

Lazada's products and functions and the cooperation between Lazada and Alibaba

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Abstract. Whether Lazada, as a shopping platform with great influence in Southeast Asia, can benefit from the cooperation with Alibaba, and what factors will affect the product sales after shopping. This article introduces the background of Lazada and the reason why Alibaba chose to cooperate with Lazada. This article also uses descriptive tables and regression analysis methods to analyze the relationship between seller scores and product scores. The variance and mean deviation of the two groups of data are simply described by the description table. Then, regression analysis is used to analyze the impact of those data on the seller rating by comparing the p value of different scores. This article concludes that Alibaba can provide sufficient funds for Lazada to help Lazada develop new software or functions, and has sufficient experience to help Lazada avoid many problems and make improvements. And the total product rating and the customer's product score of one, two and three star will have a significant impact on the merchant's score, and this impact will directly affect the seller's income and product sales.

Keywords: Lazada & Alibaba, Consumers buy products, Regression analysis.

1. Introduction

1.1. Background

Lazada was founded in 2012 and was acquired by Alibaba in 2016. And with the support of Alibaba, it began to expand the market in Southeast Asia. With the continuous development of Lazada, it has successfully entered Indonesia, Malaysia, Singapore and other countries and has about 600 million consumers. Lazada's main businesses are Lazmall, cross-border e-commerce and Lazada marketplace, so this has attracted a lot of businesses to join Lazada's shopping platform [1]. With the gradual increase of businesses in the Lazada platform, the types and scope of products have also been greatly expanded. In order to better expand the market scope, Lazada cooperated with Alibaba. The article specifically explains Alibaba's influential Ding Talk and Taobao. This news also briefly explained the logistics plan of Cainiao and Lazada to prepare for the Double 11. It also describes that Lazada has established a warehouse in China, and makes a simple analysis on the Chinese market [2].

1.2. Related Research

In the 2019 magazine, Lazada was briefly introduced, and the relationship and influence between Lazada and Alibaba were described [1]. In an article in 2021, the cooperation between Lazada and Alibaba was described, in which Alibaba's Taobao and Ding Talk were mainly described. Taobao platform is one of the most commonly used shopping software for consumers in China. Not only that, but also Taobao often holds activities, which attracts a lot of customers. Then comes Ding Talk, a popular software under Alibaba that is often used by schools and companies. Due to different audiences, its users are very active. In addition, the article also introduced a new version of Taobao software for the elderly, which has helped the older customers [2]. In a paper in 2022, the author focused on JD, shoppee and Lazada, and studied what factors affected the customers of these three shops software to purchase products. The article analyzes the six aspects of brand effect, product offering, platform feature, special offer and shopping safety. According to the results of the analysis in the article, it can be concluded that the platform and brand have a significant impact on customers' online shopping, because their p value is less than 0.05. And based on this research, operators have provided great help to influence customer choice [3]. In the 2022 paper, the author discussed the

impact of service quality on Lazada user satisfaction and loyalty, and the impact of complaint handling on user satisfaction. The author takes the service quality, complaint handling and customer satisfaction as the main objects of the study, and takes 130 Lazada consumers as the sample to study and use the structural equation model of PLS Wrap computer program for analysis. Through research and analysis, it is found that service quality has a significant impact on consumer satisfaction and complaint handling has also effectively improved consumer satisfaction. Through these studies, the author believes that these studies can effectively help companies understand customer satisfaction and retention rate [4]. In a paper on human resources and effective communication in 2020, the author took communication analysis, motivation analysis, employee performance and intermediary communication as the main factors of the study, used SPSS software to study the employees of PT Lazada Express Bandung, and took 52 employees as the experimental data. According to the research results, the author concludes that the communication environment has a great impact on employee performance. The communication environment has an impact on employee motivation, but motivation will not change the impact of the communication environment on employee performance [5]. In 2019, there was an article about studying the advantages, impacts and disadvantages of Lazada, Shopee and Tiki, three e-commerce websites in Vietnam. By using the method of statistical test, the author concludes that the advantage of e-commerce is that it can purchase at a more convenient and preferential price and save time better. However, the platform still needs to pay more attention to product quality and service, so as to effectively attract customers [6]. Also in 2019, Pratama and his colleagues conducted a survey based on Internet users in Indonesia. According to the survey, it was learned that the business content that users used most was online stores. According to the data collected, Lazada has the highest number of downloads, but Lazada also has competitors, Tokopedia and Bukalapak. This makes Indonesia's e-commerce market full of fierce competition. And because of the competition between companies, the products are constantly updated, which also brings users a better experience [7]. In 2020, Muqoddas, Yogananti and Bastian wrote an article about the business transformation in Indonesia, from traditional purchase to electronic purchase. In addition, they also measured the availability of Shopee, Lazada and Tokopedia, which helps users better choose products, of which Shopee is the best [8]. Then Prasetyo and his colleagues studied what factors affected online shopping consumers in the Philippines during COVID-19. In this paper, 251 Filipino consumers were selected as the experimental group to use structural equation model (SEM) to verify consumers. Finally, according to the calculation results, the author concludes that products/services, pricing, consumers and technology will affect consumers' purchase decisions. However, the author found in the research results that the operational has no significant impact on consumer satisfaction and influence. Based on the experiment, the author concludes that the experimental results of SEM are beneficial to e-commerce platforms and enterprises, and the factors that affect consumers can be better understood through research [9]. In 2021, Anwar, Panggabean and Oktavia conducted research on Lazada in Indonesia. In the study, the author uses Object-Oriented Analysis and Design (OOAD) method to analyze the claim and the process of claim. In addition, the author also explains the process of claim and how Lazada can avoid fraud [10].

1.3. Objective

This paper object of this paper is Lazada Company. The research questions are the products and functions of Lazada Company and the cooperation between Alibaba and Lazada. This paper will do some data analysis on Lazada's products, such as regression analysis. Then this article will continue to describe the functions of Lazada, and focus on the cooperation between Lazada and Alibaba in this article. For example, why can Lazada cooperate with Alibaba and what can Lazada get from cooperation with Alibaba.

2. Method

2.1. Data Sources

The data of this study is from Tran Ly Buu of Kaggle website. The analysis software uses SPSSPRO and Excel. First, use SPSSPRO to make a descriptive table to preliminarily understand the collected data. Descriptive statistics can intuitively observe the changes and anomalies of data, and can better help readers understand the research content. And the use of descriptive tables can also make the data more specific and explicit. In this part, this paper analyzes the impact of the product rating and the score received by the product on the merchant score through the collected product data of Lazada.

There is a similar study of the influence of Sugiarto and Putra on the atmosphere and environment of communication on employee performance in 2020. This descriptive table is based on six variables, namely product rating, product one star, product two star, product three star, product four star and product five star [5]. Therefore, this article will first analyze by using a descriptive table. The main research of this study is the impact of the total product rating and the customer's product score on the seller's rating.

2.2. Indicator Selection

Table 1. A descriptive table of total product score and user score of Lazada.

Variable	Sample capacity	Max	Min	mean	Std. Dev	media n	variance	Kurtosi s	skewnes s	Coefficient of variation(CV)
p_rate1star	2147	127	0	1.597	6.327	0	40.028	110.831	8.801	3.9613895507040007
p_rate2star	2147	39	0	0.556	2.354	0	5.543	100.043	8.835	4.237200570898329
p_rate3star	2147	71	0	1.281	4.917	0	24.177	72.204	7.703	3.838837458667252
p_rate4star	2147	211	0	2.785	10.404	0	108.234	118.752	9.219	3.7351889448832445
p_rate5star	2147	2629	0	39.598	138.949	9	19306.899	113.254	9.189	3.50903455335236
p_rating	2147	5	0	3.463	2.135	4.7	4.556	-0.989	-0.977	0.6163693092036749

In table 1, variables, standard deviation, mean deviation, variance and coefficient of variation (CV) are included. Through this descriptive table, you can clearly see the corresponding values of each variable and infer from them. Figure 1 provides a graph of the changes between different variables in the data, which can also provide a clear difference between different star during analysis and research.

Through the value of coefficient of variation (CV) in the chart, it can be concluded that when customers evaluate the product as two star after purchasing the product, the dispersion degree in the chart of this research is the largest. The degree of dispersion represents the representativeness of the measured value and is calculated by the difference between random observation variables. Usually used to measure the size of risk. The larger the CV value, the greater the degree of dispersion. The smaller the CV value, the smaller the degree of dispersion.

2.3. Mean and variance.

The mean deviation is the mean deviation between the reaction marker value and the arithmetic mean value calculated according to the specific data of the sample, and the positive and negative signs need to be removed from the calculation results. The formula is $\sum |X - \bar{X}| / N$. Variance is a method

used to measure random variables or the degree of dispersion. Variance and mean deviation can help users to better analyze the data, and the fluctuation size of the data can be obtained by calculating the distribution of the data to determine the stability and reliability of the data.

3. RESULTS

This article uses the descriptive statistical function of SPSSPRO software to analyze the data collected from the Kaggle website. According to the results of the analysis, we can intuitively see the product rating, the user's specific score after the use of the product and the average difference, variance and coefficient of variation of the score. Through Table 1, you can intuitively see and analyze the data. From the data in the table, we can draw the conclusion that when customers score 4 and 5 star, the variance value is the largest, which also represents the largest fluctuation. When the product rating and customer score are two star, the variance is the smallest, which means the data fluctuation is the smallest.

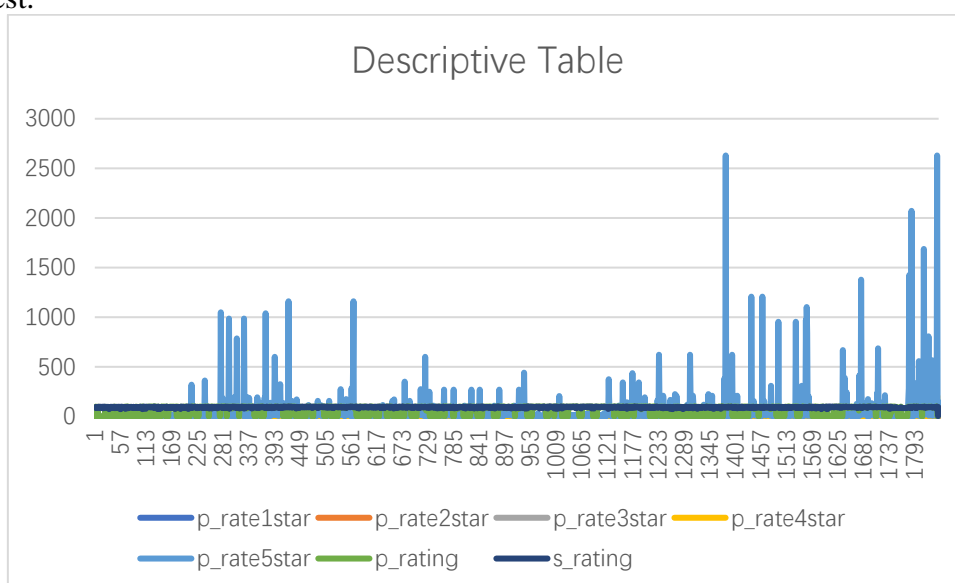


Figure 1 Average efficiency score of Chinese logistics enterprises

3.1. Regression analysis

Regression analysis is a quantitative statistical method based on the correlation between two or more data. The data can be divided into two categories: one is dependent variable, which will be affected by the change of independent variable, and the other is independent variable, which can be changed by human factors and affect the dependent variable. In this research, the independent variable is the seller rating, and the dependent variable is the total rating of the product and the specific score of the customer on the product.

Table 2 is a regression analysis chart made by SPSSPRO that can significantly affect the merchant rating when the consumer rating is a few stars. In the table, *** represents 0.01, ** represents 0.05, and * represents 0.1 for the P-value.

3.2. What conclusions can be drawn from the regression analysis.

From Table 2, we can first get the p value of different scores, which represents the significance of the impact of this data on the merchant's score. When the p value is less than 0.05, it means that the data has a significant impact on the business rating, and when the data is less than 0.01, it means that the data has a very significant impact on the business rating. According to the p value of different independent variables in the table, only when the product score is one star, two star and the three star and the total product score will have a significant impact on the business rating.

3.3. Why does the total product rating and the customer rating of one star, two star and three star have a significant impact on the seller's rating.

When using the shopping platform, after receiving the express, the software will pop up an interface that allows the consumer to write down and score the purchase experience. There will be 1-5 star in this scoring interface. This score will directly affect whether the consumer purchases in this store and the money the seller gets after selling. This is because when shopping, consumers will choose by the rating and favorable rate of classified products. Generally, the merchants with high favorable rate can get the products as quickly as possible and best to avoid mistakes and bad consumption experience. So, when the customer's product score is too low, that is, the total product score is too low, it will lead to that the product of the seller cannot be selected by the customer. And because the platform will screen products, products will be abandoned by the platform when no customers buy them and the favorable rate is low. In addition, if the product's favorable rate is high, the platform will provide seller with the opportunity to enter the home page, because consumers will enter the home page before shopping, so if the product enters the home page, it can greatly increase the purchase rate of consumers.

Table 2 Regression analysis of seller rating and product rating.

Linear regression analysis results n=1841									
	Nonstandardized coefficient		Standardization coefficient	t	P	VIF	R ²	Adjust R ²	F
	B	Standard error	Beta						
constant	7.628	0.325	-	23.465	0.000***	-	0.039	0.036	F=12.497 P=0.000***
p_rate1star	0.191	0.062	0.207	3.06	0.002***	8.771			
p_rate2star	0.345	0.171	0.139	2.018	0.044**	9.083			
p_rate3star	-0.221	0.093	-0.186	-2.366	0.018**	11.81			
p_rate4star	-0.034	0.05	-0.06	-0.669	0.504	15.324			
p_rate5star	-0.003	0.003	-0.06	-0.959	0.338	7.447			
p_rating	0.42	0.077	0.127	5.48	0.000***	1.022			

Dependent variable: s_rating

Eg: ***, **, *represent significance levels of 1%, 5%, 10% respectively.

4. Discussion

4.1. Lazada's products

Lazada is an e-commerce platform. Its main services and products are shopping platforms. Similar platforms also have Shopee. The function of these platforms is to provide merchants with a more convenient sales method and customers with a more preferential and convenient shopping method. The product category of Lazada is expanding with the gradual addition of merchants to the Lazada platform and customer feedback. There is also a very popular software in China, Taobao. Taobao is a software developed by Alibaba. Therefore, the product category and range of Taobao are very large, which also attracts many customers to use it after its listing.

4.2. What factors will affect customers' purchase of products.

To solve this problem, in 2022, Wongsunopparat and Yunjia also studied Lazada, Shopee and JD in terms of brands, products, platforms, discounts and shopping safety. The author judges different factors by using chi-square value and degree of freedom. And according to the author's data analysis, the conclusion is that the value is not significant. The SEM model used by the author can better judge the impact factors of different platforms. Finally, according to the calculation results and P value, the

author concludes that the platform and brand have a significant impact on consumers' shopping [3]. Rohmayti and Hidayat studied which factors would affect customer satisfaction. They analyzed Lazada users from different aspects through service quality, complaint handling and user loyalty. This analysis can help Lazada better improve the problems of related functions and give customers a better use experience. After using the structural equation model of PIs computer and conducting research on 130 consumers, the author finally concluded that service quality, complaint handling, consumer loyalty and consumer satisfaction have a significant impact according to the analysis structure. And according to this research, it can help the company to make specific improvements in different aspects [4].

In 2020, Sugiarto and Putra conducted a study on the motivation and performance of employees according to the atmosphere of communication. In this study, the authors used SPSS version 25 as a research tool, which can help Lazada better arrange employees to work. The author conducted a study with 52 employees of Lazada Express Company, and according to the results of SPSS, the authors concluded that the communication atmosphere and communication environment have an impact on the work and performance of employees. While work motivation has an impact on employee performance, it will not affect the impact of other factors on employee performance [5].

Through these data, it is concluded that Lazada hopes to better enable employees to work and provide better services to customers, which requires a good communication environment. Consumers often choose according to the platform and product brand when shopping online. For example, Chinese consumers often use Taobao and JD when shopping, but they will choose different platforms according to different products. Consumers often use Taobao to buy daily necessities and JD to buy electronic products.

4.3. Cooperation between Lazada and Alibaba.

Alibaba is a company with global influence. The most popular platforms under Alibaba are Taobao and Ding Talk. Most of Taobao's users are in China, and the user utilization rate and activity are very high. Then there are Ding Talk. Ding Talk is an online video software, which can be used for online meetings of the company, and can also allow students to enter the conference room organized by the school online. This function was gradually expanded at the beginning of the COVID-19 outbreak. Because most users are students and workers, Ding Talk users are very active [2].

The benefits of cooperation between Lazada and Alibaba can be described in terms of capital and logistics. First of all, capital. Alibaba is a company with great influence and many users. Therefore, Alibaba has very strong funds to help Lazada better develop new markets or improve the past products. And Alibaba has a very mature operation system, which is because Alibaba's Taobao, Tmall and Cainiao Logistics have also provided Alibaba with a complete operation system in the continuous development.

4.4. How Lazada and Alibaba cooperate.

The main reason why Alibaba chose Lazada is that Lazada is one of the largest e-commerce companies in Southeast Asia. The cooperation between Alibaba and Lazada can help Alibaba to better develop the market in Southeast Asia. Alibaba's cooperation with Lazada is mainly through the acquisition of Lazada's shares and capital injection into Lazada. In 2022, Alibaba injected capital into Lazada three times and the total amount of capital injection has reached about \$4.8 billion, which also made the valuation of Lazada reach 11.3 billion in 2022. And because Alibaba's investment in Lazada also helps Lazada develop better, sufficient funds enable Lazada to better develop new products or provide better services.

4.5. The advantages of Lazada and Alibaba

Compared with other competitors, Lazada's product technology has more than ten years of innovation history, and Lazada is also the first platform to provide image search in Southeast Asia, which also makes Lazada's product technology more excellent than other companies. Then there is

Alibaba. Alibaba has rich experience in technology, logistics, operation and payment. So after the cooperation between Lazada and Alibaba, Lazada can learn from and imitate Alibaba's mature operation system to better develop. Not only that, Lazada's overseas warehouse has also effectively attracted many customers.

5. Conclusion

This article summarizes the reasons why Alibaba chose lazada. Because Lazada has a very important market share in the Southeast Asian market, and as an early shopping platform in the Southeast Asian market, Lazada can provide effective advice to Alibaba when it enters the Southeast Asian market. Alibaba has very rich experience in China and the international market, which can be provided to Lazada to help it improve, and Alibaba can provide sufficient funds to Lazada for better development. In addition, based on the collected Lazada product data, this paper also carries out regression analysis and descriptive tables to see how the product rating will affect the business rating. According to the data, it can be inferred that the total score of the product and when the customer scores one star, two star and three star, it will have a significant impact on the score of the business.

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