

Reform and Innovation in China's E-commerce Marketplace: Case Study of Douyin

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Abstract. The e-commerce market in China has experienced significant growth in recent years, driven by technological advances in the Internet and the Covid-19 pandemic. Douyin, a leading social media platform, has conducted cross-market commerce and managed to gain significant market share in the e-commerce market with its innovative marketing approach and expansion into various product segments. This paper explores the reasons behind Douyin's success, focusing on effectively leveraging the advantages of its unique social e-commerce capabilities and developing two potential markets, second-hand luxury goods and agricultural products. By leveraging its user base and short video plus live streaming format, Douyin has effectively promoted its products and captured market share. In addition, the platform's exploration of promising market segments such as second-hand luxury goods and agricultural products has allowed it to carve out a niche in the e-commerce space. By facilitating direct communication between consumers and sellers, Douyin has revolutionized the buying and selling process, streamlining transactions and increasing transparency.

Keywords: e-commerce innovation, market equilibrium, cross-discipline business integration

1. Introduction

China's e-commerce market has seen a golden period of growth over the past five years under the combined influence of Internet technology and Covid-19. The rapid development of Internet technology has strengthened Chinese consumers' demand for and reliance on Internet-based forms of shopping. In addition, the Covid-19 epidemic has led many companies to undergo digital transformation and shift their industries from offline to online. These factors have expanded the size of the e-commerce market in China. Data shows that e-commerce sales in China will grow at a compound annual growth rate of 13.3% from 2018 to 2021, reaching RMB 13.1 trillion by 2021 [1], Such large sales and sustained growth rates are proof of the market's bright future public. In the e-commerce market, China's established e-commerce groups, Alibaba and JingDong, hold the majority of the market share. However, the recent substantial rise of Douyin poses a potential threat to their market position. The company has started to make a strong entry into the e-commerce market by selling its goods through live streaming. According to the 2021 China's e-commerce market financial data report, Douyin gained 800 billion RMB in gross merchandise volume and claimed approximately 7.5% market share of the 10.8 trillion online retail markets of physical goods [2] It should be noted that Douyin's 7.5% market share is second only to Alibaba, JingDong, and Pinduoduo, the three e-commerce platforms,

ranking fourth in the entire e-commerce market. As a company whose primary business is social media services, the reasons behind Douyin's ability to achieve cross-market business and gain a foothold and a place in the competitive e-commerce market are worth exploring. Therefore, this paper will systematically synthesize the results of previous literature reports studying Douyin's e-commerce market and discuss Douyin's marketing approach in the e-commerce market, as well as the product segments it mainly sells. In terms of marketing, Douyin relies on its social platform background to increase traffic and expand its audience for product sales. It also applies the characteristics of short videos to provide users with a concise and efficient introduction to the products. In terms of product segments, Douyin has expanded into food, media, entertainment, and used luxury goods. These product segments have yet to be fully explored and can provide Douyin with a unique consumer market. This helps Douyin attract consumers with specific needs, expand its user base and increase the competitiveness of companies in the e-commerce market.

2. Reasons for evaluating the Douyin case

Douyin is a short video social app for smartphones that was launched in mainland China in 2016. This app has revolutionized the way Chinese users interact and engage with others. As a comprehensive and convenient social platform, Douyin enables users to share their daily lives through short videos of 15 to 60 seconds. Initially, Douyin's target market was centered on social entertainment. However, the app has exceeded expectations and has not only maintained its competitiveness in the original consumer market but has also made strides in the Chinese e-commerce space. Breaking into the e-commerce market has proven challenging for new entrants due to the dominance of established giants such as Alibaba, Jingdong and Jindo. These companies have long controlled the market, making it difficult for new entrants to expand their businesses in this space. Despite these obstacles, Douyin's success story stands out as a compelling case study for researchers and industry experts. Douyin's innovative approach to combining social entertainment with e-commerce has allowed it to thrive in a highly competitive market. By studying the methods and technologies employed by Douyin, researchers can better understand the factors that contributed to its success. This knowledge can be used to develop new strategies and models for the e-commerce industry, helping to drive continued growth and progress in this rapidly evolving market. By carefully analyzing and implementing Douyin's successful strategies, new and existing e-commerce platforms can benefit from these insights and adapt to changing market dynamics, ultimately contributing to the continued growth of China's digital economy.

2.1. Features and Advantages of Social E-commerce

Douyin's extensive user base and effective promotion mechanism are critical factors in its successful foothold in the e-commerce market. It leverages its unique software features to increase the purchase rate of potential consumers and thus successfully capture the e-commerce market share. As the most successful short-form social video platform in China, Douyin has a strong user base. According to Statista, Douyin's user base will reach 639.4 million in 2021 and continue to grow in the coming years, reaching 835 million users by 2025.[3] This large user base ensures Douyin can provide enough attention and potential consumers for its e-commerce segment. On top of that, Douyin's short video push and live-streaming with goods model can clarify consumer needs and match products that meet the requirements, thus converting potential consumers into loyal users. Researchers concluded that Douyin's short videos are responsible for seeding and can attract traffic for live streaming, effectively stimulating user demand [4], Benefits from its social media nature, Douyin can push product ads to users considerably and quickly through short videos. Due to the short video length, users are more likely to watch the whole video and have a higher acceptance rate of the message conveyed. This

efficient information dissemination speed is unattainable for old e-commerce companies such as Alibaba. In addition, Douyin's short video push is targeted. Its relevant video push is generated based on the user's personal information. Douyin's self-developed algorithm can capture consumers' buying preferences and specific needs and push suitable short videos for consumers based on these details. The algorithm summarizes the videos users view daily and filters out the types of videos that users frequently watch. Douyin will infer consumers' areas of interest based on the type of video and match them with related products. For example, when consumers often view basketball-related content, Douyin's algorithm will locate consumers' interests in the basketball field. It will continue to push short videos about basketball to users in the future and start pushing live streaming rooms that sell basketball products to users. These users screened by the algorithm are quality potential consumers with higher consumption conversion rates because their personal needs are a better match for the products pushed by Douyin. This e-commerce model is officially named "interest e-commerce" by Douyin. Douyin believes this e-commerce type is driven by people's passion for a quality life and aims to satisfy consumers' implicit needs while improving their life quality. [5]. This model encourages "products looking for people," which is the opposite of the sales approach used by traditional e-merchants such as Alibaba. Alibaba's e-commerce model is to provide consumers with a powerful search engine and a rich inventory of goods so that they can find the right products for them during their search. It belongs to "shelf e-commerce," and the native model of shelf e-commerce is "People looking for products." [6] However, this sales model does not explore deeper into the needs of consumers. The model innovation strongly contributes to Douyin's success in the e-commerce market. According to the statistics, in 2021, after Douyin officially proposed the innovative concept of "interest e-commerce," the transaction value of live stream commerce increased by 1000 cross compared to 2020. merchandise billion yuan, which is twice as much as that of 2020. [7]

2.2. Major Segments Entered by Douyin

In entering the e-commerce market, Douyin's unique short video co-live streaming mechanism has attracted attention and built relationships with potential consumers. However, in China's e-commerce market, attention alone cannot support Douyin's foothold because actual customer share is the key to an e-commerce company's survival in the marketplace. Several established e-commerce companies have a loyal consumer base because consumers are familiar with and trust their services. These companies have already developed their own sophisticated sales systems in their regular product areas to provide consumers with a comprehensive range of products and excellent after-sales service. Based on these factors, consumers prefer to spend their money on these established e-commerce platforms. Their familiarity with these platforms will rise over time, further strengthening their loyalty to established e-commerce companies. According to relevant scientific reports, familiarity has a major impact on people's decision-making process, whether the public realizes it or not. That means it has a major impact on conversions as well.[8] For example, if consumers are habitual Alibaba users, it is unlikely that they will purchase elsewhere. So to increase the conversion rate of potential consumers and cultivate its loyal consumer base, Douyin has made innovations in product marketing. It has explored several product segments in the e-commerce market that have not yet been deeply explored. The next part will focus on the agricultural products segment and the second-hand luxury goods segment to explore how Douyin uses these two segments to expand its e-commerce marketplace.

3. Second-hand Luxury Product Segment

Douyin has ventured into the realm of second-hand luxury goods online sales. For Douyin, the second-hand luxury goods industry has great potential for business value. First, China's second-hand luxury goods market is supported by a considerable amount of goods. According to research, the

value of idle luxury goods in the nation, including valuable second-hand accessories, jewelry, watches, high-end clothing, and handbags, reached 2.87 trillion yuan (\$392 billion) in 2020 and is expected to stand at 3.9 trillion yuan by 2025.[9]. However, the current transaction size of the second-hand luxury goods market is far below the value of the goods. As a result, many second-hand goods are still sitting unused at home, not entering the market for sale. According to research, China's domestic luxury resale market was valued at 51 billion yuan (\$8 billion) in 2020 and its total value will exceed 208 billion yuan (\$32.75 billion) by 2025.[10] These data indicate that China's second-hand luxury goods market has vast room for growth. To tap into this lucrative market, Douyin has made considerable efforts in the second-hand luxury products segment. First, Douyin markets used luxury goods for the right group of consumers. In the Chinese consumer market, middle-aged and elderly people are not the target group for second-hand luxury goods because they have a biased view of second-hand products. These people think buying second-hand goods symbolizes poverty and will make them lose dignity. However, with the development of the times, the younger generation is gradually getting rid of these prejudices. According to the report, Gen Z consumers (people born from 1997 to 2012) have overcome such superstitious beliefs and tend to view secondhand goods beyond their function, as items with a positive emotional value and uniqueness which helps promote the circulation of the secondhand economy.[11] It is worth noting that Douyin is a social media, and most of the users it attracts are young. So when Douyin promotes used luxury jewelry to these users, the acceptance and recognition rate will be higher. Secondly, Douyin has made improvements in establishing an efficient supply chain. Inefficient market control is a significant factor currently hindering the development of the second-hand luxury jewelry market. Due to poor market supervision, many fake products have entered the market, giving consumers a poor shopping experience and leading to a lack of trust. Douyin has implemented a solution to this problem. Douyin has added an official testing process to its own sales channel, so used luxury goods sold through Douyin's e-commerce channel will be sent to official testing institutions for authenticity testing. This process can effectively protect consumers' rights and interests and improve their consumption experience. Thirdly, Douyin has united with more mature offline physical merchants and extended its available resources. After establishing an online used luxury goods sales platform, Douyin did not choose to compete with offline brick-and-mortar merchants but chose to support each other in a friendly coexistence way. As a result, Douyin provides quality sales channels for offline merchants and helps them increase their exposure. In turn, the entity will provide Douyin with quality products to attract customers. Through these three strategic improvements—targeting the right consumer group, establishing an efficient supply chain, and collaborating with offline merchants—Douyin has successfully carved out a niche for itself in the second-hand luxury goods market, paving the way for continued growth and expansion in this rapidly evolving sector.

4. Agricultural Product Segment

Douyin's success in the agricultural product segment is also an important factor in its ability to capture market share in e-commerce. Douyin identified the massive potential of the Chinese agricultural products sales market and exploited it with the advantage of its software. In the past, the Chinese agent-based trading model lacked transparency and inefficiency. Agricultural products were not sold directly between consumers and farmers but indirectly through agents. Agents were responsible for buying produce from farmers and selling it to consumers. However, this trading model tends to lead to an imbalance between supply and demand in the market. In order to make high profits, agents will lower the price of agricultural products, and farmers who have no channel to sell their products will have to accept low prices or even lower the price of their products to clear their stocks, leading to vicious competition. On the other hand, in the face of consumers, agents will raise the price of goods; high prices will reduce consumer demand for products, leading to a large number of agricultural

products being squeezed. However, Douyin takes advantage of its own e-commerce live broadcast to facilitate the promotion of agricultural products to a broader audience. By leveraging the platform's vast user base, farmers can now reach potential customers who may have otherwise been inaccessible. This direct communication channel between consumers and farmers simplifies the steps of intermediate agents. Through live streaming, farmers can directly introduce their agricultural products to consumers, and consumers can quickly and effectively purchase goods without any external factors interfering in the process. This innovation fosters a sense of trust and transparency that was previously missing from the traditional model. This newfound trust benefits not only the consumer, who can now make more informed purchasing decisions but also the farmer. They can sell out their products efficiently and avoid the problem of inventory backlog. Under this reciprocal situation, Douyin solves the supply and demand problem in the agricultural products market while occupying the agricultural products market segment in the field of e-commerce first, gaining huge sales and establishing its dominant field. According to statistics, from September 2021 to September 2022, Douyin e-commerce helped sell agricultural specialties with a total order volume of 2.83 billion units, and the number of new farmers on the platform increased by 252% year-on-year. [12]. In the future, Douyin plans to enhance its farming program by implementing several key initiatives aimed at supporting farmers and promoting their economic well-being. One initiative is providing farmers with free live teaching services, which will help them become more familiar with the Douyin live sales process. In this way, they will effectively navigate the platform and optimize their sales efforts. Another initiative is offering special live subsidies that increase farmers' income and provide them with additional financial support. These subsidies not only incentivize farmers to participate in the platform but also help alleviate some of the financial burdens they face in their daily life. These humane approaches can build farmers' trust and foster their sense of platform reliance while supporting them. As a result, Douyin can expect to see increased engagement and loyalty from its agricultural user base.

5. Conclusion

Douyin, also known as TikTok in some countries, has emerged as a formidable player in the e-commerce marketplace by deftly utilizing its vast user base and leveraging its social media capabilities to create a unique marketing strategy that has allowed it to expand its cross-sector business development. Through its innovative approach to e-commerce, Douyin has managed to carve out a niche for itself, establishing a strong foothold in the marketplace by providing a user-friendly and engaging platform that seamlessly integrates social media with online shopping. With its ability to reach a broad and diverse audience, Douyin has proven to be a valuable asset for businesses looking to tap into the rapidly growing e-commerce market, and its continued success is a testament to its ability to adapt and evolve in response to changing market conditions. Through a combination of live streaming, short videos, and interest-driven e-commerce models, Douyin has successfully captured the attention of potential consumers and tapped into untapped product areas such as agricultural products and second-hand luxury goods. In these market areas, Douyin gained its success primarily by finding suitable consumer bases, catering to consumers, building an efficient supply chain, and partnering with offline merchants. In addition to creating its own value, Douyin has also contributed to the e-commerce market. As the e-commerce landscape continues to evolve, Douyin's experience is a valuable case study for both established giants and startups in the e-commerce marketplace. The company's success is built on its strong ability to adapt to changing market dynamics, comprehensive analysis of market segments, and keen sense of business opportunities. These elements underscore the importance of innovation, flexibility, and strategic planning in a highly competitive environment. So Douyin's success story offers valuable insights into the future of China's e-commerce market and a blueprint for other companies. Douyin's success experiences can help traditional e-commerce companies make an effort to adapt and prosper in this rapidly changing digital environment.

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