Research on the Influencing Factors of Consumers' Purchase Intention in WeChat Daigou

Wang Meng*

School of Economics and Management, Nanjing University of Science and Technology, Nanjing, China

*Corresponding author: 1005699296@qq.com

Abstract. After the reform and opening up, the scale of overseas daigou in China has gradually expanded, and WeChat platform has become an important trading platform for daigou by virtue of the integration of virtual community and payment functions. As there are many contents involved in the transaction process, there will be a variety of factors that affect whether consumers are willing to purchase on WeChat. Therefore, based on the analysis of four factors on the basis of the theory and technology acceptance model, with the external environment factors, individual consumers, marketing factors and community factors dimensions of four kinds of factors as independent variables, perceived value as intermediary variables, consumers purchase intention as dependent variable, the WeChat act as purchasing agency in the empirical research on the influence factors of consumer purchase intention, and on this basis, Relevant countermeasures and suggestions are put forward for effective marketing of WeChat purchasing agents.

Keywords: WeChat daigou; Consumers' purchase intention; Perceived value; Technology acceptance model.

1. Introduction

In recent years, WeChat daigou has gradually become a new e-commerce shopping mode, which is favored by more and more consumers. The economic take-off after the reform and opening up has made Chinese consumers upgrade their consumption level and have a strong desire to buy high-quality overseas goods. During the Spring Festival of 2014, WeChat successfully promoted the online transfer function in the form of red envelopes. The combination of agglomeration effect and payment channel behind it produced a convenient and efficient transaction way, which promoted the emergence and development of a group of buyers and even teams who specialized in purchasing on WeChat platform. As there are many contents involved in WeChat purchasing transactions, there are many factors that affect whether consumers are willing to purchase through WeChat. For buyers, it is of great significance to enhance consumers’ purchase intention for buyers to use WeChat as a social media for marketing.

By summarizing the existing literature, scholars have already paid attention to the factors that affect the purchase intention of consumers in WeChat daigou. For agent buyers, it is particularly convenient and quick to use WeChat platform to do agent purchasing. It not only reduces the cost of money and time, but also achieves product promotion and marketing. However, if forced to push advertisements, consumers will be disgusted [1-2]. From the perspective of consumers, trust in daigou can reduce consumers’ risk perception and form a positive purchasing attitude and intention [3-4], the interaction between group members and the third party effect will also affect consumers’ purchasing behavior [5-6]. However, there are many problems in WeChat daigou nowadays, such as slow international logistics [7], and difficulty in ensuring the authenticity of advertisements and the integrity of rights protection evidence [8]. These problems will make consumers face legal risks, cause a serious waste of judicial resources, and lead to difficulties in litigation [9].

According to the summary of scholars' literature, it is found that most of the existing literature only stays in theory, without the support of data, and the conclusions are not sufficient. However, the perspective of empirical research is still relatively scattered and single, and some factors have been neglected. Accordingly, this study adds new related factors on this basis, classifies and integrates them based on the four-factor theory[10], and studies the factors that are more significant to WeChat
daigou among the four categories of factors through the technology acceptance model, so as to supplement the existing literature. The main contents of this paper are as follows: model analysis and construction, empirical results and analysis, research conclusions and suggestions.

2. Model analysis and construction

2.1 Research model

Based on the technology acceptance model [11], this study plans to study the influencing factors of consumers' purchase intention in WeChat daigou based on the mediating variable of perceived value. According to the four-factor analysis theory [10], external environmental factors, personal factors, marketing factors and community factors are taken as independent variables that affect consumer behavior. The specific research model is as follows:

![Figure 1. The study model of this paper]

2.2 Variables Selection

2.2.1 Dimensions of the four categories of factors

Based on the four-factor analysis theory, this study added some dimensions, such as consumers' preference for big brands, herd psychology, third-party effect (friend recommendation), and familiarity with daigou, which were ignored in existing studies, to understand consumers' demands from more dimensions. Therefore, 14 independent variables are selected from four aspects to study their influence on consumers' purchasing intention:

- The external environmental factors are divided into three dimensions: national policy, legal risk and economic environment.
- The personal factors of consumers are divided into four dimensions: education level, income, brand preference and herd psychology.
- Marketing factors are divided into four dimensions: honesty, after-sales service, advertising and marketing satisfaction and convenience.
- Community factors can be divided into three dimensions: interaction, third party effect and familiarity with buyers.

2.2.2 Dimensions of perceived value

Davis (1989) mentioned the perceived usefulness and perceived ease of use in the technology acceptance model. Therefore, in order to facilitate the study, this study will improve the technology acceptance model and divide the perceived value into two dimensions of perceived usefulness and perceived ease of use. Perceived usefulness refers to the degree to which users subjectively believe that the use of a particular system can improve their performance. Perceived ease of use refers to the degree to which a user thinks it is easier and less intrusive to use a particular system. Perceived
usefulness mainly measures the benefits brought to consumers by WeChat daigou, while perceived ease of use mainly measures the convenience brought to consumers by WeChat daigou.

2.3 Model Construction

In this study, consumers' purchase intention is measured by Likert scale, so multiple regression equation can be used to analyze the factors influencing consumers' purchase intention in WeChat daigou. The specific model is as follows:

$$Y = \beta_0 + \beta_1 W_1 + \beta_2 W_2 + \beta_3 W_3 + \beta_4 P_1 + \beta_5 P_2 + \beta_6 P_3 + \beta_7 P_4 + \beta_8 M_1 + \beta_9 M_2 + \beta_{10} M_3 + \beta_{11} M_4 + \beta_{12} S_1 + \beta_{13} S_2 + \beta_{14} S_3 + \mu$$ (1)

In formula (1), $Y$ represents consumer purchase intention, $\beta_0$ represents constant term, $\mu$ represents error term, $\beta_i (i=1,2,3,…14)$ is regression coefficient, where $W$ is the explanatory variable of external environmental factors, $W_1$ is national policy, $W_2$ is legal risk, and $W_3$ is economic environment. $P$ is the explanatory variable of consumer personal factors, $P_1$ is education level, $P_2$ is income level, $P_3$ is brand preference, $P_4$ is conformity psychology. $M$ is the explanatory variable of marketing factors, $M_1$ is credit problem, $M_2$ is after-sales service, $M_3$ is advertising and marketing satisfaction, and $M_4$ is convenience. $S$ is the explanatory variable of community factors, $S_1$ is the interaction, $S_2$ is the third party effect, and $S_3$ is the familiarity with the agent buyers.

3. Empirical results and analysis

3.1 Data sources and processing

This paper uses the network questionnaire survey to obtain data, and carries on the statistical analysis to the obtained data results. The target population of this market survey is mainly consumers with WeChat purchasing experience. A total of 344 questionnaires were issued, of which 344 were recovered. After deleting the questionnaires with blank options, 322 were valid, with an effective rate of 93.60%.

In this study, reliability analysis was carried out by Cronbach. $\alpha$ coefficient to judge the reliability and accuracy of quantitative data. Validity analysis was conducted through KMO and Bartlett tests to measure the rationality of item design. The results showed that the total Cronbach. $\alpha$ coefficient value of this study was 0.949>0.8, indicating that the scale had good internal consistency. KMO value is 0.954>0.8, indicating good validity. In the Bartlett test results, the Prob. was 0.000, less than 0.05, indicating that the questionnaire had good structural validity and the scale was suitable for factor analysis.

| Variable                   | Sample Capacity | Number | Cronbach. $\alpha$ Coefficient |
|----------------------------|-----------------|--------|-------------------------------|
| The legal risks            | 322             | 3      | 0.706                         |
| The economic environment   | 322             | 2      | 0.698                         |
| Convenience                | 322             | 2      | 0.621                         |
| Interactive                | 322             | 2      | 0.673                         |
| Perceived value            | 322             | 4      | 0.840                         |
| Purchase intention         | 322             | 3      | 0.778                         |
| Total Cronbach. $\alpha$ coefficient | 322 | 27 | 0.949 |
3.2 Empirical analysis of influencing factors of purchase intention

Regression analysis is used to study the causal relationship between dependent and independent variables. In this study, four categories of factors and each dimension of the four categories of factors were taken as independent variables, and consumers' purchase intention was taken as dependent variables to conduct multiple regression analysis.

Because sectional data may have heteroscedasticity problem, which leads to inaccurate results of least square regression estimation method, heteroscedasticity test is performed on data results.

Table 2. KMO and Bartlett test results

| KMO          | 0.954 |
|--------------|-------|
| Bartlett test|       |
| The chi-square| 3154.420 |
| df           | 120   |
| Prob.        | 0.000 |

Table 3. Results of White heteroscedasticity test

| F-statistic | Prob. F(118,203) | 0.0003** |
|------------|-----------------|----------|
| Obs*R-squared | Prob. Chi-Square(118) | 0.0044** |
| Scaled explained SS | Prob. Chi-Square(118) | 0.0000** |

Note: ** means that the estimated results are significant at the level of 0.05

As shown in Table 3 above, Prob. <0.05, so we believe that the error term of this model has heteroscedasticity, which indicates that the least square estimation method will cause errors in the results. The generalized matrix estimation method overcomes this problem and allows heteroscedasticity and sequence correlation with the error term. Therefore, the obtained parameter estimators are more effective than other parameter estimation methods, so we estimate the model through the generalized matrix estimation method.

Table 4. Regression analysis results of generalized matrix estimation method

| Variable                      | Coefficient | Std. Error | t-Statistic | Prob. |
|-------------------------------|-------------|------------|-------------|-------|
| Constant                      | 0.457**     | 0.221      | 2.064       | 0.040 |
| Level of education            | -0.062      | 0.041      | -1.493      | 0.136 |
| Income                        | -0.015      | 0.035      | -0.439      | 0.660 |
| Big appetite                  | -0.005      | 0.036      | -0.142      | 0.887 |
| A herd mentality              | 0.022       | 0.035      | 0.621       | 0.535 |
| National policy               | 0.059       | 0.042      | 1.403       | 0.162 |
| The legal risks               | 0.093       | 0.073      | 1.275       | 0.203 |
| The economic environment      | 0.132**     | 0.065      | 2.045       | 0.042 |
| Integrity problems            | -0.329**    | 0.087      | -3.823      | 0.000 |
| After-sales service           | 0.083**     | 0.038      | 2.213       | 0.028 |
| Advertising marketing satisfaction | 0.064 | 0.037      | 1.750       | 0.081 |
| Convenience                   | 0.171**     | 0.057      | 2.978       | 0.003 |
| Interactive                   | 0.145**     | 0.060      | 2.439       | 0.015 |
| Third party effect            | 0.126**     | 0.037      | 3.361       | 0.001 |
| Familiarity with the buyer    | 0.061       | 0.037      | 1.674       | 0.095 |

Adjusted $R^2$: 0.709
Durbin-Watson: 2.006

Note: ** means that the estimated results are significant at the level of 0.05

As shown in Table 4 above, the adjusted $R^2$ value of the model is 0.709, indicating that each dimension in the four categories of factors can explain 70.9% of the reasons for the change of
consumers' purchasing intention. The value of Durbin-Watson test is 2.006, close to 2, indicating that there is basically no autocorrelation between independent variables.

The conclusion is that economic environment, after-sales service, convenience, interactivity and third party effect will have a significant positive impact on consumers' purchase intention, while integrity issue will have a significant negative impact on consumers' purchase intention. However, education level, income, brand preference, herd psychology, national policy, legal risk, advertising and marketing satisfaction, and buyer's familiarity have no influence on consumers' purchase intention.

As for the above-mentioned variables that have a significant impact on consumers' purchase intention in WeChat daigou, this paper will further explore the influence path of perceived value in these relationships.

Table 5. The mediating effect analysis results of each dimension in the four categories of factors

| Dimension | EFFECT | SE | BOOTLLCI | BOOTULCI | Z | P |
|-----------|--------|----|----------|----------|---|---|
| $W_3 \Rightarrow \text{perceived value} \Rightarrow Y$ | 0.0133 | 0.0136 | -0.0081 | 0.0475 | 1.1302 | 0.2584 |
| $M_1 \Rightarrow \text{perceived value} \Rightarrow Y$ | -0.0472 | 0.0257 | -0.1138 | -0.0081 | 1.8562 | 0.0641 |
| $M_2 \Rightarrow \text{perceived value} \Rightarrow Y$ | 0.0221 | 0.0115 | 0.0054 | 0.0527 | 2.1653 | 0.0304** |
| $M_4 \Rightarrow \text{perceived value} \Rightarrow Y$ | 0.0266 | 0.0145 | 0.0053 | 0.0646 | 2.0756 | 0.0379** |
| $S_1 \Rightarrow \text{perceived value} \Rightarrow Y$ | 0.0499 | 0.0179 | 0.0212 | 0.0944 | 2.9393 | 0.0033** |
| $S_2 \Rightarrow \text{perceived value} \Rightarrow Y$ | 0.0345 | 0.0130 | 0.0147 | 0.0671 | 2.9794 | 0.0029** |

Note: ** means that the estimated results are significant at the level of 0.05

Table 5 shows that: the economic environment and integrity issues directly affect consumers' purchase intention, rather than the mediating variable of perceived value. After-sales service, platform convenience, interactivity and third party effect indirectly affect consumers' purchase intention through the intermediary variable of perceived value.

4. Research conclusions and suggestions

4.1 Research Conclusions

Based on the four-factor analysis theory and technology acceptance model and combined with the characteristics of WeChat daigou, this study constructed a theoretical model of consumers' purchase intention from each dimension under four categories of factors, namely, external environmental factors, consumer personal factors, marketing factors and community factors, and concluded that:

1. Among external environmental factors, economic environment has a significant positive impact on consumers' purchasing intention. Among marketing factors, after-sales service and convenience will have a significant positive impact on consumers' purchase intention, while honesty will have a significant negative impact on consumers' purchase intention. Among social factors, interaction and third party effect have significant positive influence on consumers' purchase intention.

2. Economic environment and integrity issues have a direct impact on consumers' purchase intention, while after-sales service, convenience, interactivity and third party effect have an impact on consumers' purchase intention through the intermediary variable of perceived value.
4.2 Countermeasures and Suggestions

External economic environment. (1) WeChat purchasing agents can encourage users to make positive comments and feedback on WeChat moments, Weibo, RED and other social platforms to enhance consumers' understanding of the WeChat daigou industry and their trust in WeChat purchasing agents. Create a good economic atmosphere for the development of WeChat daigou. (2) In line with the economic trend and under the general trend of rapid development of short video industry, short video platforms such as Tik Tok are used to promote products and attract customers through more creative and humorous ways, so that consumers can have a more comprehensive understanding of WeChat daigou in visual experience.

Marketing. (1) To ensure the quality and authenticity of products, cheating will greatly reduce consumers' trust in WeChat daigou and WeChat purchasing agents, so they will never use WeChat daigou or change the agents. Therefore, consumers should not be lost permanently for the sake of temporary interests. (2) Perfect after-sales service will increase customer satisfaction and perceived value. In WeChat daigou, imperfect after-sales service is a common phenomenon. The agents should communicate well with consumers before they receive the goods. Record delivery unpacking and verification of fake goods in real time, and actively take responsibility for the authenticity of products; At the same time, when goods are damaged, they should take the initiative to become a bridge of communication between the Courier and consumers. (3) The purchasing agents should give full play to the convenience of the WeChat platform, actively discover the new functions of WeChat, and combine them with their own marketing methods. In terms of customer feedback, WeChat purchasing agents can establish good communication platforms through WeChat anonymous mini programs. By collecting consumers' comments and questions, they can improve their own image and influence, attract more consumers. In terms of publicity and marketing, they regularly attract consumers' attention through pictures in moments, official accounts and two-dimensional code marketing, so as to break the traditional separation of pictures and text and use the combination of pictures and texts to let consumers know more about the product content in a faster and more efficient way.

Community interaction. (1) WeChat purchasing agents should manage their own customer resources more centrally through WeChat groups to increase customer stickiness. Actively interact with consumers in the WeChat groups, increase the activity of the WeChat groups and the degree of familiarity between each other by grabbing red envelopes, small program lottery, micro channel games and other interesting ways, and attract more new users to join while maintaining contact with old users. (2) Purchasing agents can provide certain discounts to users who join the daigou groups. Driven by price, the consumer groups of purchasing agents will gradually expand. Meanwhile, the third party effect will make these new users have a higher sense of trust, thus providing possibilities for consumption.

References

[1] Tang Yanjie. The advantages and disadvantages of WeChat marketing from the perspective of communication science [J]. News World, 2014(2): 112-113.
[2] Tan Juan, Cao Wenfeng, Li Xiaoyun. Consumer preference flipping in the context of over-marketing [J]. Commercial Economics Research, 2019(20): 82-84.
[3] Wu Ye. Research on trust construction of overseas daigou based on WeChat platform [J]. Journal of baotou vocational and technical college, 2016,17 (2): 27-30.
[4] Zhao Shuting. Research on consumer trust behavior in cross-border purchasing of cosmetics [J]. Modern Business,2022(05):10-14.
[5] Liu Wen, Wu Wenying. A brief analysis of the third person effect of daigou behavior in WeChat moments [J]. News World, 2015(2): 132-134.
[6] Dai Yuyang. Research on interaction of WeChat Overseas Purchasing Group and influencing Factors of Reference Group on Purchasing Intention of members [D]. Xiamen: Xiamen University, 2018:67-68.
[7] Tu Yuting. Analysis of WeChat overseas luxury marketing daigou [J]. Northern Economics and Trade, 2020(06):45-47.

[8] Zhang Zishan, Meng Xiangzhao, Hou Dekang. Problems in overseas purchasing on WeChat platform [J]. Cooperative Economics and Science and Technology, 2017(1): 77-78.

[9] Shi Zhongying. Classification and Avoidance mechanism of WeChat daigou Risk forms [J]. Journal of Tongling Vocational and Technical College, 2016(3): 15-21.

[10] Lu Taihong, Zhou Yijin. Consumer Behaviors-Insights into Chinese Consumers (3rd edition)[M]. Beijing: China Renmin University Press, 2018.

[11] DAVIS D. Perceived usefulness perceived ease of use and user acceptance of information technology [J]. MIS Quarterly, 1989, 13(3): 319-340.