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Research on Factors Influencing Consumers' Willingness to Use Community Group Buying Platform

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Abstract

Purpose: The study aims to identify the key factors that influence consumers' propensity to utilize community group buying platforms, employing the Technology Acceptance Model (TAM) as a theoretical framework. **Research design, data and methodology:** The research design involved selecting 192 consumers with experience in community group buying and analyzing the data statistically using SPSS 23.0. Hypotheses were tested utilizing the structural equation modeling software AMOS. **Results:** Key findings indicate that the attributes of products offered on community group buying platforms significantly enhance consumers' perceptions of usefulness and ease of use. Furthermore, these perceptions directly correlate with consumers' intentions to use the platform. **Conclusions:** This research, grounded in the TAM, delves into how external factors of the community group buying platform impact perceived usefulness and ease of use, and subsequently, how these perceptions affect consumers' purchasing intentions. Based on these insights, several recommendations can be proposed for the platform's development: The platform should strive to enhance product quality and cultivate a positive reputation. Strategic promotional initiatives should be designed to attract new users while retaining existing customers. Continuous optimization of platform functionalities is necessary to augment users' perception of usefulness. These measures are anticipated to foster user engagement, increase adoption rates, and contribute to the overall success and sustainability of the community group buying platform.

Keywords: The Community Group, Technology Acceptance Model, Usage Intention

JEL Classification Code: C83, L81, M31, P46

1. Introduction

Amidst the swift advancement of information technology, novel e-commerce paradigms have been blossoming. Online shopping, as a convenient mode of retail therapy, has woven itself into the fabric of people's everyday

needs, encompassing clothing, cuisine, shelter, and transportation. The constraints imposed by the COVID-19 pandemic on conventional shopping methods have not only disrupted the trajectory of traditional e-commerce but also carved out fresh opportunities for community group buying to flourish. Emerging as an innovative e-commerce

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approach, community group buying leverages platforms such as WeChat to market goods, effectively curtailing the merchants' investment expenditure. For consumers, this model presents products at lower prices that offer great value for money, eliminating the middleman who would typically mark up the cost. And its logistics mode pays more attention to the relationship with customers than traditional logistics. Group leaders, often residents within the community themselves, command a higher level of trust among their fellow community members. Additionally, any quality concerns with the products can be promptly addressed by these proximate group leaders. As a relatively novel concept in group buying, community group buying has garnered widespread attention from consumers. Though this model was initially proposed back in 2016, it did not experience rapid growth at the time. It was during and after the pandemic that community group buying truly took off, scaling new heights. The meteoric rise of the community group buying model can be attributed to the market dividends reaped from the vast WeChat user base coupled with a shift in consumer mindset—a pursuit of superior quality and cost-effectiveness. Currently, nearly all e-commerce platforms have integrated the community group buying feature, indicating its widespread acceptance and popularity.

Currently, research into the factors that influence consumer intention to use online shopping platforms has achieved commendable progress within China. However, studies focusing on consumer adoption of community group shopping platforms remain scarce. The existing body of related research primarily concentrates on the services rendered by businesses and the platform technology itself. In contrast to traditional e-commerce models, community group buying places a heightened emphasis on user experience and satisfaction. Consequently, businesses must prioritize the quality of goods and services they provide more than ever before. It follows that enterprises ought to direct increased attention to external factors such as users' personal traits.

There are many researches on logistics services in e-commerce in China, but with the vigorous development of community group buying, its logistics form has changed greatly. It mainly adopts the mode of intensive distribution and community storage (Wang et al., 2023), and because of the social attribute empowerment, it provides a stable expectation for logistics distribution, further optimizes the supply chain management, and reduces the inventory pressure. The core of community group purchase logistics is to grasp the customer relationship. Compared with the traditional logistics mode, the problems of products can be better solved through direct communication and other means. Therefore, the factors of products are the core factors in

community logistics and community group purchase, which can affect usage intention.

Previous investigations into e-commerce have predominantly embraced models such as the online stores acceptance model and the online shopping acceptance model. Nevertheless, e-commerce has progressively evolved and reached maturity, transcending its nascent stages. The advent of the pandemic has underscored its advantages over traditional marketing paradigms. In the realm of community group buying, delineating external factors is pivotal for success. Hence, in examining consumer intentions towards community group buying, the study will be grounded in the Technology Acceptance Model (TAM). The TAM posits that an individual's use of a target system is primarily shaped by their behavioral intention to use, which, in turn, is influenced by their attitude toward using the system and perceived usefulness. The attitude toward use is informed by both perceived usefulness and perceived ease of use, with perceived usefulness being a function of external variables and perceived ease of use, while perceived ease of use is determined by external variables.

Amidst the relentless expansion of the internet economy, the variety and quantity of e-commerce platforms are surging, presenting consumers with an abundance of options. As a burgeoning concept, community group buying has emerged as a significant challenge that requires addressing. To this end, grounded in the TAM, this study endeavors to delve into the external variables associated with community group buying through empirical analysis. It aims to examine the influence these external factors exert on consumers' perceived ease of use and perceived usefulness, and subsequently, their effect on consumer willingness to adopt the platform. By investigating the determinants that shape consumer preferences for community group buying, the study seeks to identify and analyze pertinent issues. Based on these findings, recommendations will be proposed to fulfill customer needs, thereby enhancing the community group buying platform's capacity to augment user willingness. Simultaneously, this research will propel the application of the TAM within the domain of e-commerce and consumer adoption behavior.

2. Literature Review and Hypotheses

2.1. Community Group Buying

As an emerging model within the realm of social e-commerce, community group buying represents a collective purchasing approach that synergistically integrates both online and offline interactions among community residents. This model is characterized by its regional specificity, niche market focus, localization strategies, and reliance on

established communal networks. The community group buying model embodies an O2O (Online-to-Offline) commerce paradigm (Wan et al., 2022). It facilitates a group pre-purchasing process through mediums such as WeChat groups and mini-programs, streamlining the distribution of goods to designated community pick-up locations where consumers can conveniently retrieve their purchases. Dai et al. (2023) further elucidates that at the heart of this model lies the community itself. By recruiting leaders to establish and manage online community platforms, it effectively rallies residents who share common shopping needs within the community for collective purchasing endeavors. This approach not only merges online and offline shopping experiences but also fosters a sense of community engagement and collaborative consumption. In essence, community group buying is a dynamic e-commerce solution that leverages the synergies between virtual platforms and physical community structures, offering a localized, networked, and niche-oriented shopping experience that caters to the specific needs and preferences of community members.

Community group buying, a novel mode of collective purchasing that has evolved from the burgeoning landscape of social e-commerce, represents a strategic fusion of technology and community dynamics. This innovative approach is characterized by enterprises establishing dedicated community group buying platforms and recruiting heads of teams, who in turn set up local pick-up points. In this model, users place their orders through a WeChat mini-program, after which the community e-commerce platform facilitates the delivery of goods to the designated pick-up locations. Subsequently, customers collect their purchases from these points the following day. Upon completion of the transaction, the team leader receives a commission as a reward for their role in the process. A key aspect of the community group buying model is its reliance on neighborhood relationships to build a customer base, resulting in a clientele that exhibits strong loyalty and a high degree of trust. As noted by He (2022), this model contrasts with traditional e-commerce by reducing customer acquisition costs through the community's social channels. The consumer groups formed through these acquaintance networks are more stable, which inherently boosts transaction and repurchase rates. Crucially, the community group buying platform serves as the linchpin of this model, shouldering responsibilities that include platform construction, merchandise storage and distribution, and after-sales service provision. It acts as the central hub that coordinates all aspects of the community group buying experience, ensuring a seamless and efficient process for both the customers and the platform operators.

The distribution mode of community group purchase enables customers to communicate more directly or even

face-to-face to solve problems related to products or platforms in the marketing process, so as to improve customer satisfaction. The innovative distribution method uses big data technology for accurate demand forecasting and intelligent scheduling (Seyedan & Mafakheri, 2020), and meets the diversified receiving needs of consumers through real-time distribution, appointment distribution and other means. And during the COVID-19 pandemic, there are new schemes such as contactless distribution (Chen., 2020) and self-delivery points, which can better ensure the safety of customers.

2.2. Consumer Usage Intention

The Rational Behavior Theory, originally proposed by American scholars Fishbein and Ajzen (1975) offers a framework for analyzing the influence of attitudes on individual behavior. Fundamentally, this theory posits that individuals will engage in a thoughtful consideration of the implications and consequences of their actions, synthesizing various pieces of information before arriving at a decision. In Tsai et al. (2011)'s study, they elaborated on the concept of consumer usage intention, describing it as a form of mental readiness. This state reflects a consumer's propensity to respond to goods or services during the consumption process. It encapsulates their willingness to embrace or reject those offerings. To elucidate further, consumer usage intention can be seen as a preparatory mindset that guides consumers' receptiveness or resistance towards certain products or services. This construct is pivotal for understanding consumer behavior, as it indicates the likelihood of an individual adopting or discarding a particular good or service based on their personal attitudes and the information they have gathered. In essence, the insights underscore the importance of understanding consumer psychology and the decision-making processes that shape their interactions with the marketplace. By recognizing the role of consumer usage intention, businesses and marketers can better tailor their strategies to align with consumers' attitudes and preferences, ultimately fostering stronger customer relationships and enhancing product or service adoption rates.

Consumer usage intention represents a subjective inclination, whereby consumers demonstrate their readiness to either embrace or decline the use of community group buying platforms. This readiness is predicated on their experiences and satisfaction derived from goods or services encountered throughout the consumption journey. The propensity to utilize community group buying, as examined in this study, pertains to the extent of consumers' preparedness to opt for community group buying platforms when engaging in shopping activities. Song et al. (2023) elucidated through investigative means that various elements, such as information quality, service quality, the nature of the

group buying products, system excellence, alongside individual consumer-related factors, can significantly influence the inclination of consumers to employ community group buying platforms. In a subsequent analysis, Chiu et al. (2018) dissected the determinants impacting consumer willingness to engage with community group buying, grounded in perceived value theory. Their findings substantiated that the apprehended value of the product, the value of services rendered, and the perceived safety value are all contributory factors shaping consumer usage intention. By delving into the existing scholarly works, this study endeavors to unravel the effects that product attributes within community group buying exert on consumer willingness to participate. The distinctive features of group buying products, as a pivotal consideration for consumers, are anticipated to directly shape their user experience.

2.3. Technology Acceptance Model

The Technology Acceptance Model (TAM), introduced by Davis (1989), stems from the application of the Theory of Rational Behavior to investigate user acceptance of information systems. Central to TAM are two primary determinants: perceived usefulness and perceived ease of use. These constructs significantly influence an individual's intention to adopt a particular technology or system. In the context of consumer purchase intention on social e-commerce platforms, research by Cha (2009) underscored the importance of perceived usefulness and perceived ease of use, demonstrating their impact on the intent to purchase goods. According to TAM, the actual usage of a system is predicated upon behavioral intention, which is a joint function of the attitude towards using the system and perceived usefulness. The attitude towards using is further shaped by both perceived usefulness and perceived ease of use. When considering consumer attitudes towards utilizing community group buying platforms, these principles hold true. The perception of the platform's utility and the effortlessness of its use will dictate consumers' attitudes toward online shopping via community group buying platforms, ultimately guiding their intention to engage in this form of e-commerce.

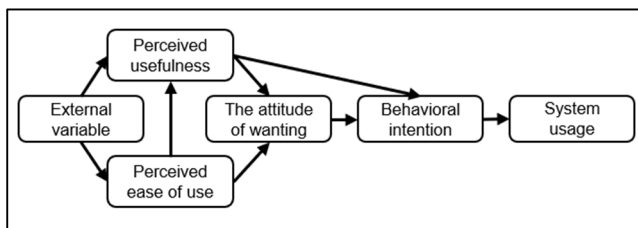


Figure 1: Technology Acceptance Model

2.4. Perceived Usefulness and Perceived Ease of Use

The TAM posits that perceived usefulness is a critical indicator of the extent to which an individual believes that a system can enhance their performance. According to the tenets of TAM, there is a positive correlation between perceived usefulness and behavioral intention, with the latter being a strong determinant of system use. In the context of community group buying platforms, perceived usefulness plays a pivotal role in shaping consumers' attitudes and intentions to engage with the platform. This perception can indirectly influence consumers' willingness to utilize community group buying services by fostering a favorable attitude towards the platform. Research conducted by Lim and Ting (2014) in 2014 further substantiates the model's applicability, particularly in rural community settings. Their findings underscore that perceived usefulness not only enhances consumer attitudes but also positively impacts their willingness to participate in group buying activities within rural communities.

Perceived ease of use, a cornerstone of the TAM, encapsulates the degree to which an individual perceives a system's usability. In the domain of community group buying, this construct refers to the extent to which consumers find shopping on these platforms to be straightforward and convenient. According to TAM, perceived ease of use is a key determinant of an individual's attitude toward using a system, which in turn influences behavioral intention. Additionally, perceived ease of use exerts an effect on perceived usefulness; when users believe that a system is easy to navigate, their perception of its utility often increases, thereby strengthening their attitude and intention to use it. Research by Hess et al. (2014) reinforces this notion, highlighting that a stronger perception of ease of use enhances both the attitude towards using the system and its perceived usefulness. Consequently, consumers who find the community group buying platform easy to use are likely to hold a more favorable attitude towards it and perceive it as more useful, which ultimately amplifies their intention to use the platform. Furthermore, Davis (1989) noted in the original TAM formulation that perceived ease of use directly impacts perceived usefulness. This direct linkage underscores the importance of designing user-friendly systems, as such systems are not only easier to use but are also more likely to be perceived as valuable by users.

According to the research conclusion of TAM, it can be concluded that perceived usefulness and perceived ease of use have a positive impact on consumer usage intention. In previous studies, Wilson (2019) has pointed out that when using e-commerce platform for shopping, the perceived usefulness of the platform has a direct positive impact on consumers' intentions to use the e-commerce platform, and perceived ease of use can affect consumers' intentions to use

the e-commerce platform through the intermediary path. Davis (1989) also pointed out in his model that perceived ease of use has a direct impact on perceived usefulness. However, most of the previous research objects are some traditional e-commerce platforms. After experiencing COVID-19 epidemic, the object of this study community group buying has become popular and the number of users has increased steadily. When consumers use the community group buying platform for shopping, the requirements for the platform itself will be higher than that of traditional e-commerce shopping. According to TAM, when using the community group buying platform, consumers will have a certain perception of the difficulty of using the platform and the efficiency of the platform. Therefore, consumers' perceived usefulness and perceived ease of use of the community group buying platform will affect their purchase intention. Based on this, this study proposes the following hypotheses:

- H1:** Perceived usefulness of the community group buying platform positively influence the consumers' usage intention.
- H2:** Perceived ease of use in community group buying platforms positively influence the consumers' usage intention.

2.5. External Variable

In the Technology Acceptance Model (TAM), external variables play a significant role in shaping an individual's beliefs, attitudes, and intentions towards technology adoption. These variables include system design characteristics, user characteristics, organizational structure, and other factors that can influence the relationship between internal beliefs and external environmental constraints. TAM posits that external variables directly impact perceived ease of use, which in turn affects perceived usefulness. Additionally, perceived usefulness is influenced by both perceived ease of use and external forces. The interplay between these factors ultimately determines an individual's attitude and behavioral intention towards using a particular technology or system. Researchers often incorporate external variables into their studies to tailor the TAM to specific contexts. For instance, Abdullah et al. (2016) examined the factors influencing college students' B2C online consumption behavior, categorizing external variables into commodity factors, risk factors, environmental factors, and trust factors. The study found that commodity factors significantly impact perceived usefulness, while all four external variable factors significantly affect perceived ease of use. Drawing from this approach, the current study identifies external variables that affect consumers' willingness to use community group buying platforms. These variables are categorized as group buying product attributes,

including product quality, product price, and product category. By considering these external factors, the study aims to provide a comprehensive understanding of the determinants that influence consumer intention to engage with community group buying platforms, thereby contributing to the existing body of knowledge on technology acceptance and providing insights for practitioners in the e-commerce industry.

Product characteristics are the main factors that affect consumers' cognition, emotion and behavior. The price, quality, cost performance, packaging and category of group buying products will have an impact on consumers' purchase intention. In previous studies, Korgaonkar and Karson (2007) have pointed out that the characteristics of the product itself will also affect consumers' perception of online shopping risks, and elaborated the product factors from three aspects: product price, brand, and degree of standardization. Product prices will inevitably have an impact on consumers' purchasing psychology, and then affect consumers' purchasing behavior. In addition, the more favorable the price offered by the online shopping platform, the more willing consumers are to shop on the platform. Then when purchasing goods, consumers tend to pay more attention to the quality of goods, and product quality is a necessary factor for customer satisfaction. This paper takes the community group buying platform as the research object, and takes the price, quality and variety of group buying products as external variables based on TAM, when consumers use the community group buying platform, they believe that the characteristics of the platform products meet their expectations, and the stronger their perceived usefulness and perceived ease of use, the stronger their willingness to use. Based on this, this study proposes the following hypotheses:

- H3:** The group purchase product factors of the community group purchase platform positively influence the perceived usefulness.
- H4:** The group purchase product factors of the community group purchase platform positively influence the perceived ease of use.

2.6. Construction of Research Models

Combined with the above theoretical background and hypotheses, the hypotheses model of this paper is shown as Figure2.

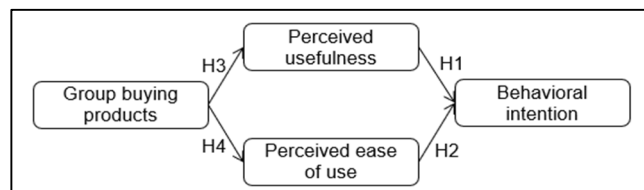


Figure 2: Research Model

3. Research Design

3.1. Questionnaire Design

The questionnaire was designed to measure the impact of various factors on consumers' use intention in community group buying platforms. The questionnaire consists of 18 items, divided into three modules: external variables, perceived usefulness and perceived ease of use, and user willingness to use the platform. The first module focuses on external variables, including product price, quality, and category. These factors are considered important determinants of consumers' perceptions of usefulness and ease of use. The second module measures perceived usefulness and perceived ease of use, with three items for each construct. Finally, the third module measures users'

willingness to use community group buying platforms, with three items assessing their intention to engage with these platforms. By incorporating relevant literature and combining it with the research model of this study, the questionnaire aims to provide a comprehensive understanding of the factors that influence consumers' use intention in community group buying platforms. By maximizing reliability and validity, this study aims to contribute to the existing body of knowledge on technology acceptance and provide valuable insights for practitioners in the e-commerce industry.

The questionnaire title measurement of this study adopts 7-point Likert scale. The research questionnaire is made with Wenjuanxing. After the completion of the production, the link is formed and distributed in the social software, and the data collection is completed. Finally, a total of 192 valid data are received.

Table 1: Questionnaire Item Setting

Variable		Question setting
Group buying products (External variables)	Product price	I think the prices of community group buying products are very favorable.
	Product quality	I think the quality of community group buying products has met expectations.
	Product category	I think there are many types of products on community group buying platforms that can meet my needs.
Intermediate variable	Perceived usefulness	I think using community group buying for shopping is very convenient.
		I think shopping through community group buying platforms can save a lot of time.
		I think community group buying platforms can meet my daily product needs.
	Perceived ease of use	I think community group buying platforms are easy to operate.
		I think the community group buying process is simple and easy to use.
Outcome	Usage intention	I am willing to use community group buying for shopping.
		I am willing to recommend community group buying to family and friends.
		I am willing to continue using community group buying in the future.

3.2. Data Collection

The questionnaire in this study was designed and produced by Wenjuanxing, and then formed a link to be distributed on WeChat, Weibo and other social platforms. After 1 week of data collection, a total of 228 questionnaires were finally collected. After data cleaning, 36 invalid questionnaires were deleted, and the number of final effective questionnaires was 192, with an effective rate of 84.21%.

consumers aged 18~25 are the most, accounting for 51.6%. In terms of occupation, most of the users of community group buying were students, with a total of 81, accounting for 42.2%. A total of 20 people with occupations of government or public institutions account for the least proportion. In terms of income, the population with a sample income of 1,001~3,000 accounts for the largest proportion, which is 35.9%. the sample income of more than 10,000 yuan accounts for the least proportion, with a proportion of 5.2%. The distribution of other levels is more equal.

The specific statistical data are shown in Table 2 below:

4. Results and Discussion

4.1. Data Collection

Among the data collected in the questionnaire, the number of female consumers who used community group buying was higher than that of male consumers, including 89 males, accounting for 46.4%. There were 103 females, accounting for 53.6%. Among all the statistical data, young

Table 2: Demographic Characteristics of Research Participants

Statistical variables	Project	Frequency	Percentage
Gender	Male	89	46.4%
	Female	103	53.6%
Age	Under 18	6	3.1%
	18~25	99	51.6%
	26~35	39	20.3%
	36~45	40	20.8%
	More than 450	8	4.2%

Statistical variables	Project	Frequency	Percentage
Career	Student	81	42.2%
	Government	20	10.4%
	Enterprise staff	36	18.8%
	Individuality	33	17.2%
	Others	22	11.5%
Income	Under 1000	38	19.8%
	1001~3000	69	35.9%
	3001~5000	46	24.0%
	5001~10000	29	15.1%
	More than 10000	10	5.2%

4.2. Method

To verify the reliability and validity of the measurement scale, Cronbach's alpha was used in the first step. The analysis results are listed in Table 3.

Table 3: Cronbach's Alpha

Dimension	GP	PU	PEOU	UI
Cronbach's α	0.745	0.748	0.689	0.808

Note: UI= Usage intention, GP=Group product, PU= Perceived usefulness, PEOU=Perceived ease of use

After the completion of the reliability analysis, the correlation and partial correlation between the variables in the questionnaire were checked through KMO measurement and Bartlett sphere test.

Table 4: KMO and Bartlett Sphere Test Results

KMO		.890
Bartlett	Approximate chi square	880.404
	df	55
	Sig	.000

According to the test results, the KMO value is 0.890, indicating a significant correlation between variables and meeting the Bartlett sphere test criteria. Therefore, factor analysis is suitable for studying variables. Then conduct factor analysis to test the structural validity of the scale.

Table 5: Factor Load Matrix

Items	Component			
	1	2	3	4
UI3	.783			
UI2	.742			
UI1	.726			
GP2		.804		
GP3		.699		
GP1		.692		
PU2			.791	
PU1			.668	
PU3			.613	

Items	Component			
	1	2	3	4
PEOU1				.809
PEOU2				.724

Note: UI= Usage intention, GP=Group product, PU= Perceived usefulness, PEOU=Perceived ease of use

This study constructed a model graph based on research hypotheses. In order to further explore the overall fitness of the model, a fit test will be conducted on the overall model. Combined with the structural equation model fitness evaluation indicators provided by previous researchers, this study chooses to χ^2 , χ^2/DF , CFI, GFI, IFI, RMSEA, TLI, and NFI are used as fitting indicators to calculate the overall model fit index of the scale, in order to test the degree of model fit. Final test results : $\chi^2=68.79$, $\chi^2/DF=1.810$, CFI=0.964, GFI=0.943, IFI=0.964, RMSEA=0.065, TLI=0.947, and NFI=0.924.

After completing the fit test, the standardized path coefficients of the final measurement model are all greater than 0.7, C R. The values are all greater than 1.96, indicating good convergence validity of the model.

4.3. Testing Hypotheses on Structural Model

This study will use structural equation modeling to investigate the impact of group buying products, perceived usefulness, perceived ease of use, and willingness to use, in order to validate the research hypothesis. Among them, group buying products are external variables, perceived usefulness and perceived ease of use are intermediate variables, and willingness to use is the outcome variable. This study used AMOS to test the constructed main model and drew a hypothetical structural equation model as shown in Figure 3:

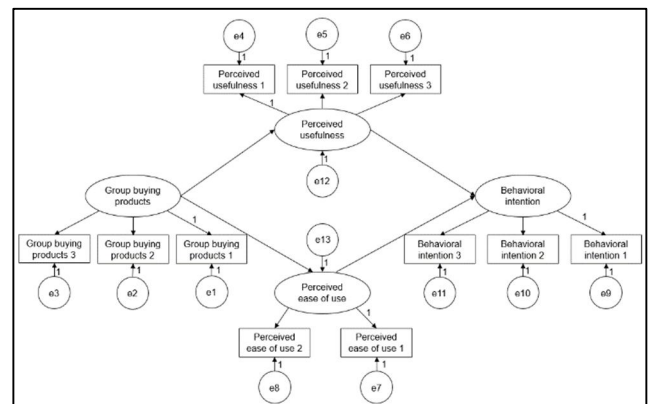


Figure 3: Structural Equation Model

The final results of the test indicate a good model fit with values of $\chi^2 = 95.118$, $\chi^2/df = 2.378$, CFI = .935, NFI = .895,

TLI = .910, RMSEA = .085, IFI = .936, GFI = .919. The results of testing the hypotheses are as follows.

The research hypothesis path analysis of external variables, intermediate variables, and outcome variables is shown in Table 6:

Table 6: Analysis of Hypothetical Pathway Results

Route	Standardized path coefficient	S.E.	C.R.	P
PEOU ← GBP	.794	.108	7.380	***
PU ← GBP	.892	.112	7.994	***
UI ← PU	.552	.157	3.509	***
UI ← PEOU	.353	.170	2.079	.038

Note: UI= Usage intention, GBP=Group buying products, PU= Perceived usefulness, PEOU=Perceived ease of use

From this, it can be concluded that all four hypotheses of this study pass:

Table 7: Research Hypotheses Passed through the Situation

	Hypotheses	Result
H1	Perceived usefulness of the community group buying platform positively influence the consumers' usage intention.	Accepted
H2	Perceived ease of use in community group buying platforms positively influence the consumers' usage intention.	Accepted
H3	The group purchase product factors of the community group purchase platform positively influence the perceived usefulness.	Accepted
H4	The group purchase product factors of the community group purchase platform positively influence the perceived ease of use.	Accepted

4.4. Discussion

After constructing the theoretical hypothesis model and empirical analysis, this study verified the research hypothesis proposed in this paper and obtained the research results. The results are explained as follows:

4.4.1. Group Buying Products and Perceived Usefulness, Perceived Ease of Use

In the hypothesis path analysis, the standardized path coefficient for the perceived usefulness of group buying products is $0.892 > 0$, and the associated P-value is less than 0.05. This result indicates that the factors related to group buying products have a statistically significant and positive effect on the perceived usefulness among consumers of community group buying platforms. Similarly, the standardized path coefficient for the perceived ease of use of group buying products is $0.794 > 0$, with a P-value below 0.05, suggesting that these product factors significantly and positively influence the perceived ease of use for community group buying platform consumers. It is evident from these findings that within the context of community

group buying, consumers' perceptions of the product are key determinants in their intention to utilize the group buying platform. Furthermore, the price, quality, and variety of the group buying products are identified as important criteria valued by consumers when making purchasing decisions within community group buying platforms.

4.4.2. Perceived Usefulness, Perceived Ease of Use, and Willingness to Use

In the hypothetical path analysis, the standardized path coefficient of perceived usefulness for usage intention is $0.552 > 0$, and the P-value < 0.05 . The standardized path coefficient of perceived ease of use for usage intention is $0.353 > 0$, and the P-value < 0.05 . Verified that perceived usefulness and perceived ease of use have a significant positive impact on usage intention. The results indicate that when consumers have a stronger perception of usefulness and perceived ease of use, their willingness to use community group buying platforms will be stronger.

5. Summary and Limitation

5.1. Research Conclusion

Under the catalysis of the epidemic, the demand of users for online shopping has surged, making the community group buying industry usher in a period of high tide of development. Many platforms are well known by consumers, and have also successfully led some Internet giants to enter the market. With the gradual formation of the industry landscape, how to improve user recognition and willingness to use community group buying has become a problem that many communities group buying platforms need to face in the rapidly changing market environment. Based on previous research, this study constructed a model of influencing factors on consumer willingness to use community group buying platforms. Based on the technology acceptance model, the study investigated the effects of group buying product factors, perceived usefulness, and perceived ease of use on consumer willingness to use. The following conclusion has been drawn:

[1] This study is based on TAM and combines previous research experience to construct a research model and propose research hypotheses. This includes the impact of group buying product factors on the perceived usefulness and perceived ease of use of intermediate variables, as well as the direct impact of perceived usefulness and perceived ease of use on usage intention. Based on this, a survey questionnaire for this study was designed with reference to mature scales from existing research, and distributed and collected. The reliability and validity of the questionnaire

were tested using SPSS software, and the results showed that the questionnaire design was reasonable and the data was reliable.

[2] Use structural equation modeling to test research hypotheses. The results indicate that the research hypothesis is valid, that is, group buying products have a significant positive impact on perceived ease of use and perceived usefulness; perceived usefulness and perceived ease of use have a significant positive impact on usage intention.

[3] Based on the research results, proposed countermeasures and suggestions to promote the development of community group buying. Community group buying platforms need to improve product quality and gain a good reputation. And design promotional strategies to attract new users and maintain existing customers. Finally, optimize platform functions and other aspects to enhance user perception of usefulness.

[4] For the platform, terminal distribution and logistics are also important factors affecting external variables such as product quality. In addition, the price of the product is an important factor affecting the purchase intention, so the platform should appropriately improve and optimize its own marketing strategy, so that it cannot only attract more consumers through concessions and activities, but also enhance the user's perceived usefulness to enhance the purchase intention.

5.2. Management Implication

From the research results, the factors that affect consumers' willingness to use the community group buying platform are consumers' perceived usefulness and perceived ease of use, while the product factors of the community group buying platform will affect consumers' perceived usefulness and perceived ease of use. Product factors include product quality, price and variety. According to the above research results, consumers' willingness to use the community group purchase platform can be improved in the following ways.

[1] Improve product quality and gain good reputation.

The community group purchase platform should strictly control the product quality. In the community group buying mode, the residents in the community know each other. Once the negative information about the product is spread, it will cause a large number of customers to lose. High quality suppliers are an important foundation for the stable development of the platform. When selecting suppliers, it is necessary to select suppliers with good commodity quality. Food commodities should be fresh and regular, and daily-use commodities should be practical and durable. The community group purchase platform should abide by the quality, safety and integrity, and should not sell fake and shoddy products, three non-products, and shoddy products;

supervision should be strengthened in the process of packaging, storage and transportation, and sales, so as to achieve standardization and institutionalization. If community group buying wants to get more users, it should strengthen quality supervision and form a good reputation in terms of product quality. Once word of mouth is formed, consumers will publicize the products of the platform by themselves. On the premise of maintaining existing users, allowing existing users to promote the products to more people can obtain a steady stream of users.

[2] Formulate promotion strategies to continuously attract users.

Community group buying should have price advantage while ensuring product quality. Preferential products will stimulate customers' purchase intention. To maintain the development of community group buying, it is necessary to provide consumers with high-quality and low-cost products. In addition, the community group purchase platform can do some promotional activities. For example, the platform can provide shopping discounts or coupons for new users to improve their willingness to use. For existing users, you can provide irregular flash sale activities to improve their willingness to use again.

[3] Meet users' needs and improve users' perception of usefulness.

The community group buying platform should better meet the needs of consumers. Whether it is to improve product quality or higher discounts, it is necessary to satisfy consumers and make them feel that community group buying is useful. Community group buying can improve consumers' perceived usefulness and perceived ease of use by optimizing the functions of the platform and the group buying process. In addition, customer relations can be maintained through the head. As a role in community group buying, the head plays an important role in the publicity and drainage promotion of platform products. The group leader can communicate with users at any time through group chat, so as to fully understand users' ideas and needs and enhance their sense of experience.

5.3. Limitations and Future Research

Although this study has reached ideal conclusions, there are still shortcomings due to insufficient time and personal abilities.

The respondents selected in this study are young people, most of the subjects' occupations are students. Therefore, the research scope can be expanded as much as possible, the quality of the questionnaire can be improved, and further analysis can be carried out more accurately.

Due to limited capabilities, this study only investigated the external variable of group buying products and did not conduct a comprehensive and in-depth study on the

influencing factors. The logistics of community group purchase is also one of the highlights that is different from the traditional e-commerce mode, and its logistics mode is also closely related to the quality of products. As an important link, this paper does not consider it too much. In future research, external variables can be further corrected and improved.

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