Customer Loyalty of Fruit WeChat Business

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Abstract: WeChat groups are the simplest and most basic private communication software in China. Those who can enter a WeChat group share common values or specific consumer groups. The marketing cost of the WeChat group is meager, and it is widely used in the current Chinese market. Consumption feelings and purchase behaviors reflect the loyalty of WeChat group consumers. What factors are these two dimensions affected by? In this report, we chose the fruit WeChat purchase group as the research object and used the questionnaire for analysis. By constructing the indicators of purchase feeling and purchase behavior for analysis, we will get the factors that affect purchase intention and behavior, which provides a reference for improving the WeChat group shopping mode.

Keywords: Customer loyalty, Fruit WeChat Business, Regression.

1.   Introduction

After the advent of the mobile Internet era, in China's huge market, WeChat has become the most prominent entrance to the mobile Interne[1]. Besides, the WeChat empire, with hundreds of millions of users, is rapidly rising and becoming the most popular instant messaging tool in China, enabling efficient and convenient online social interaction between people[2]. The primary function of WeChat that distinguishes it from other social media is its privacy protection mechanism, which enables individuals to disseminate information in a reliable circle of friends or groups. For WeChat users, WeChat is a simple software for chatting and socializing and a way of life. On WeChat, users can buy goods, take taxis, send red envelopes, etc. It has changed all aspects of our lives, making them more convenient and efficient. As a trading platform, the WeChat group belongs to a business activity transmitted through an online social environment. A significant manifestation of social commerce is the integration of business functions into social networking services. Because of the growing marketing activities using social networking services as a sales channel, and the massive increase in the profits of suppliers participating in social networking, it is essential to understand the purchasing behavior of consumers in the context of social networking[3].

Unlike the traditional one-to-one purchase model in e-commerce, consumers are always closely connected in social commerce and appear in social groups [4]. A social group is an invisible social circle formed by members with common interests, hobbies or relationships gathered in a specific social network. Members of a social group share information and provide social support to each other, and the perceived social atmosphere will affect members' intentions and eventual behavior. Buying goods in WeChat group chats is easily influenced

by others, and group purchases also have higher price discounts[5]. In addition, some goods are more convenient to buy in WeChat groups, especially food. To study this issue, we chose the fruit WeChat purchase group as the research object and used the questionnaire to investigate. By constructing the indicators of purchase intention and purchase behavior for analysis, we will get the factors that affect purchase intention and behavior, which provides a reference for improving the WeChat group shopping mode.

2. Questionnaire and Indicator Design

Table 1: Questionnaire construction, indicators, and questions.

Customer loyalty to Fruit Wechat Business	Customer Feelings	Customer Satisfaction	1 When buying fruit, I often focus on it regardless of time.
		Immersive experience	2. I believe that the WeChat Group Merchant could keep my personal information confidential
			3. I believe that the WeChat Group Merchant has sufficient capacity to address any problems I meet in transactions
			4. I believe that the WeChat Group Merchant can supply high-quality fruit and services as I expect.
		Customer trust	5. It is cost-effective to buy fruits from the WeChat Group Merchant.
			6. I believe that the WeChat Group Merchant can provide good value-added services.
		Customer perceived value	7. During the transaction, the WeChat Group Merchant always contacts you with a sincere attitude
			8. The WeChat Group Merchant always gives samples to their customers to foretaste
	Customer behavior	Purchase Frequency	1. Purchase Frequency
		Purchase Amount	2.Purchase Amount
		Attention	3.The latest Purchase Time
		The Latest Purchase Time	4.I always pay attention to the information that the WeChat Group Merchant uploads on WeChat Circle
			5.I always pay attention to the information that the WeChat Group Merchant updates in the WeChat group

This study used a questionnaire to collect data. First, based on the research model of this work, referring to historical research, the questionnaire content was initially designed for the research questions of this work. Then the questionnaire structure was adjusted through pre-investigation, and a formal questionnaire was eventually formed. The formal questionnaire consists of two parts, with a total of 22 questions. The first part is a survey on demographic characteristics such as gender and age of the respondents. The second part is a scale on consumers' perception and purchase behavior

of fruit in WeChat groups. These scales are in the form of a Likert 5-point scale. Finally, the questionnaires were distributed online. According to the research purpose, the distributed group was users in a specific fruit-sales WeChat group. It took a week to distribute 350 questionnaires randomly, and 300 of them were recovered. Therefore, the effective recovery rate of the questionnaire is 85.71%.

The specifically constructed questionnaire model and the included topics are shown in Table 1. We divide customer loyalty to Fruit WeChat Business into Customer Feelings and Customer behavior. Moreover, Customer Feelings include customer satisfaction, immersive experience, customer trust, and customer perceived value. Customer behavior includes Purchase Frequency, Purchase Amount, Attention, and The Latest Purchase Time.

3. Result and Discussion

3.1. Descriptive Statistical Analysis

Table 2: Basic information of respondents.

Variables	Options	Percentage	Average	Standard deviation
Gender	Male	30.33	1.70	0.46
	Female	69.67		
Age	Under 18	3.33	3.11	1.22
	From 18 to 25	39.67		
	From 26 to 35	19.00		
	From 36 to 45	18.33		
	Above 45	19.67		
How long have you been in the WeChat Group	Less than 1 year	41.00	1.97	1.02
	1 to 3 years	33.67		
	3 to 5 years	12.67		
	More than 5 years	12.67		
How could you enter this WeChat Group	I enter this WeChat Group on my own initiative with the help of a recommender	61.67	1.38	0.49
	I enter this WeChat Group through the invitation of the WeChat Group Merchant	38.33		
What is the relationship between you and the Fruit WeChat Merchant	0	61.67	0.75	1.09
	Relatives	14.67		
	Friends	10.67		
	Classmates	13.00		
What is the relationship between you and the recommender	0	38.33	1.27	1.11
	Relatives	10.00		
	Friends	38.33		
	Classmates	13.33		
Have you ever consumed in this WeChat group	Yes	83.33	1.17	0.37
	No	16.67		

Through descriptive statistical analysis of the sample characteristics of 300 respondents, the proportion of women (69.67%) is higher than that of men. Most respondents are between 18 and 25, followed by those over 45 years old. According to the survey, 41% of them use the WeChat group for less than 1 year, 33.67% for 1-3 years, 12.67% for 3-5 years, and 12.67% for more than 5 years. 61.67% of the respondents entered the WeChat group through recommendations and primarily by friends, accounting for 38.33%. Besides, 38.33% of the respondents were invited to the group by merchants, and most were relative, accounting for 14.67%. Among all the respondents, 83.33% of them have consumed WeChat groups.

3.2. Reliability and Validity Analysis

The validity and reliability of the questionnaire should be examined first to ensure the sample data's objectivity. The scale employed in this study has a high level of content validity because it was created using prior research and approved by professionals. In this study, the reliability and validity of the questionnaire were examined using the SPSS26 program.

3.2.1. Reliability Analysis

The questionnaire's consistency and the validity of the sample data used for modeling can both be examined using the reliability test. To evaluate the validity of each questionnaire score, we employed Cronbach's alpha coefficient approach. The reliability of the questionnaire's question setup is inversely correlated with the questionnaire's coefficient value. A value above 0.9 indicates that the data is very dependable. It is very dependable if the coefficient is between 0.7 and 0.9. Indicative of usually credible is a coefficient between 0.0 and 0.9. It is essential to modify the scale or add or remove topics if the coefficient is less than 0.5[6]. Here we mainly test the internal consistency of the two parts of the questionnaire and the overall reliability. Use SPSS software to test the results of Customer Feelings and Customer Behavior, as shown in Table 3 and Table 4.

The Customer Feelings dimension has a total standardized reliability coefficient of 0.988, as can be seen from the findings of the reliability analysis discussed above. The questions in this dimension do not need to be checked because the Cronbach's alpha dependability coefficient after removing the item is less than the overall value of 0.988. Adjustment.

The reliability coefficient's value ranges from 0 to 1, and the closer it is to 1 the more reliable it is. The overall standardized reliability coefficient is 0.988. This analysis yielded a result of 0.988, which is often very trustworthy.

Table 3: Reliability analysis of Customer Feelings.

	Scaled means if item deleted	Scale variance if item deleted	Corrected Item and Total Correlation	Squared Multiple Correlation	Cronbach's alpha if item deleted	Normalized alpha
1. When buying fruit, I often focus on it regardless of time.	24.28	140.923	0.937	0.891	0.987	
2. I believe that the WeChat Group Merchant could keep my personal information confidential	24.04	140.694	0.950	0.934	0.986	
3. I believe that the WeChat Group Merchant has sufficient capacity to address any problems I meet in transactions	24.05	140.379	0.964	0.952	0.986	
4. I believe that the WeChat Group Merchant can supply high-quality fruit and services as I expect.	24.08	140.492	0.973	0.960	0.985	0.988
5. It is cost-effective to buy fruits from the WeChat Group Merchant.	24.15	140.266	0.971	0.946	0.985	
6. I believe that the WeChat Group Merchant can provide good value-added services.	24.32	141.335	0.930	0.895	0.987	
7. During the transaction, the WeChat Group Merchant always contacts you with a sincere attitude	23.84	140.601	0.935	0.898	0.987	
8. The WeChat Group Merchant always gives samples to their customers to foretaste	24.22	141.555	0.928	0.891	0.987	

Table 4: Reliability analysis of Customer Behavior.

	Scaled means if item deleted	Scale variance if item deleted	Corrected Item and Total Correlation	Squared Multiple Correlation	Cronbach's alpha if item deleted	Normalized alpha
1. Purchase Frequency	10.09	26.637	0.588	0.533	0.885	
2. Purchase Amount	10.19	26.469	0.648	0.569	0.877	
3. The latest Purchase Time	10.03	24.213	0.786	0.670	0.848	
4. I always pay attention to the information that the WeChat Group Merchant uploads on WeChat Circle	8.59	17.459	0.866	0.839	0.822	0.893
5. I always pay attention to the information that the WeChat Group Merchant updates in the WeChat group	8.71	17.539	0.857	0.837	0.825	

The Customer Behavior dimension's total standardized reliability coefficient is 0.893, as shown by the findings of the reliability analysis discussed above. After removing the item, Cronbach's alpha reliability coefficient can be found to be smaller than the overall value of 0.893, indicating that the question in this dimension does not need to be answered. Adjustment. The reliability coefficient's value ranges from 0 to 1, and the closer it is to 1, the more reliable it is. The overall standardized reliability coefficient is 0.988. This analysis yielded a result of 0.988, which is often very trustworthy.

Table 5: Overall reliability.

Cronbach Alpha	Cronbach Alpha based on normalization term	number of items
0.943	0.895	22

According to the overall reliability coefficient, it can be seen that the standardized Cronbach's coefficient is 0.895, and the reliability is good.

It can be seen from the above table that Cronbach's Alpha coefficient of each variable scale is above 0.8, which is in line with the standard. Moreover, when a particular item is deleted, the "alpha value after deleting the item" also decreases, showing that the item's setting is reasonable and has a specific explanatory contribution. Overall, the variables used in this study and the dimensions they measure have high internal consistency and stability and are suitable for further analysis.

3.2.2. Validity Analysis

The validity of the questionnaire was analyzed by SPSS software. An exploratory factor molecule approach implements the testing process. Validity testing is used to detect the degree to which the evaluation scheme reflects the research object, that is, the validity. We mainly examine the scale's validity, so the KMO sampling appropriateness test and the Bartlett sphericity test are selected to evaluate the validity. The KMO sampling suitability test is used to test the correlation between variables. The value of the KMO test ranges from 0 to 1. The closer to 1, the more suitable the variable is for factor analysis. The starting hypothesis of Bartlett's sphericity test is that the correlation coefficient between the variables under study is a matrix in nature, i.e., unsuitable for factor analysis. SPSS software can provide the significance of Bartlett's sphericity test. When the significance is lower than 0.05, the null hypothesis is rejected and the research variables are considered suitable for factor analysis. SPSS software was used for testing; the results are shown in Table 6.

Table 6: Validity analysis.

Kaiser-Meyer-Olkin measure of sampling adequacy		.967
Bartlett's test of sphericity	Approximate chi-square	6921.652
	Degrees of freedom	78
	Salience	.000

It can be shown from the aforementioned exploratory study that the KMO test's coefficient is 0.967 and that it ranges from 0 to 1. Therefore, the validity of the questionnaire is improved by its proximity to 1. It is evident from the spherical test's significance that this test's significance is infinitesimally close to zero, rejecting the null hypothesis.

3.3. Correlation Analysis

We entered the data into SPSS and performed the Pearson correlation test. The output results are shown in the following table:

Table 7: Customer Feelings dimension correlation.

Variable		Immersive experience	Customer trust	Customer satisfaction	Customer perceived-value
Immersive Experience	Pearson's test	1	.918**	.932**	.916**
Customer Trust	Pearson's test	.918**	1	.942**	.952**
Customer Satisfaction	Pearson's test	.932**	.942**	1	.952**
Customer Perceived-Value	Pearson's test	.916**	.952**	.952**	1
**. The correlation is significant at the 0.01 level (two-tailed).					

The correlation coefficients are all more than 0, indicating that they are all positive correlations. It is clear from the results of the above correlation study that there is a substantial correlation between the variables at the 99% significance level.

For instance, there is a positive association between immersive experience and consumer trust, with a correlation coefficient of 0.918.

Table 8: Customer Behavior dimension correlation.

Variable		Purchase Frequency	Purchase Amount	The Latest Purchase Time	Attention
Purchase Frequency	Pearson's test	1	.691**	.423**	.525**
Purchase Amount	Pearson's test	.691**	1	.555**	.557**
The Latest Purchase Time	Pearson's test	.423**	.555**	1	.804**
Attention	Pearson's test	.525**	.557**	.804**	1
**. The correlation is significant at the 0.01 level (two-tailed).					

The correlation coefficients are more than 0, indicating that they are all positive correlations. It is clear from the results of the above correlation study that there is a substantial correlation between the variables at the 99% significance level. For instance, there is a positive association between the frequency of purchases and the number of s, as shown by the correlation coefficient of 0.691. These outcomes largely meet the objectives outlined in this paper.

3.4. Regression Analysis

This paper selects the dependent variables of consumer perception and purchasing behavior, examines the effect of each dimension on it, and verifies the research hypothesis. This paper selects a linear regression model to model and analyze the relationship between the dependent and independent variables.

First, we tested the linear regression relationship between Customer Feelings and its four dimensions, as shown in Table 9:

Table 9: Customer Feelings regression analysis.

Regression coefficients [a]						
Model		Unstandardized coefficient		Standardized coefficient	t	Signifi-cance
		B	standard error	Beta		
1	Constant	-.202	.383		-.527	.599
	Immersive Experience	.710	.274	.092	2.593	.010
	Customer Trust	.960	.116	.365	8.253	.000
	Customer Satisfaction	.819	.185	.207	4.419	.000
	Customer Perceived-Value	1.328	.188	.334	7.068	.000
a. Dependent variable: consumer perception						

The regression equation is as follows:

$$Y = -0.202 + 0.710X1 + 0.960X2 + 0.819X3 + 1.328X4$$

i.e., X_1 Immersive Experience

X_2 Customer Trust

X_3 Customer Satisfaction

X_4 Customer Perceived Value

It can be seen from the above table that all four dimensions significantly affect Customer Feelings ($P<0.01$), and consumers' immersive experience is often considered to be very important. At the same time, it is also essential to gain consumers' trust. In particular, the guarantee of WeChat group business is not perfect, and you should pay attention to your goodwill cultivation. Consumer satisfaction also affects the willingness to consume. For this reason, merchants must provide good services in a series of shopping links, especially after-sales links. If the commodity brings the desired utility to the consumer, the possibility of re-consumption will also increase, and the freshness of the fruit should be guaranteed.

Second, we examined the linear regression relationship between Customer Feelings and its four dimensions, as shown in Table 10:

Table 10: Customer Behavior regression analysis.

Regression coefficients [a]						
Model		Unstandardized coefficient		Standardized coefficient	t	Signifi-cance
		B	standard error	Beta		
1	Constant	-.016	.152		-.106	.916
	Purchase Frequency	1.115	.090	.197	12.348	.000
	Purchase Amount	.836	.100	.140	8.372	.000
	The Latest Purchase Time	1.003	.102	.189	9.785	.000
	Attention	1.003	.033	.606	30.527	.000
a. Dependent Variable: Consumer Behavior						

The regression equation is as follows:

$$Y = -0.16 + 1.115X1 + 0.836X2 + 1.003X3 + 1.003X4$$

i.e., X_1 Purchase Frequency

X_2 Purchase Amount

X_3 The Latest Purchase Time

X_4 Attention

It can be seen from the above table that all four dimensions have a significant impact on Customer behavior (P<0.01). Specifically, the higher the frequency and quantity of consumption, the more likely the product will be liked and the greater the possibility of re-consumption., consumption is sticky, pay attention to cultivating old customers. The shorter the time since the last purchase, the stronger the purchase intention and behavior. In WeChat groups, consumers who pay more attention to information updates tend to be more willing to consume, and merchants need to write discount information in a prominent position.

4. Conclusion

Through the questionnaire survey, this paper clarifies that user loyalty to creating a WeChat group business model is reflected in Customer Feelings and Customer behavior. The four dimensions of customer satisfaction, immersive experience, customer trust, and perceived value significantly affect Customer Feelings. In addition, purchase Frequency, Purchase Amount, Attention, and The Latest Purchase Time affect Customer behavior.

To better enhance the customer loyalty of WeChat groups, merchants must first obtain the basic information of the user group. After obtaining accurate customer information, merchants need to find ways to join the circle of friends of these precise customers and gather all target customers in the WeChat group, understand the needs of these customers, and provide accurate marketing according to the needs of customers [7,[8]. After gathering all target customers in the circle of friends, you need to find a way to activate users' needs. A simple way is to use hard advertising to promote the advertisements of merchants directly distributed to the WeChat masses. However, this method will annoy WeChat group friends, and the target customers' survival rate is meager. Another method is soft advertising, merchants and WeChat group members to build good relationships. Infiltrate product-related knowledge in daily communication, stimulate customer demand, and improve customer survival rate. It is becoming more and more difficult for merchants to acquire accurate customers. After acquiring target customers, merchants must know how to maintain old and attract new customers. They need to continuously inject new members into WeChat groups to allow old customers to complete the recovery process. Purchase, and use the enthusiasm of old customers to drive new customers to buy goods. At the same time, it is necessary to carry out promotions and price reductions from time to time to increase consumer stickiness.

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