

**RESEARCH ON THE EFFECT OF THE SOCIAL ATTRIBUTES OF  
BEHAVIORAL TARGETING ADVERTISING ON USER  
CONTRIBUTION BEHAVIOR: AN EMPIRICAL STUDY IN  
TAOBAO'S BEHAVIORAL TARGETING ADVERTISING**

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## ใบรับรองสารนิพนธ์

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Individual Study Title: Research on the Effect of the Social Attributes of Behavioral Targeting Advertising on User Contribution Behavior: An Empirical Study in Taobao's Behavioral Targeting Advertising

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### ABSTRACT

In the era of rapid Internet development, online shopping has become the main shopping method. As of March 2020, Alibaba has 960 million active users worldwide, including Taobao Tmall and Boxmart. This number is thought to continue to grow in the near future. Facing challenges from other e-commerce platforms such as Jingdong and Jindo, Taobao urgently needs strategies to ensure steady user growth. Advertising is one of the most direct ways to attract users, and in the era of big data, behaviorally targeted advertising has become a major point of research, while consumers' individual contribution behavior is the most direct response to behaviorally targeted advertising.

This study found that the proportion of female respondents (60.42%) was significantly higher than that of male respondents (39.58%), and that various factors such as age, occupation, and income also had different effects on the study, as well as on contribution behavior in the face of different products.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Research Background

In the era of the rapid development of the Internet, shopping online has become the primary shopping method. As of March 2020, the number of Alibaba's global active users has reached 960 million, including Taobao Tmall and Hema Fresh. This number is considered to grow in a near-future continually. In the face of challenges from other e-commerce platforms, such as JD.com and Pinduoduo, strategies to ensure a steady growth in its users are pressingly required by Taobao.

Advertisement is the most effective method adopted to attract customers. Therefore, behavioral targeting advertising is born due to the demand for acquisition. The earliest behavioral targeting advertising can be traced back to behavioral targeting research conducted by Tacoda in the United States in 2001 to achieve behavioral targeting for portals. In 2008, behavioral targeting advertising was gradually promoted in China, and it is more common in the current Internet advertising market. At the same time, how to attract users through users has also enabled significant companies to add social functions to their applications. Among them, WeChat Moments advertising is a typical representation. WeChat Moment's advertisements are typically social media advertisements. Customers use WeChat and their social relationship networks to carry out advertising and marketing activities, such as advertisements posted by specific WeChat friends (Wechat, Daigou, etc.) in Moments.

User contribution behavior has also become a key research object for many scholars. As Nielsen (2006) studied the uneven participation in virtual communities, he found that about 90% of users in the community belong to Lurkers who never contribute content, 9% of users contribute very little content, and 1% of users contribute the most of the content in the community. Nielsen calls it the '90-9-1 rule'. However, the operators adjusted the '90-9-1 rule' to the '80-16-4 rule'. In

research on virtual communities' contribution behavior, Wasko and Faraj (2005) noted that reputation, altruism, reciprocity, and community interest are essential motivations for members' knowledge contribution. Jeppesen and Frederiksen (2006) also stated that user experience, website recognition, and personal attributes (such as amateurs) draw a remarkable impact on user positive contributions. Chiu et al. (2006) confirmed that social capital and expected results impact whether individuals are willing to share knowledge online.

Many studies have highlighted the importance of contribution behavior. Therefore, in today's frequent online shopping era, making users provide contribution behavior has also become the key. How to influence user contribution behavior through the social attributes of behavioral targeting advertising can be analyzed through existing research. Based on current research and theories, we can study the influence of behavioral targeting advertising on user contribution behavior.

## **1.2 Research Questions**

- a. What is the relationship between the social attributes of behavioral targeting advertising and user contribution behavior?
- b. How does the social attributes of behavioral targeting advertising affect user contribution behavior?

## **1.3 Research Objectives**

Through a review and overview of previous studies. Through an in-depth analysis of the influence of social attributes of Taobao behaviorally targeted ads on user contribution behavior, the study provides a reasonable theoretical explanation for the mechanism of each dimension of social attributes of behaviorally targeted ads on users' contribution behaviors. It constructs a corresponding theoretical model for empirical research.

The objectives of this study are as follow:

- a. To identify the impact of the propagation process on the user's sustained contribution behavior
- b. To identify the impact of the propagation process on the user's initial contribution behavior
- c. To identify the impact of spread content on user's sustained contribution behavior
- d. Determine the impact of spread content on the user's initial contribution behavior

#### **1.4 Research Significance**

Behavioral targeting advertising has not only brought tremendous economic benefits but also has created a new advertisement form.

The contributions of user social interaction will produce long-term benefits to the company, so the social attributes of behavioral targeting advertising have become a key factor. Previous studies have unanimously recognized the importance of user participation.

Because of the existing research issues, this research is based on the current study, focusing on the relationship between the social attributes of behavioral targeting advertising and user contribution behavior. The sales of shops in Taobao Mall provide a reference basis and give the users a better social nature, which has specific theoretical and practical significance.

##### **1.4.1 Theoretical significance**

The theoretical significance of this article is mainly reflected in:

Expanded and deepened the theoretical research on Taobao user contribution behavior. Taobao user contribution behavior is a critical element of Taobao, which attracts many scholars to study it, but most of the research directions are capital market, motivation, etc. This research starts with behavioral targeting advertising's social attributes and contribution behavior. It subdivides contribution behavior into sustained contribution and initial contributions to further enrich the relevant theories of behaviorally targeted advertising's social characteristics to the user's contribution behavior.

#### **1.4.2 Practical significance**

The practical significance of this article is mainly reflected in:

The relationship between the social attributes of behavioral targeting advertising and user contribution behavior, divides the user's contribution behavior into sustained contribution and initial contribution, which helps the company make better use of behavioral targeting advertising to provide users with more friendly products. Users can also bring benefits to enterprises and enterprises through contribution behavior.

#### **1.5 Research Content**

Based on the characteristics of Taobao behavioral targeting advertising, this paper analyzes the relationship between the social attributes of behavioral targeting ads and users' contribution behaviors, proposes relevant research hypotheses based on theoretical analysis, constructs a model, and reveals the mechanism of Taobao behavioral targeting advertising effect on users' contribution behaviors. Specifically, the main research contents are as follows.

1) This paper firstly defines the background of the selected topic and the significance of the research on the relationship between Taobao behavioral targeting advertising and user contribution behavior and explains the concept of Taobao behavioral targeting advertising, the research object of this paper, and the selected research scope before doing specific research.

2) Through the review of the assessment of previous studies related to the topic and content of this study, and the thought of prior studies, the theoretical viewpoints and core ideas adopted in this study are elaborated based on revealing the characteristics and factors of social attributes of Taobao behavioral targeting advertising, revealing the shortcomings of previous studies, proposing problems to be solved, and leading to the center of this study.

3) Empirical analysis of social attributes' influence on user contribution behavior of Taobao behavioral targeting advertising was conducted by using the Spss statistical analysis method.



4) Summarize and summarize the research results and theoretical and practical implications of this paper, and analyze the shortcomings of this paper accordingly to provide ideas for subsequent research in this field.

## **1.6 Research Methods**

Using a combination of literature reading method and questionnaire survey method, empirical method explores the influence of the social attributes of behavioral targeting advertising on user contribution behavior, propose hypotheses, analyze data and verify hypotheses before draw conclusions.

### **1.6.1 Text Analysis**

The literature reading method collects a large number of domestic and foreign-related documents, analyzes and combs the research status of the relationship between the social attributes of behavior-targeted advertising and user contribution behavior, which build a solid theoretical foundation for the following research. Combined with social reality, it is understood that under the current overloaded advertising volume, a large number of consumers have psychological resistance to this.

### **1.6.2 Questionnaire Survey**

Use the questionnaire survey method to collect relevant data. The questionnaire uses a five-level Likert scale, and the relevant items draw on mainstream domestic and foreign literature. A small-scale pre-experiment is carried out before the formal investigation, and the formal experiment is carried out after the data is qualified, and the required data is collected by the method of the online questionnaire survey. SPSS was used to analyze the reliability, validity, correlation, and multi-level regression analysis of the data.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Definition of Related Concepts

##### 2.1.1 Definition of Behavioral Targeting Advertising

Behavioral targeting advertising refers to the in-depth observation of the behavior of website visitors, the use of web page characteristics, accurately grasp the preferences of visitors, reflect the needs of visitors according to the aspects of visitors' behavior, and place advertisements with these characteristics according to the needs and replacement of visitors People watching.

According to Liu Peng and Wang Chao (2015), published in " Computational Advertising: Market and Technology of Internet Commercial Monetization", behavioral targeting advertising is a type of advertising that pushes consumers' personalized advertising based on consumer network behavior data. Network behavior data includes user web browsing data, search history, media consumption data (such as videos watched), application usage data, purchases, click responses to advertisements, and content disseminated (such as emails and social networking sites content). Behavioral targeting technology needs to mine large-scale data, analyze the user's network behavior in a certain period, and reflect the targeted tags' results. Each user is defined by tags of different dimensions and then used for advertising content and users Match. The process of labeling needs labeling process weight of user other network behaviors is the importance of each behavior type in the definition. In the process of labeling, different types of network behaviors require different labeling methods. If you encounter pictures, Manual labeling is often needed.

Behavioral targeting advertising can achieve the support of a large amount of behavioral data, so when using personalized, targeted push methods, although it can provide users with exciting and satisfactory advertising content, it relies on basic technical techniques, such as online behavior tracking Behaviors such as data collection and information dissemination are often carried out in secret. Users frequently notice this behavior because of personalization, which

triggers negative emotions. This also reflects the two sides of behavioral targeting advertising.

Behavioral targeting advertising is the latest trend in the development of the Internet. Advertising publishers can use technical means to obtain the information and themes of the user's current page, analyze the user's information according to the user's continuous browsing behavior, and then display the advertisement through the background content matching setting on the page, this kind of orientation is more in line with the user's interest under certain conditions and is in line with the idea of precision marketing. Behavioral targeting advertising makes full use of and exerts the powerful tracking ability and marketing potential of the Internet. It has high technical requirements and requires advertising service providers to have robust data analysis and data mining capabilities. Behavioral targeting advertising does not focus on the website but the people. The system determines and locks user attributes, such as user gender, age group, income class, industry, location, user preferences, advertising tendencies, etc., and can display the network to users based on user behavior data advertising. No matter which website the user visits, he/she can see the same advertisement. This kind of targeted second, third, or even multiple exposures significantly improves the ad's effect on the target group.

Taobao uses behavioral targeting advertising to promote exhibits. First, collect user data and frequently searched product types, and then retrieve the same kind of high-quality products to send advertisements to consumers to attract consumers to browse and purchase.

### **2.1.2 Social attributes**

Unlike traditional advertising, Taobao behavioral targeting advertising mainly relies on Taobao applications and is promoted through mobile phone application software prompts. By collecting and sorting out user big data, it will recommend products that users have purchased or searched for, display other buyers' reviews and feedback in advertisements, and recommend products that have been praised for attracting consumers to open the application browse product. Users can check the evaluations and feedback of other users and communicate with other users to

determine whether the product is suitable for them.

According to the relevant literature and Taobao's behavioral targeting advertising characteristics, Taobao's behavioral targeting advertising's social attributes are summarized into two aspects: propagation process and spread content. The propagation process's social point mainly refers to the social relationship between user evaluation exchanges and user participation. Interactive behavior will affect user attitudes towards advertisements; the social nature of the spread content mainly refers to the fact that ads are near related to social life, including personal use, harvest effects, product reviews, etc. Commercial information is presented socially, and hidden commercial information makes consumers feel comfortable and more acceptable.

#### **2.1.2.1 Propagation Process**

In the advertising process, users are no longer one-way information receivers. After receiving the ad stimulus, they can interact with other consumers for feedback and communication, forming a two-way information exchange cycle. The user transmits advertising information to other users, and the two communicate and interact to a certain extent. Users will feedback positive or negative input to other users. This cycle repeats and forms a closed-loop two-way information exchange system. In this process, users and users continue to exchange and communicate information, and the two form a relationship through individual exchanges and interactions. This relationship is called a social relationship. Granovetter (1974) proposed the theory of strong-weak relations based on social network theory in 1974. He pointed out that social relations can be divided into weak and robust relationships, such as the strong relationship between family and friends and the fragile relationship between parent and child. Stranger. At the same time, he pointed out that relationship strength can be measured from four dimensions: interaction frequency, emotional stability, intimacy, and reciprocity. In other words, those who have high interaction frequency, high emotional involvement, high intimacy, and more mutual communication are considered strong relationships, and vice versa. This is a fragile relationship. Granovetter (1974) emphasized that

healthy relationships in social network groups are based on trust, conducive to the reliability and rapid dissemination of information. Krackhardt (1992) pointed out that healthy relationships are based on a high degree of confidence. This kind of trust and emotional connection can help reduce environmental uncertainty and provide individuals with a relaxed state. Individuals are more inclined to emotional support and belief, and the reliability of information enhances the sense of identity between individuals. He believes that the strength of a relationship can be described by the relationship's length, the power of emotions, and the frequency of interaction. Long relationship, high emotional participation, and increased frequency of interaction. Combining the two viewpoints, this study will describe the strength of the relationship from four aspects: relationship duration, interaction frequency, emotional stability, and intimacy, to reflect the social attributes of the advertising communication process.

From the viewpoint of Granovetter (1974) and Krackhardt (1992), Granovetter (1974) emphasized the trust of strong ties and the advantages of the weak relations in information dissemination. Krackhardt (1992) believes that strong connections play a more critical role in overcoming obstacles and improving social activities' reliability. But it is undeniable that they all agree that strong relationships in social networks are based on trust, which can have an upbeat, positive attitude and behavior. Feng Jiao and Yao Zhong believe that a robust and healthy relationship improves the reliability of the information. Compare red with weak ties, and strong ties can enhance the quality, enhance received information and stimulate user purchase intentions. Li Xujun and Liu Yezheng (2016) used the theory of strong-weak relations as the basis when studying the opinion adoption mechanism of agglomeration groups. They pointed out that a healthy relationship can accelerate the dissemination of information, improve the effectiveness of advertising, reduce the uncertainty of information, and inhibit the spread of rumors. Sun Xiaoe and Bian Yanjie (2011) pointed out that when studying the introduction of overseas talents, the strong and the weak in social networks have their advantages, and the two have a coordinating effect. Healthy relationships are more attractive in terms of interpersonal relationships, trust and reliability,

and breaking through barriers, while fragile relationships have advantages in information dissemination and resource exchange.

### **2.1.2.2 Spread content**

According to the form of communication, advertising can be divided into soft advertising and hard advertising in the traditional sense. The so-called faded advertisement refers to advertisements spread subtly and subtly to reduce general avoidance and increase acceptance. It is generally believed that soft advertising is more subtle and hidden in the form of communication. Hard advertising is more inactive and more prominent in the form of communication. Liao Daozheng (2002) summarized the characteristics and operating methods of soft advertising. He pointed out that weak advertising is the opposite of hard advertising. Traditional hard advertisements and excessive fake advertisements make users tired of guarding and cause aesthetic fatigue. The emergence of soft advertising broke this status quo. It is refreshing for users and is gradually being sought after by everyone. The essence of quiet advertising operations is to process elements such as information content, communication methods, communication media, and advertising purposes. Making soft advertisements for information content breaks the fixed structure of the original hard advertisements, randomly arranging the advertisement headlines: slogan, body, and accompanying text, and use rhetorical techniques to add literary works to the ad. Because it contains advertising information to users, such soft advertising is more acceptable to consumers and more popular. This article uses this classification method to divide Taobao push advertisements into dull advertisements and hard advertisements according to the content of the communication. It is believed that soft advertising pays more attention to hiding commercial information in disseminating content and recommends advertising information to consumers in various forms.

Taobao's behavior targeting advertising model has indeed created enormous profits for the company, but each company's business model and profitability are different. Pictures, text, videos, and links are endless, and there are many forms of advertising. However, a closer look

reveals that the more successful Taobao push ads have one thing in common. The advertisement's content is rooted, friendly to the people, and the content is closer to life. This is a commercial for wearing a social jacket. After continuous exploration, many companies have found that users cannot accept rude and straightforward advertisements. Therefore, they have begun to cater to user advertising psychology, often using personal life conditions, daily schedules, and friends' experiences to suggest product information.

Advertising content also has social attributes. In the process of applying social skills to advertising content, communicators can freely control the degree of socialization of advertising content, which is described by the "degree of socialization of advertising content." Ads with a higher level of social content have more confidential commercial information and are more similar to soft ads, so ads are readily accepted and loved by users; ads with lower levels of social content have more direct and prominent commercial information and are more consistent with rigid the ads are more similar. Users are vulnerable to resistance. Wang Zhiguo (2018) pointed out that soft advertising is the most commonly used form of advertising on the current Weibo platform when studying weak Weibo advertising. Compared with hard advertisements, dull advertisements have better communication effects and are easier to be accepted and loved by users. Aiming at the communication problems existing in soft advertisements on the current Weibo platform, a series of specific communication strategies are proposed.

### **2.1.3 User Contribution Behavior**

For a long time, contribution behavior has been regarded as a critical factor for online applications' survival and prosperity.

Nowadays, more and more companies use information resources provided by users in applications to design, develop, support, and other related products. Related events. The potential benefits make the company consider how to improve user contribution behavior effectively. Many scholars have now defined the meaning of user contribution behavior. For example, Atuahene-

Gima (2005) believes that user contribution behavior means that consumers actively and consciously share the experience of using products or experiencing services. Many scholars also explained user contribution behavior from two dimensions: positive contribution and response contribution. Mahr (2012) et al. The positive contribution behavior in online applications is proposed: users will actively post opinions and insights about the product. This information should be different from the information published in the application and have a specific value; consumers reflect their response contributions by answering questions and questions about the community's products. Qin Min and others believe that positive contribution behavior is expressed as users actively provide and share experiences and feelings related to enterprise products or services, provide valuable suggestions and solutions to products or services, or propose novel product design concepts; respond to contributions The behavior is based on the information published in the application, that is, the user answers the questions of other users in the product, comments on existing responses to specific product questions, provides comments or shares more appropriate answers. In another part of the research, user contribution behavior refers to sharing information in a particular medium, and its sharing forms include text, pictures, audio, and video. Current scholars have gradually deepened their research and noticed that user contribution behavior has developed into sustained contribution behavior. They believe that the relevant factors affecting user contribution cannot predict whether users can continue to contribute. Therefore, sustained contribution and initial Contribute two perspectives for research.

This research will also be conducted from the perspective of user sustained contribution and initial contribution.

### **2.1.3.1 Sustained Contribution**

Sustained contribution reflects the ability of behavioral targeting advertising to continue to bring social attributes. In the existing literature, there are research theories in other scenarios. Fang and Neufeld (2009) studied the sustained contribution behavior of developers in



the open-source software community. Based on the Legitimate Peripheral Participation theory proposed by Lave and Wenger (1991), the author pays attention to situational learning. (The process of acting wisely and purposefully in the community) and identity construction (the process of being identified in the community). Compared with foreign scholars' attention in the field, domestic scholars started late in exploring the sustained contribution behavior of users in virtual organizations. For example, Jin Xiaoling et al. (2013) used empirical research methods in online Q&A communities to study the factors that influencers' willingness to continue to answer questions. The research results show that reputation and the ability to learn and acquire knowledge contribute to the desire to continue contributing knowledge. There is a positive impact, and the points regulate this influence process. Specifically, users with a high level of issues, users who continue to contribute knowledge are more affected by reputation, and users with low levels are more likely to learn and acquire knowledge. He Aizhong and Li Xue (2015) used grounded theory in the Xiaomi mobile phone community

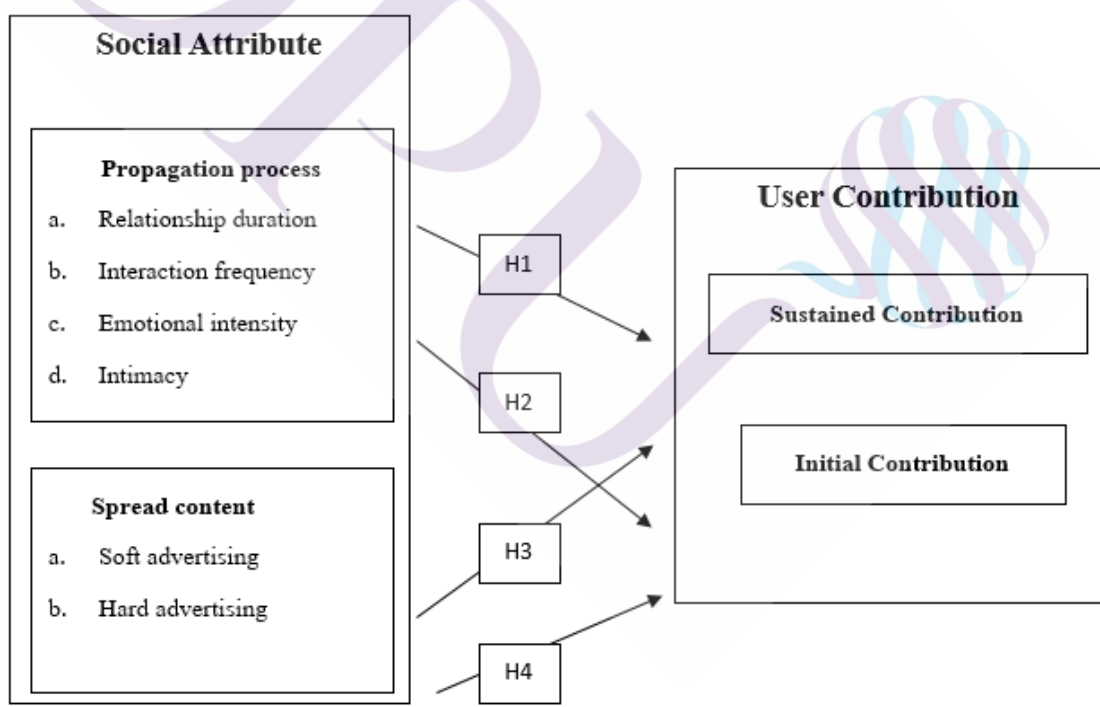
The motivational evolution mechanism of members' sustained participation behaviors was explored. The research results show that user sustained participation behaviors are formed by the sustained internalization of members' motivations after the influence of external situational factors and the satisfaction of individual psychological needs. Wan Li and Cheng Huiping (2016) explored the different effects of internal motivation and external motivation on user knowledge quality, willingness to contribute, and desire to continue contributing in a virtual knowledge community based on the theory of self-determination. Empirical research through the structural equation model found that both external motivation and internal motivation impact knowledge contribution willingness and knowledge quality, and user knowledge contribution willingness and satisfaction promote user sustained contribution willingness.

### **2.1.3.2 Initial Contribution**

Through the literature review, it is found that there is very little research on the initial

contribution behavior of users at this stage. Although scholars have proposed to subdivide the contribution behavior into initial contribution and sustained contribution, the main research object is still a sustained contribution. And has achieved rich results in continuous contribution. Ridings and Gefen (2004) conducted an exploratory study on user initial contribution behavior in virtual communities through motivation theory. They found that user motivations, such as information exchange, social support, social interaction (friendship), etc., affect user initial contributions. Some scholars also proposed the influencing factors of user initial contribution behavior, which can be referred to the previous research results on the influence factors of generalized user's contribution behavior.<sup>3</sup>

## 2.2 Theoretical Framework



## 2.3 Theoretical Analysis and Hypotheses

2.3.1 Analysis of the influence of the propagation process on the sustained contribution behavior and initial contribution behavior

Granovetter (1974) pointed out that strong relations are based on a high degree of trust in strong-weak relations theory. Krackhardt (1992) also believes that strong ties play a more prominent role in overcoming barriers and enhancing social activities' reliability. Trust can have a significant impact on consumer attitudes and behaviors. Bansal&Voyer (2000) pointed out when researching word-of-mouth communication, when the communicator When consumers have a healthy relationship, they are closer in the psychological distance, and consumers will pay more attention to the advertisements they receive. A robust social relationship means a high degree of trust, which can significantly enhance advertising effectiveness.

Therefore, the following assumptions are generated:

H1: The propagation process has a positive impact on sustained contribution behavior.

H2: The propagation process has a positive impact on initial contribution behavior.

2.3.2 Analysis of the influence of spread content on the sustained contribution behavior and initial contribution behavior

Communicators' social skills produce the content of each advertisement. Communicators often secretly convey their commercial information by publishing personal social life, chat records, and other content, freely controlling the social degree of advertising content, and promoting smooth communication of commercial advertising information. Research shows that soft advertising has a tremendous influence, and the advertising effect of quiet communication is relatively better. Wang Zhiguo (2018) used Weibo as an example to analyze the communication mechanism and impact of Weibo soft advertising. He emphasized that weak advertising is currently the most used form of advertising on Weibo

platforms. Compared with hard advertising, soft advertising has better effects and is more readily accepted by consumers. Love, enthusiastically sought after by consumers and companies. When discussing weak advertising in news media, Zhao Wei pointed out that with the development of the market economy and increased product homogeneity, customers have become tired and resistant to hard advertising. The various forms of soft advertising have high credibility and are readily accepted by consumers. The higher the social level of the advertising content, the closer the content to personal life and interpersonal communication, the more concealed commercial information, the closer it is to soft advertising, and the better the advertising effect; the lower the social level of the advertising content, the more rigid the content and the more prominent the commercial purpose. Closer to hard advertising, the advertising effect is relatively worse.

Therefore, the following assumptions:

H3: The spread content has a positive impact on sustained contribution behavior.

H4: The spread content has a positive impact on initial contribution behavior.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

Using a combination of literature reading and questionnaire methods, the empirical approach used in this paper investigates the effect of social attributes of behavioral targeting advertising on the relationship between user contribution behavior curves, formulates hypotheses, analyzes the data, and verifies the assumptions. Conclusions are drawn.

The literature reading method collected a large amount of relevant domestic and foreign literature, analyzed, and sorted out the relationship between the social attributes of behaviorally targeted advertising and the social qualities of user-contributed behavior. The current state laid a solid theoretical foundation for the subsequent research. Based on social reality, it is understandable that behavioral targeting advertising is currently under big data analysis and pushing. Many users are curious about this. Based on this, it is presumed that social attributes may have a positive impact.

Then, a questionnaire method was used to collect relevant data. SPSS was used to analyze the data for reliability, validity, and relevance.

#### **3.1 Identifying Population and Sample**

##### **3.1.1 Population**

Citizens of Kunming.

##### **3.1.2 Sample**

Citizens of Wuhua District, Xishan District, Panlong District, and Guandu District in Kunming.

##### **3.1.3 Sample size**

Due to the number of populations is unknown, the researcher uses Taro Yamane table to calculate by the approximately sample size for this study (Poldongnok, 2009). The sample size is calculated based on 95% confidence level and 5% sampling error based on the following formula:

$$n = Z^2 [P (1-P)] / e^2$$

n = Sample size

Z = Reliability of 95% is 1.96

e = Not reliability is 0.05

P = Percentage (0.05)

Calculation:

$$n = Z^2 [P (1-P)] / e^2$$

$$= (1.96)^2 [(0.50) (1-0.05)] / (0.05)^2$$

$$= 384$$

The sample size is 384 respondents.

#### **3.1.4 Sampling method**

The process of sampling method is as follows:

- a. Simple random sampling – By selecting samples from four districts of Kunming City (Wuhua District, Xishan District, Panlong District, and Guandu District)
- b. Convenience sampling – A simple questionnaire was posted on the Web using WJX to collect data. ([www.wjx.cn](http://www.wjx.cn))

### **3.2 Measurement Items and Validations**

#### **3.2.1 Measurement Items**

This research developed and adapted projects from previous research to measure the structure of the following research:

- 5 items to measure the demographic data of customers who use Taobao to shop (e.g., age, gender, occupation, income, education level)
- 5 items to measure the purchasing behavior of customers who use Taobao (for example, whether to use Taobao, the type of products they like to buy, the average number of purchases per week, and the degree of satisfaction of shopping)

- 3 items to measure whether users understand behavior targeting advertising (for example, do you know about behavioral targeting advertising, how do you view behavioral targeting advertising)

- 17 items to measure the impact of the social attributes of Taobao's behavioral targeting advertising on your own contribution behavior (such as consulting, sharing, making friends, etc.)

### **3.2.2 Measurement Validations**

There are 2 steps of validity tests for survey research questionnaires which are;

#### **1. Content Validity**

Content validity was assured by developing the study constructs based on relevant literature and suggestions of academicians and practitioners.

#### **2. Reliability Validity**

The researcher conducted a pilot test with 41 respondents. The data had coefficient alpha, or Cronbach's Alpha, 0.6 which indicated a moderate - fair internal consistency of the study constructs (Malhotra 2007).

### **3.3 Data Collection**

This study collected 2 types of data:

- Raw data: Use questionnaires to collect data from the four regions of Wuhua District, Xishan District, Panlong District, and Guandu District in Kunming.

### **3.4 Data Analysis**

The data was analyzed using the following statistics:

1. Descriptive statistics-frequency, percentage, mean and standard deviation.
2. Inferential statistics;

2.1 Chi-Square is used to test the relationship between demographic data and customer intent to use the service.

2.2 Regression analysis, the relationship between the social attributes of Taobao ads and consumer contribution behavior.

A 95% or  $<0.05$  confidence level is used to test the hypothesis of the study.





## CHAPTER 4

### FINDINGS AND ANALYSIS

This research conducted this study “the Effect of Social Attributes of Behavior Targeting Advertising on User Contribution Behavior an Empirical Study in Taobao’s Behavior. A total of 384 consumer questionnaires were coded and analyzed using SPSS to analyze the hypotheses. The research analysis is presented in the form of 5 parts as follows:

Part 1 Analysis the Personal information.

Part 2 Analysis the behavior shopped online.

Part 3 Analysis of the social attributes of behavior targeting advertising.

Part 4 Analysis of the contribution behavior.

Part 5 Analysis of the hypotheses testing.

#### 4.1 Part 1 Analysis the personal information.

This part to analysis the personal information frequencies includes gender, age, education, occupation, and monthly income by using frequency and percentage analysis method.

Table 1 Frequency and percentage of respondent personal information.

Personal information		F	
		requency	ercent
1. Gender	Male	52	9.58
	Female	32	0.42
	Total	84	00.00
Less than 20-year-old		1	

2. Age		8	.69
			1
	20 - 30-year-old	66	3.23
			1
	31 - 40-year-old	00	6.04
			6
	41 - 50-year-old	2	6.15
			2
	51 - 60-year-old	9	.55
			9
	More than 60-year-old		.34
			3
	Total	84	00.00

3.			5
Education			
	Junior high school	3	3.80
			9
	High school	1	3.70
			1
	Bachelor's degree	84	7.92
			4
	Master's degree	3	1.20
			1
	Doctorate degree	3	.39
			3
	Total	84	00.00

4.			1
Occupation			
	Student	9	.95
			2
	Employee	00	2.08
	Business Owner		8

		3	1.61
			5
	Teacher	4	4.06
			2
	Medical doctor	8	.29
			3
	Total	84	00.00
<hr/>			
	5. Monthly		1
Income	Less 3,000 RMB	06	7.60
			1
	3,000 - 4,000 RMB	27	3.07
			7
	4,001 - 5,000 RMB	5	9.53
			1
	5,001 - 6,000 RMB	7	.43
			2
	6,001 -7,000 RMB	4	.25
			1
	6,001 - 7,000 RMB	8	.69
			1
	More than 7,000 RMB	7	.43
			3
	Total	84	00.00

Based on the table explaining the respondents' profile, the results revealed that the proportions of female more than male respondents were 60.42% of them were females meanwhile the remaining 39.58% were males. Most of the respondents were age group 20 - 30 years old 43.23%, followed by those aged group 31 - 40 years old 26.04%, and age group 41 - 50 years old 16.15%, 51 - 60 years old 7.55%. The minority age groups under 20 years old 4.69% and less age

group more than 60 years old 2.34%. In terms of education level, the largest groups of respondents were education Bachelor's degree 47.92%, followed by high school level 23.70%, Junior high school 13.80%, and the small minority was a Master's degree of 11.20% and less was Doctorate degree 3.39%.

In terms of the occupations in the largest group of respondents were employees 52.08, followed by Business Owner 21.61%, and Teacher 14.06%. Small minority respondents are medical doctor 7.29%, and less Student 4.95%. The monthly income (RMB) of the largest group of respondents is in the range of 3,000 - 4,000 RMB 33.07%, followed by income per month range of Less 3,000 RMB 27.60%, and 4,001 - 5,000 RMB 19.53%. The smallest income per month range of 6,001 -7,000 RMB 6.25% and income per month range of 6,001 - 7,000 RMB 4.69% and less income per month range of 5,001 - 6,000 RMB, more than 7,000 RMB 4.43%, respectively.

#### 4.2 Part 2 Analysis the behavior shopped online.

This part to analysis the behavior shopped online includes Have ever shopped online, the following online shopping software do prefer to use, the time has used online shopping software, many online purchases do make every week and Products often to buy by using frequency and percentage analysis method.

Table 2 Frequency and percentage of respondent the behavior shopped online.

The behavior shopped online		F	
		requery	ercent
Have ever shopped online	Yes	13	15.1
	No	1	1.19
	Total	14	16.29

			2
	Taobao	44	3.54
			7
The	JD	9	0.57
following			6
shopping software does	Pinduoduo	1	5.89
prefer to use			3
	Total	84	00.00

			5
	Within 1 year	4	4.06
			9
The	1-3 years	7	5.26
has			1
used	More than 3-5 years	90	9.48
online			4
shopping software.	More than 5 years	3	1.20
			3
	Total	84	00.00

			2
	Once a week	30	9.90
			8
Many	2 - 3 times a week	5	2.14
online purchases do			6
make every week	4 - 5 times a week	9	7.97
			3
	Total	84	00.00

			1
	Clothing	10	8.65
			6
Products	Daily necessities	3	6.41
often to buy			

		4	
Electronic products	9	2.76	
		9	
Cosmetics	1	3.70	
		7	
Books	1	8.49	
		3	
Total	84	00.00	

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Based on the table explaining the behavior shopped online, the results revealed that they have ever shopped online 81.51% more than not ever shopped online were 18.49%. Most of the respondents the following online shopping software does prefer to use were Taobao 63.54%, followed by JD 20.57%, and Pinduoduo 15.89%. Most time has used online shopping software more than 3-5 years 49.48%, followed by 1-3 years 25.26% and within 1 year 14.06% and less more than 5 years 11.20%. In terms of many online purchases do make every week, the largest groups of respondents were once a week 59.90%, followed by 2 - 3 times a week 22.14%, and 4 - 5 times a week 17.97%, and the products often to buy most Clothing 28.65%, followed by Cosmetics 23.70%, Books 18.49%, and the small minority products often to buy was Daily necessities 16.41% and less was electronic products 12.76%, respectively.

#### **4.3 Part 3 Analysis of the social attributes of behavior targeting advertising.**

This part to analysis of the social attributes of behavior targeting advertising on user contribution behavior inclusive Behavior-Targeted Advertising and Social attributes using the mean and standard deviation analysis method.

Table 3 Represents the mean and standard deviation the opinion of the behavior-targeted advertising.

(n = 384)

Behavior-Targeted Advertising	$\bar{x}$	SD.	Meaning
1. I understand Behavior-targeted advertising	3.86	0.72	Agree
2. How do you view behavioral advertising	4.05	0.82	Agree
3. Do you like behavioral targeted advertising to recommend your products	3.83	0.81	Agree
4. I will pay attention to these ads	3.90	0.85	Agree
5. I feel that this ad positions me as a unique customer	3.93	0.79	Agree
6. I feel that this advertisement is made according to my preferences	4.35	0.70	Strongly agree
7. I feel this ad is made according to my needs	4.15	0.75	Agree
8. I feel that this ad is made to meet my needs and preferences	4.18	0.75	Agree
9. I will learn about the product through advertising	4.00	0.86	Agree
10. I will buy products through advertising	4.07	0.76	Agree
Average	4.03	0.59	Agree

Based on the table explaining the respondents' opinion towards the opinion of the behavior-targeted advertising. The overall average in agrees level with the mean 4.03, standard deviation 0.59. When individual aspects were considered, it was found that the most commonly found opinion in strongly agree level was "I feel that this advertisement is made according to my preferences" with a mean of 4.35, followed by opinion in agree level has 9 issue were "I feel that this ad is made to meet my needs and preferences" (mean of 4.18), "I feel this ad is made according to my needs" (mean of 4.15), "I will buy products through advertising" (mean of 4.07), "How do you view behavioral advertising" (mean of 4.05), "I will learn about the product through advertising" (mean of 4.00), "I feel that this ad positions me as a unique customer" (mean of 3.93),

“I will pay attention to these ads” (mean of 3.90), “I understand Behavior-targeted advertising” (mean of 3.86) and “Do you like behavioral targeted advertising to recommend your products” (mean of 3.83), respectively.

Table 4 Represents the mean and standard deviation the opinion of the social attributes.

(n = 384)

Social attributes	$\bar{x}$	SD.	Meaning
1. I will take the initiative to share my use of the product	3.94	0.79	Agree
2. I will share this kind of product to my close people	3.92	0.77	Agree
3. I will help those who ask about the product	3.92	0.77	Agree
4. I will contact people who bought the same product and may become friends	3.89	0.77	Agree
Average	3.92	0.68	Agree

Based on the table explaining the respondents’ opinion towards the social attributes. The overall average in agrees level with the mean 3.92, standard deviation 0.68. When individual aspects were considered, it was found that the most commonly was “I will take the initiative to share my use of the product” with a mean of 3.94, followed by “I will share this kind of product to my close people” (mean of 3.92), “I will help those who ask about the product” (mean of 3.92), and “I will contact people who bought the same product and may become friends” (mean of 3.89), respectively.

#### 4.4 Part 4 Analysis of the contribution behavior.

This part to analysis of the contribution behavior includes sustained contribution and initial contribution, using the mean and standard deviation analysis method.



Table 5 Represents the mean and standard deviation the opinion of the sustained contribution behavior.

(n = 384)

The Sustained Contribution Behavior	$\bar{x}$	SD.	Meaning
1. I will buy the products recommended by the ad	4.11	0.73	Agree
2. When I asked for help on this product, someone provided me with relevant information	4.01	0.72	Agree
3. When someone asks for help on this product, I will take the initiative to provide relevant information	4.05	0.73	Agree
Average	4.06	0.64	Agree

Based on the table explaining the respondents' opinion towards the sustained contribution behavior. The result shows the standard deviations are all less than 1.5 (30% of mean). The overall average in agree level with the mean 4.06, standard deviation 0.64. When individual aspects were considered, it was found that the most commonly found opinion was "I will buy the products recommended by the ad" with a mean of 4.11, followed by "When someone asks for help on this product, I will take the initiative to provide relevant information" (mean of 4.05), and "When I asked for help on this product, someone provided me with relevant information" (mean of 4.01), respectively.

Table 6 Represents the mean and standard deviation the opinion of the initial contribution behavior.

(n = 384)

The Initial Contribution Behavior	$\bar{x}$	SD.	Meaning
1. I think the information I share is valuable	4.02	0.83	Agree
2. I am willing to provide information to help others solve problems	4.14	0.68	Agree
3. I am willing to continue contributing knowledge or information instead of stopping	4.10	0.77	Agree
Average	4.09	0.63	Agree

Based on the table explaining the respondents' opinion towards the initial contribution behavior. The result shows the standard deviations are all less than 1.5 (30% of mean). The overall average in agree level with the mean 4.09, standard deviation 0.63. When individual aspects were considered, it was found that the most commonly found opinion was "I am willing to provide information to help others solve problems" with a mean of 4.14, followed by "I am willing to continue contributing knowledge or information instead of stopping" (mean of 4.10), and "I think the information I share is valuable" (mean of 4.02), respectively.

#### 4.5 Part 5 Analysis of the hypotheses testing.

H1: The propagation process has a positive impact on sustained contribution behavior.

Hypotheses H0 = The propagation process not relationship on the sustained contribution behavior.

Hypotheses H1 = The propagation process has a positive relationship on the sustained contribution behavior.

Table 7 Represents coefficients analysis of the propagation process and the sustained contribution behavior.

Coefficients(a)				
Model	Unstandardized		Standardized	t.
	Coefficients		Coefficients	
	B	Std. Error	Beta	
(Constant)	1.198	0.171		7.004
The propagation process	0.709	0.042	0.654	16.900

R. = 0.654 R Square = 0.428 R2 (Adjusted R Square) = 0.426 or 42.60%  
F. = 285.613 Sig. = 0.000 Durbin-Watson = 1.840

\* Significant at the 0.05 level

Based on the table explaining, the sample regression analyses between the propagation process and the sustained contribution behavior. Results found to have the relation between the variable in strong relationship level (R. = 0.654) and the coefficient of determination or R-squared values 0.428. The result shows the propagation process have influenced changing the sustained contribution behavior at the rate of 42.60% (Adjusted R Square = 0.426). The Durbin-Watson statistics tests that the residuals from a linear regression or sample regression are independently shown  $1.840 > 1.5$  does not autocorrelation between variables. And the Analysis of Variance (ANOVA) analysis of the model show  $F. = 285.613, sig. = 0.000 < 0.05$ . And demonstrates that it is significant among all independent variables to predict the dependent variable.

The analysis shows revealed constant unstandardized coefficients 1.198, standard error of the coefficients 0.171, The result show sample regression analysis shows  $t. = 16.900, sig. = 0.000 > 0.05$ , beta = 0.654, the result can be described as the propagation process have positive influence the sustained contribution behavior, by the opinion towards propagation process change

to increase one unit has the influence the sustained contribution behavior change increases 0.654 units, significant at the 0.05 level.

Summary testing accepts hypotheses H1 or the propagation process have a positive influence on the sustained contribution behavior, The propagation process has the influence to change at 42.60%, significant at the 0.05 level.

H2: The propagation process has a positive impact on initial contribution behavior.

Hypotheses H0 = The propagation process not relationship on the initial contribution behavior.

Hypotheses H2 = The propagation process has a positive relationship on the initial contribution behavior.

Table 8 Represents coefficients analysis of the propagation process and the initial contribution behavior.

Coefficients(a)	Unstandardized		Standardized		t.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	1.121	0.164			6.835
The propagation process	0.735	0.040	0.683		18.265

R. = 0.683 R Square = 0.466 R2 (Adjusted R Square) = 0.465 or 46.50%

F. = 333.628 Sig. = 0.000 Durbin-Watson = 1.845

\* Significant at the 0.05 level

Based on the table explaining, the sample regression analyses between the propagation process and the initial contribution behavior. Results found to have the relation between the variable in strong relationship level ( $R = 0.683$ ) and the coefficient of determination or R-squared values 0.466. The result shows the propagation process have influenced changing the initial contribution behavior at the rate of 46.50% (Adjusted R Square = 0.465). The Durbin-Watson statistics tests that the residuals from a linear regression or sample regression are independently shown  $1.845 > 1.5$  does not autocorrelation between variables. And the Analysis of Variance (ANOVA) analysis of the model show  $F = 333.628$ ,  $sig. = 0.000 < 0.05$ . And demonstrates that it is significant among all independent variables to predict the dependent variable.

The analysis shows revealed constant unstandardized coefficients 1.121, standard error of the coefficients 0.164, The result show sample regression analysis shows  $t = 18.265$ ,  $sig. = 0.000 > 0.05$ ,  $beta = 0.683$ , the result can be described as the propagation process have positive influence the initial contribution behavior, by the opinion towards propagation process change to increase one unit has the influence the initial contribution behavior change increases 0.683 units, significant at the 0.05 level.

Summary testing accepts hypotheses H2 or the propagation process have a positive influence on the initial contribution behavior, The propagation process has the influence to change at 46.50%, significant at the 0.05 level.

H3: The spread content has a positive impact on sustained contribution behavior.

Hypotheses H0 = The spread content not relationship on the sustained contribution behavior.

Hypotheses H3 = The spread content has a positive relationship on the sustained contribution behavior.

Table 9 Represents coefficients analysis of the spread content and the sustained contribution behavior.

Coefficients(a)				
Model	Unstandardized		Standardized	t.
	Coefficients		Coefficients	
	B	Std. Error	Beta	
(Constant)	1.419	0.134		10.601
The spread content	0.673	0.034	0.715	20.007

R. = 0.715 R Square = 0.512 R2 (Adjusted R Square) = 0.510 or 51.00%  
F. = 400.271 Sig. = 0.000 Durbin-Watson = 1.627

\* Significant at the 0.05 level

Based on the table explaining, the sample regression analyses between the spread content and the sustained contribution behavior. Results found to have the relation between the variable in strong relationship level (R. = 0.715) and the coefficient of determination or R-squared values 0.512. The result shows the spread content have influenced changing the sustained contribution behavior at the rate of 51.00% (Adjusted R Square = 0.426510). The Durbin-Watson statistics tests that the residuals from a linear regression or sample regression are independently shown  $1.627 > 1.5$  does not autocorrelation between variables. And the Analysis of Variance (ANOVA) analysis of the model show  $F. = 400.271, sig. = 0.000 < 0.05$ . And demonstrates that it is significant among all independent variables to predict the dependent variable.

The analysis shows revealed constant unstandardized coefficients 1.419, standard error of the coefficients 0.134, The result show sample regression analysis shows  $t. = 20.007, sig. = 0.000 > 0.05$ , beta = 0.715, the result can be described as The spread content have positive influence the sustained contribution behavior, by the opinion towards propagation process change to increase

one unit has the influence the sustained contribution behavior change increases 0.715 units, significant at the 0.05 level.

Summary testing accepts hypotheses H3 or the spread content have a positive influence on the sustained contribution behavior, The spread content has the influence to change at 51.00%, significant at the 0.05 level.

H4: The spread content has a positive impact on initial contribution behavior.

Hypotheses H0 = The spread content not relationship on the initial contribution behavior.

Hypotheses H4 = The spread content has a positive relationship on the initial contribution behavior.

Table 10 Represents coefficients analysis of the spread content and the initial contribution behavior.

Coefficients(a)	Unstandardized		Standardized		t.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	1.513	0.135			11.176
The spread content	0.656	0.034	0.702		19.278

R. = 0.702 R Square = 0.493 R2 (Adjusted R Square) = 0.492 or 49.20%

F. = 371.657 Sig. = 0.000 Durbin-Watson = 1.754

\* Significant at the 0.05 level

Based on the table explaining, the sample regression analyses between the spread content and the initial contribution behavior. Results found to have the relation between the variable in strong relationship level ( $R = 0.702$ ) and the coefficient of determination or R-squared values 0.493. The result shows the spread content have influenced changing the initial contribution behavior at the rate of 49.20% (Adjusted R Square = 0.492). The Durbin-Watson statistics tests that the residuals from a linear regression or sample regression are independently shown  $1.754 > 1.5$  does not autocorrelation between variables. And the Analysis of Variance (ANOVA) analysis of the model show  $F = 371.657$ ,  $sig. = 0.000 < 0.05$ . And demonstrates that it is significant among all independent variables to predict the dependent variable.

The analysis shows revealed constant unstandardized coefficients 1.513, standard error of the coefficients 0.135, The result show sample regression analysis shows  $t = 19.278$ ,  $sig. = 0.000 > 0.05$ ,  $\beta = 0.702$ , the result can be described as The spread content have positive influence the initial contribution behavior, by the opinion towards propagation process change to increase one unit has the influence the initial contribution behavior change increases 0.702 units, significant at the 0.05 level.

Summary testing accepts hypotheses H4 or the spread content have a positive influence on the initial contribution behavior, The spread content has the influence to change at 49.20%, significant at the 0.05 level.



Table 11 Summary hypotheses the Effect of Social Attributes of Behavior Targeting Advertising on User Contribution Behavior an Empirical Study in Taobao's Behavior

Hypotheses	Result	Beta	R2
H1: The propagation process has a positive impact on H1 sustained contribution behavior.	Accepts	0.654	42.60%
H2: The propagation process has a positive impact on H2 initial contribution behavior.	Accepts	0.683	46.50%
H3: The spread content has a positive impact on H3 sustained contribution behavior.	Accepts	0.715	51.00%
H4: The spread content has a positive impact on H4 initial contribution behavior.	Accepts	0.702	49.20%

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

This research conducted this study the Effect of Social Attributes of Behavior Targeting Advertising on User Contribution Behavior an Empirical Study in Taobao's Behavior . The objectives of the study were 1) To identify the impact of the propagation process on the user's sustained contribution behavior 2) To identify the impact of the propagation process on the user's initial contribution behavior 3) To identify the impact of spread content on user's sustained contribution behavior and 4) Determine the impact of spread content on the user's initial contribution behavior. The sample of survey was consumers in Citizens of Wuhua District, Xishan District, Panlong District, and Guandu District in Kunming, a total of 384 consumer questionnaires. And the reliability test by using Cronbach's alpha to analyze with each variable item in each factor, the reliability result is 0.930 over 0.7 of reliability value. Data collection this study collected 2 types of data which were 1) Primary data using the questionnaire to collect the data from customers data from 4 countries and 2) Secondary data using the documentary research to collect the data from text books, article, and related research to develop the conceptual framework of the study. The research methodology is survey research, using quantitative research method, the statistics for data analysis using descriptive statistics and inferential statistics in hypothesis testing using the sample regression analyses. Process data using statistical software packages. The results of the research can be summarized as follows;

#### 5.1 Summary of research findings

##### 5.1.1 Personal information

The majority of respondents are female (60.42%) more than male (39.58%) in age 20 – 30 years old range (43.23%), followed by those aged group 31 - 40 years old (26.04%) and education Bachelor's degree (47.92%) followed by high school level (23.70%). They mainly are

employees (52.08%) the second group was Business Owner (21.06%). And the monthly income (RMB) the range of 3,000 - 4,000 RMB (33.07%) followed by income per month range of Less 3,000 RMB (27.60%), respectively.

### **5.1.2 The behavior shopped online**

The majority of respondents revealed that most of ever shopped online (81.51%), and the following online shopping software does prefer to use were Taobao (63.54%), followed by JD (20.57%), and Pinduoduo (15.89%). The most time has used online shopping software for more than 3-5 years (49.48%), and many online purchases do make every week once a week (59.90%). The products often buy most Clothing (28.65%), followed by Cosmetics (23.70%), and Books (18.49%), respectively.

### **5.1.3 The social attributes of behavior targeting advertising**

The respondents' opinion towards the behavior-targeted advertising is to agree with the mean of 4.03, the standard deviation of 0.59. It was found that the most commonly found opinion felt that "this advertisement is made according to my preferences", followed by "feel that this ad is made to meet needs and preferences, " feel this ad is made according to needs", will buy products through advertising", "view behavioral advertising", "will learn about the product through advertising", " feel that this ad positions as a unique customer", "will pay attention to these ads", "understand Behavior-targeted advertising" and "The behavior targeted advertising to recommend products", respectively.

### **5.1.4 The social attributes**

The respondents' opinion towards the social attributes is to agree with the mean of 3.92, the standard deviation of 0.68. It was found that the most commonly found opinion felt that "take the initiative to share use of the product", followed by "share this kind of product to close people",

“help those who ask about the product”, and “contact people who bought the same product and may become friends”, respectively.

### **5.1.5 The contribution behavior**

The respondents' opinion towards the contribution behavior is to agree with the mean of 4.13, the standard deviation of 0.57. It was found that the most commonly found opinion was the initial contribution behavior with the mean of 4.09 and sustained contribution behavior with the mean of 4.06. The result show opinion towards the sustained contribution behavior in agree level the most commonly the most commonly found opinion felt that “buy the products recommended by the ad” followed by “When someone asks for help on this product, will take the initiative to provide relevant information”, and “When asked for help on this product, someone provided with relevant information”. And based on the initial contribution behavior found that the most commonly found opinion was “am willing to provide information to help others solve problems”, followed by “willing to continue contributing knowledge or information instead of stopping”, and “think the information share is valuable”, respectively.

### **5.1.6 Hypotheses testing**

The research conducted this study the Effect of Social Attributes of Behavior Targeting Advertising on User Contribution Behavior an Empirical Study in Taobao's Behavior. The results of the research hypothesis testing can be summarized as follows;

H1: The propagation process has a positive impact on sustained contribution behavior.

Summary testing accepts hypotheses H1 or the propagation process have a positive influence on the sustained contribution behavior, with the coefficients of 0.654 and the propagation process has the influence to change at 42.60%, significant at the 0.05 level.

H2: The propagation process has a positive impact on initial contribution behavior.

Summary testing accepts hypotheses H2 or the propagation process have a positive influence on the initial contribution behavior, with the coefficients of 0.683 and the propagation process has the influence to change at 46.50%, significant at the 0.05 level.

H3: The spread content has a positive impact on sustained contribution behavior.

Summary testing accepts hypotheses H3 or the spread content have a positive influence on the sustained contribution behavior, with the coefficients of 0.715 and the spread content has the influence to change at 51.00%, significant at the 0.05 level.

H4: The spread content has a positive impact on initial contribution behavior.

Summary testing accepts hypotheses H4 or the spread content have a positive influence on the initial contribution behavior, with the coefficients of 0.702 and the spread content has the influence to change at 49.20%, significant at the 0.05 level.

## **5.2 Discussion**

The research results from the analysis of the finding can be summarized as follows;

1) The objectives to studies the impact of the propagation process on the user's sustained contribution behavior. The result found the propagation process has a positive impact on sustained contribution behavior, in line with the concept of Granovetter (1974) refer those strong relations are based on a high degree of trust in strong-weak relations theory and Krackhardt (1992) also believes that strong ties play a more prominent role in overcoming barriers and enhancing social activities' reliability. Trust can have a significant impact on consumer attitudes and behaviours. The research shows the propagation process has a positive influence on the sustained contribution behavior, by the opinion towards propagation process change to increase has the influence the sustained contribution behavior change positive increases ,as based on the concept Bansal &Voyer (2000) pointed out when researching word-of-mouth communication, when the communicator When consumers have a healthy relationship, they are closer in the psychological distance, and consumers will pay more attention to the advertisements they receive.

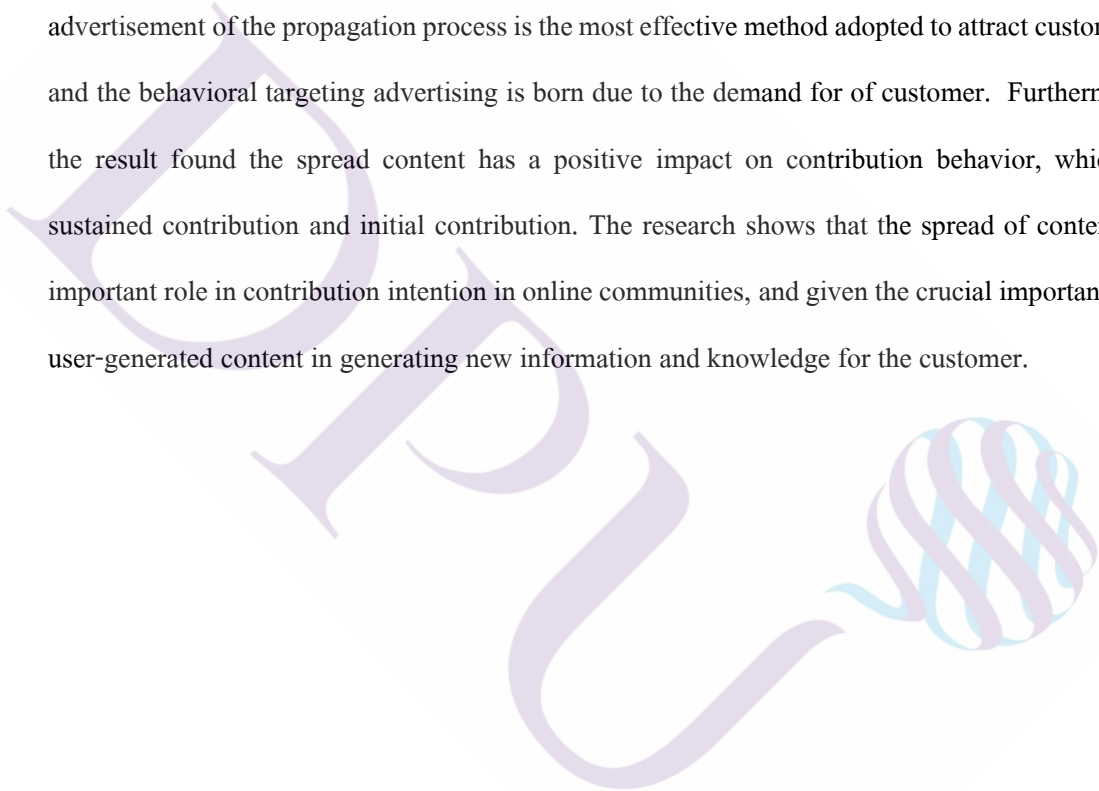
2) The objectives to studies the impact of the propagation process on the user's initial contribution behavior. The result found the propagation process has a positive impact on initial contribution behavior, in line with the concept of Krackhardt (1992) refer that those strong ties play a more prominent role in overcoming barriers and enhancing social activities' reliability. Trust can have a significant impact on consumer attitudes and behaviours. The research shows the propagation process has a positive influence on the initial contribution behavior, by the opinion towards propagation process change to increase has the influence the initial contribution behavior changes positive increases , as based on the Li Xujun and Liu Yezheng (2016) pointed out that a healthy relationship can accelerate the dissemination of information, improve the effectiveness of advertising, reduce the uncertainty of information.

3) The objectives to studies the impact of spread content on user's sustained contribution behavior. The result found the spread content has a positive impact on sustained contribution behavior, in line with the research of Mahr (2012) et al. The positive contribution behaviour in online applications is proposed, users will actively post opinions and insights about the product. The research shows the spread content has a positive influence on the sustained contribution behavior, by the opinion towards spread content change to increase has the influence the sustained contribution behavior changes positive increases.

4) The objectives to studies the impact of spread content on the user's initial contribution behavior. The result found the spread content has a positive impact on initial contribution behavior, in line with the research of Ridings and Gefen (2004) conducted an exploratory study on user initial contribution behaviour in virtual communities through motivation theory. The research shows the spread content has a positive influence on the initial contribution behavior, by the opinion towards spread content change to increase has the influence the initial contribution behavior changes positive increases.

### **5.3 Recommendation**

Based on the research to studies the Effect of Social Attributes of Behavior Targeting Advertising on User Contribution Behavior an Empirical Study in Taobao's Behavior. From the research, it can be said that targeted advertising is a form of advertising, including online advertising that is directed towards an audience with certain traits, based on the product or person the advertiser is promoting. The research shows that the propagation process has a positive impact on contribution behavior, which is sustained contribution and initial contribution. And advertisement of the propagation process is the most effective method adopted to attract customers, and the behavioral targeting advertising is born due to the demand for of customer. Furthermore, the result found the spread content has a positive impact on contribution behavior, which is sustained contribution and initial contribution. The research shows that the spread of content an important role in contribution intention in online communities, and given the crucial importance of user-generated content in generating new information and knowledge for the customer.



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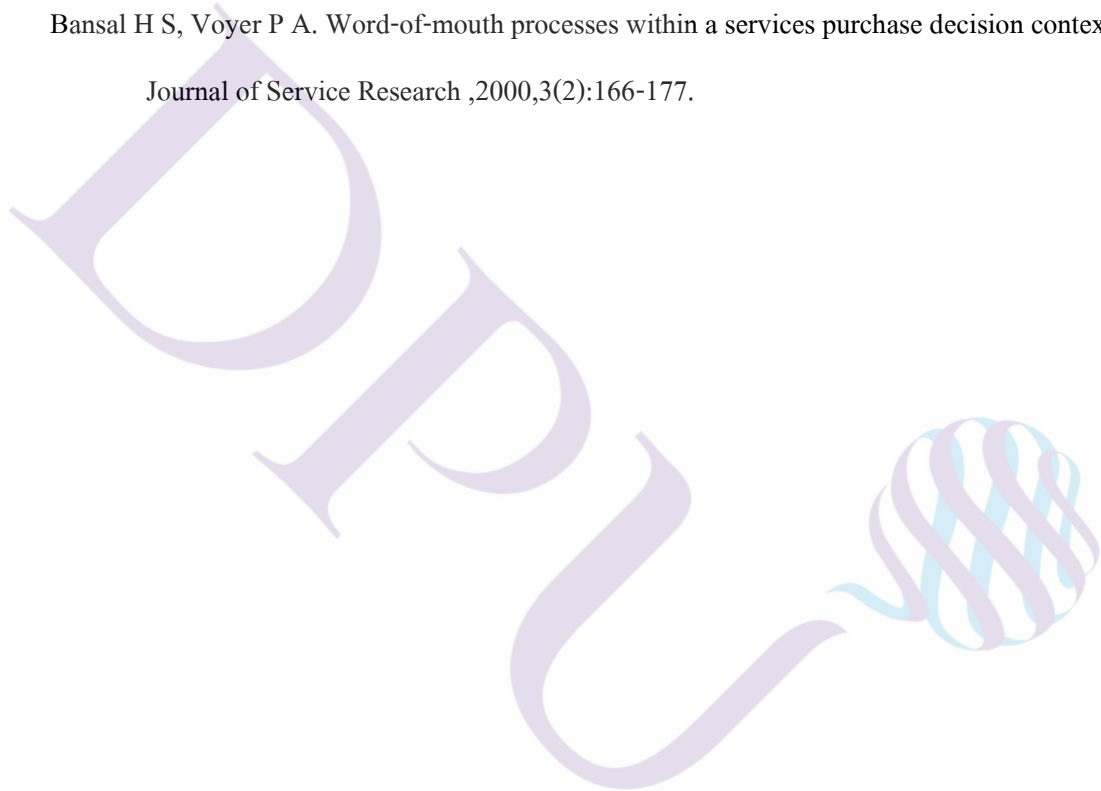
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**APPENDIX**  
**QUESTIONNAIRE**

**Research question:**

Research on the Effect of Social Attributes of Behavior Targeting Advertising on User Contribution Behavior——An Empirical Study in Taobao's Behavior

**Draft questionnaire**

**Part 1: Personal Information**

1. What is your gender?

- a. Male
- b. Female

2. How old are you?

- a. Under 20
- b. 21 - 30
- c. 31 - 40
- d. 41 - 50
- e. 51 - 60
- f. 61+

3. What is your educational background?

- a. PhD
- b. Master
- c. Bachelor
- d. High school
- e. Junior high school
- f. Other\_\_\_\_\_

4. What is your occupation?

- a. Student
- b. Business owners
- c. Teacher
- d. Medical doctor
- e. Other, please specify \_\_\_\_\_

5. How much do you earn?

- a. Under 3000RMB
- b. 3001 – 4000RMB
- c. 4001 – 5000RMB
- d. 5001 – 6000RMB
- e. 6001 – 7000RMB
- f. 7001RMB or more

6. Have you ever shopped online?

- a. Yes
- b. No

7. Which of the following online shopping software do you prefer to use?

- a. Taobao
- b. JD
- c. Pinduoduo
- d. Other

8. How long have you used online shopping software?

- a. Within 1 year
- b. 1-3 years
- c. 3-5 years
- d. 5 years and above

9. How many online purchases do you make every week?

- a. Once a week
- b. 2-3 times a week
- c. 4-5 times a week
- d. Other \_\_\_\_\_

10. What products do you often buy?

- a. Clothing
- b. Daily necessities
- c. Electronic products
- d. Cosmetics
- e. Books
- f. Other \_\_\_\_\_

**Part 2: The social attributes of behavior targeting advertising on user contribution behavior**

**Instruction:** Please mark on the number that most describes your level of agreement to the below statements using the scale:

- 5 = Strongly agree with the statement      4 = Agree with the statement
- 3 = Feel neutral with the statement      2 = Disagree with the statement
- 1 = Strongly disagree with the statement

**Behavior-Targeted Advertising**

	5	4	3	2	1
1. I understand Behavior-targeted advertising					
2. How do you view behavioral advertising					
3. Do you like behavioral targeted advertising to recommend your products					

4. I will pay attention to these ads					
5. I feel that this ad positions me as a unique customer					
6. I feel that this advertisement is made according to my preferences					
7. I feel this ad is made according to my needs					
8. I feel that this ad is made to meet my needs and preferences					
9. I will learn about the product through advertising					
10. I will buy products through advertising					

### Social attributes

	5	4	3	2	1
1. I will take the initiative to share my use of the product					
2. I will share this kind of product to my close people					
3. I will help those who ask about the product					
4. I will contact people who bought the same product and may become friends					

### Contribution Behavior

	5	4	3	2	1
1. I will buy the products recommended by the ad					
2. When I asked for help on this product, someone provided me with					

relevant information					
3. When someone asks for help on this product, I will take the initiative to provide relevant information					
4. I think the information I share is valuable					
5. I am willing to provide information to help others solve problems					
6. I am willing to continue contributing knowledge or information instead of stopping					

