

Marketing Strategy During the Pandemic: A Study of Chinese Live Streaming E-commerce Based on Taobao Live

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ABSTRACT

With the outbreak of COVID-19 in 2020, many companies were forced to change their traditional marketing strategies to survive, while the live streaming E-commerce strategy stood out owing to its numerous advantages. On the premise of the success of the live streaming E-commerce strategy, this paper established a linear regression model by randomly selecting 80 participants to conduct a questionnaire. The experimental results showed that annual salary, exposure rate, watch frequency and recommendation rate were positively correlated with consumers' purchase frequency. Therefore, during the post-pandemic era, companies could focus on the optimization of these aspects to better use the live streaming E-commerce strategy and achieve success.

Keywords: Live streaming E-commerce, marketing strategy, consumer, purchase, companies, COVID-19

1. INTRODUCTION

In early 2020, the COVID-19 pandemic had a massive breakout in Wuhan, China, which seriously influenced citizens' daily life during the traditional Chinese New Year. To control and prevent the further impact of the virus, people were asked to isolate themselves at home. Under the stay-at-home order, many traditional industries were affected, such as tourism, restaurants, transportation. The demand for working from home, online schools, and non-contact delivery significantly increased. Consumers were inevitably forced to change their previous offline shopping behaviours and turn to online shopping to cover their basic daily needs.

With the outbreak of COVID-19, a marketing strategy based on the live streaming industry became popular. Live streaming E-commerce can be summarized as a new marketing model of a digital economy that professional anchors interact with consumers directly to promote and sell goods through the internet. Many live streaming platforms have

emerged since 2015, while 2016 was even called the first year of live streaming. Live streaming E-commerce has been warmly welcomed by users, as almost 66.2% of them had purchased products on a live streaming platform [1].

Taking the success of the emerging live streaming E-commerce strategy as the premise, this paper used experimental study to analyze the relevant factors affecting the purchase frequency of Chinese live streaming E-commerce and study how companies can better optimize the use of this strategy in the post-pandemic era.

2. LITERATURE REVIEW

2.1 Consumer behaviour change in times of economic crisis

One study stated that the fear of uncertainties during the 2008 global economic crisis drove consumer behaviour into more negativity [2]. Consumers shortened their spending and stopped purchasing certain goods. They were meticulously evaluating their

investments and purchases. Simon revealed that consumers' perception of buying value has been reconstructed during the crisis [2]. Many consumers face financial restrictions during economic uncertainty. They maintain vigilance and keep moderate spending. Consumers would spend less money on non-essential items but 'nice to have' and have shifted to essential commodities [3].

2.2 Consumer behaviour change in times of public health crisis

Data showed a different consumer behaviour change in times of public health crisis. In the early stage of Covid-19 in Brazil, when there was a negative feeling, panic buying occurred. People were likely to spend more [4]. For example, the unpredictability of food supplements was one of the reasons why Covid-19 caused panic and forced consumers to buy more in Brazil. Publics impulsively purchased emergency supplies to store as a precaution. Likewise, Anastasiadou presented research on the Covid-19 effects on Greece and Sweden consumers who had similar funding [5]. It showed that negative feelings drove consumers to make irrational purchases. As a result, consumers spend higher than normal prices to get products.

2.3 Marketing strategies in times of crisis

2.3.1 Just good enough

One study presented two strategies for brands' survival in the economic downturn [6]. Budget brands could enhance appropriate value and brand equity by positioning their brands as the 'Just good enough' (JGE) brands, which refers to values provided by brands that exceeded consumers' requirement or expectation. Prestige brands could extend consumers' amortisation (Altered amortisation) to lure consumers' attention while protecting their brand equity. Instead of cutting the price, this strategy encourages brands to persuade consumers to purchase continually, even in the faltering economy. For instance, rather than reduce the car's price, the car company could consider offering longer warranties.

2.3.2 Online advertising

Another research pointed out that many companies convert their marketing budgets from traditional brand-building print campaigns to online advertising [7]. It was also Alter's view that using lower price, wide-spreading, internet-based marketing tools like Youtube, Facebook could lower the entry barriers and gain more traffic [8].

2.3.3 Providing special guarantees

Companies could provide special guarantees to consumers [2]. For products like vehicles representing a huge financial commitment, companies could offer longer warranties to make their consumers feel more secure. In addition, offering trial periods to consumers to reduce their insecurity and uncertainty of buying is also suggested.

2.4 Chinese live streaming E-commerce

2.4.1 The role of influencer (anchor)

Chinese live streaming E-commerce is driven by influencer marketing [9,10]. Consumer behaviours of Chinese live streaming E-commerce contain the admiration of influencers, who use their powerful influences to monetise their internet followers on live streaming. The key opinion Leader (KOL) plays a significant role in the process of Chinese consumers' purchase decision-making [11]. 49% of Chinese consumers check KOLs' suggestions or reviews of certain products before making purchase decisions.

2.4.2 The interactive characteristic

Yibang Power Research Institute stated that before the emergence of Chinese live streaming E-commerce, the short-form video and image content dominated how Chinese E-commerce delivered descriptions of products and services [10]. Chinese live streaming E-commerce, however, creates a virtual community for anchors and audiences to interact with each other and breaks the one-way communication [9,10]. With the anchors presenting and demonstrating products in front of audiences on the screen or sometimes other audiences posting their reviews of the products on the live streaming chat, audiences are more likely to trust products' authenticity. The experience of online shopping is upgraded through live streaming.

2.4.3 The importance of price

Price is an essential reason why consumers keep watching Chinese live streaming E-commerce [9,10]. 50.3% of consumers admitted that discounts and coupons lured them to watch live streaming, while 37.8% of consumers bought products on live streaming because the price was lower than other places [9]. It also revealed that some top live streaming anchors have collaborated and have become brand ambassadors to offer the lowest price when they sell those products on live streaming.

2.5 Weaknesses of Chinese live streaming E-commerce

The newly-developing live streaming E-commerce has some weaknesses and threats [9]. For the regulatory system is immature, the live streaming E-commerce has low access restriction, which means some anchors are not qualified for their jobs [9]. For example, some anchors sell low-quality products to audiences. Some anchors even intentionally overstate when they demonstrate some products. Moreover, Deng & Gao reveal that audiences may feel tired when they have to spend three hours watching the live streaming [9].

2.6 Research gaps

It is important to note that Chinese live streaming E-commerce performing well during Covid-19 in China is not accidental. This paper agreed that the Chinese live streaming E-commerce shows a strategical and ideological correspondence to previous researches of marketing strategies in times of crisis but is still an emerging strategy in which weaknesses and threats existed. However, there are limited studies on factors that would influence the success of the Chinese live streaming E-commerce strategy. This paper found out how Chinese live streaming E-commerce could be improved and helped companies dodge threats and boost strengths when they adopt Chinese live streaming E-commerce as a marketing strategy.

3. METHODOLOGY

This study surveyed participants (N = 80, 17.5% male, 65% 18 to 25 years old) through WJX, an online questionnaire platform. The survey results are shown in Table 1 below. The context of this study was Taobao live streaming e-commerce. Participants were randomly selected to complete annual salary, exposure rate, watch frequency, recommendation rate questions based on their shopping behaviours under the COVID-19 restriction. Results showed how Taobao live streaming e-commerce influenced their buying behaviours in each aspect and whether these factors would make consumers buy products more frequently through Taobao live streaming shows.

4. RESULTS

Based on these results, this paper built a linear regression model. The model results are shown in Table 2 below. Annual salary, exposure rate, watch frequency, recommendation rate were independent variables. Purchase frequency was the dependent variable. The null hypothesis was 'each independent variable does not influence the dependent variable'. In contrast, the alternative hypothesis was 'each independent variable influences the dependent variable'. We found that the p-values of annual salary (0.046), exposure rate (0.043), watch frequency (0.000), recommendation rate (0.012) were statistically significant, indicating strong evidence against the null hypothesis individually. The analysis showed that annual salary, exposure rate, watch frequency, recommendation rate are individually positively correlated with purchase frequency.

Table 1: Survey results

	Gender	Age	1. What is your annual income?	2. To what extent will you buy the product you are interested in because of the related Taobao live streaming show clips from social media?	3. What is your frequency of watching Taobao live streaming shows under the COVID-19 restriction?	4. To what extent will you recommend live streaming clips or shows to your family and friends?	5. What is your frequency of buying products from Taobao live streaming shows under the COVID-19 restriction?
1	Male	18 to 25 years	0-100k RMB	7	6	5	5
2	Female	18 to 25 years	0-100k RMB	1	1	1	1
3	Female	26 to 45 years	0-100k RMB	3	3	1	1
4	Female	under 18 years	100-200k RMB	6	3	6	5
5	Male	under 18 years	0-100k RMB	3	2	1	2
6	Female	18 to 25 years	0-100k RMB	6	7	7	7
7	Female	18 to 25 years	0-100k RMB	3	1	1	1
8	Female	18 to 25 years	0-100k RMB	4	1	1	1
9	Male	under 18 years	300k- RMB	5	4	1	4
10	Male	under 18 years	0-100k RMB	4	1	1	1
11	Female	18 to 25 years	0-100k RMB	6	2	2	2
12	Female	18 to 25 years	0-100k RMB	2	1	1	1
13	Female	under 18 years	0-100k RMB	5	1	1	1
14	Female	under 18 years	0-100k RMB	3	5	5	5

15	Female	18 to 25 years	0-100k RMB	4	2	5	3
16	Female	18 to 25 years	0-100k RMB	2	6	2	2
17	Female	46 to 65 years	100-200k RMB	3	2	1	1
18	Female	under 18 years	0-100k RMB	3	3	3	3
19	Female	under 18 years	0-100k RMB	3	1	1	1
20	Female	18 to 25 years	0-100k RMB	5	6	5	5
21	Female	18 to 25 years	0-100k RMB	3	4	1	3
22	Female	18 to 25 years	0-100k RMB	4	2	2	2
23	Female	18 to 25 years	0-100k RMB	7	3	3	4
24	Female	26 to 45 years	100-200k RMB	4	4	4	4
25	Female	18 to 25 years	0-100k RMB	1	1	1	1
26	Female	18 to 25 years	0-100k RMB	2	1	3	1
27	Female	18 to 25 years	0-100k RMB	5	5	5	4
28	Female	26 to 45 years	200k-300k RMB	6	5	7	6
29	Female	26 to 45 years	300k- RMB	6	3	1	5
30	Female	18 to 25 years	0-100k RMB	6	3	3	2
31	Female	18 to 25 years	100-200k RMB	3	2	2	1
32	Female	18 to 25 years	0-100k RMB	4	5	4	4
33	Female	18 to 25 years	0-100k RMB	7	5	6	6
34	Female	18 to 25 years	0-100k RMB	1	5	2	3
35	Female	26 to 45 years	300k- RMB	2	3	2	3
36	Female	18 to 25 years	0-100k RMB	3	2	1	2
37	Female	18 to 25 years	0-100k RMB	7	6	6	6
38	Female	26 to 45 years	100-200k RMB	2	3	3	2
39	Female	18 to 25 years	0-100k RMB	1	2	1	1
40	Female	18 to 25 years	0-100k RMB	3	2	2	2
41	Female	18 to 25 years	0-100k RMB	4	2	4	3
42	Female	18 to 25 years	0-100k RMB	5	1	3	2
43	Female	18 to 25 years	0-100k RMB	5	3	4	3
44	Male	18 to 25 years	0-100k RMB	5	4	6	4
45	Male	18 to 25 years	0-100k RMB	1	1	1	1
46	Female	18 to 25 years	0-100k RMB	2	1	1	1
47	Female	18 to 25 years	0-100k RMB	2	2	2	2
48	Male	18 to 25 years	0-100k RMB	3	4	4	4
49	Male	18 to 25 years	0-100k RMB	1	1	1	1
50	Female	18 to 25 years	0-100k RMB	6	4	5	5
51	Female	18 to 25 years	0-100k RMB	5	6	6	5
52	Female	18 to 25 years	0-100k RMB	3	1	1	1
53	Male	18 to 25 years	0-100k RMB	1	1	1	1
54	Female	18 to 25 years	0-100k RMB	2	2	1	2
55	Female	46 to 65 years	300k- RMB	5	3	3	3
56	Female	18 to 25 years	0-100k RMB	4	3	4	3
57	Female	18 to 25 years	100-200k RMB	3	6	6	6
58	Female	18 to 25 years	0-100k RMB	2	2	1	2
59	Female	46 to 65 years	0-100k RMB	4	5	4	4
60	Female	26 to 45 years	100-200k RMB	4	2	2	2
61	Female	26 to 45 years	0-100k RMB	7	5	1	6
62	Female	18 to 25 years	100-200k RMB	4	6	4	4
63	Female	18 to 25 years	0-100k RMB	5	4	4	4
64	Female	18 to 25 years	100-200k RMB	2	2	2	1
65	Female	18 to 25 years	0-100k RMB	4	1	1	3
66	Female	18 to 25 years	0-100k RMB	2	1	1	1
67	Female	18 to 25 years	0-100k RMB	3	1	1	1
68	Female	18 to 25 years	100-200k RMB	6	6	5	4
69	Male	under 18 years	100-200k RMB	5	3	4	4
70	Female	46 to 65 years	0-100k RMB	5	3	3	3
71	Male	26 to 45 years	0-100k RMB	1	2	1	1
72	Male	18 to 25 years	0-100k RMB	2	1	1	1

73	Female	26 to 45 years	100-200k RMB	2	2	2	2
74	Female	18 to 25 years	0-100k RMB	4	1	1	1
75	Female	above 65 years	0-100k RMB	1	1	1	1
76	Female	46 to 65 years	0-100k RMB	1	1	1	1
77	Female	46 to 65 years	0-100k RMB	1	1	1	1
78	Male	18 to 25 years	100-200k RMB	2	2	1	3
79	Male	26 to 45 years	0-100k RMB	2	3	2	2
80	Female	46 to 65 years	0-100k RMB	5	5	5	5

Table 2: Model results

Parameter Estimates (n=80)									
	Unstandardized Coefficients		Standardized Coefficients	t	p	VIF	R ²	Adj R ²	F
	B	Std.Error	Beta						
Constant	-1.026	0.482	-	-2.129	0.037*	-	0.868	0.843	F(13,66)=33.523, p=0.000
1. annual salary	0.216	0.107	0.096	2.029	0.046*	1.128			
2. exposure rate	0.163	0.079	0.173	2.064	0.043*	3.523			
3. watch frequency	0.479	0.085	0.498	5.622	0.000**	3.937			
4. recommendation rate	0.191	0.074	0.209	2.583	0.012*	3.287			
Dependent variable 5 What is your frequency of buying products from Taobao live streaming shows under the COVID-19 restriction?									
D-W value: 2.134									
*p<0.05 ** p<0.01									

5. CONCLUSION & LIMITATION

5.1 significance

This study illustrated the key drivers for optimizing the live streaming E-commerce strategy and promoting consumers' purchase, based on the existing live streaming E-commerce strategy. The study also proposed new developmental directions for companies on optimizing this strategy and making better and more effective use of it to successfully obtain greater profits.

5.2 Conclusions

5.2.1 Annual salary & Watch frequency

Salary is an essential factor influencing consumer purchase frequency. The survey showed that among those who earn less than 200k RMB a year, 30.6% of them had an above-average purchase frequency; among those who make more than 200k RMB a year, 60% had an above-average purchase frequency. The data illustrated that the higher the individual income is, the more frequently the individual will buy through Taobao live streaming.

Watch frequency is another important factor. Among those who have above-average watch frequency, 88% rated four or above (1 to 7, never to always) when answering purchase frequency. In comparison, only 7.2% of people with low watch frequency rated four or above when answering purchase frequency.

Therefore, companies should actively use this strategy to increase the promotion and exposure of their

products, like advertising on short video platforms such as Douyin and Xiaohongshu to attract more potential consumers. Besides, companies should promote their products more accurately to their target customers. For example, they can recommend some specific products required by consumers according to their search records on Taobao. In addition, recommending products at the appropriate price according to the difference in consumers' income can also encourage consumers to buy and then make more profits.

5.2.2 Exposure rate

The result of the survey showed that 39 out of 80 (48.75%) survey participants had an above-average exposure rate, 29 out of 39 (74.36%) had an above-average purchase frequency. In comparison, only 3 out of 41 (7.32%) of the rest of the survey participants who had a below-average exposure rate had an above-average purchase frequency. Thus, when people are exposed to more Taobao live streaming clips, they tend to make more purchases through shows.

To increase the exposure, anchors who host Taobao live streaming shows could send push notifications or upload posters through social media to subscribers, or potential consumers about the upcoming Taobao live streaming shows. When shows ended, they could publish some live streaming clips through public platforms for 'latecomer' consumers who missed the live streaming. Moreover, they could buy the hot search on Weibo or invite celebrities to attract more consumers.

5.2.3 Recommendation rate

As for the recommendation rate factor, among those who are most likely to recommend Taobao live streaming e-commerce (26 out of 80), 84.6% of them had an above-average purchase frequency. While those who are not willing to recommend e-commerce (54 out of 80), only 7.4% had an above-average purchase frequency. The more satisfaction consumers get, the more possibility they will recommend to the people around them [12]. It also revealed that consumers with higher satisfaction tend to purchase more frequently. To promote the recommendation rate, companies should adopt a referral program. For example, companies could provide vouchers on live streaming to audiences who recommended products to others.

5.3 Limitations

Firstly, The present study has some limitations in methods. Due to the small sample size of this study, the results may be limited. Therefore, future studies can consider expanding the sample size to verify this study. Besides, since it is difficult to obtain the actual purchase data of consumers under the influence of live streaming E-commerce strategy, this study only uses a questionnaire to collect data and conducts a rough investigation on the purchase frequency of consumers during the pandemic. Future studies can consider using the experimental research method to obtain more accurate research data.

In addition, some other factors may influence the comprehensiveness of the data, such as the platform selection which was not considered in this study. This study only takes Taobao Live as an example, but there are many live streaming E-commerce platforms in China, such as Jingdong, etc. Future studies can explore the differences between different live streaming E-commerce platforms and whether these differences will have an impact on consumers' purchase.

Furthermore, the accuracy of the data may also be affected by some external factors. Since the calculation method of the number of viewers on Taobao Live is based on the total number of times that one person enters the live streaming room, without excluding the situation that one person enters the live streaming room several times, the data is exaggerated to a certain extent. In the future, companies need to pay attention to this problem and change their statistical methods, instead of blindly believing the exaggerated data.

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