

The Influencing Factors of E-Commerce Agricultural Sales on Chongqing Consumers' Purchase Intention in the Era of New Social Media

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Abstract

With the advent of e-commerce, a new model has surfaced—community e-commerce. This model fosters a community of users with shared interests and values, offering targeted content marketing to cater to their specific needs. By investigating the factors that shape customers' purchasing decisions on community e-commerce platforms, we can unearth invaluable insights into the sustainable growth of this model. Agricultural retailers are confronted with customer attrition due to channel integration. Therefore, providing a consistent online shopping experience in an omnichannel environment has become necessary to meet customers' expectations. The study, encompassing 385 respondents, underscores that consumers' online purchase intention on e-commerce agricultural sales in the era of new social media is influenced by their motivation, perceived value, and perceived attitude, thereby highlighting the significance of these factors in shaping consumer behavior.

Keywords : E-Commerce Agricultural Sales, Purchase Intention, New Social Media

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INTRODUCTION

The agricultural product industry belt is a fundamental requirement for transforming and upgrading agriculture, enhancing the modernization level of the industrial and supply chain, and improving the quality and efficiency of agricultural development (Richards et al., 2017). It is crucial to leverage the agglomeration effect of characteristic industrial clusters, expand the scope for industrial development, boost farmers' income, and promote local and regional economic development paths (Jin et al., 2018). Agricultural product e-commerce, particularly the growth of all-interest e-commerce, is not just a new strategy to drive the large-scale expansion of specialty agricultural products and optimize the product structure but also a means to foster specialty product brands and broaden product value-added space, a new impetus to hasten the formation of industrial belts. The national interest in e-commerce has discovered a new catalyst for transforming and upgrading the agricultural product industry by altering how information interacts between producers and consumers (Yan et al., 2020). Short videos and live broadcasts are multi-dimensional information exchanges that have revolutionized the traditional method of showcasing the quality of agricultural products with single product identification and quality standards. This interactive communication offers new avenues for further industry growth. The driving force for industrial development has transitioned from purely consumption-driven to a stage combining consumption-driven and supply-led, bringing new momentum to transforming and upgrading agricultural products (Zheng et al., 2020).

This research explores the purchase intention of agricultural products in the era of new social media in Chongqing with the following objectives:

1. To examine the influencing mechanisms of Chongqing consumers' purchase intentions in e-commerce agricultural sales based on motivation, perceived value, and perceived attitude.
2. To provide additional evaluations to improve Chongqing consumers' satisfaction with agricultural sales through the e-commerce platform in the new social media era.

Therefore, this study aims to determine the effect of three independent variables, social interaction, social trust, and user-generated content, on the dependent variable of Chongqing consumers' purchase intention in e-commerce agricultural sales based on three popular theories - SOR, TPB, and TAM.

THEORETICAL FOUNDATION

Stimulation-Organism-Response (SOR) Model

The S-O-R model is one of the foundations of modern cognitive psychology, explicitly explaining the predictive impact of environmental features on users' emotional responses and subsequent behaviors (Mehrabian & Russel., 1974). Approach and avoidance behaviors are two intuitive responses to environmental stimuli. However, the initial S-O-R model cannot explain the interaction between environmental stimuli and user information processes. The S-O-R model only includes the influence of environmental stimuli and does not explain cognitive information processes. This model shows that consumers' purchasing behavior is caused by stimuli from both physiological and psychological factors inside the consumer's body and the external environment. Consumers are motivated by various factors. Driven by motivation, they purchase goods and implement purchasing behaviors (Chen et al., 2020). After purchase, they will also evaluate the purchased goods and their related channels and manufacturers. In this way, a complete purchasing decision process was completed. The S-O-R model is commonly used to study consumer purchasing behavior in online shopping environments. Research mainly focuses on which stimulus factors can prompt consumers to purchase (Wang & Wang., 2019).

Theory of Planned Behavior (TPB) and Technology Acceptance Model (TAM)

Online purchases have become an integral part of our lives, and understanding customers' purchase intentions is crucial for e-commerce platforms. The Theory of Planned Behavior (TPB) has been widely used as a theoretical framework to investigate customer purchase intentions. The TPB model consists of three key factors: attitude toward online purchases, subjective norms, and perceived behavioral control. These factors predict online purchase intention (Aertsens et al., 2009).

Perceived value has been introduced as a precursor to attitude to enhance the TPB model. Perceived value refers to the customer's perception of the value they will receive from the product or service. Various studies have found that this factor strongly predicts customer behavior (Gan & Wang., 2017).

Furthermore, the Technology Acceptance Model (TAM) has been integrated into the TPB to explain online purchase intention better. The TAM model was initially designed to predict the acceptance of computer use. It uses two key factors: perceived ease of use and perceived usefulness. Perceived ease of use refers to the customer's perception of how easy it is to use the technology. Perceived usefulness refers to the customer's perception of the technology's usefulness (Davis & Davis, 1989).

This research innovatively combines the TAM and TPB models by directly associating perceived ease of use and usefulness with attitudes toward online purchases. Perceived ease of use

was also considered a precursor to perceived usefulness, which may influence online purchase intention. Integrating the TAM and TPB models provides a more comprehensive understanding of customer purchase intentions on e-commerce platforms. This novel approach enhances our understanding of customer behavior in the digital marketplace (Song & Jo., 2023).

Terms

Online purchase intention refers to customers' desire to buy products or goods from e-commerce trading platforms. The importance of purchase intention has been confirmed in various research fields, including studies on organic food consumption (Paul et al., 2016). Research studies indicate that utilitarian and hedonic motivations (Akram et al., 2021) are significant factors that influence online purchase intentions. Among these motivations, hedonic motivations have a more significant impact than utilitarian ones. On the other hand, risks tend to negatively affect consumers' purchase intention on e-commerce platforms directly or indirectly through mediators.

Purchasing motivation refers to the desire or idea that causes people to purchase to satisfy specific needs. In real life, each consumer's purchasing behavior is triggered by his purchasing motivation, and human needs generate motivation. When people are hungry, they want to eat; when they are thirsty, they want to drink water. This manifests human needs generating motivation and motivation-causing behavior (Chen et al., 2018). Consumer purchasing motivation is the internal driving force that drives consumers to purchase. People's purchasing motivations are closely related to human needs, and needs are the driving force behind consumers' purchasing behavior.

Customer perceived value is a crucial concept determining how customers perceive a company's products or services during purchase or consumption. It is a combination of the benefits or value that customers receive from the products or services, such as the economic, functional, and psychological value, along with the total cost involved in purchasing or using them. This cost includes the financial aspect and the time and energy spent acquiring and using the product or service. Therefore, customer perceived value is a subjective evaluation of how helpful and valuable a product or service is to the customer based on their needs and preferences. It is important to note that customer-perceived value is not the same as the objective value of a product or service, as it is influenced by factors such as customer expectations, personal experiences, and other subjective elements (Onofrei et al., 2022).

Consumer perceived attitudes are crucial in determining their purchase decisions. Attitudes are formed based on their beliefs, feelings, and evaluations of a product or brand. Positive attitudes are more likely to result in a purchase intention. When making purchase decisions, consumers' attitudes toward a brand or product can significantly influence their choices. Attitudes are formed based on various factors, including beliefs, feelings, and evaluations of the object. Consumers with positive attitudes toward a brand or product are likelier to develop a purchase intention and follow through with a purchase (Yan et al., 2021).

RESEARCH HYPOTHESIS

The Impact of Motivation on Online Purchase Intention

Motivation variables, essential to a buyer's purchase behavior process, also impact a person's purchasing decisions. Individuals use these instruments to identify their emotions, collect and evaluate information, develop thoughts and views, and take action on personal factors. An assessment of conduct is described as value in product and service factors. It relates to positive affect, satisfaction, joy, dislike, disgust, or hatred for specific behavior. The platform is a functional construct that reflects an individual's willingness to behave or respond in a particular platform

(Voon et al., 2011). Thus, the motivation for online buying significantly affects the desire to purchase online (Limayem et al., 2000).

H1. Motivation does not significantly impact online purchase intention in e-commerce agricultural sales.

The Impact of Perceived Value on Online Purchase Intention

The term "shopping value" encompasses a broad assessment of subjective and objective factors that shape the shopping experience (Wu & Huang., 2023). Researchers widely employ this concept to gain insight into and forecast consumer preferences and online purchase decisions. Building on the foundational idea of perceived value, Sheth et al. (1992) extended the scope of this framework to incorporate subjective norms and perceived behavioral control, further enhancing our understanding of the complex dynamics involved in how individuals evaluate and choose products and services.

H2. Perceived value does not significantly impact online purchase intention in e-commerce agricultural sales.

The Impact of Perceived Attitude on Purchase Intention

When examining consumer attitudes in e-commerce, there are two perspectives to consider. The first perspective centers on perceived usefulness and evaluates it regarding online functionalities. Based on studies of perceived ease of use, the second perspective focuses on web trust, which is the connection between a consumer and a specific transactional or informational website. In this context, ease of use refers to the subject's attitude toward the website's use in a sales network environment relative to their expectations. Considering both viewpoints, it can better understand consumer attitudes and behaviors in e-commerce (Gong et al., 2013).

H3. Perceived attitude does not significantly impact online purchase intention in e-commerce agricultural sales.

CONCEPTUAL FRAMEWORK

With the implementation of the new social media era, e-commerce platforms have become essential tools in most product and service sales promotion. With the integration of community factors into the Internet, community e-commerce models have sprouted to meet diversified demands and are gaining attention from more consumers. As the community economy continues to evolve, it has become intertwined with the internet, leading to the emergence of community e-commerce models. These models offer a diverse range of products and services, catering to the unique demands of consumers. As a result, community e-commerce has garnered significant attention from consumers seeking a more personalized and localized shopping experience.

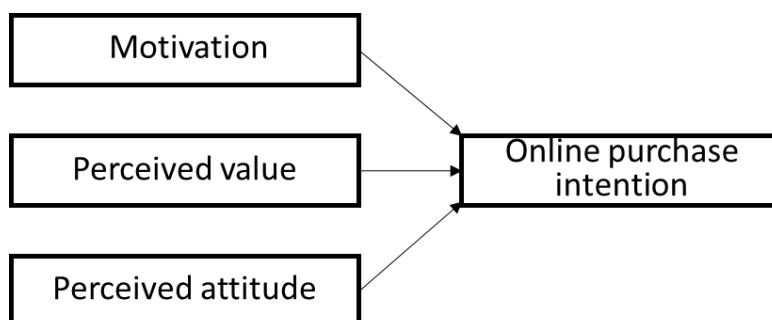


Figure 1. The Conceptual Framework

RESEARCH METHODS

Populasi dan Sampel

This research population comprises Chongqing, China, consumers who purchase ecommerce agricultural sales under the new social media era. A sample of 385 was collected for this study's analysis in January 2024.

This study's minimum research sample size is based on the following formula, which is widely accepted for analysis (Etikan & Babatope., 2019)

The margin of error (confidence interval) - 95%

Standard deviation 0.5

95% - Z Score = 1.96

Sample size formula = $(Z\text{-score})^2 * Std\ Dev*(1\text{-StdDev}) / (\text{margin of error})^2$

$(1.96)^2 \times 0.5(0.5) / (0.05)^2$

$(3.8416 \times 0.25) / 0.0025$

$0.9604 / 0.0025 = 384$

Three hundred eighty-four respondents would be needed for this study based on a confidence level of 95%.

Research Model

Regression analysis is a statistical method for analyzing the relationship between multiple independent variables of a hypothesis and a set of dependent variables. It also assesses the strength of relationships between variables and models future relationships between them. SPSS20.0 was used to include the test of correlations coefficient of determination, multiple linear regression, and testing this study's hypotheses.

RESULT AND DISCUSSION

Regression analysis of various variables on online purchase intention

The model summary shows a strong correlation (91.9%) between motivation, perceived value, perceived attitude, and online purchase intentions. The R-value is 0.955, the R-squared value is 0.916, and the adjusted R-squared value is 0.919. Additionally, the Durbin-Watson test result is 1.875, close to 2. This indicates that the residuals in the model are independent, and there are no issues with serial correlation.

Table 1. Summary of the regression analysis model of constructs and online purchase intention

Model	R	R ²	Adjust R Square	Standard estimate error	Durbin-Watson
1	0.955a	0.916	0.919	0.91123	1.875

The following are the results of the single-factor analysis: the regression sum of squares is 3884.212, the residual sum is 277.435, and the significance is 0.000, which is less than the significance level of 0.01. This study indicates significant differences between the independent and dependent variables. The study shows a substantial effect between motivation, perceived value, perceived attitude, and online purchase intentions.

Table 2. ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	3884.212	3	3842.663	4486.336**	.000 ^c
1	Residual	277.435	381	0.665		
	Total	4161.647 ^d	384			

**p ≤ .01

- a. Dependent variable: Online purchase intention
- b. Predictor variables: Motivation, perceived value, and perceived attitude

Table 3. Multiple Linier Regression Analysis Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.886	1.336		4.365	.003
	Motivation	.335	.022	.366	1.245	.011
	Percieved Value	.243	.018	.273	1.557	.025
	Perceived Attitude	.415	.018	.438	2.226	.023

*p ≤ 0.05

- a. Dependent Variable: Online purchase intention
- b. Predictor variables: Motivation, perceived value, and perceived attitude

The regression equation of the multiple linear regression analysis

$$Y = \alpha + \beta X_1 + \beta X_2 + \beta X_3 + e$$

$$Y = \alpha + 0.335 X_1 + 0.243 X_2 + 0.415 X_3$$

Description:

- Y = Online Purchase Intention α = Constant
- X1 = Motivation
- X2 = Perceived value
- X3 = Perceived attitude
- e = Error
- β1 = First Regression Coefficient Number
- β2 = Second Regression Coefficient Number
- β3 = Third Regression Coefficient Number

The table of coefficients displays the impact of motivation, perceived value, perceived attitude, and online purchase intention after adding constants to the inequality. From this, it can be concluded that these factors are significantly related.

Interpretation of Research Results

The mechanism by which consumers play a vital role in the relationship between the independent variables of motivation, perceived value, perceived attitude, and the dependent variable of online purchase intention on their e-commerce agricultural sales based on the era of new social media.

The Effect of Motivation on Online Purchase Intention

The results of testing the first hypothesis indicate that motivation significantly impacts the online purchase intention of agricultural sales. This is based on the standard regression coefficient of the economic level, which is 0.335, with a t-value of 1.245 and a significance level of 0.011, less than 0.05. Therefore, H1 is not established. Motivation significantly impacts online purchase intention in e-commerce agricultural sales.

The Effect of Perceived Value on Online Purchase Intention

The results of testing the second hypothesis indicate that perceived value significantly impacts the online purchase intention of agricultural sales. This is based on the standard regression coefficient of the economic level, which is 0.243, with a t-value of 1.557 and a significance level of 0.025, less than 0.05. Therefore, H2 is not established. Perceived value significantly impacts online purchase intention in e-commerce agricultural sales.

The Effect of Perceived Attitude on Online Purchase Intention

The results of testing the third hypothesis indicate that perceived attitude significantly impacts the online purchase intention of agricultural sales. This is based on the standard regression coefficient of the economic level, which is 0.415, with a t-value of 2.226 and a significance level of 0.023, less than 0.05. Therefore, H3 is not established. Perceived attitude significantly impacts online purchase intention in e-commerce agricultural sales.

CONCLUSSION

The research study concluded that motivation, perceived value, and perceived attitude significantly impact online purchase intention for Chongqing consumers in e-commerce agricultural sales. The results showed that all three influencing variables experienced by Chongqing consumers proved crucial to using e-commerce platforms in farm product sales. Social commerce is a combination of e-commerce and social media. It utilizes network technology and social media to encourage users to interact socially, build trust, and generate content. This ultimately leads to changes in consumer purchasing behavior, especially in agriculture. The most critical aspect of social commerce is social interaction, which can help boost the sales of farmers' agricultural products in the consumer market.

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