

# Factors Influencing Online Shopping Behaviors: The Case Study of HUAWEI Mobile Products

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**Abstract:** *Recently, online shopping has been a lifestyle, and more and more people are engaged in online shopping. Therefore, it is very necessary to research consumer behavior in online shopping. By taking HUAWEI mobile phones as an example, several factors affecting consumers' online shopping behaviors were analyzed in this report from perspectives of marketing mix (7Ps), lifestyle and personal technology knowledge. The data were collected by online questionnaire survey on groups who had purchased HUAWEI mobile phones on the internet. A quantitative survey method was used in this research. A questionnaire was used as a data collection tools. The statistics used in the data collection were t-test, one way ANOVA, correlation analysis and regression analysis. The research showed that based on demographics, men aged 26 to 33 are more likely to buy HUAWEI phones online, government workers are most likely to buy the phones. In terms of personal lifestyle, the research found that those who prefer to stay home are more willing to buy HUAWEI phones online and more likely to use online payment. According to online shopping and marketing mix 7Ps, the factors of product and price have the most effect on online shopping consumption intention. As for the personal technical knowledge, online shopping technology is the most important.*

**Keywords:** online shopping; HUAWEI mobile; Chinese consumer behavior; Marketing Mix 7Ps

## Introduction

### Introduction to the problem

In just two decades, China has emerged as the global e-commerce industry. A leading player whose achievements have captured the world's attention today. Online retail transactions in China are expected to reach \$1.5 trillion in 2008, Accounting for a quarter of the total retail sales in China. Which is not only the largest in the world, It is expected to surpass online retail sales in the next ten global markets. The sum of the changes. With 855 million digital consumers and, The most active group of mobile social users in the Chinese market already is a global consumer goods and retailers to grab the target (Pu Lan, Wang Gancheng, Wang Wei & Daniel Zipser, 2019)

Analyze the counterpoint report through a professional global perspective Counterpoint's China Channel Service (2019). HUAWEI (including the HONOR brand) leads the Chinese smart-phone market with its market share growing to 40%, a record high. HUAWEI's total shipments in Q3 reached 41.5 million units. In the third quarter of 2018, HUAWEI had just 23% of the market.

This was the first time that online smart-phone sales increased during a quarter when there were no major e-commerce festivals. The surge in online sales was mainly attributed to rising online sales of HUAWEI, which have been aggressively expanding domestic sales across all channels. China's online smart-phone sales increased to 27% of total sales in Q3 2019 from 24% in Q1 2019, according to the latest research from Counterpoint's China Channel Service. China's smart-phone market continued its slowdown due to the sluggish economy and

consumers delaying smart-phone purchases for 5G network roll-outs. China's smartphone sales in Q3 2019 registered a 5% year over year decline, but increased 3% quarter on quarter but while China's smart-phone market continued its slowdown, the decline has narrowed in year over year terms. Foreseeable expect the online smart-phone retail space to become more consolidated going forward.

China's trade war with the United States in 2019 is also of concern. About HUAWEI's performance, Flora Tang (2019), Research Analyst at Counterpoint, added, "Since the trade ban by the US, HUAWEI aggressively increased its domestic sales strategy dedicating more resources to offset the decline from overseas markets. For example, the HUAWEI are deepening their channel relationships, promotions, and incentives across all the tiers of cities, and both online and offline. Since most of the services and applications within HUAWEI smart-phones are highly localized, Chinese consumers are immune to the implications of the US ban. On the contrary, the ban has increased the sense of nationalism towards HUAWEI, increasing the brand's minds-hare and adoption domestically.

All the data and research show that HUAWEI mobile phone market share and online shopping market share, are growing and currently affected by trade war and the economic downturn, China market sales situation even more severe, so the study is very important, help to research the current buying HUAWEI mobile phone consumer behavior.

### **The Statement of the Research Problems**

This research problem is to study the behavior of Chinese online consumers toward HUAWEI mobile phone according to marketing mix 7Ps, lifestyle, demographics and computer technology.

The demographics factor is a necessary part of the research. It can be used to judge the differences of purchasing groups such as simple sex ratio, age ratio, income level and other influence factors. The research the influence of consumers' gender, age, monthly income level, education level and living area on online shopping consumer behavior.

In the research of consumer behavior of online shopping, 7Ps is the most important research factor, including price, place, product, promotion, process, people and physical evidence. Marketing mix 7Ps model has gained significant traction over the past years and the marketing is becoming increasingly important as an independent field of study. Although China has developed rapidly in recent years, it still has many underdeveloped areas. Therefore, it is necessary to study the price and product factors. And because the study targets online shoppers, the place and physical evidence factors of online activities deserve further exploration.

On the other hand, lifestyle factors for Chinese online consumers. At present, the Internet is gradually popularized in China. More and more consumers choose to use the Internet to obtain new information, and more and more people choose to live a stay-at-home lifestyle. Therefore, finding out the influence of lifestyle on online shopping consumer behavior will also be beneficial.

A certain technical threshold in China where higher education is not widely available, there are a large number of middle-aged and elderly consumers who are not proficient in online shopping, and some of them even have no contact with the Internet. Therefore, the research on the computer technology level of consumers is particularly important, so this factor is taken as part of the research. In order to grasp the expectation, people who like to shop online are usually what kind of technical level.

### **The Objectives of the Study Were:**

1. To study the consumers' behaviors toward mobile phone online shopping in China
2. To study the impact of demographics variables of the Chinese customer on online shopping behaviors
3. To study the impact of lifestyle on online shopping behaviors of Chinese customers
4. To study the impact of marketing mix 7Ps on the online shopping behaviors of Chinese customers
5. To study the impact of technology knowledge on the online shopping behaviors of Chinese customers.

### **The Scope of the Research Study**

This research, conducted from December 2018 to August 2019, focused on online consumers in mainland China, especially on consumers who have the habit of online shopping. Among the big lineups of HUAWEI mobile phone products in mainland China, the most representative model was chosen as the research object to pursue the most representative research results.

### **The Limitation and Future of the Research**

Any rigorous scientific research has some limitations, and my research is no exception. For example, the research focused on HUAWEI's mobile phone products, but did not research other products comprehensively. The research was only done on the internet as I live in Thailand, and the language barrier was another important limitation.

The research in the future should follow the different online shopping websites that may have different influences on consumers. Therefore, different types of shopping websites should also consider different influences on buyers. In addition, researchers should focus on the larger cross section of internet users in order to get different perspectives such as the business perspective. This will provide equilibrium perspective on research issues. Researchers should also conduct the researches based on the comparisons of different genders (different psychological perception), races (cross-cultural study), age group (comparing the perception of baby boomers and youth groups), as well as online shoppers to non-online shoppers.

### **Literature Review**

#### **Consumer Behavior**

Consumer behavior is a summary of a consumer's attitudes, preferences, intentions, and decisions in the marketplace when purchasing a product or service. The researches of consumer behavior usually draw upon social science disciplines of anthropology, psychology, sociology, and economics (Velumani, 2012). Furthermore, the theory of reasoned action suggested that consumer behavior can be predicted from intentions that correspond directly in terms of action, target and context to that consumer behavior (Ajzen & Fishbein, 1980). According to Day (1969), the intentional measures can be more effective than behavioral measures to capture customer's mind as the customer may make purchases due to constraints instead of real preference when purchase is considered.

According to the research from Wilson, Zethaml, Bitner & Gremler (2012), the economic term "consumer behavior" can be defined as the decision of consumers towards purchase. In addition, consumer behavior is a prevalent topic of marketing, which has been studied and discussed in the past decades (Constantinides, 2004). There are several factors affecting

consumer behavior, such as lifestyle, culture, economy and demography, which are beyond the control of entrepreneurs (Constantinides, 2004; Czinkota and Kotabe, Foxal, 2005).

### **Demography**

Demography is a study of the size, territorial distribution and composition of population; changes of population and the components of such changes. It may be identified as natality, mortality, territorial movement (migration), and social mobility (change of status) (Duncan & Hauser, 1972).

### **Marketing Mix 7Ps**

The marketing mix is also called 4Ps and 7Ps. 4Ps refer to price, place, product and promotion. 7Ps refer to price, place, product, promotion, process, people and physical evidence. Marketing mix 7Ps model has gained significant traction over the past years and the marketing is becoming increasingly important as an independent field of study. This model by Booms and Bitner (1981), extends the marketing mix by 3 new “P”s that directly relate to the service industry. These are people, physical evidence and process.

### **Lifestyle**

Lifestyle refers to the interests, opinions, behaviors, and behavioral orientations of an individual, group or culture and also a combination of determining intangible or tangible factors. According to Adorno (1991), the tangible factors are specifically related to demographic variables such as an individual's demographic profile, whereas intangible factors concern the psychological aspects of an individual such as personal values, preferences, and outlooks (Kahle & Close, 2011).

### **Technology Knowledge**

General technology knowledge, such as the ability to switch on and off a computer and the normal use of the computer. Special technology knowledge usually refers to software designed to abilities to operate the computer to do work. Online shopping technology knowledge, generally refers to the ability to do online shopping alone. Researches have revealed that online shopping innovativeness is a function of attitude towards the online environment and individual personal characteristics (Midgley & Dowling, 1978; Eastlick, 1993; Sylke, Belanger & Comunale, 2004; Lassar et al., 2005).

### **Online Shopping**

Advancement in the internet technology has facilitated the growth of in-home shopping (Lumpkin & Hawes, 1985). Online shopping was defined as a process that consumers go through to purchase products or services over the internet (Shim, Quereshi, Siegel & Siegel, 2013). Online shopping includes but not limited to the use of computers, or other mobile devices, such as mobile phones.

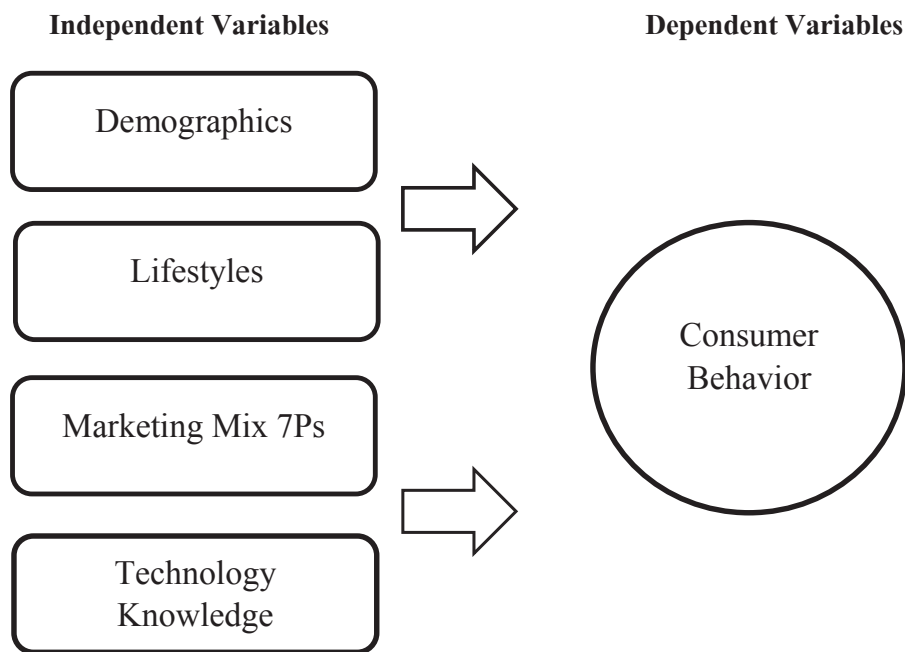
### **The Related Studies**

Thananuraksakul, Study “Factors Affecting Online Shopping Behavioral Study of Thai Consumer” in 2007 find out that the experience of online shopping is very important: the more experienced people are, the more likely they are to continue online shopping. Trust in shopping online is important. When consumers are aware of this, they are more likely to do online shopping. When they have a positive attitude, they are more likely to have intentions of online shopping. Families, relatives, friends and colleagues influence shoppers' buying intentions online (Thananuraksakul, S., 2007).

Hongyang Yu, Study “Analysis of Influencing Factors of Taobao.com (A online shopping website from China) Consumer Behavior” in 2017 find out that the factors influencing consumers' behavior in Taobao: store, commodity, safety, time, speculation, interaction and

occasional income. Moreover, consumers' personal factors including gender, occupation, education, income and online time are also important factors affecting their behavior (Hongyang Yu and Qianli Gao, 2012).

Kateryna Smoliana, Study "Consumer behavior towards buying consumer electronics online: cross-national analysis" in 2017 find out that the following results can be obtained: First, multiple regression analysis showed that only two of the five hypotheses were accepted. This proves people's attitude towards consumers of electronic products online and towards users. When people have a positive view of the behavior and believe in the safety and value of the program, they will be more willing to buy electronic products online. The number of online stores exceeds physical stores, and there are no technological barriers in recognizing time and money, as well as experience of online shopping. Smoliana (2017) conducted a research related to online consumers behavior by using multiple regression model and found out 2 of the 5 hypotheses were accepted.



**Figure1: Conceptual Framework of the Study**

**Research Methods**

The research method is a quantitative methods, applying a survey as a research strategy.

**The Population and Sample**

The population in the study was 8000 online shopping customer during 1<sup>st</sup> January, to 4<sup>th</sup> February, 2019. The sample was 500 online shopping customers who were randomly selected from the list of e-mail addresses of the 8000 online shoppers. The returned questionnaire was 417 sets, accounting for 83.4 present of the returned questionnaire.

### **Data Collection Tool**

The questionnaire was the tool for data collection. It consisted of 5 parts with 64 items. The content validity of the questionnaire was assured by 5 experts, through the IOC value. All the questionnaires have possessed the IOC of 0.50 or higher.

The reliability of the questionnaires of the 5 parts was between 0.70 to 0.90, which is considered a reliable tool.

No incentives or follow-up e-mail reminders were used to increase participation. Thus, the sample was a product of self-selection and all the respondents should be considered as internet users. Moreover, they have online shopping experience and bought HUAWEI phones online. Data collection was carried out for about one month. Respondents were screened to be at least 16 years old.

### **Data Collection**

A self-completion questionnaire was created using a tool called WJX.cn. WJX.cn is the most popular survey website in mainland China. The main survey method of WJX.cn is to issue questionnaires on the internet and distribute them to the respondents through certain communication methods similar to Google tools. The best use of this online survey model is to collect questionnaires from various provinces in mainland China. China is a big market and a questionnaire offline might only be able to collect data from certain regions.

In order to get more responses, the questionnaire started with a paragraph dedicated to explain the nature and purpose of the research. The respondents were assured that their contribution would be important and valuable. Also, the confidentiality and anonymity were guaranteed.

Totally 500 questionnaires were distributed, and 417 qualified questionnaires were returned. The questionnaire survey was done from 1st January, to 4th February, 2019.

### **The Statistics for the Data Analysis**

In the research, descriptive and inferential statistics methods were adopted for data analysis, distribution evaluation, difference analysis, ANOVA, correlation analysis and regression analysis.

### **Ethical consideration**

Concerning the ethical considerations, the researcher has done as followed: first, the names and any identities of the questionnaire respondents are kept secret. Second, the respondents are told to be free to withdraw from answering the questionnaire at any time if they feel unwilling to continue answering the question. Third, the researcher did not provide any incentive for answering the question to be sure that there is no influence of the incentive on the results of the study.

### **Trustworthiness**

The researcher has tried to keep the trustworthiness by assuring the respondents of completely understanding the questionnaire items by writing the questionnaire in Chinese then translating them to English. The English-Chinese translation was done under the language expert's supervision.

## Results and Discussions

### The Descriptive Statistics

In this research, the demographic statistics in terms of frequency, percent frequency, mean and descriptive statistics was applied. The details of 417 questionnaires were as below:

**Table 1** Descriptive Statistics of Demography

Item		Frequency	Valid Percent
Gender	Male	204	48.9
	Female	213	51.1
Marital Status	Single	99	23.7
	Married	297	71.2
	Divorce	21	5.0
Age	Less than 19 years old	23	5.5
	19 but less than 26	117	28.1
	26 but less than 33	174	41.7
	33 but less than 40	64	15.3
	40 and more	39	9.4
Occupation	House-wife/Unemployed	78	18.7
	Student	93	22.3
	Government Officers	98	23.5
	Private Business	128	30.7
	Other	20	4.8
Income	Less than 1000 Yuan	74	17.7
	1000 but less than 5000 Yuan	202	48.4
	5000 but less than 10000 Yuan	116	27.8
	10000 but less than 15000 Yuan	25	6.0
Education	Less than Bachelor Degree	124	29.7
	Bachelor Degree	195	46.8
	Master Degree	81	19.4
	Doctor Degree	17	4.1
Home Town	Big City	63	15.1
	Small City	253	60.7
	Rural area	101	14.2
<b>Total</b>		<b>417</b>	<b>100</b>



As can be seen from table 1, among the respondents, 23 ones were aged under 19 years old, 117 ones aged between 19-25; 174 ones aged between 26-32; 64 ones aged 33-39; 39 ones aged at and above 40. There are different age groups taking part in the survey, but most of them were aged 19 to 33. Among them, the age group from 26 to 32 was the largest, with 174 people taking part in the survey.

**Table 2** Descriptive Statistics of Lifestyle

<b>Item</b>		<b>Frequency</b>	<b>Valid Percent</b>
Outgoing Frequency	Less than 3 times	141	33.8
	3 but Less than 10 times	248	59.5
	More than 10 times	28	6.7
Access to Information	Internet	140	33.6
	TV	155	37.2
	Traditional media	109	26.1
	We-Media	13	3.1
Online Shopping Frequency	Every Week	110	26.4
	Every Month	194	46.5
	Every 3 Month	81	19.4
	Every 6 Month	16	3.8
	Rarely	16	3.8
Online Shopping Payment	Online Payment	104	24.9
	COD	132	31.7
	Credit Card	117	28.1
	Debit Card	49	11.8
	Hire purchase	15	3.6
Social Networking	Never use	89	21.3
	Generally, not used	100	24.0
	infrequently used	130	31.2
	frequently use	98	13.5
Main use of Compute	work	127	30.5
	study	107	25.7
	entertainment	148	35.5
	Other	35	8.4
<b>Total</b>		<b>417</b>	<b>100</b>



**Table 3** Descriptive Statistics of Marketing Mix 7Ps

7P	MEAN	SD	RANKING
PRODUCT	3.627	0.737	4
PRICE	3.626	0.709	5
PLACE	3.629	0.699	3
PROMOTION	3.624	0.688	6
PROPLE	3.587	0.755	7
PROCESS	3.645	0.724	2
PHYSICAL EVIDENCE	3.669	0.773	1

From Table 3, physical evidence is the most important feature, with the mean of 3.669; followed by process feature, with the mean of 3.645; the last one was people feature with the mean of 3.587. Opinions on marketing mix 7Ps from all of the respondents were on the consistent level, with the mean ranking from 3.626 to 3.669.

**Table 4** Descriptive Statistics of Technology Knowledge

	MEAN	SD	RANKING
GENERAL KNOWLEDGE	3.677	0.739	1
SPECIAL KNOWLEDGE	3.628	0.915	3
ONLINE SHOPPING	3.658	0.721	2

From Table 4, general knowledge was the most important feature with the mean of 3.677; followed by online shopping knowledge with the mean of 3.658; the last one was special knowledge with the mean of 3.628. All of the respondents' opinions on place feature were on the agree level with the mean ranking from 3.628 to 3.677.

**Table 5** Descriptive Statistics of Online Shopping Behavior

	Strength Disagree	Disagree	Neutral	Agree	Strongly Agree	MEAN	SD	RANKING
Online Shopping Behavior1	1(0.2% )	23(5.5% )	105(25.2% )	183(43.9% )	105(25.2% )	3.882	0.8566	1
Online Shopping Behavior 2	5(1.2% )	27(6.5% )	123(29.5% )	187(44.8% )	75(18% )	3.719	0.8746	2
Online Shopping Behavior 3	1(0.2% )	36(8.6% )	164(39.3% )	159(38.1% )	57(13.7% )	3.564	0.8415	4
Online Shopping Behavior 4	6(1.4% )	31(7.4% )	133(31.9% )	178(42.7% )	69(16.5% )	3.655	0.891	3
<b>Total Online Shopping Behavior</b>						<b>3.658</b>	<b>0.721</b>	

From Table 5, shopping behavior 1 was the most important feature with the mean of 3.82; followed by shopping behavior 2 with the mean of 3.719; the last one was shopping behavior 3 with the mean of 3.564. All of the respondents' opinions on place feature were on the agree level, with the mean ranking from 3.525 to 3.564.

**The Inferential Statistics**

In the questionnaire analysis, the commonly used difference tests are the independent sample t-test and one-way ANOVA. The t-test statistical method is applicable to the difference test of two means. The applicable one is that the independent variable is a two-point discrete variable and the dependent variable is a continuous variable. The one-way ANOVA is applicable to the difference test of the average between three or more groups. In this survey, gender is a two-point discrete variable, while marital status, age, occupation, monthly income, education, hometown, times of going out, access to information, times of online shopping, payment methods, common social networking sites, and the main purpose of computers are more-than-three population variables. Therefore, independent sample t-test and one-way ANOVA were used to test whether there are differences in shopping behavior factors.

**Table 6** Online Shopping Behavior with Demographic Factor

Online Shopping Behavior Factor	Difference	Not Difference	H0
Demographic			
Gender	√		$\mu_1 \neq \mu_2$
Age	√		$\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$
Occupation	√		$\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$
Marital Status		√	$\mu_1 \neq \mu_2 \neq \mu_3$
Income	√		$\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$
Education	√		$\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$
Home town	√		$\mu_1 \neq \mu_2 \neq \mu_3$

**Table 6 (Continued)**

Online Shopping Behavior Factor		Difference	Not Difference	H0
Lifestyle	Going out frequency	√		$\mu_1 \neq \mu_2 \neq \mu_3$
	Access to information	√		$\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$
	Online shopping frequency	√		$\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$
	Payment	√		$\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$
	Social networking frequency	√		$\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$
	Main purposes computer	√		$\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$

**Correlation Analysis**

In the statistics, the person correlation coefficient is used to measure the linear relationship between two distance variables. The correlation coefficient has a value between -1 and 1; and the larger the absolute value, the stronger the correlation between the two. The closer the correlation coefficient is to 1 or -1, the stronger the correlation is; and vice versa. In addition, the correlation coefficient and the significance level are considered to judge the correlation comprehensively. Only when the correlation coefficient is greater than 0 and the significance level is  $P < 0.05$ , the variables are related. Therefore, in order to explain whether there is a correlation between variables, SPSS 19 was used in the study for data analysis.

**Table 7** Correlation Analysis for Marketing Mix 7P

	Product Feature	Price Feature	Place Feature	Promotion Feature	People Feature	Process Feature	Physical Evidence	Shopping Behavior
Product Feature	1							
Price Feature	.364**	1						
Place Feature	-0.027	0.041	1					
Promotion Feature	0.065	.397**	.348**	1				
People Feature	0.095	.288**	0.015	.260**	1			
Process Feature	-0.009	.226**	-0.02	.107*	0.003	1		
Physical Evidence	.352**	.161**	.150**	.115*	.227**	.122*	1	
Shopping Behavior	.646**	.537**	.242**	.406**	.220**	.230**	.441**	1

It can be seen from Table 7 that there is a significant positive correlation between shopping behavior with 7 independent variables of product, price, place, promotion, people, price, process and physical evidence, and the relevant degree are 0.646, 0.537, and 0.242, 0.406, 0.220, 0.230 and 0.441 respectively.

**Table 8** Correlation Analysis for Computer/ Internet Knowledge Feature

	General Knowledge	Special Knowledge	Online Shopping	Shopping Behavior
General Knowledge	1			
Special Knowledge	0.079	1		
Online Shopping	.108*	.362**	1	
Shopping Behavior	.288**	.265**	.343**	1

It can be seen from Table 7&8 that there is a significant positive correlation between shopping behavior and general knowledge, special knowledge, and online shopping. The relevant degree is 0.288, 0.265, and 0.343, respectively.

### Regression Analysis

Regression analysis is a statistical analysis method that determines the correlation between two variables or multiple variables. Regression analysis can be used to solve the following two problems: First, it can determine the quantitative relationship between the dependent variable and several independent variables, usually called the mathematical model of the regression equation, so variable value can be explained and predicted by the independent variable. Secondly, according to the regression coefficient, whether the independent variable has a positive or negative influence on the dependent variable can be determined; in other words, which explanatory variables have a significant influence on the explained variable, and which explanatory variables have a weak influence on the explained variable. Thus, the main influence and secondary influence factors of the explained variables can be grasped. Therefore, multiple regression analysis was used in the paper.

### Coefficients of Marketing Mix 7Ps

Equation 1:

$$Y = (a_0 + a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + a_5x_5 + a_6x_6)$$

$$Y = -2.141 + .449x_1 + .197x_2 + .170x_3 + .218x_4 + .161x_6 + .146x_7$$

$$(.000) (.000) (.000) (.000) (.000) (.000) (.000)$$

$$\text{Adjusted } R^2 = .680$$

From the equation 1, product, as the most important feature, influences the shopping behavior with the regression coefficient of about .445, followed by product, promotion, price, place, process and PE, respectively, with the coefficient of .218, .197, .170, .161, and .146

### Coefficients of Computer Knowledge

Equation 2:

$$Y = (a_0 + a_1x_1 + a_2x_2 + a_3x_3)$$

$$Y = -2.141 + .097x_1 + .108x_3$$

$$(.000) (.001) (.001)$$

$$\text{Adjusted } R^2 = .680$$

From the equation 2, online shopping, as the most important feature, influences the shopping behavior with the regression coefficient of about .108, followed by general, respectively with the coefficient of .097.

## Conclusions and Recommendations

### Conclusions

#### Conclusions Based on Demographic Factors

The results of this research showed: the shopping behavior of male is significantly higher than that of female; the shopping behavior of people at the age of 26-33 is significantly greater than that of people in other ages; the shopping behavior of people at the age of 33-40 is significantly greater than that of 19 years old; the shopping behavior of government workers is significantly larger than that of housewives/freelancers, students, corporate workers, and others; the shopping behavior of students and corporate workers is significantly greater than that of housewives/freelancers. According to marital status factor after one-way ANOVA, there is no significant difference in shopping behavior of people in different marital status ( $F=1.357$ ,  $p>0.05$ ). Different marital status does not affect the shopping behavior. The shopping behavior of people with 5000-10000 Yuan is significantly greater than that of people with other income, and the shopping behavior of people with 1000-5000 Yuan is significantly greater than that of people with less than 1000 Yuan. The shopping behavior of people with the master's degree is significantly larger than that of people with the undergraduate degree or below. The shopping behavior of people with the doctoral degree is significantly larger than that of people with the undergraduate degree. The shopping behavior of people in both big and small cities is significantly larger than that of people in rural areas.

#### Conclusions Based on Lifestyle Factors

The shopping behavior of people with less than 3 times of going out is significantly different from that of people with other times of going out, and the shopping behavior of people with 3-10 times of going out is significantly larger than that of people with 10 times of going out. The shopping behavior of people using online information is significantly larger than that of people using TV and traditional media. The shopping behavior of people with weekly and monthly online shopping is significantly greater than that of people with online shopping every three months and every six months, and people who barely shop online; the shopping behavior of people with online shopping every three month and every six-month is significantly greater than that of people who barely shop online. The shopping behavior of people using online payment and installment payment is significantly greater than that of people using cash on delivery. The shopping behavior of people using social network is often significantly larger than that of people who barely or never use social network; the shopping behavior of people who do not often use social network is significantly larger than that of people who barely or never use social network; the shopping behavior of people who barely use social network is significantly larger than that of people who never use social network. The shopping behavior of people with the main purpose of entertainment should be significantly larger than that of people with the main purpose of research.

#### Conclusions Based on Marketing Mix 7Ps Factors

It can be seen from Table 4 that there is a significant positive correlation between shopping behavior and product, price, place, promotion, people, process, and physical evidence. The relevant degree is 0.646, 0.537, and 0.242, 0.406, 0.220, 0.230, 0.441, respectively. Among the influencing factors of marketing mix (7Ps), product factor is the most important, followed by price.

#### Conclusions Based on Technology Knowledge Factors

It can be seen from Table 5 that there is a significant positive correlation between shopping behavior and general knowledge, special knowledge, and online shopping. The relevant

degree is 0.288, 0.265, and 0.343, respectively. It can be seen from the data that among the influencing factors of technology knowledge, online shopping technology is the most important.

## **Recommendations**

### **Suggestions on HUAWEI**

#### **Demographics**

This research strongly suggests that HUAWEI should invest more in the female mobile phone market, such as special female mobile phone models, advertisements and spokespersons targeting female consumers. The lineups of HUAWEI mobile phones should be more attractive to the youth, by adding some trendy factors and keeping the prices affordable among young people. It is suggested that HUAWEI should cooperate with government departments to purchase official mobile phones. Besides, apps or specialized phones that are suitable for government employees should be developed. HUAWEI is reminded that it should produce more mid-range models to meet the needs of this income group while ensuring its profits. For the highly educated people, advertisements should be released in universities and research institutions, and some software or mobile phones should be suitable for scientific research and teaching. HUAWEI's sales strategy can be rooted in big cities. But it should also develop and expand markets in small cities and rural areas.

#### **Lifestyle**

HUAWEI can provide more intimate services for people who don't go out much, such as door-to-door maintenance. HUAWEI should put more investments in online advertising on video websites and news websites. HUAWEI can strengthen the cooperation with shopping websites and launch advertisements and product placement on their websites. HUAWEI can support online payment and installment services for all of its mobile phone products. HUAWEI can increase its sharing with social networking companies, including spending in advertising and registering official social media accounts.

#### **Marketing Mix 7Ps**

Among the marketing mix 7Ps, the most concerned factors are the product and price. Accordingly, HUAWEI should continuously improve the quality and product characteristics of mobile phone products. In terms of price, while maintaining profit, the product lineups should be streamlined and high-end mobile phones and low-end mobile phones should be both launched to adapt to different markets. According to the research, the number of employees with online shopping is small compared with the number of people related to traditional business. Therefore, HUAWEI can reduce the budget and labor cost in this aspect while ensuring normal operation.

#### **Technology Knowledge**

From the perspective of computer technology, consumers who master online shopping technology are more willing to buy HUAWEI mobile phones online. It indirectly indicates that if the online sales volume of HUAWEI mobile phones needs to be improved, the online shopping knowledge needs to be popularized to the public. And making online shopping easier can lure people who do not have much computer knowledge to participate in the online shopping too.

#### **Suggestions for This Paper**

In this research, efforts have been made to improve various parts, including multiple modifications of variables. However, there are still many barriers, such as the international economic situation, the US-China trade war, that have seriously affected the development and sales of HUAWEI phones. This paper was written earlier and has not focused much on these

effects. I hope to research HUAWEI 's online shopping strategy of mobile phones after the trade war between China and the United States in the future.

In addition, due to the limitations of time and ability, some other variables, such as regions and online shopping websites, were not factored in the research. These two factors will be investigated in the future research.

### **The Limitations of the Research**

Even though this research was deliberately constructed and developed, there were some inevitable shortcomings during the research process. This might slightly affect the results of my research.

This research only focused on some shopping websites and HUAWEI mobile products, so the conclusion may not be suitable for all goods and industries. Although online questionnaires could help gain more respondents to ensure the quantity of the data, this method could not guarantee the quality of the data. This research only used a quantitative method. The combination of qualitative method and quantitative method should be more valid.

This survey was limited to a pool of internet users. Hence, the results may not be generalized to non-internet users. Although it was tended to cover few non-users through paper survey but since the pool of respondents was either students or working professionals, all of them had sufficient exposure to internet. Second, the samples of internet users for this research were mostly those who were more knowledgeable about the internet and were thus experienced in the use of internet. Thus, the sample of respondents may be skewed toward more experienced internet users. This may also restrict the generalization of the findings.

Another limitation was language barrier because I had to read English literatures, paraphrase them, and wrote down my research in English. However, since I am Chinese, there might have been some language mistakes or misunderstandings in the process. At the same time, the questionnaire survey was released in China, I had to translate it into English, which may also lead to some language restrictions.

### **References**

- Adorno, T. W. (1991). *The culture industry: Selected essays on mass culture*. London: Routledge Publishers.
- Adedokun, J. A. A. (2003). *Basics of research Methodology*. "Sagamu: New Hope Publishe
- Ajzen, I. and Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*, New Jersey: Prentice-Hall.
- Constantinides, E. (2004, 12). Influencing the online consumer's behavior: The Web experience. *Internet Research*, 14(2), 111-126.
- Czinkota, M. R., & Kotabe, M. (2005). *Marketing management*. Cincinnati: Atomic Dog.
- Counterpoint's China Channel Service (2019). *China Smart phone Market Share: By Quarter*. Retrieved from <https://www.counterpointresearch.com/china-smartphone-share/>
- Counterpoint's China Channel Service (2019). *Online Channel Share in the Chinese Smartphone Market Grew in Q3 2019*. Retrieved from <https://www.counterpointresearch.com/online-channel-share-chinese-smartphone-market-grew-q3-2019/>
- Day, G. (1969). A two dimensional concept of brand loyalty. *Journal of Advertising Research*, 9(3), 29-35.
- Duncan, O. D., David L. F., and Beverly, D. (1972) *Socioeconomic Background and Achievement*. New York: Seminar Press.
- Eastlick, M. A. (1993). Predictors of videotext adoption. *Journal of Direct Marketing*, 7, 66-74.



- Flora Tang. (2019). *Huawei captured a record 40% share in chinese smartphone market in q3 2019*. Retrieved from <https://www.counterpointresearch.com/huawei-captured-record-40-share-chinese-smartphone-market-q3-2019/>>
- Hauser, R. M. (1972). Disaggregating a social-psychological model of educational attainment. *Social Science Research, 1*, 159-188.
- Hongyang, Y., & Qianli, G. (2012). Analysis of Influencing Factors of Taobao Consumer Behavior. *Wuhan International Conference on e-Business*. Wu Han.
- Kahle, L. R., & Close, A. G. (2011). *Consumer Behavior Knowledge for Effective Sports and Event Marketing*. New York: Routledge.
- Lumpkin, J. R., & Hawes, J. M. (1985). Retailing without stores: An examination of catalog shoppers. *Journal of Business Research, 13*(2), 139-151.
- Lassar, W. M., Manolis, C., & Lassar, S. S. (2005). The relationship between consumer innovativeness, personal characteristics, and online banking adoption. *International Journal of Bank Marketing, 23*(2), 176-199.
- M.Velumani (2012). *A Study on consumer buying behaviors towards nokia mobile in erode district*. P.k.r Arts College for women.
- Midgley, D. F., & Dowling, G. R. (1978). Innovativeness: the concept and its measurement. *Journal of Consumer Research, 4*(4), 229-235.
- Pu, L., Wang, G., Wang, W. & Daniel, Z. (2019). *China in 2019 Word consumer trend, McKinsey digital consulting* (Sep,2019).
- Smoliana, K. (2017). *Consumer behavior towards buying consumer electronics online: crossnational analysis* (Master's thesis, Nord universitet).
- Singh, J. (1995). Measurement issues in cross-national research. *Journal of International Business Studies, 26*(3), 597-619.
- Shim, J. K., Quereshi, A. A. Siegel, J. G., & Siegel, R. M. (2013). *The international handbook of electronic commerce*, New York, NY: Routledge Francis & Taylor Group.
- Sylke, V.C., Belanger, F. & Comunale, C.L. (2004). Factors influencing the adoption of web-based shopping: the impact of trust. *ACM SIGMIS Database, 35*(2), 32-49.
- Thananuraksakul, S. (2007). Factors influencing online shopping behavior intention: A study of Thai consumers. *AU Journal of Management, 5*(1), 41-46.