

Chapter 5

Conclusions, Discussion, and Recommendations

Conclusion

The Effect of Service Quality on Customer Loyalty of Social E-commerce. A Case Study of Pinduoduo is aimed is to investigate the effect of service quality on customer loyalty of social e-commerce with the case study of Pinduoduo. The data were collected through questionnaires and the collected data were analyzed, summarized and discussed, thus validating the hypotheses and making from the study recommendations and suggestions for further research.

Conclusion of Research

1. Basic information about the respondents

The survey for this study was conducted on consumers who have made purchases at Pinduoduo and spanned a period of almost six months. In order to collect data, the study utilized a questionnaire survey, which was distributed and collected through the Questionnaire Star platform. A total of 386 valid questionnaires were collected. Based on these questionnaire data, the study conducted reliability and validity analyses.

The majority of participants were female (65.75%). The largest age group was 30-39 years (35.25%). The majority of participants had a Bachelor's degree in education (49.00%), while the occupational level was more evenly split between students (15.50%), company employees (14.75%), civil servants (15.25%), self-

employed (14.25%), retired (16.75%) and other occupations (7.50%). Most of the participants had pre-tax income between \$1000-3000 (21.00%), followed by between \$3001-5000 (19.50%), most of the participants had been using Pinduoduo for between 4-6 years (50.75%), most of the participants had been using Pinduoduo regularly (48.50%), most of the participants had been using Pinduoduo through advertisements (33.50%) and recommendations from friends (30.50%), and most participants used Pinduoduo for the convenience of purchasing products and services (35.75%).

2. Opinion on service quality and customer loyalty

For opinion on overview variables, Assurance ranks the highest among the six variables, with an average score of 4.90. This indicates that customers rate Pinduoduo's service assurance high, i.e., customers are satisfied with Pinduoduo's ability to provide reliable, stable, and assured services. Responsiveness ranks second, with an average score of 4.81. This suggests that customers perceive Pinduoduo to be good at responding to customers' needs, and that it is able to respond to and solve customers' problems or needs in a timely manner. Reliability is ranked third with an average score of 4.51. Customers rate Pinduoduo's service reliability as high, and believe that Pinduoduo is able to provide stable, accurate, and trustworthy services. Reputation is ranked fourth with an average score of 4.12, which shows that customers rate Pinduoduo's reputation as high, i.e., they recognize and trust Pinduoduo's brand image and credibility. Information Quality ranks fifth with an average score of 3.98, indicating that customers are satisfied with the quality of information provided by Pinduoduo, and may believe that Pinduoduo has room for improvement in providing accurate, clear and useful information. Customer Loyalty ranked sixth with an average score of 3.92. This shows that customers rate Pinduoduo's loyalty high, implying that customers are somewhat loyal to Pinduoduo's brand and services, but there is still room for improvement.

Opinion on reliability, 1. The consulting service is reliable Mean value of 4.14, interpreted as high reliability and ranked 1st. 2. Pinduoduo platform is trustworthy Mean value of 3.99, interpreted as high reliability and ranked 2nd. 3. Transaction information is easily accessible Mean value of 3.97, interpreted as high reliability and ranked 3rd.

Opinion on responsiveness, 1. Remedial measures are taken promptly MEAN value of 4.01, interpreted as high responsiveness and ranked 1st. 2. Customer issues are fully resolved MEAN value of 3.89, interpreted as high responsiveness and ranked 2nd.3. Customer service and after-sales support have a good attitude MEAN value of 3.78, interpreted as high responsiveness and ranked 3rd.

Opinion on assurance, 1. Delivery is secure MEAN value of 3.92, interpreted as high assurance and ranked 1st. 2. Reputation is ensured MEAN value of 3.67, interpreted as high assurance and ranked 2nd.3. The transaction is secure MEAN value of 3.56, interpreted as high assurance and ranked 3rd.

Opinion on reputation,1. Pinduoduo maintains content standards MEAN value of 3.74, interpreted as high reputation and ranked 1st. 2. Personalized services are provided MEAN value of 3.52, interpreted as high reputation and ranked 2nd. 3. Accurate positioning is available MEAN value of 3.45, interpreted as high reputation and ranked 3rd.

Opinion on information quality, 1. Information provided is accurate MEAN value of 4.05, interpreted as high information quality and ranked 1st. 2. Information is easy to understand MEAN value of 3.80, interpreted as high information quality and ranked 2nd. 3. Information is timely MEAN value of 3.61, interpreted as high information quality and ranked 3rd.

Opinion on customer loyalty, 1. I will persuade other people to make purchases on Pinduoduo MEAN value of 4.17, interpreted as high customer loyalty and ranked 1st. 2. Making purchases is repeatedly if other platforms offer the same

products as Pinduoduo MEAN value of 4.06, interpreted as high customer loyalty and ranked 2nd. 3. Making purchases on Pinduoduo is repeatedly MEAN value of 3.84, interpreted as high customer loyalty and ranked 3rd.

3. Correlation analysis results

In this study, the relationship between the five variables of reliability, responsiveness, assurance, reputation, information quality. The results of the study indicate that there is a positive relationship between these five variables and customer loyalty.

The correlation coefficients between Reliability and other variables are all positive and high in absolute value. In particular, the correlation coefficients with Responsiveness, Assurance, and Reputation are high, with 0.831, 0.724, and 0.676 respectively. This suggests that there is a strong positive linear relationship between Reliability and these variables, i.e., Pinduoduo services with better reliability has a strong positive correlation with its Responsiveness, Assurance and Reputation. The correlation coefficients between Responsiveness and the other variables are also high, especially with Reputation and Customer loyalty at 0.628 and 0.640. This indicates that the better Pinduoduo is in responding to customers' needs, the higher is its reputation and customer loyalty. The correlation coefficient between Assurance and Reputation is 0.661 which shows a strong positive relationship. This Means that Pinduoduo's ability to provide assured services has a positive impact on its reputation. The correlation coefficient between Information Quality and other variables is low, but the correlation coefficient with Reputation is 0.568, which shows some positive correlation. This may Mean that there is some correlation between the good quality of information provided by Pinduoduo and its reputation. The correlation coefficients between Customer Loyalty and the other variables are high, especially with Information Quality with a correlation coefficient of 0.884, showing a strong positive

correlation between the two. This indicates that Pinduoduo's ability to provide good information quality is very important for enhancing customer loyalty.

4. Results of multiple regression analysis

(1) For the reliability variable, the R^2 is 0.304, indicating that the reliability variable explains 30.4% of the variation in the dependent variable. The constant term is 0.006, the regression coefficient is 0.304, the standard error is 0.185, the beta is 0.312, the t-value is 5.325, and the p-value is 0.000. This indicates that reliability has a significant positive effect on customer loyalty and this effect is statistically significant.

(2) For the reputation variable, the R^2 is 0.296, indicating that the reputation variable explains 29.6% of the variation in the dependent variable. The constant term is 0.006, the regression coefficient is 0.296, the standard error is 0.001, the beta is 2.618, the t-value is 2.618, and the p-value is 0.000. This indicates that reliability has a significant positive effect on customer loyalty and this effect is statistically significant.

(3) For the information quality variable, the R^2 0.138, indicating that the information quality variable explains 13.8% of the variation in the dependent variable. The constant term is 0.006, the regression coefficient is 0.138, the standard error is 0.034, the beta is 0.217, the t-value is 3.494, and the p-value is 0.000. This indicates that reliability has a significant positive effect on customer loyalty and this effect is statistically significant.

(4) For the responsiveness variable, the R^2 is 0.127, indicating that the responsiveness variable explains 12.7% of the variation in the dependent variable. The constant term is 0.006, the regression coefficient is 0.127, the standard error is 0.028, the beta is 0.209, the t-value is 2.837, and the p-value is 0.000.

(5) For the assurance variable, the R^2 is 0.059, indicating that the assurance variable explains 5.9% of the variation in the dependent variable. The

constant term is 0.006, the regression coefficient is 0.059, the standard error is 0.034, the beta is 0.342, the t-value is 5.537, and the p-value is 0.000.

5. Hypothesis testing

(1) There is a significant positive relationship between reliability and customer loyalty on Pinduoduo. (t-value =5.325)

(2) There is a significant positive relationship between responsiveness and customer loyalty on Pinduoduo. (t-value =2.837)

(3) There is a significant positive relationship between assurance and customer loyalty on Pinduoduo. (t-value =5.537)

(4) There is a significant positive relationship between reputation and customer loyalty on Pinduoduo. (t-value =2.618)

(5) There is a significant positive relationship between information quality and customer loyalty on Pinduoduo. (t-value =3.494)

Discussion

There is a significant positive relationship between reliability and customer loyalty on Pinduoduo. Validation result: valid. Reliability has at score of 5.325. This indicates that in Pinduoduo, users rate Reliability relatively highly, and Reliability is considered to be one of the higher-ranked variables (ranked 3rd). In research on customer loyalty, reliability is widely recognized as an important factor influencing customer loyalty. Fida, et al. (2020, pp. 1-15) showed that there is a significant positive correlation between reliability and customer loyalty, with customers rating reliability relatively high, and reliability is considered an important factor influencing customer loyalty. Also, the ways to improve reliability and the mediating role of customer's perceived value were confirmed (Chodzaza &

Gombachika, 2013, pp. 269-282). These studies provide important references for Pinduoduo to improve reliability and customer loyalty.

There is a significant positive relationship between responsiveness and customer loyalty on Pinduoduo. Validation result: valid. Responsiveness has a score of 2.837. This indicates that in Pinduoduo, users' evaluation of Responsiveness is relatively high, and Responsiveness is considered one of the higher-ranked variables (ranked 2nd). Research has shown that there is a positive correlation between the extent to which a firm performs well in responding to customer needs and customer loyalty. Coelho and Henseler (2012, pp. 331-356) explored the impact of online response time on customer satisfaction and loyalty. The results showed that short online response time can increase customer satisfaction and loyalty, especially in situations involving high-risk purchases. Mahmood, et al. (2018, pp.135-154) examined the key factors that create a good customer experience, which includes responsiveness. The results of the study showed that customer experience can be improved by providing timely and accurate information and responding to customers' problems. Responsiveness is an important part of creating a good customer experience and Pinduoduo should emphasize on responsiveness to improve customer satisfaction and loyalty.

There is a significant positive relationship between assurance and customer loyalty on Pinduoduo. Validation result: valid. Assurance has a score of 5.537. This indicates that users in Pinduoduo rate Assurance very highly, and Assurance is considered to be one of the highest ranked variables (ranked 1st). Trustworthiness studies have shown that consumers are more loyal to guaranteed services provided by firms because they are confident that the firms are able to provide services that meet their expectations. Izogo (2017, pp. 19-36) studied the evolution of customer loyalty intention. The study found that the more satisfied customers are with the guaranteed services provided by a firm, the more loyal they

are to that firm. Supriyanto, et al. (2021, pp. 241-256) study examined the impact of service quality on consumer behavior. The results of the study showed that providing high quality services can increase customer satisfaction and loyalty. Abdullah, et al. (2011, pp. 542-558) explored the impact of customer satisfaction and switching barriers on customer loyalty in the mobile services industry. The results of the study showed that satisfaction and switching barriers have a significant effect on customer loyalty. The high ratings of assurance by Pinduoduo users may imply that Pinduoduo has been successful in providing assured services, thus increasing customer loyalty.

There is a significant positive relationship in between reputation and customer loyalty on Pinduoduo. Validation result: valid. Reputation has at score of 2.618. This indicates that in Pinduoduo, users rate reputation highly and reputation is considered one of the higher ranked variables (rank 4th). Reputation plays a key role in customer loyalty, and consumers are more likely to be loyal to companies that enjoy a good reputation and high reputation. Amin (2016, pp. 280-306) introduced the concept and importance of corporate reputation. Reputation is the image and reputation of a company in the eyes of various stakeholders. Studies have shown that reputation has a significant impact on customer loyalty. Consumers are more inclined to be loyal to a firm when they have a favorable opinion of the firm's reputation. Ariff, et al. (2013, pp. 469-473) showed that firms with good reputation tend to achieve consistently excellent financial performance. This suggests that reputation is critical to the success and long-term growth of a business. The high rating of reputation by Pinduoduo users may mean that Pinduoduo has succeeded in building consumer trust, which in turn enhances user loyalty.

There is a significant positive relationship between information quality and customer loyalty on Pinduoduo. Validation result: valid. The score for Information Quality is 3.494. This indicates that in Pinduoduo, users rate Information Quality higher and Information Quality is considered as one of the higher variables

(ranked 5th). Information quality is one of the important factors in forming consumers' loyalty to enterprises, and consumers are more willing to be loyal to enterprises that can provide accurate and useful information. Hapsari, et al. (2017, pp. 21-40) found that information quality is one of the key factors influencing customer acceptance and loyalty to information technology. When customers perceive a higher quality of information, they are more inclined to accept and be loyal to use the technology. Exploring the relationship between trust and user loyalty in online shopping. Pakurár, et al. (2019, pp. 1113) showed that information quality is one of the most important factors in building users' trust in companies. When customers perceive a high quality of information, they are more inclined to trust and be loyal to the company. The high rating of information quality by Pinduoduo users implies that Pinduoduo has succeeded in providing high quality information, which enhances user loyalty.

Research Result Recommendations

1. Improving reliability: According to the survey results, reliability has a significant impact on customer loyalty. Therefore, Pinduoduo can further improve delivery security, reputation assurance and transaction security to enhance users' trust and satisfaction with its services. For example, the platform can strengthen the reliability of logistics and distribution to ensure that products can be delivered to users on time and accurately; at the same time, it can strengthen the credibility guarantee to ensure the credibility of sellers and goods, and increase users' confidence in the security of transactions.

2. Strengthen responsiveness: responsiveness also has a significant impact on customer loyalty. Pinduoduo can strengthen communication with customers, respond to their inquiries and questions in a timely manner, and actively

take remedial measures to solve their troubles. In addition, in terms of customer service and after-sale support, Pinduoduo can improve its service attitude and efficiency to better meet customers' needs.

3. Emphasize on Assurance: Assurance is equally important for customer loyalty. Pinduoduo can further strengthen measures in delivery security, reputation assurance and transaction security to improve users' trust in its services. The platform can strengthen the monitoring and management of the logistics and distribution process to ensure the safe transportation of goods; at the same time, the credibility will be used as an important indicator for evaluating sellers and goods to improve users' confidence in the transaction.

4. Enhance reputation: reputation has a certain influence on customer loyalty. Pinduoduo can continue to strengthen its brand image and reputation assurance, and win favorable comments and word-of-mouth from users by providing high-quality goods and services. The platform can cooperate with trusted suppliers and strictly supervise and control the quality of goods and services to increase users' trust and loyalty to Pinduoduo.

5. Improve information quality: Information quality has a significant impact on customer loyalty. Pinduoduo can provide more accurate, clear and useful information about goods and services to meet users' needs for goods and services. The platform can strengthen the audit and screening of commodity information to ensure that the information displayed is true and reliable; at the same time, it can provide comprehensive commodity introduction and evaluation to help users make more informed shopping decisions.

To summarize, Pinduoduo can start from improving reliability, responsiveness, assurance, reputation and information quality to enhance customer loyalty. By strengthening its brand image and service quality, it will increase user satisfaction and loyalty.

Recommendations for the Following Research

1. Further research on consumer perceptions and responses to specific service quality variables: Consumer perceptions and responses to different service quality variables on the Pinduoduo platform could be explored in depth. For example, consumers with different characteristics such as age, gender, educational background and occupation can be analyzed to understand their different needs and expectations of service quality. Such a study can help companies better understand the needs of different consumer groups and provide them with personalized services and offers.

2. Considering the introduction of other influencing factors: In addition to service quality variables, other factors affecting customer loyalty, such as price, promotion and product quality, can also be introduced. By considering these factors together, a more comprehensive model can be built to explain and predict customer loyalty. Such a study can help companies better understand the extent to which different factors affect customer loyalty, so that they can formulate appropriate strategies to improve customer loyalty.

3. Comparing customer loyalty of different e-commerce platforms: Pinduoduo can be compared with other e-commerce platforms to analyze the differences in their service quality and customer loyalty. Such a study can help companies understand their competitive position in the market and find potential opportunities and challenges to improve customer loyalty.

4. Explore long-term trends in customer loyalty: Long-term tracking studies can be conducted to analyze trends in customer loyalty. By observing the long-term changes in loyalty, it is possible to understand whether customers' attitudes and behaviors towards the Pinduoduo platform are stable or not, so that strategies can be adjusted in time to maintain customer loyalty.

In summary, by further studying consumer responses to specific service qualities, introducing other influencing factors, comparing different e-commerce platforms, and exploring long-term trends in change, more comprehensive and in-depth insights can be provided to organizations in order to develop more effective strategies to increase customer loyalty and drive business growth.