

A comparative analysis of the economics of Douyin live streaming and Facebook marketplace

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Abstract. With the mature development of China's e-commerce live broadcast, it provides experience that can be used for reference by other countries' e-commerce live broadcast, so that major cross-border e-commerce platforms can follow suit in the field of live broadcast. Coupled with the strong demand for e-commerce live streaming in the international market, live streaming and other online sales services have become a new outlet for cross-border e-commerce. Therefore, the research goal of this paper is to compare the different effects of Douyin live streaming and Facebook Marketplace on the economy through cultural, institutional and market structure.

Keywords: Douyin; live streaming; Facebook marketplace; economics.

1. Introduction

Douyin live streaming is the most popular and advantageous sales business model at present, showing a booming trend of "everything can be broadcast and everything can be sold". Whether it is a physical business district, self-operated stores, or well-known brands, they will bring live broadcasts to the scene to enhance digital transformation channels. In addition, in the context of the new crown epidemic, people's willingness and frequency of online consumption have increased significantly. E-commerce live broadcast is an important factor for the success of e-commerce operation model. China's e-commerce live broadcast system has now entered a mature stage of development, bringing not only traffic but also sales. At the same time, the vast majority of cross-border e-commerce platforms have also flooded into the tide of e-commerce live broadcasts, and have achieved good results. Compared with Chinese consumers, consumers in other countries are more inclined to personalization and diversification, and the form of online marketing is also very different from Chinese consumers. The huge profits brought by live broadcast and the high click traffic of a single top anchor have prompted more and more brand owners, traffic stars, business investors, and various Internet celebrities to flood into the live broadcast platform. However, with the continuous expansion of the live broadcast market, the live broadcast distribution industry has not only developed in China, but also started network-related economic businesses in other countries. Facebook Marketplace is a retail function that was released on the mobile terminal by Facebook on October 3, 2016, and allows users to buy and sell things on the social media platform.

2. Literature Review

2.1 Live E-Commerce Marketing

Based on other research findings, User-generated content (UGC) includes live streaming. It enables users to broadcast live material such as singing, dancing, or video game play. Initially, the primary focus of live streaming sites was gaming and entertainment. With its advancement, it also improves its integration with marketing activities, resulting in an increase in live streaming e-commerce. E-commerce sites with live streaming capabilities and social network platforms with e-commerce capabilities are the two most common types of live streaming e-commerce sites. The former indicates that live streaming can be utilized instead of showing products or services on an e-commerce website. Here are two examples: Amazon Live and Taobao Live. The former denotes e-commerce activities embedded in social network platforms or short video platforms such as Facebook Live or YouTube Live, whereas the latter denotes e-commerce activities embedded in social network

platforms or short video platforms such as Facebook Live or YouTube Live. Several Chinese short video sites, such as Douyin, have integrated e-commerce activities as well.

Consumer impulsive purchase behavior is more likely to be induced by live e-commerce than by standard website e-commerce for the following reasons: For starters, interactive activities on typical e-commerce websites are mostly between clients and the website. Live-streaming e-commerce, on the other hand, uses digital technology to post video footage in real time and show items from various viewpoints. Traditional customer-site contact has been changed into an interactive activity between the host and the consumer, or between multiple customers, in live e-commerce. Second, as compared to standard e-commerce websites, live e-commerce may give clients with a more realistic experience and greater social connection. Broadcasters might exhibit and offer extensive information on items or test on things during the live broadcast (such as cosmetics and clothing). Customers can obtain real-time feedback from live broadcasters in live broadcast e-commerce. Viewers on the live stream, on the other hand, may use the chat box to engage with one another and discuss their shopping experiences. As a result, e-commerce live streaming may provide a more participatory, real, and visual purchasing experience, drawing more prospective customers and increasing the rate of impulse purchases.

2.2 Different backgrounds in China and other countries

People in various nations have fundamentally different moral standards and values due to cultural variations between China and the West. This is the root of the cultural disparities in etiquette between Chinese and Western cultures. The following is the specific performance: The economic system's effect. China's political system is the product of the Sino-inaction of communism. It conforms to the development trend of China, adapts to history, has distinctive Chinese characteristics, and also conforms to the fundamental interests of the broad masses of the people, so it can have a strong vitality. The political system in the West is a bourgeois representative system. The bourgeois system inherits the productive forces created by the previous society and promotes the rapid development of the productive forces on the basis of the previous ones. The mixed economic system coexists in the scientific socialist China and the democratic socialist western world, and both have played an active role. The application of pluralistic governing philosophy is characteristic of western democratic socialist nations, and its ideological sources include neo-Kantism, Christian theology, Marxism, Bernstein's, Keynesianism, and so on. Democratic socialist nations offer to construct pluralistic democracy on the basis of the pluralism theory's guiding ideology, and to execute economic democracy in the economic element, which refers to the mixed economic system. Various economic components, such as state-owned and private economic components, are included in this economic system. Democratic socialism does not advocate for the implementation of comprehensive state-owned or traditional capitalist ownership, but rather emphasizes the importance of focusing on public interests, meeting public goals, and strengthening state intervention to improve people's living conditions and economic strength. The mixed economic system is its means to achieve economic democracy. The current system of China's economy is dominated by the market economy, supplemented by the government's macro-control. From the previous research, the related work mainly focuses on the differences of national system and culture as well as economic structure. Relatively speaking, the actual content of live streaming has been ignored, but in view of different national conditions, the economic benefits and traffic brought by live streaming at home and abroad are also different.

2.3 Uses and gratification theory

Although it is commonly understood that the Internet as a marketing tool or media has tremendous potential and benefits [1]. The motivations for using the Internet and related online consumer behaviors are poorly understood [2]. The uses and gratifications theory might provide fresh insight into the meaning and reasons of consumer online behaviors such as attitude toward the Internet, Web usage and satisfaction, and online purchasing.

The uses and gratifications research have been extremely successful in understanding consumers' motives and concerns in the setting of traditional media such as radio and television [3] for a review of uses and gratifications applications. The functionalist approach on mass media communication gave rise to the uses and gratifications (U&G) theory. It was initially created in the 1940s as part of study on the efficiency of the radio medium. Essentially, it focuses on the reasons behind audience members' motives and behaviors. The word gratifications were established by Psychologist Herta Herzog [5] to describe the unique elements of radio audience usage pleasure. The U&G paradigm was then applied to numerous mass media, such as television and electronic bulletins, by mass communication theorists. Rubin [5], for example, discovered that particular types of television shows have been linked to a variety of human needs, including knowledge acquisition, escape, emotional release, friendship, reality investigation, and value reinforcement.

Consumer motives and concerns for using various media such as radio, television, and electronic bulletins have been well-understood thanks to the U&G study [3]. Users are actively involved in media consumption and have a high level of interaction with communication medium, according to a core assumption of U&G theory. Because the interactive nature of the Web necessitates a high level of customer participation, using uses and satisfaction theory to better understand e-consumer behavior appears to be a viable option. As a result, it's no surprise that this idea has lately been applied to the study of online customer experience [3] [6] [7].

3. Methodology

3.1 Design

Content analysis approaches have become well-known research tools that are employed in a wide range of fields. "A study approach that objectively, systematically, and statistically describes the apparent substance of communication," writes Berelson [9]. Content analysis has four key benefits, according to McMillan [8] it is unobtrusive; it takes unstructured information; it is context-sensitive and hence capable of handling symbolic forms; and [4] it can manage vast volumes of data. Because of these characteristics, content analysis is an excellent method for studying Web material. Various e-commerce studies have used content analysis research approaches in recent years. Former scholars employed a content analysis software to investigate how organizations use various components of their corporate website to reach and sell to potential consumers, as well as meet their communication and transactional objectives. To analyze the e-commerce capabilities of 260 firms, Zhu and Kraemer (2002) [11] conducted a content study of their websites. The goal of our study is to examine the economics of the two platforms by looking at how user experience, emotion, and cultural institutions differ between Douyin live streaming and Facebook marketplace. As a result, content analysis is an appropriate research strategy for our investigation. Extract qualitative data such as specific texts and languages used in this study to provide more context and explore further into marketing appeal and strategies. Because all of the data was publicly available and contained no personally identifying information, the study did not require IRB approval.

3.2 Data sampling and collection

User Comments on Douyin Live with Goods

As of January, to May 2022, the current research shows user purchase evaluations of 25 different product categories on the Douyin platform and Facebook Marketplace, and extracts 25 product types from Douyin live streaming and Facebook marketplace. There are 1000 user purchase reviews, including positive, negative, return and exchange reviews. This paper also coded categories such as gender, video length, and whether the product publicly mentioned the brand in the video in the live video with goods. The main unit of analysis includes the full reviews of each purchasing user in each type of item. Reviews of a live-streamed merchandise and used platform ranged from extremely low to hundreds. In general, each comment is coded to determine frequency and sentiment

For example, the SSSW's ritual and transmission views were coded, showing if the ego, sensory, or social component (ritual) or the rational, routine, or acute requirement (transmission) was present or absent in the text. After determining whether a segment was present or not, the researchers assessed which section was the most prominent and assigned a number to it. Ahn, Lei, and Taylor (2013) [12] used the SSSW to do content analysis in the same way. The current study, on the other hand, was looking for interactions between viewers explicitly commenting on the video's writers. The presence or absence of the social segment was coded first, followed by the presence or absence of PSI, and finally dominance.

3.3 Coding Categories

First, two major coding categories are used to investigate user comments for Douyin Live Streaming and Facebook Marketplace. The researchers wanted to see if the drivers of the two app economies, such as comments like "This item is too excellent!" were factors. PSI and quasi-social satisfaction (PSS) were investigated within the social component of the SSSW to address study question 2. If the PSI occurs in any sentence in the remark, the interaction is marked as active. PSI is marked for presence in a review if a reviewer indicates an interest in the platform's products or a favorable or negative opinion of the artist. The Audience-Character Interaction Scale was abridged and modified for the PSI Satisfaction Coding Category [13]. However, Auter and Palmgreen (2000) [13] pointed out that PSS may be classified into various degrees and categories. As a result, the researchers looked into the PSI titers and the categories that were present whether SMI was identified or not. This study looked at four criteria given by Auter and Palmgreen (2000) [13] to develop satisfaction coding categories: consistency, success, consistency, and desire. Attractiveness was included in this study since it is a predictor of PSI and may influence satisfaction. If the review includes PSI and valence, the researcher searches the PSS for the major coding category.

While the study's main focus is on comparing the two software economies, it's also vital to highlight all of the other factors that influence the two software economies that are marketed differently. As a result, the other two sections (feeling and self) as well as the transmission perspective were programmed (i.e. rational, routine and urgent need). Viewpoints on transmission include whether or not the comments on Douyin's live broadcasts are logical (eg, "I like to buy goods in the live broadcast room because I think it makes sense to listen to the explainer.") The researchers looked at the Facebook marketplace comments to check if there was a pressing need to acquire anything (for example, "I need a computer right now!"). The researchers looked for the general section to see if reviewers watched livestreams and browsed the Facebook marketplace at specified times (eg, "I have a specific plan to shop online twice a week"). The existence or absence of the ego component in statements about internet buying (e.g., "I'm a long-term online shopper") was one of the ritual viewpoints. The researchers examined the social part to see if reviewers were convinced to exhibit their work as a unified whole (eg, "We represent the nation of online shopping"). The researchers encoded sensory components to see if sensory-based joyful memories might convince individuals (e.g., "I like buying online since it's more convenient"). The strategy round was chosen as the dominating portion by the researchers.

3.4 Procedure

The comments of the shop evaluated in this study were assessed by two coders who had been trained. Code tables and codebooks based on the previously mentioned categories were created and utilized. Two coders carefully examine the coding table and codebook, as well as the descriptions of each coding category, before beginning any content coding. The lead investigator stated which coding categories were categorized as dominant and which were coded as presence/absence. Coders agreed on each coding category throughout the session after understanding the meanings of the coding tables connected with the reviews, and then used the reviews to determine inter-coding reliability. Five live videos of products with goods (14.7 percent of the entire sample) were randomly picked, and a sample of 200 comments (15 percent) was acquired to calculate encoder reliability. The programmers start

by looking for the most common portion in the reviews, and then they scan the full content of the videos and reviews in the sample. Each researcher categorized all of the previously described categories and put the data into an Excel spreadsheet, which was subsequently transferred to an SPSS spreadsheet for data collection and analysis. To determine inter-encoder reliability, calculate Cronbach's Alpha. This study's content analysis was categorized and aligned well with Cronbach's Alpha. The review's overall alpha reliability is 0.88 (>0.7). The primary investigator then decoded the additional images and responses, entered the data into an Excel spreadsheet, uploaded it to SPSS, and computed frequencies and chi-squares for the research topic [14].

4. Finding

Table 1. Sssw Frequencies And Percentages

	Absence	Rational	Acute	Need Routine	Ego	Social	Sensory
SSSW type	260	340	100	55	15	110	120
Percentage	26	34	10	5.5	1.5	11	12
Percentage of present	0	12	0	0	10	42	36

This paper looked at the frequency of prominent segments in SSSW. Although SSSW categories aren't found in every review, they do exist in 260 of them (26 percent). The ceremonial side received the top rank out of 340 evaluations (34.3%), while the transmission side took the top spot out of 100 reviews (10 percent). The researchers went through the reviews looking for the most important portions. This shows that additional portions of the comments may exist, but one is more generic. More transmission commentary is mentioned in the strategic wheel on etiquette. Although the sensory side of the wheel was considered low-engagement, it showed most frequently in the dominance and ritual sides of the sample, with 120 (12 percent; 110 instances in social class), and was the second most prevalent in SSSW (11 percent). The ego portion was the fourth most prevalent and least explored (1.5 percent) inside the ritual viewpoint, with 15 examples in SSSW. The social and sensory aspects of the higher-involvement ritual were not as good as the lowest-involvement ritual. The view part is the most important. The driving side of the wheel is also assessed during the content inspection. The driving side of the wheel is also examined during the content analysis. Rationality, on the other hand, was the third most frequently stated main part, largely due to the communication element, with 50 mentions (5 percent). On the transmission side, the reasonable section refers to the part with the most intervention. A little amount of resentment, 5 times that of acute need, represents acute need (0.5 percent). Explain that internet purchasing is a source of dissatisfaction for reviewers.

Table 2. Pss frequencies and percentages

PSS	Absence	Positive	Negative
Frequency	500	450	50
Percentage	50	45	5

The PSI coding category is a continuation of the strategy round. PSI is related to the social aspect. The occurrence frequency is 500 times (50 percent). The researchers discovered that reviews with PSI were more common. The frequency of PSS is 450. Within the sample, the overall incidence (45%) was rather high (see Table 2). The PSS with the highest frequency was identified with 150 occurrences (15%), followed by alignment with 80 occurrences (8%), and finally success with 100 occurrences (10 percent).

5. Discussion

The goal of this research is to determine the economic differences between the two software's based on consumer buy user experiences on Douyin Live and Facebook Marketplace. Using the sssw framework as a theoretical lens, it investigates the differences between the two software's as a result of diverse cultural and economic systems produced by different nations, based on user feedback. The findings of the study show that live broadcasters' social presence and skill may aid in the economic growth of Douyin, and that customers' Facebook postings can also aid in the development of the marketplace platform. However, our data imply that in live-streaming e-commerce, audience social presence has no direct influence on impulse purchase. They may be skeptical of the reason for exposing social signals from other viewers, or the legitimacy of those social cues; as a result, customers may not use these social cues from other viewers to make purchase choices. Another plausible argument is that the things offered through live e-commerce are generally experiential products (such as cosmetics, clothes, and so on), and advice supplied by other viewers isn't trustworthy until they've tried the products themselves.

Facebook is well-known for its extensive content, which includes walls, profiles, and photographs. However, little is known about how this material influences traders' perceptions of their trading experience and goals. Furthermore, Facebook's design features allow users to choose who has access to what information and to see if they have mutual "friends" (mutual friends) on Facebook. We suggest a number of possibilities, including the impact of mutual friend presence and seller access to buyer information on sellers' assessments of buyer information quality and social quality, as well as transaction experience and behavioral intents to use Facebook again. Individual sellers can sell their products through Facebook Marketplace. But that's not to say that businesses don't use Facebook Marketplace to sell their products, businesses can effectively use Facebook Marketplace to provide customers with a highly personalized service. Facebook Marketplace is just a platform to help connect sellers and buyers, and there are no listing fees [15].

With the development of the Internet celebrity economy and digital transformation in recent years, China's live broadcast industry has taken the lead in the world. Copying the experience and model of China's live broadcast e-commerce may achieve dimensionality reduction. The development and changes of the global market in recent years have provided a favorable soil for successfully replicating the model of China's live broadcast e-commerce [16]. First, under the catalysis of the global epidemic, the consumption habits of users in other countries have changed, and more attention has been paid to social media. Compared with foreign countries, China's prevention and control situation is better, and the supply chain can play a higher level. Under the premise that the global supply is in short supply, China's export trade has ushered in new opportunities. Second, the huge traffic platform has laid a foundation for cross-border live broadcasts. Since the 21st century, with the continuous development of network and information technology, China's e-commerce has made rapid iterative innovations and achieved staged breakthroughs. The product of this rapid development has also generated a series of problems. Researching the problems and the reasons behind them, breaking through the predicament of the industry, and promoting the sustainable development of the Douyin live streaming industry are necessary to keep this economic engine moving [17]. In the era of interconnection of all things, the electronic economy has been growing at a breakneck speed. Machine learning and big data are transforming the real economy in a variety of ways, and new spending patterns like online-offline integration are emerging on a daily basis. The Chinese government is extremely pro-digital. China's live streaming sector has benefited from the Department of Business and Information Technology's acceleration of the combination of 5G innovation and modern consumption patterns. E-commerce, physical business live streaming, and "Village Broadcasting" have all become part of a technology-mass market that has sprung up across the country.

There are still huge differences in the form of live streaming in many countries. First of all, whether it is for brands or Internet celebrities, traditional video promotion is more about conveying content or values, helping to shape brands and personal images, and does not need to be realized immediately. This also affects their attitude towards live broadcast, so many overseas brands will choose to start

live broadcast activities when new products are released, rather than daily sales. Similarly, most of the anchors carrying goods in countries other than China are well-known Internet celebrities themselves, and many of them already have their own brands, and they are displaying and promoting their personal brands during live broadcasts. In addition, the consumption habits of netizens in other countries are also different from those in China. Consumers are more accustomed to shopping on the brand's official website, so there is a very large market for e-commerce independent stations in other countries. But it can be seen that e-commerce live broadcasting is gradually changing the retail market in other countries, and more and more platforms are beginning to embrace this new monetization method.

6. Conclusion

Douyin's social e-commerce began before Facebook marketplace, owing to the quick growth of the mobile Internet, and its ecological maturity is greater. It's also on the cutting edge of combining content with e-commerce. The degree of connection between Douyin live streaming and e-commerce continues to grow. As a result, e-commerce has emerged as the most lucrative revenue stream for Chinese Internet superstars. The viewing habit of users' live broadcasts has not yet evolved for the Facebook marketplace audience, and it is developing slowly. The Facebook marketplace shopping platform places a premium on precision and efficiency. Consumers frequently go to the e-commerce platform after deciding on their buying objectives. The move from "people seeking for things" to "people looking for goods" has yet to be accomplished by shopping logic. The shift from "people seeking for things" to "commodities looking for people" has not yet been accomplished in shopping logic, and Douyin's live broadcast of goods was realized a few years ago. However, at an era when China's live broadcast delivery industry is getting increasingly crowded, going abroad for marketing is becoming increasingly popular. The global live-streaming delivery business, in comparison to China's established and expensive live-streaming delivery infrastructure, still has a lot of room for growth.

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