



Influencing Factors of Consumer Behavior of Fresh Electricity Supplier Enterprises

Hailing Hong*, Chaiyawit Muangmee, Nusanee Meekaewkunchorn

Faculty of Management Sciences, Bansomdejchaopraya Rajabhat University, Bangkok, Thailand

*Corresponding author: Hailing Hong 99768498@qq.com

Abstract. This paper takes the fresh electricity supplier L enterprise as an example to study the influence of consumer behavior factors. Based on AISAS model, through the analysis of these influencing factors, the influence level of each factor on consumer action is obtained, and the improvement of marketing and operation of fresh e-commerce enterprises is discussed. The main tool of this study is questionnaire survey, with a total sample space of 3.85 million, 400 samples were actually collected, 400 valid questionnaires were issued, and specific influencing factors were studied through quantitative analysis and statistical methods. This includes the analysis of the collected data. Through basic analysis, reliability analysis, validity analysis, correlation analysis and regression analysis, the validity of the questionnaire is good, and the influence of attention factor, interest factor, search factor and sharing factor on consumer action is analyzed, and the internal law between independent variable and dependent variable is found out. Finally, the research finds that interest factor and sharing factor have a greater impact on consumer action, while search factor and attention factor have a relatively small impact on consumer action. In addition, according to the research conclusions, this paper puts forward suggestions to improve customer service, marketing strategy and operation, which can provide reference for similar e-commerce enterprises.

Keywords: AISAS model, consumer behavior, fresh electricity supplier.

1 Introduction

The fresh e-commerce industry in China has developed over nearly 20 years. It began in 2005 with the establishment of Yiguo Network, followed by platforms like Tuotuo Working Society and Daily Orchard. Between 2014 and 2015, the market grew rapidly, reaching 4000 businesses by 2016. A reshuffle occurred from 2016 to 2020⁴, with many small and medium-sized enterprises closing or merging. Meanwhile, giants like Alibaba, Tencent, and JD.com entered the market, investing heavily in cold chain logistics and fresh supply chains, introducing innovative models and reshaping the industry.

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Fresh products refer to items sold without deep processing, such as fruits, vegetables, meat, and aquatic products. These products have short shelf lives, require refrigeration, and are often sold in bulk. The supply chain includes upstream suppliers, midstream suppliers, e-commerce platforms, logistics providers, and end consumers.⁶ To reduce costs and improve efficiency, many businesses use direct sourcing and farm sales, bypassing midstream suppliers. Innovative models like the supplier-operation center (CFC)-spoke site-customer model have improved order accuracy and reduced delivery times.

Despite advancements, challenges remain, including small circulation radii, high product loss rates, lack of standardization, and high markup rates.⁷ Cold chain logistics utilization is low, leading to high loss rates in transportation. Improving infrastructure and increasing investment in cold chain logistics, warehousing, and supply chain management are crucial. The "new retail" model, exemplified by Hema Fresh, integrates online and offline experiences, enhancing customer satisfaction and meeting high consumer demand for fresh products.

2 Literature Review

The document focuses on reviewing existing literature related to consumer behavior and theoretical models. It begins by defining consumer behavior as a series of actions taken by individuals to meet their needs through the purchase, comparison, use, and evaluation of goods and services. Several scholars' definitions of consumer behavior are explored, highlighting the complexity, diversity, and unpredictability of consumer actions⁵.

The chapter discusses the historical evolution of consumer behavior research, starting with early 20th-century theories like Veblen's conspicuous consumption and progressing to modern models that account for digital and online influences. Key models examined include the AIDMA model (Attention, Interest, Desire, Memory, Action) and its evolution into the AISAS model (Attention, Interest, Search, Action, Share), which addresses changes in consumer behavior in the internet era¹¹.

The literature review includes significant contributions from both Western and Chinese scholars. Western theories, such as those proposed by Del Hawkins and Roger Blackwell, are detailed. Hawkins' model emphasizes the decision-making process influenced by external and internal factors, while Blackwell's models focus on the stages of acquisition, consumption, and disposal of products¹².

Chinese scholars have also contributed notably to the field¹. Studies range from analyzing factors affecting consumer behavior in specific markets, like the internet era or high-quality livestock products, to broader analyses of consumer psychology and its impact on purchasing decisions.

Overall, the chapter provides a comprehensive overview of the theoretical underpinnings of consumer behavior, the evolution of consumer behavior models, and insights from both international and domestic research, setting a solid foundation for understanding consumer actions and informing marketing strategies.¹³

The four hypotheses presented in the study are as follows:

- H1: Attention is positively correlated with consumer behavior
- H2: Interest is positively correlated with consumer behavior.
- H3: Search n is positively correlated with consumer behavior.
- H4: Sharing is positively correlated with consumer behavior.

3 Research Methodology

Outlines the process and tools used for conducting the research. The study focuses on the total population of Z city, with a sample size determined using the Taro-Yamane formula, resulting in 400 participants. Stratified sampling was employed, and questionnaires were distributed online.

The research instruments include a carefully designed questionnaire based on the AISAS (Attention, Interest, Search, Action, Share) model, which is tailored to the consumer behavior in the context of L enterprise, a fresh e-commerce business. The questionnaire covers various aspects such as browsing frequency, collection of shops and goods, search behavior, purchase frequency, and sharing experiences.³ The study aims to understand how these factors influence consumer actions in the online shopping environment.

The chapter also details the data collection process and the statistical methods used for data analysis, ensuring a rigorous and systematic approach to gathering and interpreting the data¹⁴. This methodology provides a comprehensive framework for examining consumer behavior in the fresh e-commerce sector, focusing on the interaction between consumers and the online platform. the consistency index between the questionnaire and the research objective is greater than 0.6. Therefore, the accuracy of the questionnaire content is within the acceptable standard range. As shown in Table 1, Cronbach's alpha values of all variables in this questionnaire exceeded 0.8, indicating that these variables had good reliability and could be used for formal questionnaire survey.

Table 1. Questionnaire Cronbach's Results of Data Analysis

Variable Items	Sample size	N of Items	Cronbach's alpha
Attention	400	4	0.852
Interest	400	4	0.840
Search	400	4	0.851
Sharing	400	4	0.845
Action	400	5	0.856
Total	400	21	0.923

3.1 Correlation Analysis

As can be seen from Table 2, According to the results of the above table obtained from the correlation analysis of 400 valid questionnaires, some research conclusions are drawn.

Attention are positively correlated with customer behavior, and Pearson's correlation coefficient is 0.459, with a significance of 0.000, indicating strong significance among variables. Interest factor is positively correlated with customer behavior, and Pearson correlation coefficient is 0.498 the significance is 0.000, and the significance among variables is strong. Search factor is positively correlated with customer behavior, and Pearson's correlation coefficient is 0.435, indicating a significant correlation between variables of 0.000.Share factor is positively correlated with customer behavior, and Pearson correlation coefficient is 0.422 with a significance of 0.000, indicating strong significance among variables.

According to the above data analysis, the attention factor, interest factor, search factor, sharing factor and action of consumer behavior in L fresh e-commerce enterprise customers are positively correlated, and the correlation coefficient is basically above 0.4, indicating that the independent variable has a high correlation with the dependent variable. Therefore, the hypothesis proposed by H1, H2, H3 and H4 above has been strongly confirmed.

Table 2. sis (Pearson)

variable	X1	X2	X3	X4	Y
Attention(X1)	1	.558**	.544**	.499**	.459**
Interest (X2)	.558**	1	.528**	.428**	.498**
Search (X3)	.544**	.528**	1	.447**	.435**
Share (X4)	.499**	.428**	.447**	1	.422**
Action (Y)	.459**	.498**	.435**	.422**	1

4 Regressive Analysis

In order to further analyze the impact of digital transformation of commercial banks on customer behavior, this paper further studies the relationship between independent variables and dependent variables, establishes a regression model, and estimates model parameters according to actual survey data. Then, the regression model is evaluated to evaluate whether the regression model can represent the actual data, and then the further prediction is made.

This paper conducts regression analysis on the factors affecting customer behavior. The independent variables are efficiency and trust scale, reception capacity factor, price factor, tangible asset factor, service responsibility factor and reliability factor, and the dependent variable is customer behavior. The regression model is established:

$$y=b_0+b_1x_1+b_2x_2+b_3x_3+b_4x_4+b_5x_5$$

As can be seen form Table 3, The dependent variable y represents the customer behavior and is the estimated value calculated from all the independent variables x, b0 is the constant term, b1,b2,b3,b4,b5,b6 is the regression coefficient of x1,x2,x3,x4,x5,x6, and C is the random error. The regression coefficient is a constant and represents the rate at which a change in the independent variable x causes a change in the dependent variable y, other things being equal. The following model is obtained through the analysis with SPSS software.

Collinearity diagnosis: VIF>5 indicates that there is a collinearity problem; VIF less than 5 indicates that there is no collinearity problem, and the constructed model is effective. The results of this analysis show that the VIF value is less than 5, indicating that the model is effective.

In the model, R²=0.334, adjusted R²=0.328, that is, the reason why attention factor, interest factor, search factor and sharing factor affect action is 33.4%.

According to regression analysis that the above Unstandardized standardized coefficients are 1.448, 0.127, 0.25, 0.167, 0.120, 0.158, respectively. The significance of all variables is less than 0.05, indicating that the coefficients are very significant. Therefore, the customer behavior regression equation can be obtained by substituting the coefficients into the model.

$$Y = 1.448 + 0.127x_1 + 0.250x_2 + 0.120x_3 + 0.158x_4$$

To sum up, interest factor and sharing factor have a greater impact on consumer action, while search factor and attention factor have a relatively small impact on consumer action. From the point of view of coefficient, interest factor has the greatest influence, and search factor has the least influence.

Table 3. Results of coefficient a

variable	B	Std Error	Beta	t	Sig	Tolerance	VIF
(Constant)	1.448	.179		8.081	.000		
Attention	.127	.046	.150	2.736	.006	.557	1.794
Interest	.250	.049	.271	5.140	.000	.605	1.653
Search	.120	.047	.134	2.557	.011	.609	1.642
Share	.158	.045	.171	3.481	.001	.693	1.444
R	0.578a						
R ²	0.334						
Adjusted R ²	0.328						
F	F=49.879, sig=.00b						

5 Conclusions

This study takes L company as an example to explore the factors that affect consumer behavior in fresh e-commerce enterprises. This study involves collecting data through questionnaire surveys and conducting comprehensive data analysis, including reliability, validity, correlation, and regression analysis. Four main factors were studied: attention, interest, sharing, and search⁸.

The results indicate that all four factors have a positive impact on consumer behavior, with interest and sharing factors having a greater impact compared to attention and search factors. Specifically, interest factors have the greatest impact, while search factors have the smallest impact². This is consistent with Kotler's view that consumer be-

havior should be analyzed from both subjective and objective perspectives, emphasizing the importance of external stimuli and internal motivation in driving consumer behavior.

The discussion section emphasizes the role of internal and external environmental factors in shaping consumer behavior. External factors include consumer culture and environment, while internal factors include personality traits, lifestyle habits, attitudes, perceptions, motivations, and social roles. These findings are supported by previous studies such as Charlotte GB and Priya R, which emphasize the significant impact of consumer environment and scenario shaping on actual consumer behavior. In addition, Mithilesh Pandey's research emphasizes the impact of media and peer recommendations on consumer behavior, particularly in purchasing decisions⁹.

At the end of this chapter, it is proposed that fresh e-commerce enterprises should focus on enhancing interest and sharing in order to improve customer service and retention rates. Future research recommendations include exploring other potential influencing factors and studying their effects in different contexts to gain a more comprehensive understanding of consumer behavior in the field of e-commerce¹⁰.

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