

Research on the Business Model of Live Stream Marketing on e-Commerce Platform

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Abstract. With the popularization of mobile Internet and the improvement of streaming media technology, live streaming marketing has become a popular marketing method. In China, live stream marketing helped e-commerce merchants earn more than 100 billion yuan in sales revenue in 2018. This study focuses on analysing the differences in business models of different types of live stream marketing. Using the method of case study, the paper adopts a business model canvas to study the process of value creation, value transfer and value acquisition of anchor-oriented live stream marketing and brand-oriented live stream marketing respectively, and carries out the comparative analysis. The results of the case study summarize and compare the characteristics of the two live stream marketing business models, which makes up for the deficiency of discussion on live broadcast marketing business models in existing studies and provides suggestions regarding how to choose live stream marketing types for e-commerce platform merchants.

Keywords: live broadcast marketing; business model; business model canvas; case study

1. Introduction

In the past decade, the application of Information and Communication Technology (ICT) has dramatically changed living habits of the public. With the increase of Internet penetration rate, e-commerce platform has become the main channel for People's Daily consumption. The development of ICT has supported the expansion of live streaming e-

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commerce. According to Alibaba Group's 2019 financial report, the total transaction volume of Taobao live streaming guided transactions in 2018 increased by 400% compared with the previous year. During the epidemic, live streaming e-commerce has become one of the important approaches to help farmers and small and medium enterprises restore productivity, which had a significant impact on merchants, customers, business models and market structure. The development of live streaming e-commerce has attracted a great deal of attention from both academia and practitioner. The existing studies pay much attention on the factors influencing the live streaming sales, little is known regarding business model of live streaming marketing. There are two typical business models in today's live streaming commerce, brand-oriented and anchor-oriented. This paper attempts to understand how different business model affects live streaming marketing. To achieve goal, this paper conducts a case study to compare the differences in these two typical live streaming marketing business models.

This paper is organized as follows, the next section summarizes the concepts related to live streaming marketing and reviews the existing literature related to live streaming marketing and business model. The third section is the research design, which expounds the reasons for choosing the comparative case study method, the reasons for choosing WeiYa and Peacebird as the research object. Section three also clarifies the process of data collection and the theoretical framework. The fourth section describes the two cases respectively. The fifth part carries out case analysis. Firstly, it identifies the content corresponding to the canvas elements of the business model in cases. Secondly, it makes a comparative analysis of the differences between the two business models of live streaming marketing. Finally, the paper points out the future research direction.

2. Literature review

2.1. Live streaming marketing

In this section, the relevant concepts of live streaming marketing are first elaborated in order to explain the business model of live streaming marketing. Live streaming marketing is a digital marketing method that shows the product information that cannot be obtained through online channels to consumers in the form of live broadcast [1-2]. With the popularity of live broadcast, live streaming marketing has become one of the main marketing means for merchants to increase sales in recent years. Streaming media technology supports the live marketing business. The provider collects video data by collecting devices such as cameras and mobile phones, encapsulates the video data and uploads it to the streaming media server through the streaming media transmission protocol. Viewers of live broadcast use web player or live broadcast APP to obtain server address to watch live broadcast. The improvement of streaming media technology reduces the technical difficulty of live broadcasting. Therefore, more and more e-commerce platforms

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incorporate the function of live broadcasting into their platform functions [3]. Live broadcasting provides e-commerce merchants with new marketing methods and helps them further improve their sales capacity. E-commerce platform merchants can interact with consumers in real time through live marketing to promote the increase of sales volume of products and services. According to the 2019 Taobao Live Ecological Development Report, Taobao Live helped merchants on the platform earn more than 100 billion yuan in sales revenue in 2018.

The development of live broadcast marketing has attracted the attention of scholars. At present, most relevant studies focus on the influencing factors of live broadcast marketing and consumers' attitudes towards live broadcast marketing. Among them, consumers' attitude towards live broadcast marketing is a hotspot of live broadcast marketing research, accounting for more than half of the studies in the field of live broadcast marketing.

Most of the existing researches on the influencing factors of live broadcast marketing are discussed from the perspective of consumers. Su [2] took user attitude as the mediating variable to explore why consumers choose live broadcast marketing. conducting a survey to young people, the study found that perceived usefulness, perceived fun and "immersive" experience will indirectly affect consumers' acceptance of live marketing. Cai and Wohn [4] discussed the motivation of consumers to choose live broadcast marketing under different live broadcast marketing scenarios, as well as the relationship between live broadcast marketing scenarios and consumers' live broadcast marketing choices. The research finds that consumers have the following motivations for choosing live broadcast marketing: 1) To get happiness through live broadcast interaction; 2) Supplement information not displayed on online commodities; 3) To obtain a sense of belonging and meet the needs of community communication; 4) Participate and lead new trends. When consumers are in the general viewing scenario and product search scenario, they pay more attention to whether live marketing can supplement the product information not displayed on online platforms. When stars participate in live broadcast marketing, consumers pay more attention to the interaction in the process of live broadcast. Regardless of whether consumers are in the general viewing scenario, product search scenario or star live broadcast scenario, consumers are more expected to grasp and lead new fashion trends in the process of participating in live broadcast and do not value community communication. Studies on consumers' attitudes to live broadcast marketing includes discussion of consumers' willingness to participate in live broadcast marketing and analysis of how live broadcast marketing affects consumers' decision-making. Todd and Melancon [5] explored the relationship between gender and live broadcasting participation. The study found that male consumers are more willing to participate in the live broadcast activities of female anchors, while female consumers do not care about the gender of anchors. Sun et al. [3]

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discussed the influence of information technology in live broadcast on consumers' consumption intentions. The results show that information technology can help businesses to display products, help consumers communicate with businesses, and provide consumers with personalized services that help them make decisions. Zhang et al. [6] discussed the influence of live broadcast marketing on consumer decision-making from a psychological perspective. They found that live broadcast can narrow the psychological distance between consumers and merchants, reduce consumers' perceived uncertainty of goods and merchants, and thus improve consumers' consumption intention. Park and Lin [7] found that consumers' attitudes toward anchors and live broadcast content depend on the matching degree of anchors and marketing products. The higher the matching degree of anchors and products is, the higher the consumers' perceived credibility of live broadcast is, and the easier it is to buy products.

2.2. Business model

In market competition, competitive advantage derived from business model has always been valued by enterprises and scholars [8-9]. In different organizations and enterprises, different business models play an irreplaceable role. Among them, the customer-oriented business model explains the following issues: 1) how to create value? 2) how to deliver value? 3) how to appropriate value in different contexts [9-11]?

Although there is no unified definition of business model in academic circles, Zott, Amit [11] and Magretta [12] believe that business model should be always customer-oriented, focusing on summarizing and analysing the following business processes and business operation methods: 1) How does the organization create, deliver and appropriate value? 2) What business activities are participants involved in? 3) How do the roles of relevant internal and external firms affect transaction activity? Since 1990, ICT has developed rapidly, attracting scholars' interest in business model concept research [13-14]. According to the research of Teece [15] in 2010, that change can be attributed to the rapid development of technology brought by business integration. Subsequently, e-commerce business model has become one of the main issues in business model research [11]. The development of ICT has also brought technical support to the development of digital economy. In this context, the new value generated by digital economy market has attracted the attention of management scholars. In the digital economy market, the process of value generation, transmission and acquisition is constantly changing. Many scholars [16] has tried to use the business model to explain value creation in online markets.

In the current research on business model, scholars mainly focus on the following aspects: E-commerce business models and ICT applications in organizations; business model and strategic organizational issues, such as the relationship between enterprise competitive advantage, business model and organizational performance; Technology

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development and business model innovation [11,14]. Recent research has shifted its focus to the following questions: The business model of IoT market; business models in sharing economy and sustainable economy [17-19]; technology and business model innovation [20-21]. Meanwhile, the continuous development of digital market and digital economy has attracted the attention of many scholars. In relevant studies, business model-related studies tend to focus on the impact of technology on the original business model in emerging markets, while ignoring the different applications of business model in different scenarios. This paper will analyze the business model of live broadcast marketing which is an emerging marketing model.

3. Methodology

3.1. Case selection

This paper conducts comparative case analysis method for research. Case study refers to a research method whereby researchers obtain general conclusions by collecting data and information of a single or multiple entities, analysing and explaining the causes and process of a phenomenon [22-23]. Compared with other research methods, case study is suitable for studying problems that are in the early exploratory stage and have strong practicality [22]. Live broadcast marketing is a new marketing approach emerging with the development of digital technology, and most of the existing research results are summarized from live broadcast marketing experience. Therefore, this study is suitable for case study. This paper will adopt exploratory methods and make comparative analysis by selecting two representative cases, so as to find the differences between business models of different types of live broadcast marketing, and then summarize the characteristics of the two business models respectively.

On The Taobao platform, live streaming marketing can be divided into two different types. The first type is anchor-oriented live broadcast. In this kind of live broadcast, anchors personally select products and cooperate with merchants to sell target products at a lower price. These products will be displayed and introduced during live broadcasts, giving anchors the opportunity to guide consumers to buy them. Another form of live streaming is brand-oriented model. Under this model, merchants employ anchors to introduce and display target products in the live broadcast, so as to influence consumers' purchasing decisions and promote purchasing behaviours. In the live broadcast, issuing coupons and giving certain discounts to the target products are the main means to promote the purchase.

The two forms of live streaming have a lot in common. First of all, the purpose of the two kinds of live marketing is to show and introduce products to customers in a more intuitive way, so that customers can have as real a feeling of the products as possible in a virtual environment. Secondly, people with great influence and popularity such as stars will be invited to participate in the promotion to promote the purchase. Third, most of the target

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products selected in live broadcast marketing will be sold at a discount.

Besides, there are differences between the two methods of live broadcasting. First, anchor-oriented live broadcast marketing allows anchors to choose their own products. The basis of business cooperation between merchants and anchors lies in the influence of anchors and the size of their fan base. Meanwhile, brand-oriented live marketing means that marketers rely on their own fan base to showcase brands and try to attract users through discounts.

This study chooses Weiya and PeaceBird Tmall flagship store as two case study objects. Weiya is one of the most famous anchors in China. Weiya's broadcasting selection covers a wide range of products, including daily necessities, beauty, skin care, clothing, home appliances and more than a dozen categories. In the selection of brand-oriented live marketing cases, this paper takes women's clothing store as the case selection scope. According to the latest data of Taobao, clothing products are the product category with the highest popularity and attention in Taobao live marketing. In Taobao live marketing, women's wear is the commodity category with the most page views at present. According to the comprehensive ranking of Taobao merchants in the past six months, PeaceBird Tmall flagship store is usually among the top three.

3.2. Analytic framework

This paper chooses business model canvas model to compare and analyse typical cases of live broadcast marketing. Business model canvas is a theoretical model that is often used to explain the value created and delivered by business models. Business model canvas is a strategic management tool developed by Osterwalder and Pigneur. It consists of nine basic components: strategic partners, key resources, key activities, value proposition, customer segmentation, customer relationships, channel, cost structure and revenue sources [24-27]. These nine modules cover the four main parts of a business: customers, products, infrastructure management, and financial capabilities. The relationship between the main parts of the four business bodies and the nine modules is shown in Figure 1.

Customer segmentation, customer relationship and channel constitute the customer part of the business model canvas. Customer segmentation module describes the different target groups and institutions that an enterprise expects to serve, which is the core of the business model. Customer segmentation answers questions of how to create value and who is the most important customer of the enterprise. After determining customers, enterprises should deeply understand the personalized needs of customer groups, and then design business models. The channel module describes the process of communicating, connecting and delivering value propositions between the enterprise and customer groups. Channels can deliver value propositions to customers, provide after-sales support, help customers better understand enterprise products and services, and evaluate enterprise value

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propositions. Customer relationship module describes the types of customer relationship established by enterprises and customer groups. Customer relationships can be driven by new customer acquisition, retention, and increased sales (or unit prices), and will have a profound impact on the overall customer experience. The business model product section contains a value proposition module. A value proposition describes how a business provides products and services that create value for a group of customers. The value proposition is mainly to solve customers' problems or meet customers' needs. The value proposition is why customers choose or leave a business.

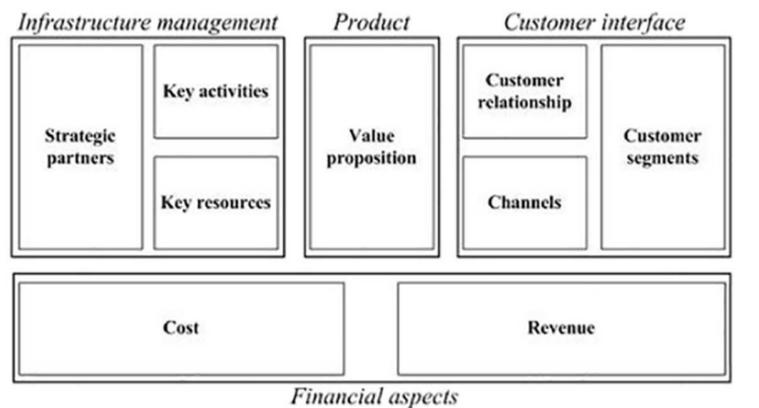


Figure 1: Conceptual model

The infrastructure management component includes core resources, business critical and strategic partners. Core resources describe the resources needed to ensure the smooth operation of a business model. Core resources can be physical resources, financial resources, knowledge resources or human resources. Core resources can be owned, leased, or obtained from external partners. Key business describes the most important business that needs to be carried out to ensure the smooth operation of the business model. It is necessary for an enterprise to create and provide value proposition, gain market, maintain customer relationship and gain revenue. For example, for Dell, the key business is supply chain management. For McKinsey, the key business is providing solutions. Strategic partners describe the network of suppliers and partners needed to make a business model work. Inter-organizational cooperation is playing an increasingly important role in today's business activities, and important partners are playing the role of cornerstone in many business models. By cooperating with excellent partners, enterprises optimize their business models, reduce enterprise risks and obtain external resources.

The financial capability of business model includes cost structure and revenue source. The cost structure describes the total cost of operating a business model. The revenue source section describes how much cash a company gets from each customer group and is the artery of the entire business model.

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This paper mainly obtains data from official websites, public online materials and third-party live broadcast data statistics platforms. This paper analyses the content of the above materials. The materials and data involved in the different cases were first grouped and then coded according to nine elements of the business model canvas to identify and evaluate the specific performance of the two cases in terms of customer, product, infrastructure management and financial capabilities. A comparative analysis was conducted for each business model element identified above, and the differences between the two cases in terms of customers, products, infrastructure management and financial capabilities were analysed and verified by data. Finally, based on the above analysis, this paper summarizes the characteristics and differences of the two business models of live broadcast marketing and puts forward suggestions for businesses to make decisions on live broadcast marketing.

4. Case description

Peacebird is a fashion brand retail company founded in 1996. Initially, it was a women's clothing brand. With the development of the brand, the business of the company has changed a lot. In 2001, Taiping was established to serve Asian women's clothing brand Taiping women's clothing, highlighting the characteristics of fashion and vitality. After that, Peacebird expanded the apparel business to a menswear brand in 2008. In the women's clothing field, it further segmented customers, focused on serving adolescent girls, and launched LED'IN women's clothing brand featuring sweetness, elegance and vitality. In 2013, PEACEBIRD company marketed MATERIAL GIRL, an American women's clothing brand, in greater China. 2014 was a turning point for the business, with the launch of AMAZING PEACE menswear, a light luxury line aimed at the high-end market, and the purchase of French couture house Alexis Mabille in 2015. Since then, PEACEBIRD products into the fashion line. In 2018 and 2019, Peacebird participated in New York Fashion Week and Paris Fashion Week on behalf of Chinese fashion brands. So far, Peacebird owns 6 clothing brands for high-end men, children, adolescent girls and ordinary Asian men and women. Peacebird entered the field of e-commerce in 2008, and then built a three-dimensional retail model of network coordination. With the development of live streaming e-commerce in recent years, Peacebird opened online channels of live streaming e-commerce in 2016 to carry out live streaming marketing activities through social media platforms MicroBlog, Xiaohongshu, Tik Tok, and e-commerce platforms such as Taobao official store

Weiya is the full-category anchor on Taobao Live platform. She is one of the hottest anchors in the ranking of Taobao Live. The product category of Weiya's live streaming is not limited to a single brand, but multi-brand and full-category products. In 2011, Weiya established the online stores in Taobao and Tmall to enter the e-commerce market. Initially,

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Weiya worked as the model personally and took product promotional photos for herself or other businesses to display the products on e-commerce platforms. In 2016, Taobao Live appeared which is the official live streaming platform of Taobao. Then, Weiya was invited to become an anchor on Taobao Live by the promotion photos. With the significant increase of the number of the fans, increasing businesses chose to cooperate with Weiya and sell their own products based on the network traffic of Weiya. This has also increased the product categories of her stores and helped Weiya gain more user traffic, which makes the amount of cooperation and the number of fans promote each other in a circular state.

5. Results and discussion

5.1. Core elements identification

Based on the description of the above two cases, this paper uses the business model canvas model as the framework to identify the elements corresponding to the business model in the two cases. The result is shown in Table 1.

In the customer part, the customer segment of Peacebird Tmall flagship store is Asian women. Before the live broadcast, the store mainly communicated with customers through taobao news and third-party social platforms. During the live broadcast, Peacebird Tmall flagship store will establish communication channels with consumers through user comments and real-time live broadcast. In terms of customer relations, Peacebird Tmall flagship store will push the notice to the fans who pay attention to the store through taobao news before the launch, so as to predict the product information of the next live broadcast. Besides, Peacebird Tmall flagship store will also inform potential customer groups who are not fans of the store to preheat activities on Weitao, Weibo and other social platforms. In the process of live broadcast, live broadcast marketing personnel will read the content of consumers' messages and respond in time, so as to shorten the distance between live broadcast personnel and consumers.

In addition, while promoting the product, the broadcast personnel will also output the content unrelated to the product that customers are concerned about, such as colour matching, accessories matching and other matching skills. Livestreaming marketers will also guide livestreaming viewers to pay attention to stores through brand discount vouchers, and turn potential customers into actual customers. Weiya live marketing is aimed at consumers who need to buy cost-effective products. The vast majority of consumers visiting Weiya live marketing channel have rich e-commerce shopping experience. These fans are not close to Weiya and mainly attracted by the cost-effective products of Weiya's live marketing channels. Weiya communicates with consumers through Taobao news, fan groups, third-party social platforms and live broadcasts. In order to build a better customer relationship with consumers, Weiya attaches great importance to customer experience.

Table 1: Core elements of business model

Dimension	Element	Peacebird	Weiya
Customer interface	Customer segments	Asian women	Customers who purchase cost effective products
	Customer relationship	Upcoming events; Communicating with audience; Sending discount coupons; Sharing dressing experience	Upcoming events; Communicating with audience; Sending discount coupons; Sharing shopping experience; A good after-sale service; Statistics consumer demand.
	Channels	Real-time communication tool; Live streaming; Social platform	Real-time communication tool; Live streaming; Social platform
Product	Value proposition	Deliver product information; Close customer relationship	Selling cost-effective products
Infrastructure management	Key resources	Brand influence	Personal influence; Product supply chain
	Key activities	Sell store merchandise; Increase brand awareness	Choose cost-effective produces; Sale products
	Key partners	Taobao e-commerce live streaming platform	Taobao e-commerce live streaming platform; Product supplier
Financial aspects	Cost	Potential user conversion costs Labour costs	Labour costs; The cost of choosing cost-effective products; Celebrity appearance fee
	Revenue	Commodity sales revenue	Commission Commodity display fee

Before live broadcast marketing, Weiya will acquire product demands of users through communication channels with users and formulate live broadcast content according to their needs. Weiya will release the product information of live broadcast marketing on social media to let consumers know the content of live broadcast marketing as soon as possible and help consumers decide whether to watch live broadcast or not. During the live broadcast, Weiya will emphasize the discount information and purchase channels for many

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times, interact with customers in real time, and introduce shopping experience that many consumers do not know. After the live broadcast, Weiya and her team will be responsible for the products purchased by consumers to ensure their interests. If the products received by consumers are inconsistent with the broadcast content, Weiya and her team will take the initiative to make up for the loss of consumers.

In terms of products, the value proposition conveyed by the live marketing of Peacebird Tmall flagship store is to deliver more product information to consumers and guide them to consume in the store. Before each live broadcast marketing, live broadcast marketing personnel will do live broadcast planning including content planning, discount planning and product planning, so as to help consumers know more product content and preferential activities. The value delivered by Weiya live streaming is the purchase of cost-effective goods. To this end, Weiya's live marketing team will spend a lot of time inspecting products and negotiating with manufacturers to ensure that consumers can buy the best quality products at the lowest price.

In terms of infrastructure management, the core resource of Peacebird live marketing is Peacebird's brand influence. The key business of Peacebird Tmall flagship store is mainly selling Peacebird brand goods. According to the third-party Taobao live broadcast data statistics platform, during the recent 90 days of live broadcast of Peacebird flagship store on Tmall, products of Peacebird brand appeared in 103 times, while products of other brands appeared in 9 times. Secondly, livestreaming marketing also needs to guide consumers to pay attention to Peacebird Tmall flagship store and increase the number of brand fans. Anchors will guide consumers to pay attention to the store in a variety of ways, thus enhancing the influence of Peacebird Tmall flagship store. Peacebird's main partner on Tmall is Taobao Live that provides the live streaming platform. The fundamental of Weiya live marketing is infrastructure management. The key business of Weiya live marketing is to sell cost-effective products. The success of key business comes from unique core resources and numerous quality partners. The core resources of its live broadcast marketing are Weiya's huge number of fans and the commodity supply chain supported by the live broadcast marketing team. Weiya relies on her huge number of fans to build social influence to help her cooperate with many celebrity artists, so as to attract more consumers to participate in live marketing and increase product sales. High product sales help Weiya gain bargaining advantage in the process of cooperating with suppliers and ensure that the live broadcast marketing channel can sell goods at the lowest price of the whole network. In addition, an independent commodity supply chain helps Weiya ensure the quality of live marketing products. The inability to guarantee product quality is one of the pain points of live broadcast marketing. Weiya's live marketing team has built an independent selection platform, standardized all the processes and methods of industrial cooperation, and filtered out unqualified suppliers. In addition, the live broadcast marketing team of Weiya also built

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a supply chain base to manage the live broadcast products in a unified way, so as to ensure that the products can be traced back and solve the product quality problems. Quality partners are another reason for the success of Weiya's key business. Taobao is one of Weiya's main strategic partners. As Weiya participated in Taobao live broadcast early, the Taobao live broadcast platform set up by Taobao has helped her accumulate a large number of fans. In addition, excellent suppliers of all kinds of products also help Weiya to establish an image of good quality and low price. The suppliers selected by Weiya team all have high-quality products. The standardization and high-quality quantification of product supply help Weiya to improve online reputation and influence.

The income source of the live marketing of Peacebird Tmall flagship store is the consumption of consumers in the Tmall flagship store, while the cost structure includes the conversion cost of potential customers in the form of discount coupons or vouchers and the human cost of live marketing personnel. Weiya's main source of income is the commission she earns from working with merchants. The commission that Weiya can get for each live broadcast accounts for 20% of the turnover of live broadcast. In addition, merchants who sell goods through Weiya's live marketing channels also need to pay different amounts of commodity display fees. The display cost of food products is 40,000 yuan, while the display cost of apparel and clothing products is as high as 100,000 yuan. The cost structure of Weiya live broadcast marketing includes the cost of constructing supply chain, the appearance fee of stars and the human cost of live broadcast marketing team.

5.2. Comparative analysis

The business models of live broadcast marketing in the two cases have been described above. In this section, a comparison will be made between the two live broadcast marketing by using the business model canvas tool and the live broadcast data of the two live broadcast marketing collected by the third-party platform.

The differences between Weiya and Peacebird Tmall flagship store in their live marketing business models are reflected in customer segmentation, customer relationship, value proposition, key business, core resources, strategic partners, revenue sources and cost structure. This paper will analyse the differences from four dimensions of business model in combination with specific live broadcast data.

(1) Customer

Although Weiya and Peacebird Tmall flagship store live marketing business model channel access is the same, their customer segmentation and customer relationship are different.

As discussed above, Weiya and Peacebird Tmall flagship stores cater to two different customer groups. Weiya provides services to customers that are more price-sensitive and quality-sensitive, while Peacebird is aimed at Asian women of all levels of consumption.

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The customer relationship management of Weiya and Peacebird Tmall flagship store is also different. Compared with Peacebird Tmall flagship store, Weiya attaches more importance to mining users' needs through third-party social platforms and real-time interaction, and then selects products based on users' product needs and negotiates prices with suppliers, so as to attract users' attention with products with higher cost performance. As a retailer in the value chain, Weiya does not have the ability to produce its own products, but sells its products as an agent through cooperation with upstream suppliers. Activities such as production, packaging and transportation of goods are all done by upstream suppliers. Therefore, she will face the overbooking problem that Peacebird Tmall flagship store does not face. Due to the weak production capacity of some suppliers, the production speed of orders will be slower than the sales speed of products, and some merchants will pass off unqualified goods as qualified goods to sell to consumers. This dishonest behaviour will seriously affect the image of Weiya in consumer groups. In order to solve this problem, The live broadcast marketing team of Weiya will undertake the quality problems of the products sold in the live broadcast marketing, so that consumers can be assured to buy every product in the live broadcast.

In order to evaluate the performance of the two live streaming marketing business models in terms of customers, this study uses five indicators, such as per capita residence time, turn-to fan rate, live streaming duration, like/view UV and comment barrage/view UV, to measure the specific content of the indicators, as shown in Table 2.

Table 2: Model customer interface evaluation index of live streaming marketing business model

Indicator Name	Indicator Meaning
Per Capita Residence Time	The time spent by each user in the live streaming room, in seconds.
Turn-to-Fan Rate	Percentage of new users becoming fans of bloggers in live streaming.
Live Streaming Duration	The length of the live streaming, in hours
Like/View UV	The average number of likes of users in the live streaming can be used to reflect the degree of favorite of the live streaming content by users. The larger the value, the stronger the like
Comment Barrage/View UV	The average number of user comments in the live streaming can be used to reflect the degree of interaction between the user and the blogger. The larger the value, the stronger the degree of interaction

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According to the analysis of the live streaming data of the online store of Wei Ya and Peacebird official online store from July 18, 2020 to August 15, 2020, the statistics of live streaming data indicators have been obtained and shown in Table 3 and Table 4.

Table 3: Data Index Statistics of Wei Ya Online Store Live Streaming

	Per Capita Residence Time (S)	Turn-to-Fan Rate	Live Streaming Duration (h)	Like/View UV	Comment Barrage/View UV
Average Value	650	0.84%	3.94	2.80	0.0039
Minimum Value	429	0.53%	2.68	2.28	0.0026
25% Points	562.25	0.65%	3.54	2.56	0.0036
Median	586.5	0.70%	3.78	2.77	0.0039
75% Points	704.5	0.86%	4.20	2.89	0.0044
Maximum Value	1076	2.01%	5.87	3.89	0.0050
Standard Deviation	166.688	0.003	0.81	0.367	0.001

Table 4: Peacebird Official Online Store Live Streaming Data Index Statistics

	Per Capita Residence Time (S)	Turn-to-Fan Rate	Live Streaming Duration (h)	Like/View UV	Comment Barrage/View UV
Average Value	159.61	6.84%	14.29	1.02	0.10
Minimum Value	0.00	1.72%	6.50	0.45	0.04
25% Points	155.00	5.22%	15.07	0.78	0.09
Median	168.00	6.02%	15.10	0.92	0.10
75% Points	178.50	6.83%	15.13	1.06	0.11
Maximum Value	217.00	17.61%	17.15	2.09	0.12
Standard Deviation	40.31	3.33%	2.46	0.38	0.02

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As shown in Table 3 and Table 4, the average live streaming duration of the Peacebird official online store is 14.29h, which indicates the anchors of Peacebird online store always do live streaming on Taobao Live platform throughout the day approximately. In contrast, Wei Ya's average live streaming duration is only 3.94 hours every day, and the duration of each live streaming during the statistical period is also relatively concentrated. However, it is significant that the average value of Per Capita Residence Time in Wei Ya's live streaming is greatly higher than the Per Capita Residence Time of the Peacebird official online store. The average value of Per Capita Residence Time of Wei Ya online store has reached 650s, while that of Peacebird official online store was only 159.61s. In addition, the average value of the Like/View UV indicator of Wei Ya online store is also higher than that of the Peacebird official online store, which means that the content of live streaming in Wei Ya online store is more concerned and loved by customers. On the other hand, the average value of Comment Barrage/View UV indicator and Turn-to-Fan Rate of the Peacebird official online store are higher than Wei Ya online store, which indicating that the live streaming of the Peacebird official online store is more interactive and new users are more easily converted into fans of the online store by live streaming.

(2) Product

Viya and Taiping Bird small flagship store live marketing business model in terms of products are very different. The Value Proposition in the live marketing business model of Wei Ya online store is to recommend customers to purchase high-cost products that users really need, while the Value Proposition of the Peacebird official online store uses live streaming to show consumers as much as possible products information and details which are difficult to be displayed on the web. At the same time, this kind of live streaming marketing makes it closer between consumers and the store through interaction and attracts more users to visit the Peacebird official online store so that consumers could purchase goods successfully and efficiently.

This study uses the proportion of the number of people entering the store guided by live streaming live streaming guide to the number of shoppers, customer unit price, and sales of goods to assess the performance of the live streaming marketing business model of Wei Ya online store and Peacebird official online store in terms of Product. The specific content of the indicators is shown in Table 5.

Table 5: Product Evaluation Index of Live Streaming Marketing Business Model

Indicator Name	Indicator Meaning
the Proportion of the Number of People Entering	Refers to the proportion of the number of users visiting the store of merchant through the live streaming channel

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the Store Guided by Live Streaming	to the total number of live streaming users. This indicator can reflect the ability of live streaming marketing content to guide users to spend in the store. The larger the value, the stronger the ability.
Unit Price Per Customer	The average purchase amount of each consumer who purchases goods through live streaming marketing channels, which depends on the price and quality of the goods.
Sales	Refers to the number of products sold by the merchant after live streaming marketing, which can directly reflect the ability of live streaming marketing to help product sales. The larger the value, the stronger the ability.

The relevant data analysis results in Products of Wei Ya online store and Peacebird official online store from July 17, 2020 to August 15, 2020 are shown in Table 6 and Table 7 respectively.

Table 6: Live Streaming Marketing Product Data Statistics of Wei Ya Online Store

	the Proportion of the Number of People Entering the Store Guided by Live Streaming	Unit Price Per Customer (estimate)	Sales (estimate) (thousand yuan)
Average Value	0.0044	112.72	75.79
Minimum Value	0.0001	56.41	24.83
25% Points	0.0002	76.82	43.89
Median	0.0003	99.76	55.66
75% Points	0.0083	122.51	70.29
Maximum Value	0.0161	251.78	434.67
Standard Deviation	0.006	55.57	79.00

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Table 7: Live Streaming Marketing Product Data Statistics of Peacebird Official Online Store

	the Proportion of the Number of People Entering the Store Guided by Live Streaming	Unit Price Per Customer (estimate)	Sales (estimate) (thousand yuan)
Average Value	0.20	327.37	0.55
Minimum Value	0.09	280.47	0.01
25% Points	0.18	282.33	0.08
Median	0.19	297.86	0.22
75% Points	0.21	342.89	0.64
Maximum Value	0.31	433.28	5.45
Standard Deviation	0.05	62.46	0.98

As shown in Table 6 and Table 7, the average value of people who visit the store through the live streaming of Wei Ya is only 0.006. The average value of that in the Peacebird official online store is 0.05, that is higher than Wei Ya. This proves that the value proposition of live marketing of Peacebird Tmall flagship store is to attract more users to visit the store to buy goods. The average customer unit price of Wei Ya's live marketing is 112.72, lower than the 327.37 of Peacebird Tmall flagship store, but the sales volume with goods is much higher than that of Peacebird Tmall flagship store. This shows that the price of goods in Weiya's live marketing is cheaper, confirming the view that the value proposition of Weiya's live marketing business model is to sell cost-effective goods.

(3) Infrastructure management

In infrastructure management, Weiya and Peacebird Tmall flagship store have different key businesses because of their different value propositions. Although the key business of both of them involves selling goods, the goods sold by Weiya Live Marketing are all from high-quality suppliers in the strategic partner sector. Besides a small number of cooperative brand products, the vast majority of products sold in Peacebird Tmall flagship store come from the production line of Peacebird Group. Therefore, the key business of Weiya also includes the selection of high-quality products in the market that can be marketed in live

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streaming marketing. Besides selling commodities, the key business of Peacebird Tmall flagship store is to promote the popularity of Peacebird's brand and products through live broadcast and guide users to consume in the store.

Key business cannot be realized without the support of core resources. The core resources of Weiya's live marketing business model include personal influence and independent supply chain system. Weiya's personal influence helped her gain the right to sell goods at low prices. She now has more than 10 million followers and 230 million monthly viewers. In addition, through data analysis, Weiya can sell 757,900 items per live broadcast on average, 137.8 times that of Peacebird Tmall flagship store. With excellent influence and sales ability, Weiya has the bargaining power to negotiate with suppliers and can obtain low prices that cannot be obtained through other marketing channels. Excellent personal influence also helps Weiya live marketing team to establish an independent supply chain system to ensure the reliability of the quality of live marketing products. Weiya's live marketing products come from thousands of suppliers. The livestreaming marketing team will assess the suppliers who sign up for the livestreaming and select qualified products and suppliers. Only the products and suppliers that pass the screening are eligible to participate in the live marketing of Weiya, which ensures the reliability of the quality of the live marketing products. The core resource of Peacebird Tmall flagship store's live marketing business model is Peacebird's brand influence. Peacebird Tmall flagship store attracts consumers to participate in live marketing by virtue of the brand image established by Peacebird in the clothing industry for many years, so as to display more product information and guide consumers to the store with discount coupons.

(4) Financial aspect

The difference in financial aspect between the live marketing business model of Weiya and Peacebird Tmall flagship store is reflected in revenue source and cost structure. The income source of Weiya's live marketing is the commission earned by agency sales and the cost of live product display, while the income of Peacebird Tmall flagship store directly comes from the income gained from selling products. In terms of cost structure, apart from paying the salaries of the staff of the live broadcast marketing team, Weiya also needs to pay the appearance fees of celebrities involved in live broadcast marketing and other expenses of the team during the selection of live broadcast marketing products. For Peacebird Tmall flagship store, the discount coupons issued by live broadcast marketing are the only cost that needs to be borne besides human cost.

As can be seen from the aforementioned analysis, the core content of the anchor-oriented live broadcast marketing business model represented by Weiya is that the anchor recommends the consumers that are sensitive to commodity price and quality to buy the cost-effective commodities. Anchors learn about consumers' demands through various

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online channels and choose appropriate high-quality products according to consumers' demands. The products come from high-quality suppliers selected by the livestreaming marketing team. The anchors communicate with the suppliers by virtue of their network influence and sales ability to obtain sales prices lower than other channels, and finally sell high-quality products at a lower price to consumers in need through livestreaming on e-commerce platforms. In the business process described above, anchors earn commissions from commodity suppliers for agency sales and expenses for live broadcast marketing and display of commodities, and pay for human costs of live broadcast marketing teams and expenses for screening qualified commodities and inviting stars to participate in live broadcast. Taking Peacebird as the representative case, the core content of the brand-oriented live broadcast marketing business model is that the anchor reduces the distance between consumers and the brand through live broadcast and attracts more Asian women to consume in the flagship store of the brand. Brand owners deliver live broadcast information to users through various online channels and attract users to participate in brand live broadcast by virtue of brand influence. During the live broadcast, the anchors of the brand will show the product experience information to users and guide consumers to purchase the products produced by the brand in the form of discount coupons. In this process, the brand's income comes from consumers' consumption in the stores on the e-commerce platforms, while the brand's cost is the labour cost of the live broadcast marketing team and the discount coupon expenditure to guide consumers into the stores.

Comparing the two different business models from the perspective of merchants, it is clear that although the anchor-oriented live streaming marketing business model is the same as the brand-oriented live streaming marketing business model, the channels and forms of live streaming marketing are the same. However, the two business models rely on different key resources, target customer groups, and delivered value propositions, which also leads to different key activities in the value delivery process and key partners supporting key activities.

The unit price of live broadcast marketing centered on the anchor is lower, but merchants can sell far more goods than their daily sales by virtue of anchors' influence. In addition, the number of users participating in the live broadcast marketing centering on anchors is larger. Merchants can promote brand products through this channel, improve brand exposure and get more users' attention. On the other hand, merchants must pay anchors a higher percentage of sales for greater visibility and lose control over pricing. Brand-oriented live broadcast marketing focuses on assisting consumers to consume in stores. The content of live broadcast marketing focuses on products of brand merchants. Merchants guide more users to consume in stores through live broadcast and convert more new users into fans of stores. In brand-oriented live marketing activities, merchants can independently decide the selling price of goods, and all the store income comes from the

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in-store consumption of consumers. However, the disadvantage of this business model is that the sales capacity and influence of merchants are weaker than that of anchors, so the sales volume of merchandise-oriented live marketing is lower, and the time for merchants to broadcast is longer.

Therefore, for merchants, the key to choosing to participate in anchor-oriented live streaming marketing or to develop merchant brand-oriented live streaming marketing is the merchant's brand awareness, product prices, and marketing intentions. For businesses with low brand awareness, they need to publicize their brand products through anchor-oriented live streaming marketing activities to gain high popularity and attention among users. After gaining a high level of brand awareness, businesses can carry out brand-oriented live marketing activities to convert users into store fans and guide users to consume. Products with high prices are not suitable to be sold through anchor-oriented live streaming marketing activities. The customer groups of anchor-oriented live broadcast marketing services are sensitive to price, which is not conducive to the sales improvement of high-price commodities. The choice of direct marketing business model is also related to the marketing intention of direct marketing. If merchants want to enhance the exposure and popularity of brand products through live broadcast marketing, they should choose to participate in anchor-oriented live broadcast marketing activities. If businesses want to convert more potential users into actual consumers through live broadcast marketing, they should choose to carry out brand-oriented live broadcast marketing activities.

6. Conclusion

Using case study method, this paper adopts business model canvas as the theoretical lens to study the business model of anchor-oriented and brand-oriented live broadcast marketing respectively. This study collected the live broadcast data of Weiya and Peacebird Tmall flagship store from July 17, 2020 to August 15, 2020 from a third-party data platform for data analysis. According to the data analysis results, the differences between the business model of anchor-oriented and brand-oriented live broadcast marketing are reflected in customers, products, infrastructure management and financial capabilities. In addition, the study summarized the characteristics of the two business models of live marketing from the perspective of e-commerce businesses, and therefore put forward suggestions regarding how to choose the business model of live marketing for e-commerce businesses.

This research fills the gap of the current studies on the theoretical studies on the business model of live streaming marketing. At present, there are few empirical evidence on live streaming marketing. The existing studies pay much attention on the influencing factors of live streaming marketing and the attitudes of consumers towards live streaming marketing. However, these studies ignored the discussion of the merchants in live streaming marketing, and lacked attention to the value creation and value transmission

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process of live streaming marketing. In this research, we have summarized how anchor-oriented live streaming marketing and brand-oriented live streaming marketing create value and deliver value respectively.

This study has certain limitations, providing great opportunities for future research. This study only adopted the case of Taobao live broadcasting platform for analysis. Further research can verify whether this research conclusion can be applied to other social platforms. Besides, the data selected in this study only covered 22 days of live broadcast marketing content. Subsequent research can expand data sources and therefore obtain new research conclusions.

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