integrates the unique

range of its advertising products to gain the recognition of advertisers and consumers. Revenue from other content derivative services, including online games, paid content and other value-added services, is also a key source of revenue for Kuaishou Live-streaming. Given the rapid economic and social development, revenue from content derivative services is a significant growth point for Kuaishou to increase its future profitability.

Consumers usually prefer live-streaming applications with diverse content and simple operation. Kuaishou Live-streaming has simplified the interface and process to meet users' needs. Only three options are on the home page: Follow, Explore, and Nearby (Wang, 2017). The Explore page is designed in a pull-to-refresh manner so users can give likes by double-clicking. By highlighting the content, the minimalist operation improves the user experience, lowers access barriers, and attracts many users. To enlarge the profit, a firm should take complete care of different classes of consumers. Kuaishou upholds the principle of fairness and inclusiveness, as it supports the top VIP hosts, benefits ordinary users, and attracts the middle and bottom users for creation. As a result, its live-streaming content is richer and more enjoyable, attracting consumers from all walks of life to watch, reward and purchase.

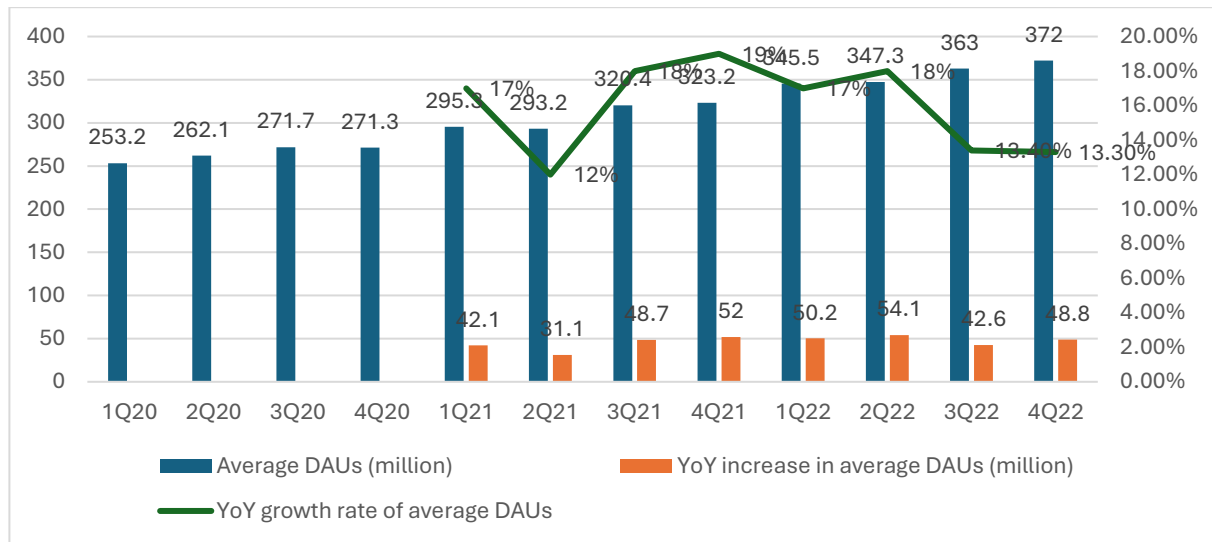
In recent years, as Kuaishou's business revenue has grown steadily, Kuaishou has also made a breakthrough in its business share cost. Kuaishou has optimized its sharing mechanism through innovation, resulting in an MoM reduction of 2.5% in overall sharing cost to revenue. Secondly, Kuaishou follows the concept of pursuing efficiency through technology and controlling costs through efficiency. Given this, it maximizes technology cost-effectiveness. Regarding server technology, Kuaishou has implemented technological innovations to enhance resource management. Also, it has significantly improved the utilization of computing and storage resources for optimal cost per resource unit. Finally, at the cost level, Kuaishou has restructured its organization, optimized its efficiency, and iterated its technology while ensuring user growth. Based on this, the costs of acquiring customers per user and maintaining DAUs decline, and sales and marketing expenses are reduced. Kuaishou is constantly exploring new cash models, improving cash efficiency, and seeking efficient growth paths to maximize its profits.

### **Profit Targets of Kuaishou Live-streaming**

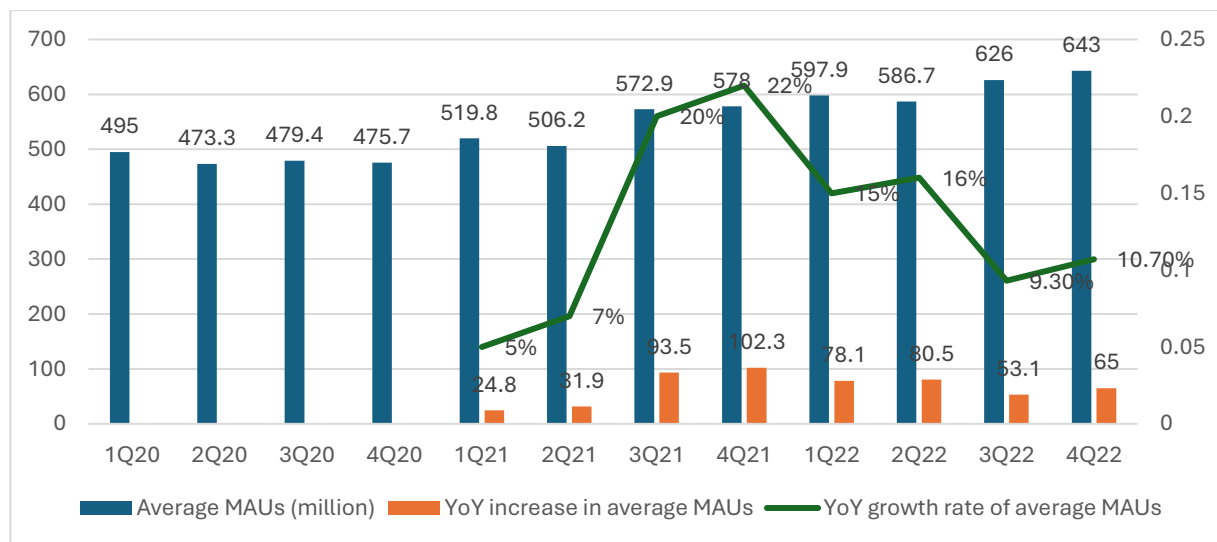
Kuaishou has evolved from an early application tool to an online community. With its previous user base and good reputation, it insists on a minimalist model and light operation, thus creating a distinctive local online community. With its unique down-to-earth style, Kuaishou has attracted many middle and low-level users, setting it apart from its competitors.

In 4Q22, Kuaishou Live-streaming's average DAUs and MAUs hit record highs. China's average DAU was 370 million, and average MAU was 640 million, up 13.3% and 10.7% year-over-year, respectively. As this quarter is the peak season for user growth, Kuaishou reacted quickly and continued to optimize the algorithm model through refined operation management and differentiation strategies. Thus, it can continuously stimulate users' sense of freshness and experience. Users can find what they are interested in and like-minded friends on the platform, increasing user stickiness (Figure 4 and Figure 5).

**FIGURE 4**  
**VARIATION IN AVERAGE DAUS OF KUAISHOU LIVE-STREAMING, 1Q20 - 4Q22**



**FIGURE 5**  
**VARIATION IN AVERAGE MAUS OF KUAISHOU LIVE-STREAMING, 1Q20 - 4Q22**



From a competitive perspective, Kuaishou has been building a diversified content and e-commerce ecosystem and accelerating conversion efficiency with live-streaming rooms as its super marketing nodes. At the same time, Kuaishou keeps improving the system of protecting users' rights and interests. Its service brand, "Trusted Purchase," has remained a leader in the industry regarding the coverage rate of orders related to user rights and interests and the monthly re-purchase rate of e-commerce. Thus, it further reinforces users' dependence and loyalty to the merchant and the platform. Recently, live-streaming platforms have been highly competitive in the industry. From the sustainability perspective, Kuaishou has restructured its internal organization to improve its efficiency and competitiveness further. Kuaishou's core business units, including product operation and e-commerce, have closed mainly the business loop and have been split into business divisions. Thus, Kuaishou has transformed from a functional structure to a business unit structure, further enhancing the efficiency and fluidity of business operations.

## **Problems in the Profit Pattern of Kuaishou Live-streaming**

### *High Operation Cost*

As one of the leading platforms in the industry, Kuaishou Live-streaming involves high operating costs. As the number of Kuaishou Live-streaming users grows, it has to ensure a good experience for all users while keeping the live-streaming videos high-definition and lag-free. In addition, the platform should feature video recording, playback, beauty mode, commenting and liking and other related functions. All these basic requirements involve high broadband costs. Secondly, to increase the popularity and traffic of the platform, Kuaishou must raise the signing fee to retain famous hosts or recruit hosts from other platforms. Finally, the revenue generated by Kuaishou Live-streaming must be shared with guilds and hosts—all of the above cause high operating costs for Kuaishou Live-streaming.

### *Over-reliance on Top Hosts*

With the decentralized algorithm recommendation, the ratio of Kuaishou's private domain traffic to public domain traffic is 4:6. Private and public domain traffic differ in focus, with the former focusing on fairness and the latter on efficiency. Kuaishou maintains right at the expense of efficiency to attract more users from different classes. However, the traffic may still gather in the top hosts uncontrollably. Kuaishou recommends that the content users follow enhances the connection between hosts and followers. At present, Kuaishou's live-streaming is dominated by master live-streaming. After gaining a firm foothold, the top hosts gradually grew into a family-based host system. According to the iiMedia Data Center, Kuaishou's total e-commerce live-streaming turnover for 2019 was 40-50 billion, while top hosts such as Xinba Family contributed 13.3 billion in sales alone. Since a few top hosts dominate Kuaishou Live-streaming's traffic, Kuaishou's further commercialization is limited.

### *Stagnant User Growth and Fierce Competition in the Industry*

Regarding user data, Kuaishou has hundreds of millions of MAUs. Still, the survey shows more than 40% of Internet users reported reducing their access to Kuaishou or hardly accessing it. Recently, Kuaishou has been performing well in terms of user growth. However, average DAUs grew by 51% in 2020, 16% in 2021, and 17% in 1Q22, representing a significant decline. Kuaishou's active user base's growth has stagnated, making it difficult to achieve rapid growth. With the booming live-streaming industry, Kuaishou Live-streaming faces more and more competitors, including Huya and Douyu. Its rivals also include TikTok and Bilibili, whose business models are very similar to that of Kuaishou, indicating fierce competition in the industry. However, the currently prevalent live-streaming content is seriously homogenized. Different platforms have similar live-streaming styles and ranges, quickly causing aesthetic fatigue among users.

## **CONCLUSIONS AND RECOMMENDATIONS**

The live-streaming platform has been developed for over ten years, but its main profit pattern is based on user tips. Kuaishou has been adhering to the decentralized algorithm-driven, highlighting the advantages of universal and balanced traffic distribution and private domain that distinguish it from other platforms. Thus, it attracts many users. Moreover, it combines user traffic with e-commerce, enabling live-streaming marketing and creating a unique profit pattern. At the same time, Kuaishou continuously tries to increase advertising revenue and content derivative revenue to create a new profit point. So, its profitability is constantly enhanced. It analyzes the internal ecosystem of Kuaishou, the components of the profit pattern and the financial statements. The profit pattern of Kuaishou Live-streaming has problems such as high operating costs, over-reliance on top hosts and stagnant user growth. The following recommendations are made to optimize the profit pattern of Kuaishou Live-streaming:

### **Lowering Operating Costs**

Kuaishou should increase investment in technology research. It should conduct advanced technology research and applications in audio and video, image, and other technologies, as well as optimize the implementation of algorithms. Moreover, it should reduce the total bandwidth usage, increase the

proportion of free and low-cost bandwidth usage, and reduce the cost of broadband. Also, Kuaishou Live-streaming should highlight the cultivation of hosts, develop a standardized and long-term cultivation plan and mechanism, and divert hosts depending on their interests and specialties. In this way, it can cut down some high signing fees and improve the cultivation efficiency of new hosts, avoiding the discontinuation of hosts. Besides, the platform should sign long-term agreements with newly recruited and well-known hosts to prevent hosts from frequent job-hopping. At the same time, Kuaishou can also distribute guild benefits. In addition, Kuaishou can also contribute to each guild via shareholding or capital participation, gaining a voice and allowing the guild to make decisions that benefit the platform.

### **Implementing Differentiated Development Models**

The user scale of Kuaishou has been stable for a long time. Kuaishou should implement differentiated models based on its unique community culture to attract new users and improve user stickiness. Kuaishou is a community where acquaintances and strangers co-exist, generating numerous social relationships. In addition, it allows online socialization to become a new lifestyle in contemporary society. Kuaishou should continuously innovate based on human interaction, development, human needs and experience and introduce more unique content categories. Based on this, it can meet diversified user needs and improve user stickiness. Also, most of Kuaishou's users come from third- and fourth-tier cities and rural areas. To expand the user scale, Kuaishou should bring many knowledge-based creators, celebrities and organizations from first- and second-tier cities. It should launch a support program and optimize the user experience to reach users in first- and second-tier cities.

### **Establishing a Platform Mechanism for Balancing Public and Private Domains**

In recent years, Kuaishou has insisted on a decentralized algorithm-driven approach to creating a content ecosystem accessible to the public. Although it provides creators with a better channel to cash in and enhances user stickiness, it reduces public domain traffic and lowers the conversion efficiency of traffic. Thus, Kuaishou should establish a platform mechanism that balances the public and private domains. Also, it should balance fairness and efficiency, adapt to and facilitate growth, and foster a virtuous cycle.

### **Strengthen Supervision by Rectifying the Bad Practices of the Platform**

Kuaishou Live-streaming should strengthen the management of hosts' words and actions and popularize legal knowledge to prevent plagiarism, infringement and vulgar content. For some uncivilized online behaviors, Kuaishou Live-streaming can regularly broadcast reminders of online ethics in live-streaming rooms. So, it can promote awareness of online ethics and create a clean and healthy live-streaming environment. Kuaishou Live-streaming should set up a strict punishment system. The hosts who commit general violations on the platform should be suspended for a limited duration. Those who commit serious crimes should be permanently banned, and those who commit severe crimes should be transferred to judicial authorities. To protect minors' physical and mental health, Kuaishou should prohibit minors from giving tips to live-streaming hosts and strictly control minors' involvement in the hosting industry. Moreover, it should optimize its youth model.

In short, Kuaishou, although formerly a GIF-oriented application, has quickly established an ecosystem centered on the guild system after its transformation. Moreover, it has developed a content and e-commerce ecosystem that combines its features in the development process. A compatible ecosystem allows Kuaishou to grow healthier and faster, and its unique profit pattern will enable it to optimize its algorithms, expand its business scope, and reach overseas markets. Finally, Kuaishou was successfully listed. Currently, the digital transformation of the industry is empowering live-streaming e-commerce. It is an opportunity and a challenge for Kuaishou Live-streaming. Kuaishou should seize this opportunity to improve and upgrade its profit pattern, making its future development more stable and maximizing its enterprise value. At the same time, Kuaishou's successful innovation in the profit pattern inspires its peers in China and provides an excellent reference for them.

This paper proposes recommendations by analyzing the profit pattern of Kuaishou Live-streaming. It should reduce cost, implement differentiated development models, establish a platform mechanism to

balance public and private domains and strengthen supervision by rectifying the platform's evil practices. However, more information and data were unavailable, and no field visits were conducted on Kuaishou. Therefore, the proposed recommendations may be biased. It is recommended that as much information as possible should be collected for future studies. Moreover, field visits should be conducted to the studied firms to improve and consolidate the research.

## ENDNOTE

- <sup>1</sup> Laotie is a term normally used in Northern China to refer to close friends alike to a brother, and has since been widely adopted by users on Kuaishou, indicating a trust-based relationship between channel holders and their fans.

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