

Factors that Influence Agricultural Products' Marketing Strategies on Consumer Buying Behavior in Hainan Province, China: Basis for Network Marketing Model

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Feng Zeng^{1,2}, Lin Peng¹

¹School of Economics and Management, Hainan University, Haikou City, China; ²Graduate School, Lyceum of the Philippines University, Batangas City, Philippines
632245747@qq.com

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Abstract – The development of the Internet in China is already the trend of the times. As a traditional industry, China's agriculture is also trying to infiltrate and integrate with the internet. At present, Hainan Province is increasing the application of Internet in agricultural products marketing, giving full play to the important role of network marketing, and actively guiding Hainan agricultural enterprises and farmers' professional cooperatives to use e-commerce platforms to expand Hainan's agricultural product marketing channels and accelerate Hainan's agricultural development. Reliability, descriptive, correlation, T-test, ANOVA and multiple regression analysis were utilized in this study. The respondents in this study were the 600 customers from Hainan province and other provinces in China. This study found that product strategy, price strategy, promotion strategy, people strategy and process strategy have a significant impact on consumer buying behavior, but the influence of place strategy and physical evidence strategy is not significant. This paper elaborates that agricultural products network marketing is an emerging and efficient marketing method for agricultural products and proposes a model of Hainan agricultural products network marketing. This study shows that the current Hainan agricultural products network marketing strategy is more suitable for the 5Ps, rather than the traditional 7Ps.

Keywords – Marketing Strategies of Agricultural Products, 7Ps, O2O, Consumer Buying Behavior, Network Marketing Model

INTRODUCTION

This study aimed to determine marketing strategies of agricultural products in Hainan China as the basis for a new network marketing model to improve the market competitive advantage of Hainan agricultural products to enhance its brand image and increase the sales volume.

Hainan is the only tropical island province in China. It can produce agricultural products all the year round. Tropical agriculture is a dominant industry developed under this climate background. Hainan province is an important winter vegetable and tropical fruit production base in China, with adequate light temperature, abundant rainfall and fertile land.

With the rapid development of Internet industry, it has brought new opportunities for the development of agricultural products marketing in Hainan Province of China. In recent years, the variety of tropical agricultural products in Hainan has become more and

more abundant, the yield is rising steadily, and the development trend is good. Hainan's agricultural products are popular in more than 50 countries and regions and more than 180 large and medium cities in China.

At present, mobile Internet has become an important carrier of agricultural product marketing. As an emerging marketing method, network marketing is increasingly recognized by many agricultural enterprises and many consumers. In 2016, the trade volume of e-commerce in agricultural products in China exceeded 220 billion Yuan [1]. Internet has promoted Hainan's tropical agriculture development and industrial upgrading.

On August 20, 2018, the China Internet Network Information Center (CNNIC) released the 42nd Statistical Report on China's Internet Development in Beijing. As of June 30, 2018, the number of Internet users in China reaches 802 million, and the penetration

rate reached 57.7%; the number of mobile Internet users reached 788 million, and the proportion of Internet users using mobile Internet access reached 98.3%. China's rural Internet users accounted for 26.3%, 211 million, 73.7% and 591 million respectively; online shopping users accounted for 569 million, accounting for 71.0% of the total Internet users; and online take-out users in China reached 364 million. China's online payment users reached 569 million, an increase of 7.1% from the end of 2017, and the proportion of users increased from 68.8% to 71.0%. Among them, the mobile payment users reached 566 million, an increase of 7.4% in six months [2].

With the rapid development of information technology and network technology, the operating mode and marketing strategies of agricultural products based on Internet have been proved to be a new and effective business model and have received wide attention of the whole society.

OBJECTIVES OF THE STUDY

The study aims to identify the factors influencing network marketing in terms of product, price, place, promotion, people, physical evidence, process and buying behavior; to test the significant relationship of Hainan agricultural products network marketing strategies on consumer buying behavior; to come up with a new network marketing strategies model that can be adopted by Hainan agricultural products.

LITERATURE REVIEW

4Ps theory is the basic framework of marketing theory. 7Ps theory added 3P on the basis of 4Ps theory. The focus of 4Ps theory lies in the product itself, and the 7Ps theory is more concerned with the addition of the product, such as services. 7Ps theory includes product, price, place, promotion, people, physical evidence, and process. The Marketing theory of 7Ps also constitutes the basic framework of service marketing [3]. In today's world, the corporate competitive strategy centered on the 7Ps concept has proven to be more and more applicable to today's increasingly competitive business environment.

With the development of Internet and other technologies, new ideas have been injected into 7Ps service marketing theory, and new requirements have been put forward for service marketing based on 7Ps theory. Increased network marketing mix, combined with more experiential services, customized services, online services and other content. The organic combination of service marketing and online marketing

will inevitably cause a major change in corporate marketing strategy [4].

Network marketing is based on the Internet as a basic means of marketing as an integral part of the enterprise marketing strategy for the realization of corporate marketing activities conducted by the online marketing. It has two main characteristics, one is based on the Internet, all marketing models or marketing activities are based on the Internet as a medium; the other is part of the marketing sphere, and physical marketing is the corresponding and belongs to the marketing form [5].

Network marketing is not equal to website promotion, nor is it merely selling products online. It is to say that network marketing is the extension of traditional marketing mode under the background of Internet. The characteristics of network marketing are as follows: beyond the limits of time and space; reducing market transaction costs; effectively integrating the marketing resources of the enterprise; diversified forms of network marketing.

In terms of comparison between network marketing and traditional marketing, as a new marketing means, the emergence of network marketing is ultimately to achieve the purpose of achieving sales. In essence, the network marketing is a means to apply the traditional marketing concept to the Internet.

Network marketing can be divided into four modes: Businessman and Businessman (B to B); Businessman and Customer (B to C); Customer and Customer (C to C); Online to Offline (O to O). B2B and C2C often go through middlemen. They don't need to consider other issues such as logistics and inventory, etc. B2C must take this factor into account. As a special commodity, agricultural products have certain requirements for their cycle and shelf life. Therefore, logistics and inventory factors must be taken into consideration. Therefore, B2C should be the most common network marketing mode. The new model should add to the factors of the government (G), so agricultural products network marketing model of B2B, B2C, B2G and C2C and C2G should be finally formed [6].

O2O is the customer online consumption, and to enjoy offline related services, such as "group buying". O2O does not need logistics, customer purchase of goods must go offline to get. On the surface, the key to the O2O model seems to be based on the benefits of the network, and in fact, its core is online payment [7].

O2O model is quite different from the concept of traditional e-commerce. It mainly drives offline

transactions through online business expansion, and combines online business opportunities with the internet, and transforms the internet into the foreground of offline transactions [8].

O2O model of agricultural products can not only solve consumer demand for high-quality and healthy agricultural products, but also use online and offline support. When merchants learn about the needs of consumers in a certain area near the physical store, physical stores can quickly provide intimate services to consumers in specific areas, so as to maximize the freshness of agricultural products and increase consumer satisfaction with agricultural products and services [9].

Network marketing of agricultural products refers to the distribution and collection of information, such as the supply and demand of agricultural products, and the price of the agricultural products in the process of the sale of agricultural products. Relying on the Internet as the medium, relying on the agricultural production base and logistics distribution system, it is a new marketing activity for local agricultural products to enhance brand awareness, improve customer service, promote customer relationship and expand network sales channels [10].

Simply speaking, agricultural product network marketing is a series of marketing activities of agricultural products that are carried out by network technology, and it is a marketing way to realize agricultural products publicity, sales and business activities by means of Internet.

Some scholars have conducted in-depth research on the existing problems, practical significance, influencing factors of consumer Internet Purchase Intention and operation mode of agricultural product network marketing.

Wu and Hao (2011) pointed out that, with the increasing popularity of the Internet in China, the continuous expansion of the coverage of telecommunications business and the continuous reduction of related costs will contribute to the stable and healthy development of the network marketing of agricultural products. Various types of websites can directly or indirectly provide comprehensive services for the agricultural production process and the marketing process of agricultural products [11].

Gong (2012) pointed out that the problem of oversupply of agricultural products in China can be solved through network marketing. The Internet media should be effectively applied, and at the same time, combined with the more mature resource advantages,

such as the production and distribution of agricultural products, the security control and so on, so as to achieve the perfect integration of online sales and offline services [12].

Xia and Pan (2012) combined with the traditional marketing of agricultural products and the new network marketing, studied the marketing of agricultural products in China, and creatively put forward the new concept of "Company + Farmers + Network Marketing" and other new network marketing concepts [13].

Luo (2012) pointed out that China's agricultural products market should follow more standardized industry standards, and related departments should strengthen the supervision and management of various network marketing links. Reasonable market competition will promote agricultural enterprises to improve the quality of agricultural products and promote the orderly and healthy development of agricultural product network marketing [14].

Sun (2014) believed that the network marketing model includes three aspects: one is the virtual wholesale market, the two is the cooperative e-commerce platform, and the three is the service mechanism. To further improve the basic platform to achieve the information center of the productive areas; to update the agricultural product information database in order to promote regional cooperation in the trading platform, he proposed that a complete and systematic network marketing mode of agricultural products should be established [15].

Zhu (2014) pointed out that the current conflict in the marketing of agricultural products in China is reflected in the huge shortage of grass-roots network marketing employees in rural areas and the shortage of talents. At the same time, he believed that the practical solution to the current problems in China's agricultural product network marketing needs to fully integrate the agricultural product network marketing system and strengthen the construction, operation and management of the agricultural product network marketing website [16].

Song (2015) put forward the development of modern logistics construction mechanism, in the use of "Internet +" background of the Internet platform, to new heights of fusion between the creation of agricultural products logistics and the internet [17].

Liu [18] pointed out that a stable supply relationship is established between the leading agricultural enterprises and the individual farmers, and the new Internet means can be used to stabilize the

contractual relationship to achieve a win-win situation [18].

Qiu (2016) put forward two models that are suitable for the development of agricultural products network marketing, that is, online and offline direct marketing with online community as the core and network marketing mode supporting agriculture based on community [19].

Du and Ding (2016) confirmed that online reviews have a significant impact on the value judgments of consumers, which will affect consumers' online shopping intentions [20].

Dou (2016) believed agricultural products can carry out marketing activities with the help of the Internet, and on the network, the market investigation and transaction negotiation of agricultural products can be realized. Network marketing of agricultural products is conducive to increasing opportunities for transactions, broadening the marketing channels of agricultural products, preventing agricultural products from deteriorating due to time factors and causing a certain degree of economic losses, which can further reduce transaction costs and bring benefits to agricultural products enterprises [21].

Lu and Li (2017) through the research found that the imperfect development of e-commerce of agricultural products in the market will influence consumer online shopping of agricultural products to a certain extent the decision. The imperfect market and the shortage of agricultural products have weakened the consumer's intentions to buy agricultural products online to a certain extent. And there is a significant correlation between the factors of logistics, reputation and security and the intentions of consumers to buy agricultural products online [22].

Through the comparison and analysis of the above professional literature, we can find that the network marketing of agricultural products in China is still in its infancy. The combination of basic theories and business practices is less. With the rapid development of China's Internet industry and real economy, the marketing model of agricultural products will also develop and change. There is still a great space for research on the topic of network marketing of agricultural products.

METHODS

The network marketing measurement in this paper is mainly based on 7Ps marketing theory and O2O network marketing model, including product strategy, price strategy, place strategy, promotion strategy,

people strategy, physical evidence strategy and process strategy.

The literature research has revealed the influence of the agricultural products network marketing strategies on the consumer buying behavior. Based on the preliminary analyses, the bellow hypotheses were formulated:

H1: Product strategy has a significant positive impact on consumer buying behavior.

H2: Price strategy has a significant positive impact on consumer buying behavior.

H3: Place strategy has a significant positive impact on consumer buying behavior.

H4: Promotion strategy has a significant positive impact on consumer buying behavior.

H5: People strategy has a significant positive impact on consumer buying behavior.

H6: Physical evidence strategy has a significant positive impact on consumer buying behavior.

H7: Process strategy has a significant positive impact on consumer buying behavior.

Multiple regression analysis was performed using variables. They were divided into dependent variables and independent variables. The dependent variables were the consumer buying behavior. For the independent variables, they were the 7 factors identified from factor analysis.

Participants

The respondents in this study were the 600 customers from Hainan province and other provinces in China. The questionnaires were distributed by this thesis author through the following two ways: the local agricultural products consumers in Hainan; consumers of online shopping for agricultural products in various regions of China.

Instrument

Questionnaire is the basic instrument of data collection. The questionnaire is divided into two parts: The first part collects the personal basic information of the respondent. It includes categories such as gender, age, family composition, education level, occupation, monthly income level, current place of residence, and online shopping experience. The second part is the focus of the whole questionnaire. The article systematically collated the literature review of consumer behavior of online shopping for agricultural products, according to the 4-point Likert scale design questionnaire. It includes 8 subscales: product subscale, price subscale, place subscale, promotion subscale, people subscale, physical evidence subscale,

process subscale and buying behavior subscale, each of these subscales consists of 5 items.

Reliability analysis is an important part of data gathering procedure. The purpose of the reliability analysis is to determine the stability and consistency of the scale. This study examined the internal consistency of items by internal reliability analysis. The reliability of the scale is usually tested using Cronbach's Alpha coefficient. It is generally considered that the Cronbach's Alpha coefficient is greater than or equal to 0.7 ($\alpha \geq 0.7$), indicating that the reliability of the whole scale is good [23].

In the survey of social sciences, each scale usually includes several subscales, so the reliability coefficient of each subscale should also be analyzed when the reliability of the whole scale is analyzed. Under normal circumstances, the fewer the number of items in the scale, the lower the Cronbach's Alpha coefficient, and vice versa [24]. In general, if the Cronbach's Alpha coefficient of the subscale is greater than 0.5 ($\alpha > 0.5$), the reliability of the subscale is acceptable [25].

The overall Cronbach's Alpha coefficient of 7Ps scale is 0.875, ie $\alpha > 0.7$, and in ANOVA with Friedman's Test, Sig=0.000, reaching a highly significant level. At the same time, P1, P2, P3, P4, P5, P6, P7 and BB, the Cronbach's Alpha coefficients of the eight subscales are 0.610, 0.571, 0.584, 0.633, 0.652, 0.597, 0.582 and 0.553, respectively, all greater than 0.5, ie $\alpha > 0.5$, and in ANOVA with Friedman's Test, Sig=0.000, reaching a highly significant level. Through the above reliability analysis, Hainan agricultural products network marketing Strategies scale has good reliability, and the reliability of the eight subscales it includes is also acceptable.

Procedure

Data collected from a questionnaire survey was conducted from April 6, 2018 to July 28, 2018. A total of 600 questionnaires were distributed and 578 questionnaires were collected. Some questionnaires were considered to be invalid because of missing data or were not carefully filled out. The total effective questionnaire was 555, and the effective rate of the questionnaire was 92.5%.

Through field survey and network survey, the author used random sampling method to issue questionnaires.

Field survey: To the Hainan agricultural products supermarket and the farmers' market, the hard copies of the questionnaire were distributed randomly to the consumers. In the block with a large flow of people, the respondents were randomly selected to distribute the questionnaires, which ensured the random distribution of the survey samples to a certain extent.

Internet survey: Through WeChat group, QQ group, questionnaire star, e-mail and other internet media, the electronic copies of the questionnaire were randomly distributed to consumers across the country. The electronic copies were distributed via the internet, so the scope of the survey was not limited to a specific area, which guaranteed the coverage of the random survey sample to a certain extent, and improved the recycling efficiency of the questionnaire.

Data Analysis

Through the data collection and data processing of the collected questionnaires, the research variables of this article are measured by professional statistical software SPSS V24. The technical route of the data analysis in this paper is as follows:

Descriptive statistical analysis of the sample data of the questionnaire is first carried out; secondly, correlation analysis is carried out; finally, multiple regression analysis is performed.

RESULTS

The specific distribution of the recovered samples in terms of Gender, Age, Family composition, Education level, Occupation, Monthly income level (RMB), Current place of residence and Online shopping experience is shown in the table 2.

According to the table 2, it can be analyzed that the ratio of male to female respondents is about 1:1; the number of respondents 60 years old and above is small (0.4%), and the number of respondents 19-29 years old is more than half (54.1 %); the proportion of respondents in the family of three is close to one-third (32.3%); one-half of the respondents with a bachelor's degree (50.1%); the respondents are mainly enterprise staff (41.4%); the number of respondents with monthly income of 4000-6000 Yuan is relatively large, and the proportion is close to one-third (32.4%); most of the respondents currently reside in Hainan Province (78%); the vast majority of respondents often shop online (63.1%).

Table 2 Percentage distribution of the respondents' profile (N=555)

Profile Variables	Category	Frequency	Percentage (%)
Gender	Male	281	50.6
	Female	274	49.4
Age	18 years old and below	16	2.9
	19-29 years old	300	54.1
	30-39 years old	147	26.5
	40-49 years old	76	13.7
	50-59 years old	14	2.5
	60 years old and above	2	0.4
Family composition	Single	140	25.2
	Two worlds	105	18.9
	Family of three	179	32.3
	Family of three or more	131	23.6
Education level	Senior high school and below	89	16.0
	DEUG	126	22.7
	Bachelor	278	50.1
	Master and above	62	11.2
Occupation	School student	25	4.5
	Enterprise staff	230	41.4
	Civil servants and institutions staff	110	19.8
	Individual business	93	16.8
	Freelancer	97	17.5
Monthly income level (RMB)	2000 Yuan and below	63	11.4
	2000-4000 Yuan	163	29.4
	4000-6000 Yuan	180	32.4
	6000-8000 Yuan	86	15.5
	8000 Yuan and above	63	11.4
Current place of residence	Hainan Province	433	78.0
	Outside Hainan Province	122	22.0
Online shopping experience	Yes, I often online shopping.	350	63.1
	Yes, I occasionally online shopping.	205	36.9

Correlation analysis

The purpose of correlation analysis is to find whether the variables are highly correlated and low correlated, that is, the degree of tightness between variables. From the perspective of research, through the correlation analysis, we make a preliminary understanding and judgment on the relationship between the variables, and fully prepare for further analysis of the relationship between the variables. Correlation test is the basis of regression analysis. Only when there is a certain correlation between variables, can we use regression equation to do regression analysis.

This study uses the Pearson correlation analysis method to analyze the seven variables of P1-product

strategy, P2-price strategy, P3-place strategy, P4-promotion strategy, P5-people strategy, P6-physical evidence strategy, P7-process strategy and BB-buying behavior. Thus, the hypothetical situation in the study is initially judged. The correlation analysis results are shown in the table 3.

The table 3 analyzes the correlation between the core variables of this study. From the table 3, we can see that there is a simple correlation between P1, P2, P3, P4, P5, P6, P7 and BB, and the correlation degree is in the significance level of 0.01, Sig.(2-tailed)=0.000, and their simple correlation coefficients are 0.342, 0.367, 0.330, 0.387, 0.406, 0.339 and 0.456, respectively, indicating a simple positive correlation. The simple correlation between the core variables lays the foundation for further regression analysis.

Table 3. Mean, standard deviation and correlation analysis

	Mean	Std. Deviation	N	P1	P2	P3	P4	P5	P6	P7	BB
Product	2.8598	.47282	555	1	.000	.000	.000	.000	.000	.000	.000
	Sig. (2-tailed)										
Price	2.6998	.48507	555	.402**	1	.000	.000	.000	.000	.000	.000
	Sig. (2-tailed)										
Place	2.7449	.48833	555	.350**	.400**	1	.000	.000	.000	.000	.000
	Sig. (2-tailed)										
Promotion	2.6613	.50111	555	.281**	.315**	.427**	1	.000	.000	.000	.000
	Sig. (2-tailed)										
People	2.6789	.49420	555	.398**	.411**	.413**	.424**	1	.000	.000	.000
	Sig. (2-tailed)										
Physical Evidence	2.75568	.470635	555	.383**	.368**	.335**	.304**	.514**	1	.000	.000
	Sig. (2-tailed)										
Process	2.7773	.46056	555	.399**	.416**	.423**	.477**	.557**	.541**	1	.000
	Sig. (2-tailed)										
Buying Behavior	2.8324	.42549	555	.342**	.367**	.330**	.387**	.406**	.339**	.456**	1
	Sig. (2-tailed)										

** . Correlation is significant at the 0.01 level (2-tailed).

From the analysis of the figure 1, the distribution of all points on the left and right sides of the fitting line, and the confidence interval of the individual is 95%, the degree of deviation from the fitting line is not too large. Thus, it is considered that BB is linearly related to P1, P2, P3, P4, P5, P6, P7, respectively.

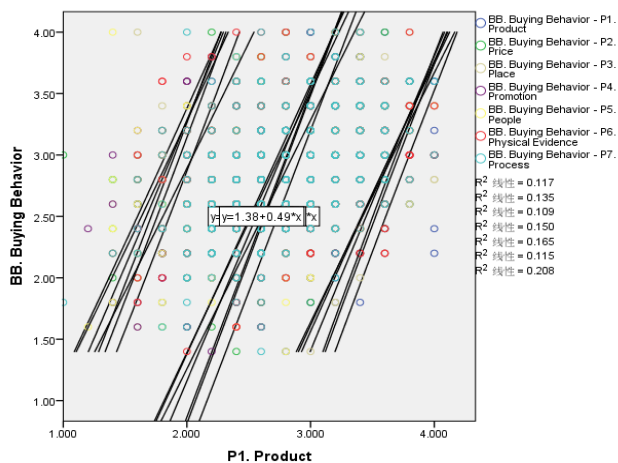


Figure 1. Correlation diagram of BB-P1, BB-P2, BB-P3, BB-P4, BB-P5, BB-P6, BB-P7

Multiple regression analysis

The regression analysis is convenient, quick and scientific to explore and analyze the relationship between different variables or different things. In statistics, regression analysis is mainly described and reflected by the form of regression equation, which can help us to image and accurately grasp the degree of influence and the direction of influence between different variables or between different things.

According to the 7Ps marketing theory analysis, O2O network marketing model and the design structure of the questionnaire in this paper, in order to test the impact of Hainan agricultural products network marketing strategies on consumer buying behavior, this paper will take P1-product strategy, P2-price strategy, P3-place strategy, P4-promotion strategy, P5-people strategy, P6-physical evidence strategy, P7-process strategy as independent variables, BB-buying behavior as a dependent variable to construct a multiple linear regression model. The specific regression analysis process of Hainan agricultural products network marketing strategies on consumer buying behavior are shown in the table 4.

Table 4. Multiple regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.001	.127		7.905	.000	
	P1	.092	.038	.102	2.418	.016	.725
	P2	.109	.038	.124	2.900	.004	.700
	P3	.036	.038	.042	.962	.337	.686
	P4	.130	.037	.153	3.535	.000	.690
	P5	.091	.041	.106	2.219	.027	.566
	P6	.029	.041	.032	.711	.477	.619
	P7	.182	.046	.197	3.976	.000	.523
R Square						.297	
Adjusted R Square						.288	
F						33.025	
Durbin-Watson						1.814	

a. Dependent Variable: BB. Buying Behavior

From the fitting indicators in the table 4, the R square and the adjusted R square are 0.297 and 0.288, respectively, and the F value is 33.025, and Sig.=0.000, reaching a highly significant level, indicating that the model has excellent fitness. That is to say, the constructed regression model is effective, and the independent variable and the dependent variable are linear.

The Durbin-Watson value is 1.814, which is close to the suggested value of 2, indicates that there is no serious autocorrelation problem in the model. The value of VIF is between 0-10, and there is no multicollinearity between independent variables.

It is generally considered that the Sig.<0.05, indicating that the independent variable has a significant influence on the dependent variable. From the regression results in the table 4, we can see that:

The P1 has a significant positive impact on the BB (Beta=0.102, Sig.=0.016<0.05), and H1 is supported; the P2 has a significant positive impact on the BB (Beta=0.124, Sig.=0.004<0.05), and H2 is supported; the P3 has no significant positive impact on the BB (Beta=0.042, Sig.=0.337>0.05), and H3 is not supported; the P4 has a significant positive impact on the BB (Beta=0.153, Sig.=0.000<0.05), and H4 is supported; the P5 has a significant positive impact on the BB (Beta=0.106, Sig.=0.027<0.05), and H5 is supported; the P6 has no significant positive impact on the BB (Beta=0.032, Sig.=0.477>0.05), and H6 is not supported; the P7 has a significant positive impact on the BB (Beta=0.197, Sig.=0.000<0.05), and H7 is supported.

To sum up, it can be concluded that:

(1) The non-standardized regression equation of Hainan agricultural products network marketing strategies for consumer buying behavior is as follows:

$$BB=1.001+0.092*P1+0.109*P2+0.130*P4+0.091*P5+0.182*P7$$

(2) The standardized regression equation of Hainan agricultural products network marketing strategies for consumer buying behavior is as follows:

$$BB=0.102*P1+0.124*P2+0.153*P4+0.106*P5+0.197*P7$$

CONCLUSION AND RECOMMENDATION

Based on the background of China's vigorous development of the internet, this paper takes the influence of Hainan agricultural products network marketing strategies on consumer buying behavior as the main research content, and obtains relevant research data by combing professional literature, expounding relevant theories and issuing questionnaires. On the basis of the above, first put forward the research hypothesis of the relationship between the two, and then use SPSS V24 to empirically test the relationship between the two. The main research conclusions of this paper are shown in the table 5.

In other words, product strategy (P1), price strategy (P2), promotion strategy (P4), people strategy (P5), and process strategy (P7) have significant effects on consumer online purchase behavior, while place strategy (P3) and physical evidence strategy (P6) have no significant impact on consumer online buying behavior.

Table 5. Summary of research findings

NO.	Research Hypothesis	Conclusion
H1	Product strategy has a significant positive impact on consumer buying behavior.	Supported
H2	Price strategy has a significant positive impact on consumer buying behavior.	Supported
H3	Place strategy has a significant positive impact on consumer buying behavior.	Not supported
H4	Promotion strategy has a significant positive impact on consumer buying behavior.	Supported
H5	People strategy has a significant positive impact on consumer buying behavior.	Supported
H6	Physical evidence strategy has a significant positive impact on consumer buying behavior.	Not supported
H7	Process strategy has a significant positive impact on consumer buying behavior.	Supported

By analyzing the standardized regression equation of Hainan agricultural products network marketing strategies for consumer buying behavior, we can further draw the following conclusions:

(1) In terms of the degree of influence of the independent variable on the dependent variable (BB), the order from big to small is: process strategy (P7) > promotion strategy (P4) > price strategy (P2) > people strategy (P5) > product strategy (P1).

(2) In comparison, among the independent variables, process strategy (P7) has a greater impact on consumer online buying behavior; product strategy (P1) has a lower impact on consumer online buying behavior.

(3) Based on the absolute value of the five standard coefficients ($0.100 < |\text{Beta}| < 0.200$), the overall influence degree of all five independent variables on consumer online buying behavior is not high.

To sum up, this paper believes that the product strategy, price strategy, promotion strategy, personnel strategy and process strategy implemented by Hainan agricultural products e-commerce enterprises have a significant impact on consumer buying behavior, but the influence of place strategy and physical evidence strategy is not significant. Among them, the process strategy plays the most important role. On the whole, these five strategies have a limited overall effect on increasing consumer networks' purchase of Hainan's

agricultural products. The effect of Hainan's agricultural products network marketing strategies needs to be improved. The proposed network marketing model (5Ps) of Hainan's agricultural products is shown in the figure 2.

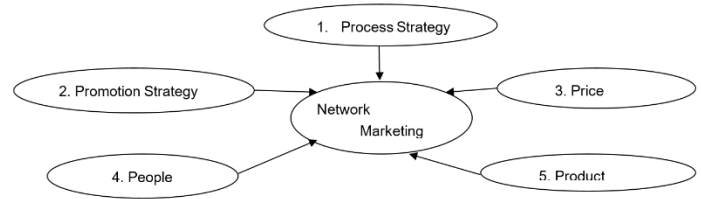


Figure 2. Proposed Hainan agricultural products network marketing model (5Ps)

The current Hainan agricultural product e-commerce enterprises should actively carry out network marketing planning (process strategy, promotion strategy, price strategy, people strategy, product strategy), focus on strengthening the process strategy, and vigorously promote consumers to purchase Hainan agricultural products online, thus effectively improving the overall effect of Hainan agricultural products network marketing strategies.

(1) Process strategy of Hainan agricultural products network marketing. Website internal search needs to be intelligent and fast; Web service is more close to the customer's usage habits; O2O cooperation to improve consumer satisfaction.

(2) Promotion strategy of Hainan agricultural products network marketing. Hainan agricultural products e-commerce enterprises should focus on the effective integration of online experience and offline experience, and promote network promotional activities.

(3) Price strategy of Hainan agricultural products network marketing. Hainan's agricultural products e-commerce enterprises must do a good job in the preliminary market research, clarify the target market and price positioning, fully consider the characteristics of agricultural product network marketing different from the traditional marketing, based on market demand, to formulate scientific and reasonable price strategy for agricultural products.

(4) People strategy of Hainan agricultural products network marketing. Hainan agricultural products e-commerce enterprises must pay attention to the training of employees' marketing level and service level, improve their work efficiency and quality, strengthen interaction and communication with consumers, and better meet the needs of consumers.

(5) Product strategy of Hainan agricultural products network marketing. Improve the standardization policies and regulations of Hainan agricultural products; Strengthening the construction of quality and safety traceability system for Hainan agricultural products; Formulating a diversified product strategy for Hainan's agricultural products

REFERENCES

- [1] Ministry of Commerce People's Reputation of China. (2017). The construction of the national agricultural product market system has achieved positive results. Date Retrieved: February 10, 2018 from <http://www.mofcom.gov.cn/article/ae/ai/201702/2017022515705.shtml>
- [2] China Internet Network Information Center. (2018). The 42nd Statistical Report on China's Internet Development. Date Retrieved: August 20, 2018 from <https://tech.sina.com.cn/i/2018-08-20/doc-ihhxaafz2145674.shtml>
- [3] Li, H. Y. (2011). The marketing theory of 7Ps. Date Retrieved: March 23, 2018 from <http://wiki.mbalib.com/wiki/7Ps%E8%90%A5%E9%94%80%E7%90%86%E8%AE%BA>
- [4] Ma, T. Li, Y. M. Fang, C. M. and Guo, W. (2014). Research on the application of 7Ps service marketing strategy in tourism enterprises. *Commercial Economy*, 2014 (11): 74-75.
- [5] Li, Q. (2017). Study on the network marketing mode of characteristic agricultural products in Gansu province. *Chongqing Normal University*, 2017: 2-4.
- [6] Yang, D. X. (2017). Research on the construction of Chongqing Fuling "Zeng Fu chicken" network marketing system.
- [7] Chongqing Normal University, 2017: 10. Wang, G. (2016). Analysis on internet marketing strategy of agricultural products in China. *Central China Normal University*, 2016: 16.
- [8] Zhang, R. (2013). The development status of O2O model enterprises. *Logistics Engineering and Management*, 2013(12): 127-129.
- [9] Liu, J. (2013). Discussion on the O2O mode of fresh electricity business. *Modern Business*, 2013 (36): 85.
- [10] Liang, R. X. (2015). Problems and countermeasures of agricultural products network marketing in China. *Shanxi Agricultural Sciences*, 43 (12) : 1690-1692.
- [11] Wu, M. Y. and Hao, N. (2011). Necessity of building an e-commerce collaborative platform for agricultural enterprises. *China Seed Industry*, 2011 (4): 14-18.
- [12] Gong, P. (2012). Research on Internet marketing related to agricultural products in China. *Huazhong Normal University*, 2012: 9-10.
- [13] Xia, S. H and Pan, Y. F. (2012). Research on the development mode of agricultural product network marketing. *Electronic Commerce*, 2012 (4): 8-14.
- [14] Luo, Y. (2012). Some thoughts on the development of e-commerce of agricultural products in China--Based on a group of multi case studies [J]. *China's Circulation Economy*, 2012 (9): 20-24.
- [15] Sun, Y. (2014). Analysis of agricultural product network marketing strategy under e-commerce environment. *Agricultural Economy*, 2014 (12): 139-140.
- [16] Zhu, X. K. (2014). Research on the conflict and integration rule of china's agricultural products marketing channels--Book review of study on the conflict and integration of agricultural products marketing channels. *Agricultural Technology Economy*, 2014 (12):127-128.
- [17] Song, X. (2015). Research on the development of agricultural products logistics under the background of "Internet +" in china. *Anhui Agricultural Sciences*, 2015 (9): 299-300.
- [18] Liu, G. (2015). Study on the stability of the relationship between the leading enterprises and farmers in the contractual agricultural products channel. *Modern Finance and Economics*, 2015 (5): 80-89.
- [19] Qiu, H. Y. (2016). Research on the marketing model of agricultural products in HX farm based on O2O. *Beijing Jiaotong University*, 2016: 2.
- [20] Du, X. M. Ding, J. Y. Xie, Z. H. and Lei, L. F. (2016). The impact of online reviews on consumers' willingness to purchase. *Management Review*, 2016(3): 173-183.
- [21] Dou, P. (2017). Research of the perspective of green agricultural products marketing □model Internet, *Anhui science and technology university*, 2017: 12.
- [22] Lu, Q. and Li, H. (2017). Research on consumers' willingness to purchase organic agricultural products based on TAM model. *Contemporary Economic Management*, 2017(1): 15-23.
- [23] Wang, X. (2016). Data processing and analysis based on SPSS. *Beijing: Posts & Telecom Press*, 2016: 264.
- [24] Feng, Y. S. (2015). SPSS 22.0 statistical analysis application tutorial. *Beijing: Tsinghua University Press*, 2015: 371-372.
- [25] Wu. J. (2014). SPSS statistical analysis starts from scratch. *Beijing: Tsinghua University Press*, 2014: 361.

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