

An Empirical Analysis of the Factors Influencing Group Purchasing Behavior of Young Consumer Groups

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Abstract: As an emerging business model derived from the development of the Internet, the O2O model has widely influenced the consumption habits of contemporary young people. Based on the O2O group-buying model, this paper uses literature research and quantitative analysis to empirically analyze the factors influencing group-buying attitudes in the online environment from the consumer psychology of young consumers and the characteristics of group-buying itself, using the perceived risk and technology acceptance model. The purchase intention of young consumers was derived to be positively correlated with effort expectation, performance expectation, social expectation, perceived preference, and facilitation factors. It helps businesses to better utilize the group-buying model in the online environment and grasp the purchasing preferences of young consumers and proposes countermeasures and suggestions in further segmenting the market, strengthening experience marketing, and focusing on the development of new products. The retail industry has also begun to gradually seek the optimization and integration of offline and online to carry out O2O transformation.

Keywords: young consumer group, O2O model, perceived risk and technology acceptance model

1. Introduction

The concept of O2O (Online to Offline) was introduced by Alex Rampell as a non-physical version of e-commerce for service products [1]. The core element of O2O is to pay online and enjoy services offline, that is, to combine offline business opportunities with the Internet, so that the Internet becomes the front desk for offline transactions. This way offline services can be used online to solicit customers, consumers can come online to screen services, and transactions can be settled online and quickly reach scale. The features are the promotion effect can be checked and each transaction can be tracked.

Based on the O2O group purchase model, the paper aims to explore the key factors that influence the purchase decision of young consumers, and then help O2O merchants improve their business results [2]. the paper firstly reviews the theories and literature related to the online group purchase mode; secondly, the paper list the factors influencing the group purchase of young consumers and put forward the research hypothesis, and at the same time, the paper design the corresponding questionnaires and distribute and collect them, and conduct a simple questionnaire quality analysis; secondly, the paper conduct in-depth research on relevant social sectors, consumers and enterprises, and verify the research hypothesis based on the research results; finally, the paper draw the

conclusion of this paper based on the analysis results and put forward the research hypothesis. Finally, based on the results of the analysis, the conclusions of this paper are drawn and marketing strategies for shopping. This paper sites are proposed.

2. Research Methods

2.1. Selection of Measurement Indicators

The O2O model is a new technology-based group purchase model that combines online and offline, and this study fully referred to other related scales such as traditional shopping model, online sales, and technology acceptance theory in designing the questionnaire, based on the traditional online sales model, combined with the main variables that affect The main variables of consumer online purchase and Del Hawkins theoretical model to make targeted corrections to it, collated the following measurement indexes, in order to meet the actual situation of O2O group purchase [3].

In order to make the scale better and more scientific, based on the previous research results, this study is aimed at young consumers, and the online questionnaire is filled in anonymously, and the data obtained are counted after recovery, and the questionnaire is revised with the respondents' opinions. The following questions this paper are designed for each variable, measured on a five-point Likert scale as shown in Table 1 [4].

Table 1: Measurement indicators of each variable.

Variables	Title
A1 Effort Expectation	The procedure for participating in the O2O group buying model is clear
	Easy to participate in the O2O group buying model
	In general, O2O group buying is an easy thing to do
	O2O group purchase is not as complicated as imagined
A2 Performance Expectations	Participation in the O2O group buying model provides a product or service that is useful
	O2O group buying model of goods at good prices
	Participating in the O2O group buying model has brought convenience to my life
	Participate in the O2O group buying model than the traditional network group buying more quality
	Participating in the O2O group buying model is good for me
A3 Social Expectations	My classmates and friends think O2O group buying is a good idea
	My classmates and friends had a successful O2O group buy
	My classmates and friends influenced me to try O2O group buying
B1 Perceived Risk	O2O group buying model transaction information may be leaked by the website
	I am worried that returning the goods will be more trouble
	I'm worried that I just bought a low-cost item
C1 Perception Offer	I think the O2O group buying model can get more benefits than traditional online shopping methods
	I think the O2O group buying model has lower prices than traditional online shopping methods
	I think the O2O-based group buying information is attractive
D1 Perceived Cost	I always get a larger percentage discount
	The time and effort I need to spend is relatively short

Table 1: (continued).

	Compared with ordinary group purchase, I think it is more convenient in terms of maintenance, after-sales service and quality inspection
E1 facilitators	I think group buying sites have the ability to provide O2O based group buying services
	I can use the mode easily and conveniently whenever I want to
F1 usage attitude	I am willing to use when needed
	I am willing to learn how to use
	I would like to recommend O2O-based group buying services to my friends and family
F2 usage behavior	I often use group buying services
	I will continue to use the model
	I will recommend this group buying service to people around me

2.2. Research Hypothesis

This topic combines the characteristics possessed by the young consumer group, perceived risk, and technology acceptance theory to empirically analyze the factors influencing O2O group purchasing behavior and hypothesize seven aspects that affect consumers' purchasing decisions. Its research hypotheses are shown in Table 2.

Table 2: Summary of study hypotheses.

Serial number	Hypothetical content
H1	Effort expectation positively influences the willingness of young consumers to use the O2O group buying model
H2	Performance expectations positively influence the willingness of young consumers to use O2O group buying models
H3	Social expectations have a positive impact on the willingness of young consumers to use O2O group buying models
H4	The perceived risk of O2O group purchase model among young consumers can negatively affect the willingness to use it
H5	Young consumers' perceived benefits of O2O group buying model positively affects willingness to use
H6	Young consumers' perceived cost of O2O group buying mode can negatively affect their willingness to use it
H7	Facilitating factors positively influence the usage behavior of O2O group purchase mode among young consumers

This study is mainly based on the influence factors of O2O model on the group purchase behavior of young consumers, so in the selection of the research sample, this survey is mainly based on graduate students and young people who have just joined the workforce (25-28 years old) and urban white-collar workers in first and second-tier cities [5]. In order to be able to get accurate results and reduce errors, this survey takes a combination of online and field surveys, and the survey covers 20 provinces, cities and autonomous regions across China to ensure the authenticity and represent of the research data. A total of 267 questionnaires were collected in this survey, including 240 valid questionnaires. This paper are valid questionnaires (more than 80% of the questions were filled in and the response time was more than 60 seconds), with a valid recovery rate of 91% [6].

3. Analysis of Results

Reliability refers to the consistency or stability of a measure, i.e., the consistency of scores obtained by the same group of test takers on the same test multiple times. The most commonly used reliability analysis method is the Alpha reliability coefficient method. Alpha coefficients are correlation coefficients with values ranging from 0 to 1, but the probability of having two extreme values of 0 or 1 is very low. Different scholars have different opinions. For general studies, a generally acceptable value for internal consistency estimates is 0.8, and when standardized scores are an important decision, the coefficient should be at least 0.9. The reliability results of the formal questionnaire can be seen in Table 3.

Table 3: Survey questionnaire reliability table.

Variables	Volume of questions	Cronbach's Alpha	Cronbach's alpha based on standardized terms
Effort Expectations	4	.862	.866
Performance Expectations	5	.824	.826
Social Expectations	3	.791	.729
Perceived Risk	3	.779	.783
Perception Offer	3	.763	.763
Perceived Cost	3	.722	.722
Facilitating Factors	3	.921	.922
Usage attitude	3	.741	.741
Usage behavior	3	.718	.721
Total volume	30	.850	.825

From the above table, the paper can see that: the reliability coefficient of the total table is 0.825, which indicates that the reliability coefficient of the questionnaire is very high and there is no need to delete or add question items. Other reliability coefficients are also above 0.7, which is relatively good.

This research mainly used factor analysis to test the validity of the questionnaire. Factor analysis module in spss20.0 was used to conduct the analysis, the influence factors were extracted by the principal component method, and the correlation coefficient was used as the basis for factor extraction, Bartlett's spherical analysis can be used to test whether the correlation coefficients are different and greater than 0. A significant spherical test indicates that the correlation coefficients meet the requirements of factor analysis. the basic principle of KMO is based on the value of the net correlation coefficient between variables, and the index value When the KMO value is less than 0.5, it indicates that the inter-topic variables are not suitable for factor analysis, and 0.5~0.8 is an acceptable range. If the KMO indicator value presented by all the inter-topic variables is greater than 0.8, it means that the relationship between the inter-topic variables is good and the inter-topic variables are suitable for factor analysis.

Table 4: Questionnaire factor table.

KMO and Bartlett's test		
The Kaiser-Meyer-Olkin metric of sampling adequacy.		.766
Bartlett's sphericity test	Approximate cardinality	2314.699
	df	325
	Sig.	.000

According to the able 4, the value of KMO for the whole questionnaire is 0.766, which is greater than 0.5 and meets the criteria mentioned above for factor analysis. The value of Bartlett's spherical test $P=0.000$, according to Ming-Lung Wu's criteria, indicates a significant effect and is suitable for factor analysis.

After the above analysis, this study conducted a factor analysis on the scale, deleting the items with similar factor loadings on both factors, deleting a factor if the factor loadings of both items are less than 0.4, deleting a factor if only one item corresponds to it, and deleting both the item and the factor after combining the above deletion methods to obtain the results of the factor analysis [7].

Table 5: Results of factor analysis.

Rotated Component Matrixa								
	Ingredients							
	1	2	3	4	5	6	7	8
Usage attitude	.809	.096	.107	-.027	-.047	.007	-.074	.126
Usage attitude	.789	.197	-.042	.118	-.071	.039	-.126	.043
Usage attitude	.687	.035	.143	.086	.027	.031	-.013	-.257
Perceived usefulness	.146	.863	.142	.074	-.018	.019	-.064	.003
Perceived usefulness	.155	.845	.057	-.006	-.020	.065	-.034	.030
Perceived usefulness	.082	.839	.129	.014	-.024	-.009	.081	-.079
Perceived usefulness	.217	.776	.062	.028	.010	-.041	-.109	.090
Perceived ease of use	.053	.064	.877	.018	-.042	-.060	-.041	-.019
Perceived ease of use	.017	.157	.807	.095	-.035	-.071	-.164	.154
Perceived ease of use	-.033	.129	.769	-.056	.082	-.074	-.112	.023
Perceived ease of use	.082	.036	.754	.026	-.035	-.027	.009	-.248
Privacy Risk	.070	.098	.018	.878	.100	.097	-.059	.024
Privacy Risk	.001	.031	-.016	.803	.178	.075	-.001	-.019
Privacy Risk	.087	-.029	.065	.755	.151	.161	.031	.029
Service Risk	-.020	-.043	-.049	.174	.827	.188	-.014	-.041
Service Risk	-.045	.054	.007	.202	.790	.130	.073	-.186
Service Risk	-.020	-.083	.027	.120	.751	.159	-.034	.355
Economic Risk	.055	-.051	-.040	.146	.141	.824	-.012	-.034
Economic Risk	-.013	.013	-.130	.082	.042	.788	.146	.121
Economic Risk	-.034	.082	-.052	.118	.291	.713	-.018	-.083
Psychological Risk	-.072	-.061	-.132	-.063	-.025	.080	.864	-.008
Psychological Risk	-.194	-.060	-.122	.029	.044	.033	.769	.161

Table 5: (continued).

Psychological Risk	-.012	.085	-.081	.045	.020	-.007	.675	.494
Usage behavior	.030	.048	-.004	-.020	-.007	-.054	-.061	.745
Usage behavior	-.289	.190	.026	.030	.118	-.036	.134	.695
Usage behavior	.204	.182	-.094	.042	-.103	.044	-.193	.643
Extraction method: principal components.								
Rotation method: Orthogonal rotation method with Kaiser standardization.								
a. The rotation converges after 6 iterations.								

As the table 5, facilitation factors and usage behavior are negatively correlated at 0.01 level of significance, while usage attitude is positively correlated with usage behavior at 0.01 level of significance, which shows that both facilitation factors and usage attitude of consumers have corresponding effects on user behavior. As a merchant, it is extremely important to reduce the facilitating factors and improve the attitude of consumers.

Table 6: Analysis of the correlation bet.

Usage attitude
Effort expectation Pearson correlation .450** Significance (Bilateral) .000
Performance expectation Pearson correlation .512** Significance .000
Social desirability Pearson correlation .082 Significance (Bilateral) .234
Perceived risk Pearson correlation -.477** Significance (Bilateral) .000
Perceived preference Pearson correlation .494** Significance (Bilateral) .000
Perceived Cost Pearson Correlation -.420** Significance (Bilateral) .000
*. Significantly correlated at the 0.05 level (bilaterally). **. Significantly correlated at the .01 level (bilaterally).

As can be seen from table 6, although the factor analysis yielded six possible factors that influence attitude toward usage, the paper found that not every factor was significantly and positively correlated with attitude toward usage. Three factors, effort expectation, performance expectation, and perceived preference, this paper significant correlation with attitude toward use at the 0.01 level of significance, and perceived risk. This paper significant negative correlation with perceived cost. In the data analysis of this survey, social expectation was not significantly correlated with attitude toward use, indicating that the social expectation factor does not affect attitude toward use.

Table 7: Correlations facilitators and attitudes toward use and use behavior.

Usage behavior
Promoter Pearson correlation -.423 Significance (Bilateral) .000
Attitude of use Pearson correlation .370 ** Significance (Bilateral) .000
*. Significantly correlated at the 0.05 level (bilaterally). **. Significantly correlated at the .01 level (bilaterally).

From the table 7, the paper can see that: facilitators are negatively correlated with usage behavior at 0.01 level of significance, while usage attitudes are positively correlated with usage behavior at 0.01 level of significance, which shows that both facilitators and usage attitudes of consumers have corresponding effects on usage behavior. As a merchant, it is very important to reduce the facilitation factors and improve the attitude of consumers.

Table 8: Empirical findings of the research hypotheses.

Serial number	Hypothetical content	Empirical results
H1	Effort expectations have a positive impact on the willingness of young consumers to use the O2O group buying model	Establishment
H2	Performance expectations have a positive impact on the willingness of young consumers to use O2O group buying models	Establishment
H3	Social expectations have a positive impact on the willingness of young consumers to use the O2O group buying model	Not Established
H4	The perceived risk of the O2O group buying model among young consumers can negatively affect the willingness to use it	Established
H5	The perceived benefits of the O2O group buying model for young consumers positively affects the willingness to use it	Established
H6	The perceived cost of the O2O group buying model for young consumers can negatively affect the willingness to use it	Establishment
H7	Facilitating factors positively influence the usage behavior of O2O group purchase mode among young consumers	Establishment

4. Discussion

Through the above-derived empirical findings, this paper puts forward the following countermeasures and suggestions for O2O merchants:

4.1. Further Market Segmentation

The paper Make full use of the convenience of communication, the wide range of network technology, a large number of data analysis, integration of online and offline resources, the actual needs of the target customer group as a guide to shelves and publicity products [8]. For large group buying sites, businesses should give full play to their financial advantages, attract talent, encourage innovation, increase layout and launch diversified services. And small and medium-sized website operators must

maintain their market share, more from the vertical field, do brand, and do characteristics, continuous innovation.

4.2. Strengthen Experience Marketing and Focus on the Development of New Products

Stores can from the characteristics of young consumers, cater to their needs with more novel and interesting products, and attract more experience marketing through membership mechanism and regular activities. On the other hand, merchants can use the QR code in WeChat to realize the digitalization of category management and refinement of operation capability of group-buying websites. The digitalization of the category of the group-buying website makes each dish or service product have digital credentials, information and data should be networked, and also to manage the relationship between things [9].

4.3. Explore a Better Profit Model

The O2O-based group buying model brings not only a change of consumer thinking and service mode, but also a new challenge to the traditional group buying industry. Based on the conversion effect of different marketing platforms, merchants can provide targeted value-added services to further stimulate customers' desire to buy, thus forming a virtuous circle and promoting the further development of O2O websites [10]. With the development of social era marketing in various forms, merchants need to determine the business strategy according to the specific situation, symbiosis and coexistence, mutual benefit and win-win.

5. Conclusion

This paper serves as a research analysis of the factors influencing the purchase decision of young consumers based on the O2O group purchase model. Through the method of literature research and quantitative analysis, the paper firstly put forward the conditional hypothesis and distribute a large number of questionnaires nationwide, through the study, the paper can draw the following conclusions: effort expectation presents a positive influence on young consumers' group purchase mode; performance expectation, perceived preference, and perceived cost present a positive direct influence on young consumers' group purchase mode; perceived risk The perceived risk has a negative direct effect on the group purchase pattern of young consumers; social performance has a positive contribution to the group purchase pattern of young consumers. Based on the correlation of the variables analyzed by the integrated technology acceptance model, the paper made the following recommendations for O2O merchants: further segmentation of the market and strengthening. The limitations and shortcomings of the article are that the samples selected in this study are mostly young consumers in the first place. The limitations and shortcomings of the article are that the samples selected in this study are mostly young consumers in first- and second-tier cities, which are targeted studies. In reality, how to balance the purchase preferences of young consumers and other age groups, and then improve the overall business situation, is the direction of the author in future in-depth research.

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