I1

Business

A BUSINESS MODEL ANALYSIS OF THE PET COMMUNITY IN RAMA II AREA

Rathirat Kongchim[1*] and Anna Davtyan[2*]

Master of Science in International Digital Business (International Program)
Faculty of International College, Rangsit University, Thailand
[*]**Corresponding Author, E-mail:** nattyrathirat@gmail.com, anna.d@rsu.ac.th

Abstract

In Thailand, more and more families are willing to have a pet. They take very seriously taking care of their pets and consider pets as family members. Which explains big number of the pet market value in 2019 grew to 35,453 million THB, which increased by 10 percent from 2018. It is divided into three major sections: pet food (45%), pet services (32%), and pet care (care and medical services, 23%). This research is mainly focused on pet services.

For conducting in-depth research, designed a questionnaire and distributed online to RAMA II and surrounding area residents. The researcher aims to use the Taro Yamane formula in order to find the population and sample size with a 95% confidence level. There are 400 respondents. SPSS tool is used for quantitative data analysis, particularly Chi-square test for hypothesis testing.

Major findings of this study indicates that the residents of RAMA II and surrounding areas have high level of willingness to spend for pet services, the target customer group being as over 90% of LGBTQ+ in their 20s, in low-income group.

To unite pet services and create greater pet community, best to create a guideline for pet community business in order to improve its service quality and create comfortable, affordable space for pet owners.

Keywords: Pet, Pet Community, Pet Services, Rama II, Pet shops

Introduction

The rise of pet ownership in Thailand, where pet owners are often referred to as “pet parents”, and pet humanization is a common phenomenon. Human provides their pet with human-like experiences and amenities. Dogs (60%), cats (20%), and other animals (10%) such as small mammals and reptiles are the most popular pets (Bottomline, 2019). In Thailand, the pet business is thriving, with the pet market value reaching 35,453 million THB in 2019. The market is divided into three major segments: pet food (45%), pet services (32%), and pet care (23%). As of 2021, there are 23 corporations registered with the Department of Business Development, representing a 76.92% market share, with a total registered capital of THB 37 million - a 94.95% increase from the previous year (2020).

In 2020, Thailand has been dramatically affected by the COVID-19 pandemic caused by the new severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). As a result, Thailand has limiting social event which people have been forced to work from home (WFH) (Kumthorn Malathum and Porntip Malathum, 2020), leading to loneliness and stress. Besides, many individuals are searching for activities to relieve stress (Marketeer Team, 2021). Thailand is currently one of the most rapidly aging nations in East Asia, with an estimated 17 million Thais expected to be 65 years or older by 2040. This is partly due to the highest proportion of older people and the fastest-declining

working-age population in Asia. Moreover, the changing lifestyle of the new generation, the Millennials (Generation Y) has shifted away from the traditional notion, as of having children. This is due to a greater focus on personal freedom and lifestyle choices rather than the social pressure to have children (Bottomline, 2019). Having a pet can be beneficial for people as it can help improve mood, leading to feeling of happiness, and reducing feelings of stress, loneliness, and sadness.

Rama II Road links Bangkok with neighboring provinces and is a gateway to southern Thailand. It is easily accessible as it is located near three expressways, including the Kanchanaphisek West and South Expressway, the Dao Khanong Expressway, and the Rama 3 Expressway. The central area of Rama II is expanding, becoming more diverse, and with highest land prices, with housing costing approximately 20-100 million baht.

This research aims on finding out if Rama II has a potential of becoming pet related business community. How can pet related businesses develop the community and bring convenience to pet owners.

Research Objectives

This research focused on analyzing the market and to determine the business, services that can satisfy customer needs and the possibility of creating a pet community in the Rama II area:

1. To identify customer's profile of the pet community.
2. To identify potential customers attitude towards pet communities, businesses
3. To develop a guideline for a pet community owner.

Literature Review

Pet Industry in Thailand

The pet sector in Thailand is estimated to be between 700-800 million USD, making it the second biggest in Asia with dogs (47%), followed by cats (42%), fish (11%), birds (4%), rabbits (3%), and rodents (3%) being the most common domesticated animals (Pet Fair Southeast Asia, 2019). Cats and dogs are the most popular pets in Thailand, with 8.9 million dogs and 3.3 million cats kept as pets. The Thai Pet Product Industries Association (TPIA) reported that the market for pets has been expanding at an annualized average rate of 10% in 2011. The total value of the Thai pet market was 35,453 million THB in 2019 with the market share that is held by pet food is 45% accounting for 15,954 million THB, followed by the market share held by pet healthcare services at 33% accounting for 11,345 million THB, and the remaining market share is represented by pet clothes, accessories, and toys (Pet Fair Southeast Asia, 2019).

	China	Hong Kong	Indonesia	India	Japan	South Korea	Malaysia	Philippines	Singapore	Thailand	Taiwan	Vietnam
Dog	31%	16%	10%	34%	11%	22%	20%	67%	17%	47%	25%	53%
Cat	22%	14%	47%	20%	11%	9%	34%	43%	10%	42%	19%	35%
Bird	3%	2%	18%	14%	1%	1%	6%	10%	4%	7%	4%	14%
Rabbit	3%	2%	5%	9%	1%	1%	4%	3%	3%	4%	3%	3%
Hamster	3%	3%	3%	5%	1%	1%	4%	3%	3%	2%	3%	3%
Goldfish	9%	7%	11%	10%	4%	2%	5%	7%	3%	7%	7%	15%
Tropical fish	5%	5%	11%	7%	2%	5%	10%	6%	7%	4%	5%	9%
Reptile or amphibian	4%	5%	2%	4%	2%	1%	2%	2%	2%	1%	3%	2%
Insect	1%	1%	1%	4%	1%	1%	1%	1%	0%	1%	1%	1%
Other	1%	2%	5%	4%	2%	1%	3%	3%	2%	4%	2%	1%
Not raising any pets	47%	61%	28%	41%	72%	66%	41%	17%	64%	24%	49%	27%

Figure 1: Online Survey with 97,000 respondents from Rakuten Insight Propriety Panels; Markets
Source: Pet Fair Southeast Asia, 2019

The primary distribution channels for pet items in Thailand are conventional shops and special trade channels, with conventional shops accounting for 90% of the market (Pet Fair Southeast Asia, 2019). Special trade channels have a wider range of pet supplies from affordable to expensive alternatives, while e-commerce platforms such as Lazada, Shopee, and JD Central are popular for pet owners to purchase because it is convenient, saves their time, and provides access to a wider variety of products than traditional shopping does (Pet Fair Southeast Asia,2019).

Thailand has been experiencing "pet humanization" since 2020, with single people and childless couples making up a significant portion of pet owners. This has led to an increased pet purchase rate and increased demand for high-quality pet supplies.

Pet Businesses in Thailand

Daterapeepong (2021) conducted a study based on innovative design for pet zones in Tops Supermarket to explore new business opportunities and generate value-added for pet products and services. To optimize consumer satisfaction and loyalty, Tops Market must reevaluate its strategy for marketing and sales. Environmental variables such as store layout, shelving and fixture design, product selection, lighting, color and theme design, background music, and aroma contribute to the quality of the environment.

In addition, Beynen (2013) places a strong emphasis on the intimate relationship that exists between the Thai pet food industry and the science of pet nutrition. The pet food business has to develop new offerings in response to challenges such as the segmentation of the market, emerging trends in nutrition, the advancement of scientific knowledge, and the diminishing stock of major ingredients. Training of pet owners and regulation of food safety are two other issues that need to be addressed. The Thai pet food sector should progressively collaborate with specialists in pet nutrition in order to sustain growth and address the many challenges that are now being faced. Enhancing training in pet nutrition and facilitating research in this field should be priorities for veterinary and agricultural schools within Thai universities.

Kongtaveesawas and Namwong (2019) found that individuals are more likely to travel with their pets in Thailand, making pet-friendly policies an important competitive advantage. Management should devise a policy that satisfies both pet owners and those who do not own pets while preserving the luxury brand. As a result of this, it is advised that some aspects of successful hotels' pet policies

need modifications of services generated from in-depth research of the various views or predicted perceptions of customers in accordance with the SERVQUAL model (see Figure 2).

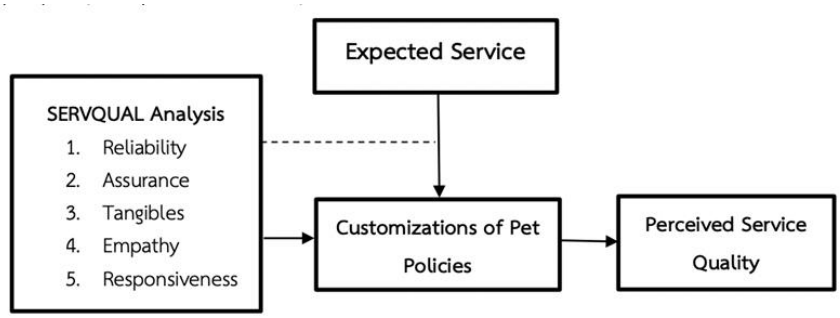


Figure 2: Expectation and perception management under SERVQUAL
Source: Kongtaveesawas & Namwong (2019)

Methodology

This research is a quantitative study. The study used primary data collected from pet owners in the Rama II area and its surrounding. The study used the Taro Yamane formula to estimate the population and sample size with 95% confidence. The sample size in this research paper is consisted of 400 respondents. Data collected using a close-ended questionnaire via a Google form written in English and translated into Thai for Thai respondents. The questionnaire consists three main sections: Section I; demographic factors; Section II; behavior and experience factors; and Section III; customer satisfaction, measures with five-point Likert scales. For determine the target audience and feasibility of establishing a pet community in Rama II, generic analysis of data and SPSS are used.

Data Analysis and Discussion

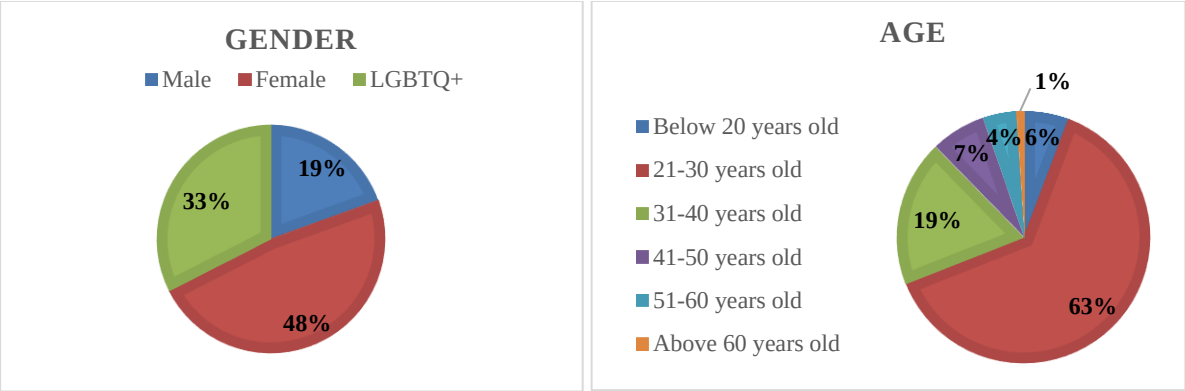


Figure 3: Gender and Age Charts

Figure 3 shows the data of demographic factors on gender and age from 400 respondents. The female has the highest proportion accounting for 48%. The second-highest is LGBTQ+ representing 33%, and 19% is male. However, most respondents are 21 – 30 years old, accounting for 63%, followed by 31 – 40 years old, accounting for 19%; 41 – 50 years old, accounting for 7%; below 20 years old, accounting for 6%, 51- 60 years old, accounting for 4%, and above 60 years old, accounting for 1%.

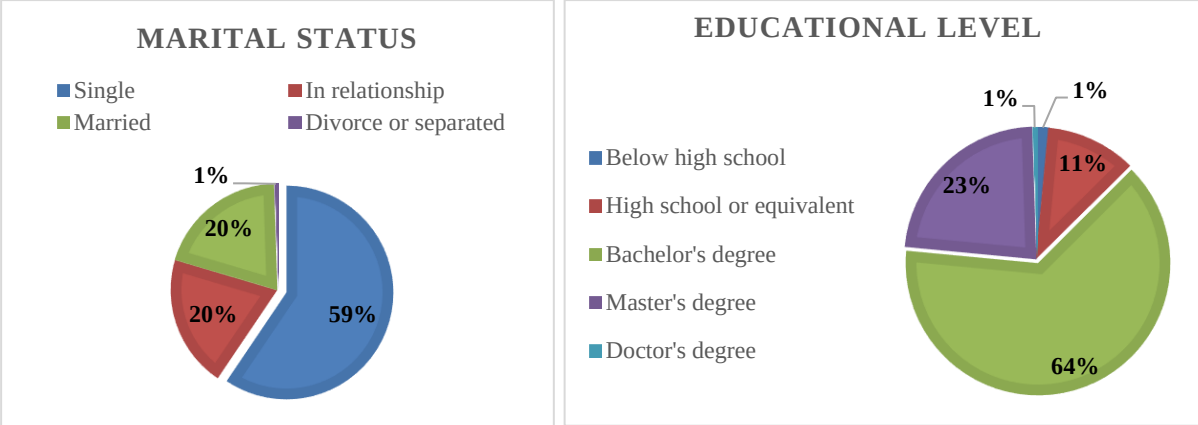


Figure 4: Marital Status and Educational Level Charts

Figure 4 shows the results of demographic factors on marital status and educational level from 400 respondents. The marital status is single (59%), which is the highest proportion, followed by in a relationship and married (20%), and divorced or separated (1%). Additionally, the educational level was divided into five ranges, including range one bachelor's degree (64%), range two master's degree (23%), range three high school or equivalent (11%), range four below high school (1.5%), and range five doctor's degree (0.50%).

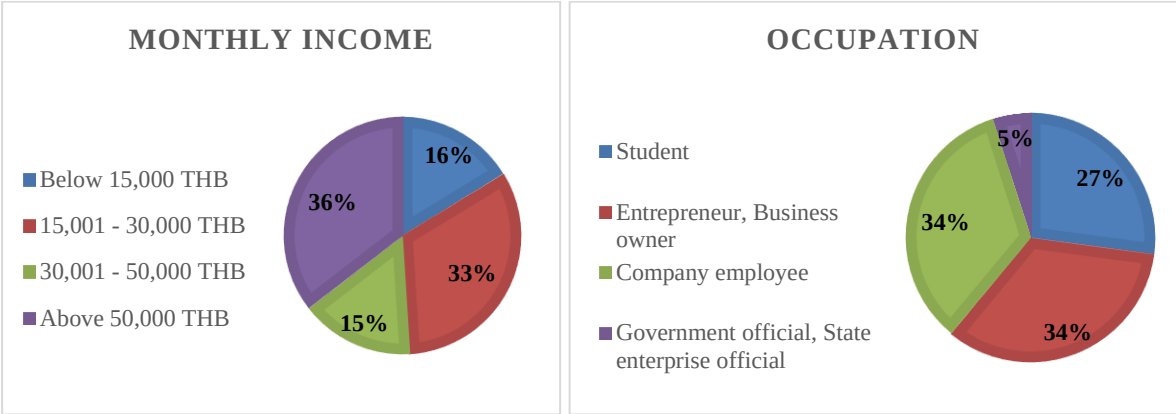


Figure 5: Occupation and Monthly Income Charts

Figure 5 shows the results of demographic factors on occupation and monthly income from 400 respondents. Entrepreneur and company employee has the highest amount accounting for 34%, followed by the student, accounting for 27%, and government officials or state enterprise officials, accounting for 5%. Besides, the majority of participants have a monthly income of around above 50,000 THB, accounting for 36%, followed by 15,001-30,000 THB (33%), below 15,000 THB (16%), and 30,001-45,000 THB (15%).

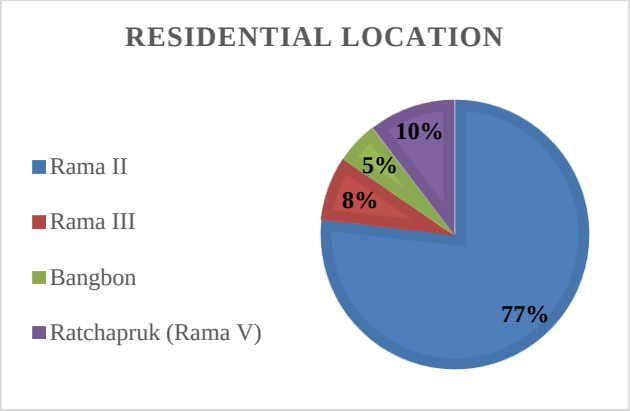


Figure 6: Residential Location Charts

Figure 6 shows the results of demographic factors on residential location from 400 respondents. The highest percentage of participants come from Rama II, accounting for 77%, followed by Ratchapruk (Rama V), accounting for 10%, Rama III, accounting for 8%, and Bangbon, accounting for 5%.

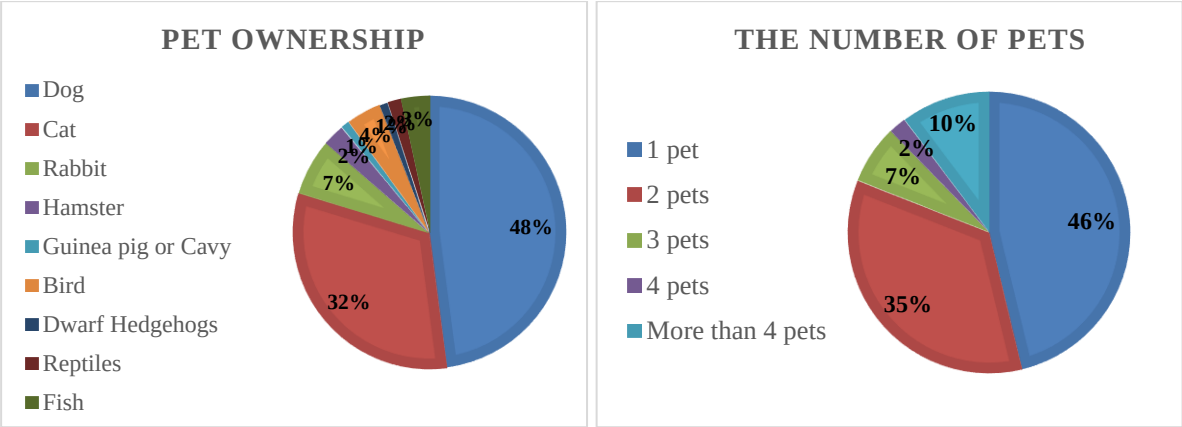


Figure 7: The Number of Pet and Pet Ownership Charts

Figure 7 shows the number of pets and pet ownership. 1 pet consumed the most, at 46 percent. 2 pets have the second-highest consumption level, 35 percent, followed by more than 4 pets, accounting for 10 percent. 3 pets at 7 percent. The most minor consumption is 4 pets, at 2 percent. Also, the vast majority of participants have dogs, accounting for 48%, followed by cats (32%), rabbits (7%), and a negligible percentage of hamsters, cavies, birds, dwarf hedgehogs, reptiles, and fish.

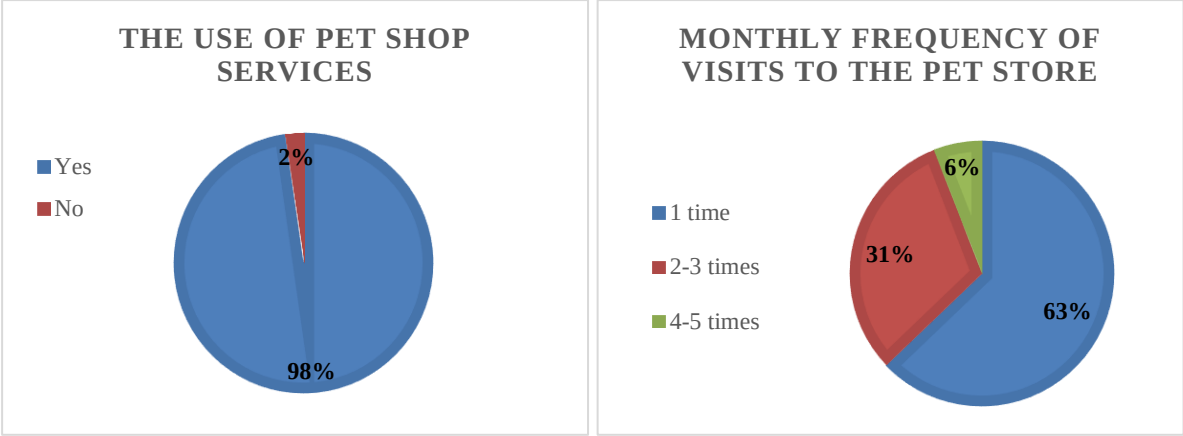


Figure 8: The Use of Pet Shop Services and Monthly Frequency of Visits to The Pet Store Charts

Figure 8 shows the data on the use of pet shop services and the monthly frequency of visits to the pet store. The vast majority of participants have experienced using pet shop service with a frequency of once a month (63%), followed by 2 – 3 times per month, accounting for 31%, and 4 – 5 times per month, accounting for 6%.

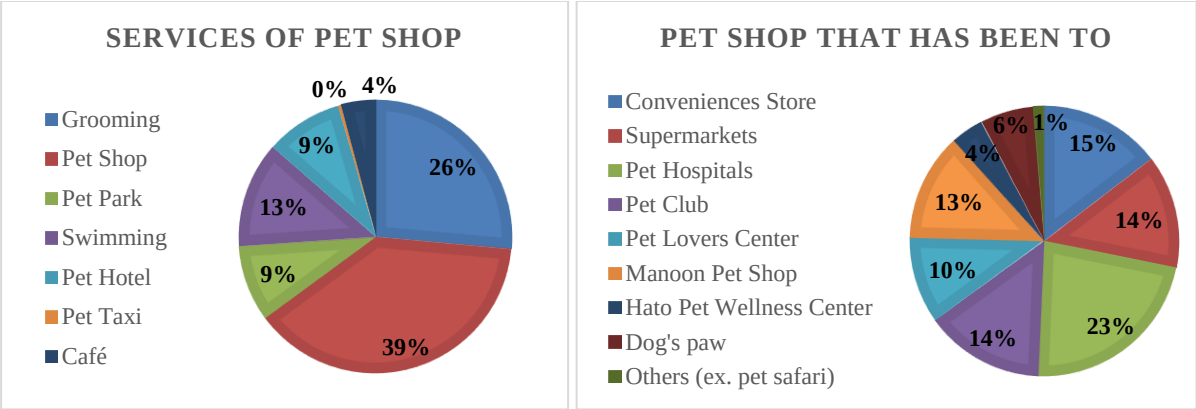


Figure 9: Pet Shop That Has Been to and Services of Pet Shop Charts

Figure 9 shows the data of 400 respondents who have been to the pet shop and chosen services of the pet shop. Most respondents have been to pet hospitals, accounting for 23%. Conveniences store are at 15%, followed closely by supermarkets and pet clubs at 14%, Manoon pet shop accounts for 13%, and a negligible proportion of Dog's Paw, Hato pet wellness center, and others. Besides, there is 39 percent of the pet shop, followed by grooming, counted as 13 percent. Pet parks and pet hotels are at 9 percent.

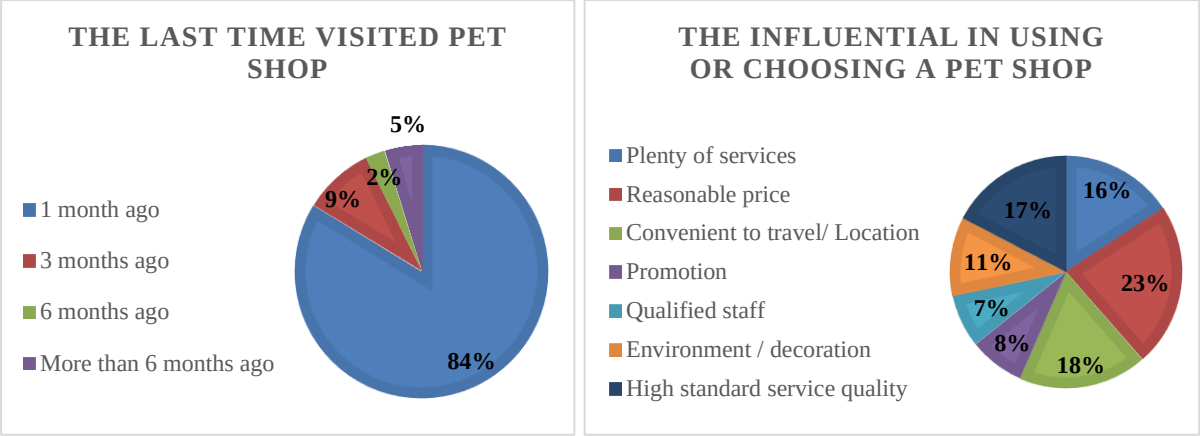


Figure 10: The Last Time Visited Pet Shop and The Influential in Using or Choosing a Pet Shop Charts

Figure 10 shows the data on participants last time visited the pet shop and the influential in using or choosing a pet shop. First of all, the last time that most participants visited the pet shop was a month ago, accounting for 85 percent, followed by 3 months ago (9%), more than 6 months ago (5%), and 6 months ago (2%). However, reasonable price has the highest proportion accounting for 23 percent. The second-highest is convenient to travel, accounting for 18 percent, followed closely by high standard service quality (17%) and plenty of services (16%). Representing an 11% which is environment and decoration, and promotion and qualified staff is a minor proportion.

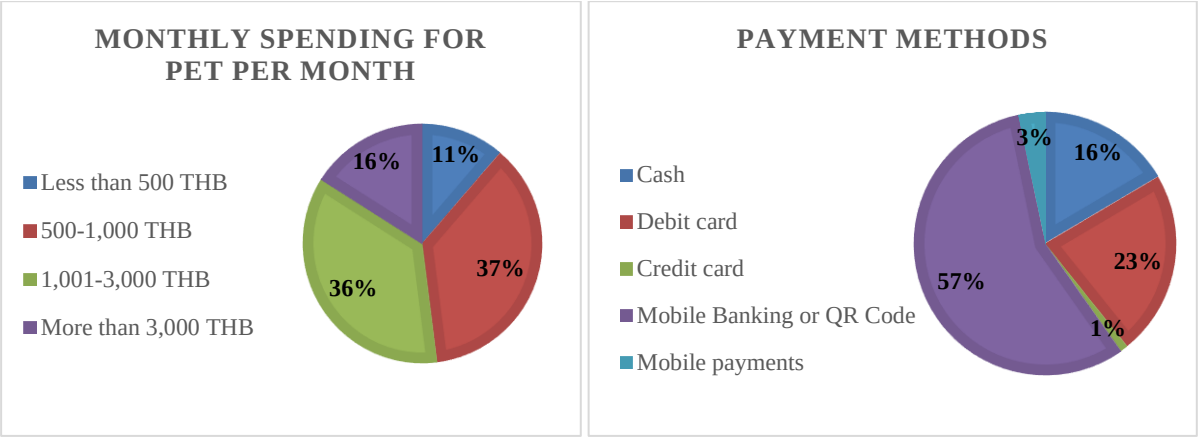


Figure 11: Monthly Spending for Pet Per Month and Payment Methods Charts

Figure 11 shows monthly spending for pets per month and payment methods. Participants spend around 500 – 1,000 THB per time, accounting for 37%, followed nearly by 1,001 – 3,000 THB per time, accounting for 36%, more than 3,000 THB per time, accounting for 16%, and less than 500 THB per time, accounting for 11%. In addition, the majority of payment methods that participants choose are mobile banking or QR code payment methods at 57%, followed by debit cards at 23% and 16% of cash. A minor proportion of payment methods are cash (3%) and credit card (1%).

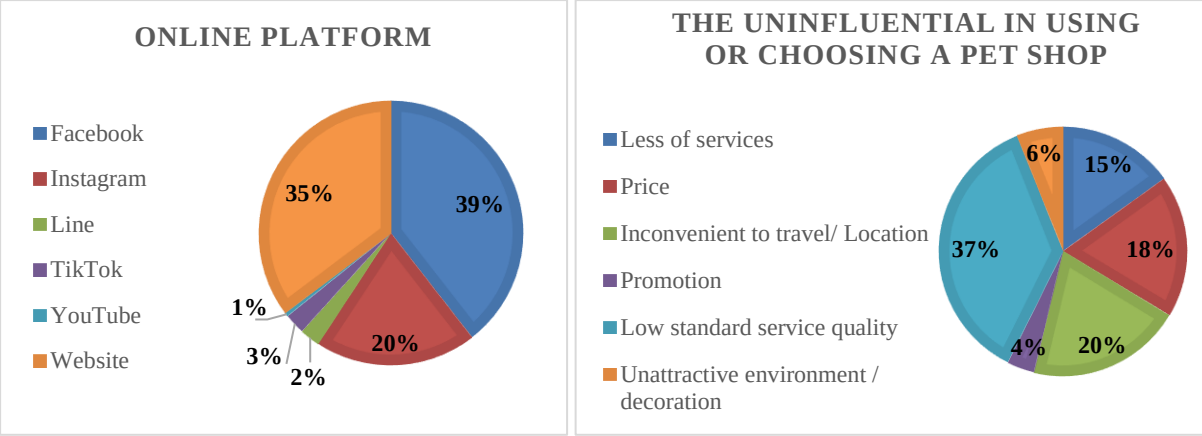


Figure 12: Online Platform and The Uninfluential in Using or Choosing a Shop Charts

Figure 12 shows the online platform and the uninfluential in using or choosing a shop. There are the top three online platforms that respondents use to search for finding a pet shop which are Facebook (39%), Website (35%), and Instagram (20%). However, a minor proportion of online platforms are TikTok (3%), Line (2%), and YouTube (1%). The highest percentage of the uninfluential in using or choosing a shop is low standard service (37%), followed by inconvenient to travel, accounting for 20 percent, the price at 18%, and less of services at 15%. Minor proportions are homely environment and decoration (6%) and promotion (4%).

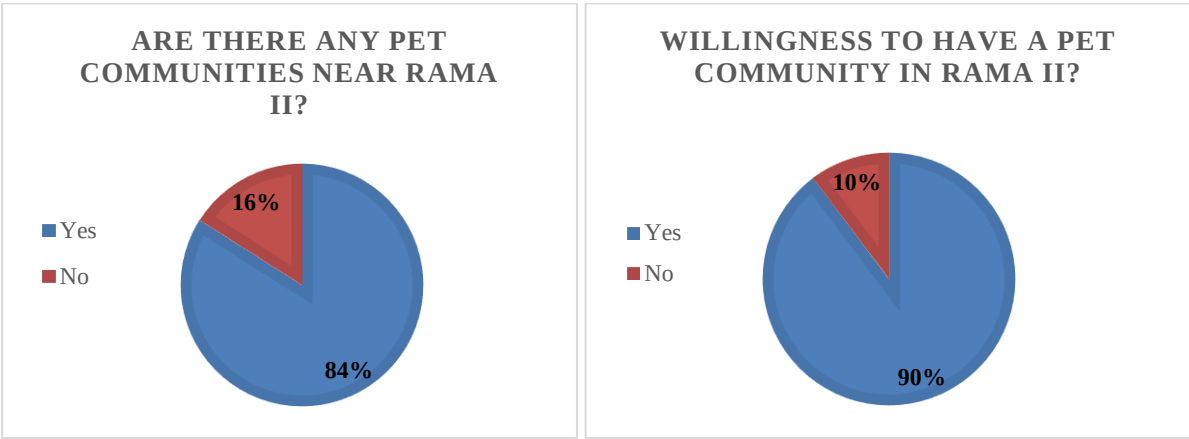


Figure 13: Are There Any Pet Communities Near Rama II and Willingness to Have a Pet Community in Rama II Charts

Figure 13 shows respondents' data who had seen pet communities near the Rama II area, accounting for 84%, and 16% had not seen pet communities near Rama II. 90 percent of participants want to have a pet community in Rama II area, which has the highest percentage. 10 percent participants do not want to have a pet community in Rama II area.

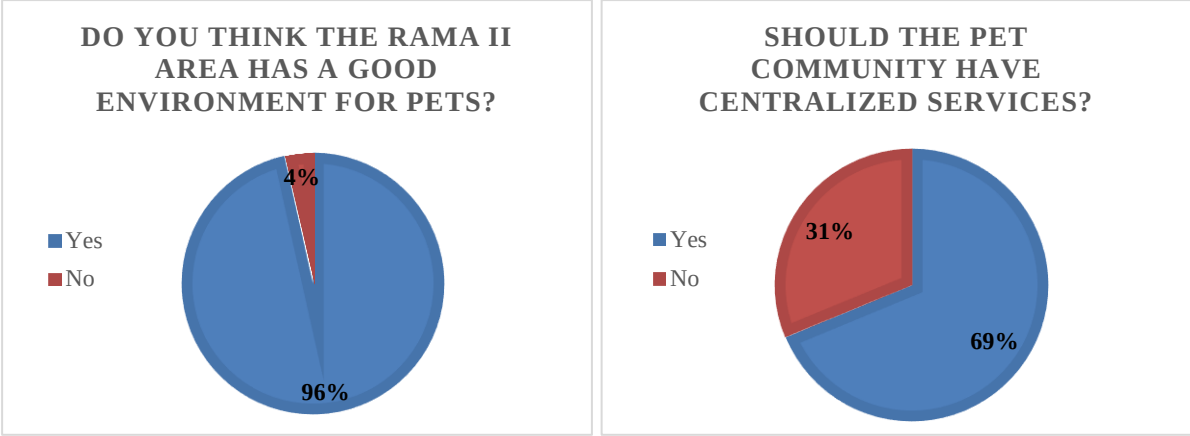


Figure 14: Do You Think the Rama II Area Has a Good Environment for Pets and Should Pet Community Have Centralized Services Charts

Figure 14 shows respondents' data who think the Rama II area has a suitable environment for pets, accounting for 96% of respondents. However, a negligible percentage of respondents think that Rama II is not a suitable environment for pets, accounting for 4%. Besides, respondents agreed that the pet community should have a centralized service, accounting for 69% and 31% who do not agree.

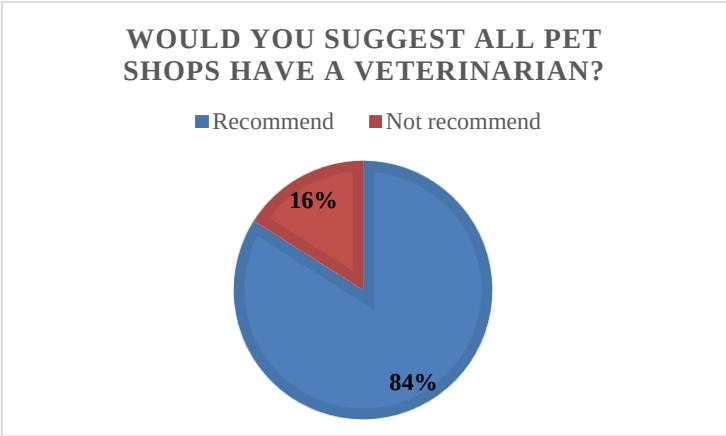


Figure 15: Would You Suggest All Pet Shops Have a Veterinarian Charts

Figure 15 shows the results of participants who suggest all pet shops should have a veterinarian. It shows that there 84% of participants suggest having a veterinarian at pet shops, and 16% of participants who not suggest having a veterinarian at pet shops.

Table 3: The Summary of Demographic Factors of Respondents (n=400)

Factors of attitude and needs	$\bar{x}$	S.D.	Level
Quality and Service	4.32	1.1	Highest
Brand Reputation	3.45	1.01	High
Price	4.22	1.06	Highest
Atmosphere and Environment	4.04	1.07	High
Location	3.9	1.09	High
Advertising	3.01	1.14	Medium
Promotions	3.91	1.09	High
Total	**3.84**	**0.87**	**High**

Table 3 represents the mean score and standard deviation of attitude factors and needs towards the pet community among pet owners living in Rama II area and nearby. The data shows that the average mean score is high at 3.84 ($\bar{x}$= 3.84). The factors which have highest mean score include 1) Quality and Service ($\bar{x}$= 4.32), and 2) Price ($\bar{x}$= 4.22). The factors which have high mean score include 1) Atmosphere and Environment ($\bar{x}$= 4.04), 2) Promotions ($\bar{x}$= 3.91), 3) Location ($\bar{x}$= 3.90), and 4) Brand Reputation ($\bar{x}$= 3.45). The factor which has medium mean score is Advertising ($\bar{x}$= 3.01).

Data analysis for hypothesis testing

Hypothesis 1: The demographic factor is influential on willingness to spend on pet-related services

Null Hypothesis (Ho): There is no significant difference of willingness to spend on pet-related services among different demographic factor.

Alternate Hypothesis (Ha): There is a significant difference of willingness to spend on pet-related services among different demographic factor.

Table 4: The Summary of Demographic Factors of Respondents (n=400)

Demographic Characteristics	Willingness to spend within pet community in Rama II		Total
	Willing	Not Willing	
Gender			
Male	61	17	78
	(78.21)	(21.79)	(100.00)
Female	158	34	192
	(82.29)	(17.71)	(100.00)
LGBTQ+	117	13	130
	(90.00)	(10.00)	(100.00)
Total	**336**	**64**	**400**
	(84.00)	**(16.00)**	**(100.00)**

Table 4 represents the Chi-square test result of willingness to spend on pet-related services and gender among pet owners living in Rama II area and nearby. The p-value is 0.054, which is greater than 0.05 (Sig. > 0.05), thus, we accept the null hypothesis. There is no significant difference of willingness to spend on pet-related services among different gender. The data shows that all genders are willing to spend on pet-related services; 90% of LGBTQ+ are willing to spend, followed by Female (82.29%), and Male (78.21%).

Table 5: Summary of relationship between willingness to spend on pet-related services and age

Demographic Characteristics	Willingness to spend within pet community in Rama II		Total
	Willing	Not Willing	
Age			
Below 20 years old	20	3	23
	(86.96)	(13.04)	(100.00)
21-30 years old	220	33	253
	(86.96)	(13.04)	(100.00)
31-40 years old	61	14	75
	(81.33)	(18.67)	(100.00)

Demographic Characteristics	Willingness to spend within pet community in Rama II		Total
	Willing	Not Willing	
41-50 years old	18	10	28
	(64.29)	(35.71)	(100.00)
51-60 years old	14	3	17
	(82.35)	(17.65)	(100.00)
Above 60 years old	3	1	4
	(75.00)	(25.00)	(100.00)
Total	**336**	**64**	**400**
	(84.00)	**(16.00)**	**(100.00)**

Table 5 represents the Chi-square test result of willingness to spend on pet-related services and age among pet owners living in Rama II area and nearby. The p-value is 0.061, which is greater than 0.05 (Sig. > 0.05), thus, we accept the null hypothesis. There is no significant difference of willingness to spend on pet-related services among different ages. The data shows that all ages are willing to spend on pet-related services; 86.96% of respondents with age below 20 years old are willing to spend, and 21-30 years old are willing to spend, followed by age 51-60 years old (82.35%), 31-40 years old (81.33%), above 60 years old (75%), and 41-50 years old (64.29%).

Table 6: Summary of relationship between willingness to spend on pet-related services and marital status

Demographic Characteristics	Willingness to spend within pet community in Rama II		Total
	Willing	Not Willing	
Maritial Status			
Single	200	39	239
	(83.68)	(16.32)	(100.00)
In relationship	73	7	80
	(91.25)	(8.75)	(100.00)
Married	61	18	79
	(77.22)	(22.78)	(100.00)
Divorced/Separated	2	0	2
	(100.00)	(0.00)	(100.00)
Total	**336**	**64**	**400**
	(84.00)	**(16.00)**	**(100.00)**

Table 6 represents the Chi-square test result of willingness to spend on pet-related services and marital status among pet owners living in Rama II area and nearby. The p-value is 0.101, which is greater than 0.05 (Sig. > 0.05), thus, we accept the null hypothesis. There is no significant difference of willingness to spend on pet-related services among different marital status. The data shows that all types of marital status are willing to spend on pet-related services; 100% of respondents, who are divorced are willing to spend, are willing to spend, followed by In-a-relationship respondents (91.25%), single respondents (83.68%), and married respondents (77.22%).

Table 7: Summary of relationship between willingness to spend on pet-related services and age

Demographic Characteristics	Willingness to spend within pet community in Rama II		Total
	Willing	Not Willing	
Level of Education			
Below high school	6	0	6
	(100.00)	(0.00)	(100.00)
High school or equivalent	38	6	44
	(86.36)	(13.64)	(100.00)
Bachelor's degree	208	48	256
	(81.25)	18.75	(100.00)
Master's degree	83	9	92
	(90.22)	(9.78)	(100.00)
Doctor's degree	1	1	2
	(50.00)	(50.00)	(100.00)
Total	**336**	**64**	**400**
	(84.00)	**(16.00)**	**(100.00)**

Table 7 represents the Chi-square test result of willingness to spend on pet-related services and educational level among pet owners living in Rama II area and nearby. The p-value is 0.129, which is greater than 0.05 (Sig. > 0.05), thus, we accept the null hypothesis. There is no significant difference of willingness to spend on pet-related services among different educational level. The data shows that all types of educational level are willing to spend on pet-related services; 100% of respondents, with educational level below high school are willing to spend, followed by master degree (90.22%), high school or equivalent (86.36%), bachelor degree (81.25%), and doctoral degree (50%).

Table 8: Summary of relationship between willingness to spend on pet-related services and occupation

Demographic Characteristics	Willingness to spend within pet community in Rama II		Total
	Willing	Not Willing	
Occupation			
Student	89	11	100
	(89.00)	(11.00)	(100.00)
Entrepreneur, Business owner	104	21	125
	(83.20)	(16.80)	(100.00)
Company employee	103	23	126
	(81.75)	(18.25)	(100.00)
Government official, State enterprise official	15	3	18
	(83.33)	(16.67)	(100.00)
Freelance, Self-employed	25	6	31
	(80.65)	(19.35)	(100.00)
Total	**336**	**64**	**400**
	(84.00)	**(16.00)**	**(100.00)**

Table 8 represents the Chi-square test result of willingness to spend on pet-related services and occupation among pet owners living in Rama II area and nearby. The p-value is 0.616, which is greater than 0.05 (Sig. > 0.05), thus, we accept the null hypothesis. There is no significant difference of willingness to spend on pet-related services among different occupations. The data shows that all occupations are willing to spend on pet-related services; 89% of students are willing to spend, followed by government/state enterprise official (83.33%), entrepreneur (83.20%), company employees (81.75%), and freelance (80.65%).

Table 9: Summary of relationship between willingness to spend on pet-related services and residential location

Demographic Characteristics	Willingness to spend within pet community in Rama II		Total
	Willing	Not Willing	
Residential Location			
Rama II	229	43	272
	(84.19)	(15.81)	(100.00)
Rama III	24	3	27
	(88.89)	(11.11)	(100.00)
Bangbon	17	1	18
	(94.44)	(5.56)	(100.00)
Ratchapruk (Rama V)	30	7	37
	(81.08)	(18.92)	(100.00)
Bang Khae	22	7	29
	(75.86)	(24.14)	(100.00)
Suksawat	14	3	17
	(82.35)	(17.65)	(100.00)
Total	**336**	**64**	**400**
	(84.00)	**(16.00)**	**(100.00)**

Table 9 represents the Chi-square test result of willingness to spend on pet-related services and residential areas among pet owners living in Rama II area and nearby. The p-value is 0.601, which is greater than 0.05 (Sig. > 0.05), thus, we accept the null hypothesis. There is no significant difference of willingness to spend on pet-related services among different residential areas. The data shows that all residential areas are willing to spend on pet-related services; 94.44% of respondents, who live in Bangbon, are willing to spend, followed by Rama III (88.89%), Rama II (84.19%), Suksawat (82.35%), Ratchapruk Rama V (81.08%), and Bang Khae (75.86%).

Hypothesis 2: Income is influential on the willingness to spend on pet-related services.

Null Hypothesis (Ho): There is no significant difference of willingness to spend on pet-related services among different income.

Alternate Hypothesis (Ha): There is a significant difference of willingness to spend on pet-related services among different income.

Table 10: Summary of relationship between willingness to spend on pet-related services and monthly income

Monthly Income	Willingness to spend within pet community in Rama II		Total
	Willing	Not Willing	
Below 15,000 THB	56	9	65
	(86.15)	(13.50)	(100.00)
15,001-30,000 THB	117	14	131
	(89.31)	(10.69)	(100.00)
30,001-45,000 THB	49	13	62
	(79.03)	(20.97)	(100.00)
Above 45,000 THB	114	28	142
	(80.28)	(19.72)	(100.00)
Total	**336**	**64**	**400**
	(84.00)	**(16.00)**	**(100.00)**

Table 10 represents the Chi-square test result of willingness to spend on pet-related services and residential areas among pet owners living in Rama II area and nearby. The p-value is 0.134, which is greater than 0.05 (Sig. > 0.05), thus, we accept the null hypothesis. There is no significant difference of willingness to spend on pet-related services among different income. The data shows that monthly income group population willing to spend on pet-related services; 89.31% of respondents, with the income of 15,001-30,000 THB, are willing to spend, followed by income below 15,000 THB (86.15%), above 45,000 THB (80.28%), and 30,001-45,000 THB (79.03%).

Hypotheses 3: Service quality is influential for repeated visitation of a pet shop.

Null Hypothesis (Ho): There is no significant difference of repeated visitation of pet shop among different service quality.

Alternate Hypothesis (Ha): There is a significant difference of repeated visitation of pet shop among different service quality

Table 11: Summary of relationship between willingness to spend on pet-related services and service quality

Service Quality	Willingness to spend within pet community in Rama II		Total
	Willing	Not Willing	
Disagree	26	3	29
	(89.66)	(10.34)	(100.00)
Neutral	33	6	39
	(84.62)	(15.38)	(100.00)
Agree	67	15	82
	(81.71)	(18.29)	(100.00)
Strongly Agree	210	40	250
	(84.00)	(16.00)	(100.00)
Total	**336**	**64**	**400**
	(84.00)	**(16.00)**	**(100.00)**

Table 11 represents the Chi-square test result of repeated visitation of a pet shop and service quality among pet owners living in Rama II area and nearby. The p-value is 0.796, which is greater than 0.05 (Sig. > 0.05), thus, we accept the null hypothesis. There is no significant difference of repeated visitation of pet shop among different service quality. The data shows that most customers are willing to re-visit the pet shop for pet-related services.

Conclusion & Discussion

For customer's profile, data analysis show that the main target customer group would be LGBTQ+, as over 90% of LGBTQ+ are willing to spend on pet services (89.96% in their 20s). The customers with an income of 15,001-30,000 THB (89.31%) of them are also willing to spend on pet services. By taking under the consideration the residential area, results shows that pet-related businesses should target the customer within Bangbon area and create a pet community in that area since 94.44% of them are willing to spend on pet services. In addition, the research found that over 84.19% of people living in Rama II area are willing to spend. With this, we can conclude that there is a high feasibility to conduct a pet community business within this area, given the high level of willingness to spend on pet services from all demographic factors.

For guideline of pet community business to improve its service quality, according to the result, the overall mean score of attitude factors is high, especially on the factor of quality and service, and price. Kotler and Amstrong (2010), elaborated the importance of a marketing mix, product, price,

place, promotion, people, physical evidence, and process. Price is one of the factors, which is influential in customer experience and re-visitation of pet shops. As the target group, who have the highest willingness to spend on pet shop services are among the low-income group. Hence, pet community businesses should make the price affordable to this group by offering discounts, providing payment plans, partnering with local organizations, offer sliding-scale pricing, and provide low-cost services. Kongtaveesawas and Namwong (2019), investigated the essential of pet policy which focused on the goal of satisfying both pet owners and those who do not own pets while preserving the luxury brand. This suggests that pet community business owners should focus on creating clean and eco-friendly atmosphere not only in immediate surrounding of the shops, but also in larger diameters will arise willingness to adopt pets, feel comfortable to live with pets. For increased customer satisfaction level, pet shop owners should provide training to their staff. Creating loyalty programs will ensure having repeated customers to some extent. Future research should focus on analyzing the price among competitors within Rama II area and its surrounding areas for setting affordable prices for residents.

References

Beynen, A. C. (2013). Thai Petfood Industry and Pet Nutrition Science. *Journal of Mahanakorn Veterinary Medicine, 8*(2), 103–113.

Daterapeepong, C. (2021). *Innovative Design for Pet Zone that Influences Customer Behavior in Tops Market* [Thematic paper]. Mahidol University.

Fortune Business Insights. (2021). *Pet Care Market Size, Share, Growth & Industry Trends [2028]*. https://www.fortunebusinessinsights.com/pet-care-market-104749

Jalongo, M. R. (2021). Pet Keeping in the Time of COVID-19: The Canine an Feline Companions of Young Children. *Early Childhood Education Journal*, 18, 1-11.

Kongtaveesawas, N., & Namwong, S. (2020). Pet-friendly Policy in Upscale and Luxury Tourism Accommodations: Service Customizations Under SERVQUAL. *Dusit Thani College Journal, 14*(1), 500–512.

Kumthorn Malathum & Porntip Malathum (2020). The COVID-19 Pandemic: What We Have Learned from Thai Experiences.

Pet Fair Southeast Asia. (2019). *Thailand Pet Market – Pet Fair South-East Asia*. https://www.petfair-sea.com/asia-markets/southeast-asia-pet-market/thailand-pet-market/

Phenomenon of Pet Humanization pushing the pet business market to grow. (2021, December 29). Marketeer Online. https://marketeeronline.co/archives/243237

PR Newswire. (2021). *Global Pet Care Market to Reach $241.1 Billion by 2026.* PR Newswire. https://www.prnewswire.com/news-releases/global-pet-care-market-to-reach-241-1-billion-by-2026--301350916.html

PR Newswire. (2021). *Pet Care Market to grow by USD 48.94 Billion during 2021-2025*. PR Newswire. https://www.prnewswire.com/news-releases/pet-care-market-to-grow-by-usd-48-94-billion-during-2021-2025--beaphar-beheer-bv-and-colgate-palmolive-co-emerge-as-key-contributors-to-growth-technavio-301300150.html

The pet business continues to grow as people who love their dogs and cats like their children (2020, August 18). https://www.thairath.co.th/business/market/1912957

ANALYSIS OF CUSTOMER BEHAVIOR USING TIKTOK AS A LIVE BROADCAST

Ren Luo[1*] and Suttisak Jantavongso[2]

[1,2]Master of Science in International Digital Business (International Program)
International College, Rangsit University, Thailand
[*]**Corresponding Author, E-mail:** ren.l65@rsu.ac.th

Abstract

There are over one billion active users worldwide, and TikTok has become a global phenomenon. The theoretical system of live broadcast marketing has evolved on the TikTok platform. It was known as Douyin in China when TikTok was first launched in 2016. Therefore, the combination and innovation of marketing and TikTok live broadcast are worthy of analysis and exploration. However, TikTok's current broadcast marketing situation also has specific problems, i.e., if the quality of the videos released by users or businesses on TikTok is not high, there will be less traffic, likes, and comments. Hence, three research objectives are: (i) using TikTok to determine most customer behavior; (ii) to discover the factors attracting young users to spend time watching live on TikTok; and (iii) to suggest recommendations for successfully using live streaming to communicate with audiences. In addition, 41% of the TikTok users are aligned with the university's demographics. Therefore, the descriptive and correlation research adopted an online questionnaire as a research instrument. By random sampling, 401 valid responses were via an online survey from 2,200 international students enrolled at Rangsit University. The online survey was conducted from January to February 2023. The results were that most behavior when watching Live was researching to compare the price followed by purchasing without a doubt. Furthermore, the factors attracting young users were influencers and new style interaction-live. Finally, the recommendations were to provide more rich live content, strengthen the sociality of live broadcasts, connect the brand with live broadcasts, improve live broadcasts' quality, and strengthen cooperation with content creators.

Keywords: TikTok, Douyin, e-commerce, live broadcast

Introduction

There are over one billion active users worldwide, and TikTok has become a global phenomenon. TikTok has changed how individuals consume content and how it is created and distributed (Scribere, 2023). This research paper is conducted according to the theoretical system framework formed in the traditional marketing field. The theoretical system of live broadcast marketing has been improved on TikTok or DouYin platform. The combination and innovation of marketing and TikTok live broadcast are worthy of analysis and exploration. However, TikTok's current broadcast marketing situation also has specific problems. For example, if the quality of the videos released by users or businesses on TikTok is not high, there will be less traffic, likes, and comments. This paper comprehensively sorts out the relevant theories and analysis tools of TikTok's marketing strategy, 4C theory, direction, and formulation of a TikTok live broadcast marketing plan to solve these problems.

Online marketing, the TikTok platform lives broadcast marketing hopes to have low operating costs and a quick start. Regarding operating expenses, TikTok live broadcast has a simple form.

Compared with traditional e-commerce platforms, TikTok live broadcast has a lower entry threshold and relatively reduced cost (Hutchinson, 2021; Hutchinson, 2022). In addition, the TikTok live broadcast has an efficient dissemination speed, and challenging to replicate the original advantages. TikTok and other short video live broadcasts are very popular among users in the current fast-paced lifestyle (Montenegro, 2021). Compared with the traditional marketing mode, it spreads quickly and fully utilizes the advantages of the Internet.

Research Objectives

This study examines the present state of TikTok's live broadcast marketing, poses questions, and studies and develops TikTok's live broadcast marketing optimization strategy, creating individual user strategies and improving concerns. The objectives are as follows.

1. Using TikTok to determine the majority of customer behavior.
2. To discover the factors attracting young users to spend time watching live on TikTok.
3. To suggest recommendations for successfully using live streaming to communicate with audiences.

Literature Review

The retail business has been distinguished by its tremendous dynamism. The new millennium has witnessed a steady rise in modern retail formats such as hypermarkets, supermarkets, and discount stores, most of which foreign corporations control. However, conversely, the consumer is involved in the simultaneous creation and consumption of experience, which has become the primary form of happiness.

This happiness, known as "human experience," is the most ephemeral and enduring outcome (Toffler, 1995). Modern digital reality is positive and negative, just like the physical world. The threat of exploiting customers by invading their privacy and stealing personal information; child abuse; spreading rumors, fabrications, defamation, and other false information; manipulating consumer behavior through social networks. The undeniable progression of digital changes has altered the emphasis of retail away from the optimized movement of products with the aid of business logistics and toward the acquisition of relevant data, transforming the commercial business into a future business. When achieving digital transformation, introducing creative retail strategies is crucial.

TikTok macro market over the world

Like any other, the e-commerce market also faced immense backlash due to the epidemic. According to the International Monetary Fund (IMF) baseline forecast, many countries have also been hit by the "epidemic," and economic growth will slow to 3.2% from 6.1% last year (Zhu, 2022). The epidemic has affected the global economy, and finding more "outlets" for business or personal needs is necessary. According to Ray & Zou (2022), "live broadcast" and "e-commerce" (e-commerce live broadcast) is a new business models. The new crown epidemic causing turbulence in the global food market has made more people choose online shopping. As a result, online shopping is carried out in the market, and live streaming has also begun to take shape. Lazada, the most popular Southeast Asia in recent years, has also launched its live broadcast sales with Shopee (Webretailer 2022). These two platforms have developed rapidly in recent years, but they are still not mature enough compared to domestic ones.

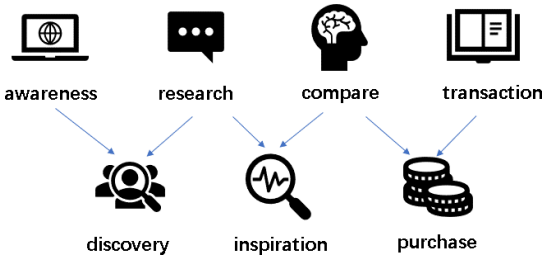
Most of the live broadcasts are learning from China's live broadcast model. In recent years, e-commerce and live broadcasting have received widespread attention worldwide. Whether it is entertainment, education, or retail industries, world-renowned companies are testing the waters, and

some innovative startups have performed well on this track. But from the perspective of the application,

China's e-commerce and live broadcasting industries are far ahead of foreign countries due to factors such as infrastructure construction and user base. The industrial and user bases determine the development and future trends of Chinese and foreign e-commerce and live electronic broadcasting. This is based on fundamental reasons such as differences in the maturity of major economies, different stages of technological development, and differences in the population structure of countries and regions

The development status and market research analysis report of the Live streaming industry in China

The live broadcast platform should be familiar with the laws and regulations, and they should plan ahead of time based on the quality of the goods brought, the software and hardware requirements of the live broadcast scene, the network anchor's code of conduct, the operation and management of industrial enterprises, and the content publishing platform's compliance, and reserve relevant materials and workforce. Optimizing content, swiftly demonstrating advantages over rivals in the same business, and focusing on resource advantages are important to expand and grow. 5G technology makes it possible to broadcast live with zero delays, and the rise of the Metaverse has promoted the development of advanced technologies such as virtual reality (Nezami et al., 2022). The live broadcast platform should be familiar with the laws and regulations and prepare in advance for the quality of the goods brought. For example, the software and hardware requirements of the live broadcast scene, the code of conduct of the network anchor, the operation and management of industrial enterprises, and the compliance of the content publishing platform, and reserve relevant materials and workforce. Optimize content, show advantages among competitors in the same industry, and concentrate resource advantages to develop and grow.



Picture 1: Traditional digital sale style

Picture 2: TikTok digital sale style

Source: TikTok Inc. (2023)

Compared to traditional digital marketing, TikTok's digital marketing method takes a shorter time to attract users, allowing the users to search for products and complete transactions (see Pictures 1 and 2). As a result, TikTok has a comparative advantage in online sales—the absolute benefit of the same type of products. In addition to the different platform preferences caused by differences in age, gender factors also have a certain impact on teenagers' choice of social media platforms: girls in their teenage years are more inclined to use TikTok.

Methodology

HEM (2020) reported that Tik Tok users are between the ages of 16 and 24, nearly 41%. Thus, the platform's audience aligns with the university's target demographics. In addition, not only is

the channel a magnet for Generation Z. The audience is very engaged. For example, 90% of the students access TikTok daily, and 55% create their content. Nevertheless, the population for the study is 2,200 international students enrolled at Rangsit University. The number of international students provides a diverse group of students. There are more than 60 countries, including the United States, China, the European Union (EU), and others (Rangsit University, 2023). Hence, Rangsit University has a diverse student population, providing researchers with access to a wide range of international perspectives and experiences (Brasier, Bhovichitra, & Malisuwan. 2021; Akpan & Chayanuvat, 2022; Jantavongso, & Nuansomsri, 2019). Although this research is focused on TikTok digital program, international students could provide a good sample for the study, similar to the study by Akpan & Chayanuvat (2022) that investigated the impact of social media on motivation in a Thai private university. Thus, a random sampling method was employed.

According to the objectives of this study, Yamane (1967) suggested 400 sample is sufficient for a 95% confidence level. Therefore, the sample size followed Yamane, cited in Saensane & Jantavongso (2022). The online questionnaires were conducted from January to February 2023. The link to the questionnaire was distributed via the Line and WeChat group at Rangsit University. Four hundred-one responses were valid.

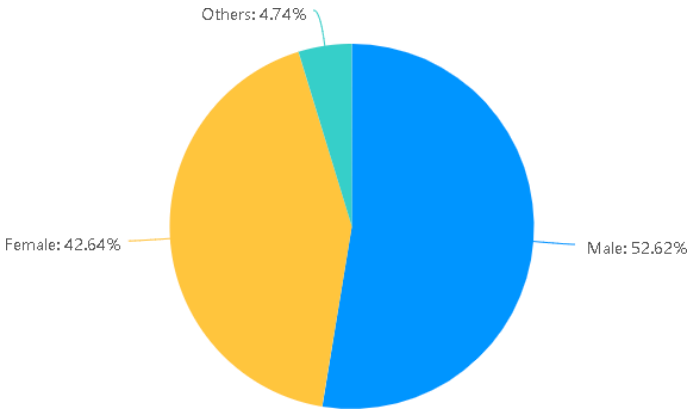
The eighteen questions (the instrument) were developed based on the research objectives. The content validity was the judgment-based decision (Jantavongso & Fusiripong, 2021; Jantavongso, 2022). Three experts evaluated the instrument using the Index of Item Objective Congruence (IOC). Items rated below 0.5 were excluded.

Descriptive and correlation statistics were used to analyze the data.

Results

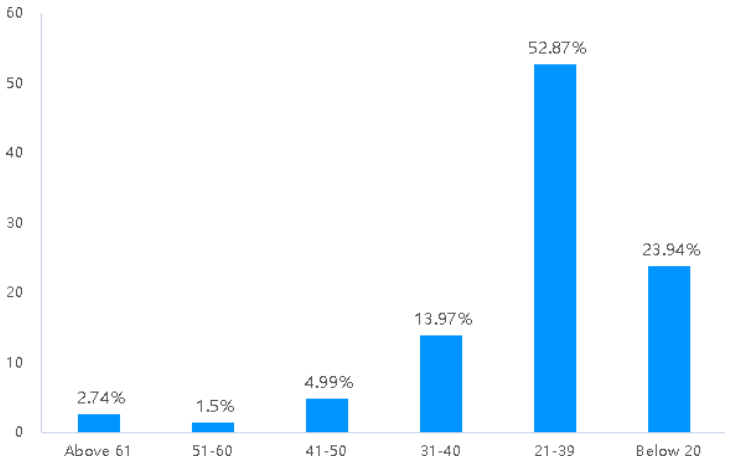
The results were from 401 valid responses. The order of the results is according to the research objectives.

General information



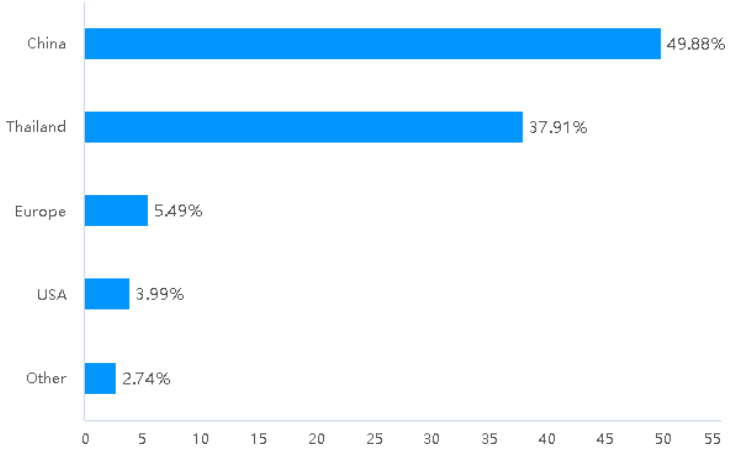
Picture 3: Gender information

Two hundred-eleven males participated, accounting for 52.6%. A total of 171 women participated, accounting for 42.6%. In addition, 19 other gender participants accounted for 4.7% (Picture 3).



Picture 4: Age information

In this survey, most were young participants. Ninety-six people under 20 accounted for 23.9%. In addition, there were 212 participants aged 21-39, accounting for 52.9%; 56 participants aged 31-46 accounted for 14%; 20 participants aged 41-50 accounted for 5%, and participants aged 51-60, with a total of 6 accounted for 1.5%. Eleven participants over 60 accounted for 2.7% (Picture 4).



Picture 5: Countries where the participants live

According to the results, 200 Chinese participated in answering the questionnaire, accounting for 49.88%, 152 Thai accounted for 37.91%, 22 Europeans accounted for 5.49%, 16 Americans accounted for 3.99%, and others 11 accounted for 2.74% (Picture 5).

Statistics about TikTok behaviors

The correlation analysis was conducted on Questions 4, 6, 7, 8, and 10 of the instrument: Q4 Do you watch the short video in TikTok or Douyin; Q6. How did you feel when you watched TikTok or Douyin; Q7 When you want to watch a live stream, do you prefer to use; Q8 When you watch Douyin, What are you looking for?; and Q10 Whenever you watch TikTok or DouYin, you expect. The correlation between the four items uses the Pearson correlation coefficient to indicate the strength of the correlation (Table 1).

Table 1: The correlation to an analysis of TikTok users' behavior

Do you watch the short video on TikTok or Douyin? (Q4)	
How did you feel when you watched TikTok or Douyin? (Q6)	-.199*
When you want to watch the live stream, do you prefer to use it? (Q7)	.247*
When you watch Douyin, What are you looking for? (Q8)	.049
Whenever you watch TikTok or Douyin, you expect. (Q10)	-.032
* p < .05 ** p < .01	

The correlation coefficient value between Q4. (Do you watch the short video in TikTok or Douyin) and Q6. (How did you feel when you watched TikTok or Douyin) is -.199, showing a significant level of 0.05, thus indicating there is a significant negative correlation between Q4 and Q6.

The correlation coefficient value between Q4 (Do you watch the short video in TikTok or Douyin) and Q7. (When you want to watch a live stream, you prefer to use) is .247, showing a significant level of .05, thus indicating Q4 has a significant positive correlation with Q7.

The correlation coefficient value between Q4 (Do you watch the short video in TikTok or Douyin) and Q8 (When you watch Douyin, What are you looking for?) is .049, close to 0, and the p-value is .625>.05, thus indicating there is no correlation between Q4 and Q8,

The correlation coefficient value between Q4 (Do you watch the short video in TikTok or Douyin) and Q10 (Whenever you watch TikTok or Douyin, you expect) is -.032, close to 0, and the p-value is .753>.05, thus indicating there is no correlation between Q4 and Q10.

Customer behavior analysis

Table 2 presents the results of the customer behavior when they watched live streaming. The top responses were "to find another way to compare the price" (37.2%), followed by "searching it without a doubt" (25.4%) and "purchasing it without a doubt" (23.7%), respectively.

Table 2: Analysis of customer behavior when they watch Live.

Whenever you see a product live streaming, and you want to					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ask to send a message to the anchor	55	13.7	13.7	13.7
	Find another way to compare the price	149	37.2	37.2	50.9
	Purchase it without a doubt	95	23.7	23.7	74.6
	Searching it without a doubt	102	25.4	25.4	100
	Total	401	100	100	

According to Table 3, the participants have mixed opinions about the interactivity and sociality of TikTok Live. One hundred eighty-five participants believe that the function of Live encourages communication and interaction between users. Hence, it enhances the multi-element on the platform. However, the rest of the participants think the interactive elements, such as gifts and likes in the live broadcast, are too commercialized, making them dislike this interaction.

Table 3: The comfort level test of customers.

How would you rate your comfort level with live streaming?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unable to get it to work	35	8.7	8.7	8.7
	Completely uncomfortable	39	9.7	9.7	18.5
	Somewhat comfortable	146	36.4	36.4	54.9
	Uncomfortably competent	89	22.2	22.2	77.1
	Very comfortable	92	22.9	22.9	100
	Total	401	100	100	

Table 4: Personal motivation to TikTok.

What is the motivation for your personal to live stream					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Better reach the target audience	131	32.7	32.7	32.7
	Exploring new technology to evaluate capabilities	131	32.7	32.7	65.3
	Covid-19 Pandemic	139	34.7	34.7	100
	Total	401	100	100	

Table 4 presents the motivations to live stream. Again, the Covid-19 pandemic is the top motivation at 34.7%, followed by better reaching the target audience and exploring new technology to evaluate capabilities, 32.7% equally.

Table 5: Customer experience by watching TikTok Live.

How would you rate your experience with live streaming					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Fantastic results	72	18.0	18.0	18.0
	Good	110	27.4	27.4	45.4
	Good but inconsistent results or reliability	118	29.4	29.4	74.8
	Horrible results	46	11.5	11.5	86.3
	Need help	55	13.7	13.7	100
	Total	401	100	100	

Most participants have a good evaluation of TikTok Live, but 118 participants think that the live broadcast is different from reality, which means that the live broadcast lacks authentic and reliable factors (Table 5). Although TikTok has high popularity, it involves users. In the case of interests, users will proceed according to the actual situation instead of following the lead of the live broadcast.

Factors attracting young users to spend time watching Live on TikTok.

The top two factors attracting young users were influencers and new style interaction-live. From the results, the participants believe that the influencers are famous (24.44%), and receive high income (29.43%), see Table 6. When asking the participants to rate (1-5) the key success factors of using TikTok in China and Thailand, setting up video from start to finish, making a talent, and presenting during live stream were the top three factors at 3.99, 3.92, and 3.91 respectively (Table 7).

Table 6: Opinion of the participants on the live stream holder (influencers).

Opinions	No.	Percentages
Influencers are famous people	98	24.44%
Influencers received too much payment	118	29.43%
Influencers are just normal salesman	126	31.42%
I want to be one of the influencers	59	14.71%
Total	401	

Table 7: The ratings of the key success factors using TikTok in China and Thailand

Factors	1	2	3	4	5	AVE
Know what to purchase	9 (2.24%)	16 (3.99%)	101 (25.19%)	208 (51.87%)	67 (16.71%)	3.77
Presenting during a live stream	6 (1.5%)	19 (4.74%)	74 (18.45%)	207 (51.62%)	95 (23.69%)	3.91
Set up video from start to finish	5 (1.25%)	13 (3.24%)	89 (22.19%)	168 (41.9%)	126 (31.42%)	3.99
Making a talent	5 (1.25%)	15 (3.74%)	92 (22.94%)	184 (45.89%)	105 (26.18%)	3.92
Managing the on-air process	5 (1.25%)	17 (4.24%)	113 (28.18%)	193 (48.13%)	73 (18.2%)	3.78
Delivering the live streaming (TikTok)	13 (3.24%)	23 (5.74%)	158 (39.4%)	117 (29.18%)	90 (22.44%)	3.62
Total	43 (1.79%)	103 (4.28%)	627 (26.06%)	1077 (44.76%)	556 (23.11%)	3.83

Recommendations for successfully using live streaming to communicate with audiences

TikTok Live is a live broadcast function on the TikTok platform, which can provide real-time interaction with users and brand promotion. The following are five suggestions for the development of TikTok Live:

1. Provide more rich live content: TikTok Live can provide various types of live content, including entertainment, knowledge, and games. As a result, it attracts different types of users while providing more creative and professional live content to increase viewing time and interactivity.

2. Strengthen the sociality of live broadcasts: TikTok Live can increase interaction with users, such as adding more social tools, increasing interactive functions and activities with audiences, and communicating and exchanging with users to improve the sociality of live broadcasts and interactivity.

3. Strengthen the connection between the brand and the live broadcast: Brands can strengthen the brand promotion effect by providing more connections between the live broadcast and the brand. For example, brands can offer more discounts, discounts gifts to stimulate users' desire to buy and, at the same time, provide more brand information and brand activities to increase users' attention.

4. Improve the quality of live broadcasts: TikTok Live can provide higher quality live broadcasts, such as high-definition images, smooth playback, and better audio effects. As a result, it improves users' viewing experience.

5. Strengthen cooperation with content creators: TikTok Live can strengthen cooperation with content creators and provide more live broadcast opportunities and brand cooperation opportunities, thereby increasing the diversity of live broadcasts and user attention.

TikTok Live broadcast improves the user experience and brand promotion by providing rich content; enhancing the sociality of live broadcasts; strengthening the connection between brands and live broadcasts; enhancing the quality of live broadcasts; and strengthening cooperation with content creators effect, to better promote the development of TikTok Live.

Discussion

The correlation analysis showed a negative correlation between Q4 (Do you watch short videos on TikTok or Douyin) and Q6 (How did you feel when you watched TikTok or Douyin), meaning that the shorter videos users watched, the worse users felt after watching them. On the other hand, there is a positive correlation between Q4 and Q7 (When you want to watch live streams, you prefer to use), meaning that the shorter videos the user watch, the more user prefer to watch live streams. However, there is no significant correlation between Q4 and Q8 (What are you looking for when you watched Douyin) and Q10 (Whenever you watch TikTok or DouYin, you expect).

As mentioned in Table 2, 149 participants chose to compare product prices when watching live broadcasts. The results aligned with Jin, He, & Zhang (2014). Jin et al. (2014) express how powerful customers feel when they compare prices. TikTok users' purchases on the platform have come under increasing scrutiny. Through TikTok's shopping function, users can buy their favorite items on the platform.

Moreover, TikTok uses various marketing methods, such as recommendations, advertisements, celebrity endorsements, etc., to attract users' attention and promote users' purchase behavior. TikTok also cooperates with merchants to provide high-quality goods and services to meet users' needs. Therefore, TikTok's shopping function provides users with a convenient shopping experience and brings merchants a broad sales channel. In general, TikTok has greatly impacted users' purchasing behavior and promoted the development of e-commerce.

The result (Table 4) also aligns with the study by UNCTAD (2020). Consumers are making the shift to online shopping (UNCTAD, 2020). The COVID-19 pandemic has boosted the popularity of online shopping. With most people isolating themselves at home and avoiding non-essential public places, online shopping has become more convenient, safe, and secure. This makes people more inclined to use e-commerce platforms for shopping and consumption, including food, daily necessities, and other necessities. In addition, the epidemic has accelerated the development of digital payments. People are increasingly reluctant to use cash, and digital payment methods have become safer and more convenient. As a result, digital payment tools such as e-wallets, Alipay, and WeChat Pay have been promoted. With the closure of many public places, such as movie theaters and gymnasiums, people increasingly rely on online platforms for entertainment. Promote online consumption methods such as live streaming, video streaming services, games, and music, so that people can enjoy entertainment without leaving home.

Conclusions

TikTok Live is a live broadcast function on the TikTok platform which allows users to share their life, talent, or hobbies in real-time interaction. First, through user interaction, TikTok Live can increase brand recognition and loyalty. Brands can attract and retain consumers by interacting with users and answering their questions, demonstrating product or service features and uses, offering special offers and discounts, and more. Second, TikTok Live can stimulate users' desire to buy and promotional effects. Showing or demonstrating products in a live broadcast can allow users to understand the product or service better and enhance their interest and willingness to purchase. In particular, offering discounts, coupons, and other promotions during live broadcasts can further increase purchase motivation and sales. Third, TikTok Live can increase users' trust in brands and products. Interaction and sharing in live broadcasts can allow consumers to understand brands and products better and build trust and brand loyalty. This situation is especially critical when consumers are new products, new brands, or unfamiliar products. TikTok Live has influenced consumer behavior through brand interaction, stimulating purchase desire and improving trust. This function provides

brands and enterprises with a channel for real-time consumer interaction and promotion, increasing their sales and brand value.

References

Akpan, S. & Chayanuvat, A. (2021). The impact of social media on motivation towards learning English as a global language. *APHEIT International Journal*, *11*(1), 1-19.

Brasier, B., Bhovichitra, P., & Malisuwan, U. (2021). The effects of social media on university student's daily life and motivation to study. *RSU International Research Conference 2021*. Pathumthani, Rangsit University.

HEM (2020, December 7). *TikTok university marketing: A new social media trend for schools*. https://www.higher-education-marketing.com/blog/tik-tok-university

Hutchinson, A. (2021, June 9). *TikTok shares new insights into the importance of sound for marketing promotions on the platform.* SocialMediaToday. https://www.socialmediatoday.com/news/ tiktok- shares-new-insights-into-the-importance-of-sound-for-marketing-promo/601569/

Hutchinson, A. (2022, October 3). *TikTok's taking a new approach to promoting its live stream shopping tools in the US*. SocialMediaToday. https://www.socialmediatoday.com/news/ tiktoks- taking-a-new-approach-to-promoting-its-live-stream-shopping-tools/633226/

Jantavongso, S. (2022). Toward global digital literate citizens: A case of Thailand's aging generation. *The Electronic Journal of Information Systems in Developing Countries*, 88(2), e12207.

Jantavongso, S., & Fusiripong, P. (2021). Ethics, big social data, data sharing, and attitude among the millennial generation: A case of Thailand. *The Electronic Journal of Information Systems in Developing Countries*, 87(5), e12179.

Jantavongso, S., & Nuansomsri, C. (2019). Factors influencing knowledge sharing among Thai ICT undergraduate students. *Journal of Technology and Innovation in Tertiary Education*, *2*(1), 1- 10.

Jin, L., He, Y., & Zhang, Y. (2014). How power states influence consumers' perceptions of price unfairness. *Journal of Consumer Research*, 40(5), 818-833.

Montenegro, L. (2021, August 27). *The rise of short-form video: TikTok is changing the game*. Forbes. https://www.forbes.com/sites/forbesagencycouncil/2021/08/27/the-rise-of-short-form-video- tiktok-is-changing-the-game/?sh=53837c885083

Nezami, Y., Dohler, M., Shirazipour, M. & Blomquist, E. (2022). *What is the Metaverse and why does it need 5G to succeed?* The metaverse 5G relationship explained. Retrieved from https://www.ericsson.com/en/blog/2022/4/why-metaverse-needs-5g

Rangsit University. (2023, April 30). *About Rangsit University*. Rangsit University. https://www2.rsu.ac.th/Home

Ray, P. & Zou, L. (2022). Live stream e-commerce: Factors that motivate the evolving consumer patterns. *African Journal of Economics, Politics and Social Studies.* doi:10.15804/ajepss.2022.1.08

Saensane. J. & Jantavongso, S. (2022). Evaluating the digital literacy learning and teaching materials in creating digital media knowledge with safety awareness of the Thai elderly. In S. Yurarach (Ed.), Proceedings of the 17th National and International Sripatum University Conference (SPUCON 2022): Research and Innovations to Sustainable Development (pp. 310-320).

Scribere, M. (2023, January 17). *The phenomenon of TikTok: How a short-form video app is changing the entertainment industry.* Medium. https://medium.com/@Moneta_Scribere/the- phenomenon-of-tiktok-how-a-short-form-video-app-is-changing-the-entertainment-industry- f88ece694727

TikTok Inc. (2023, March 10). *TikTok for business*. Follow Me to TikTok. https://followme-na.splashthat.com/

Toffler, A. (1995). *Creating a new civilization: The politics of the third wave.* Atlanta, GA

UNCTAD (2020, October 8). *COVID-19 has changed online shopping forever, survey shows*. UNCTAD https://www.sciencedaily.com/releases/2013/09/130910112842.htm#:~:text= According%20to%20the%20authors%2C%20consumers,paying%20(other%2Dcomparison).

Webretailer. (2022, April 27). *Online marketplaces in Southeast Asia: A unique region for ecommerce.* Webretailer. https://www.webretailer.com/marketplaces-worldwide/online-marketplaces- southeast-asia/

Yamane, T. (1967). *Statistics: An introductory analysis*. New York: Harper and Row.

Zhu, H. (2022). Study of the global economic recession. *Highlights in Business, Economics and Management*, 1, 52-55.

BUILDING A DIGITAL PLATFORM TO IMPROVE CUSTOMER DEVELOPMENT CAPABILITIES FOR DOMESTIC SERVICE COMPANIES

Junhao Zhao

Faculty of RIC, Rangsit University, Thailand
Corresponding Author, E-mail: junhao.z65@rsu.ac.th

Abstract

The rapid development of China's social economy, the continuous improvement of people's quality of life, the trend of expansion of the service market. The rapid growth of consumer demand for services has led many domestic service companies to enter the increasingly competitive market environment. Digital technology is rapidly developing and integrating into people's social life, under the influence of which digital marketing supported by digital technology has started to become an important way for them to develop customers. How can we better face the future challenges in the new market environment and more efficiently develop the value of home management companies? This study will present the results by analyzing the current situation of Chin Cheng domestic service companies in Yunnan, China, combined with knowledge about digital marketing, to provide reference for domestic service companies in similar situations. The methodology of this study uses questionnaires to collect data from 400 respondents, and based on the analysis of the data, inferential statistical analysis is conducted to analyze the customer behavior based on the consumer's age, income, and some perceptions of the domestic service company or industry. The research results show that domestic companies should pay attention to digital marketing tools, keep up with the development trend of the digital era, develop relatively reasonable digital transformation strategies for different types of customers through social media and digital platforms, and improve their own services at the same time, so that they can get good development.

Keywords: home service companies, China market, influencing factors, digital marketing

Introduction

Domestic service refers to the social services provided by domestic helpers for family life. With the accelerated pace of urbanized life and the rapid development of diversified employment in China, people are slowly increasing their consumption of services and other means of enjoyment, in addition to material consumption to meet their basic needs. The domestic service industry in Yunnan, China, has gradually emerged and is becoming more prosperous, becoming an important part of the tertiary industry, promoting economic development and creating a large number of jobs.

The company's main business is to provide home cleaning, babysitting, glass cleaning, hood cleaning, etc. The company currently relies on an online intermediary platform "58 Tongcheng" and community flyers to develop customers. The company has 43 domestic helpers and 8 administrative staff to coordinate the business. Due to the limitations of the online agency platform it is currently working with, such as the difficulty of receiving user feedback in a timely manner, as it is difficult to facilitate user reviews like online take-out platforms, it is also difficult for new users to get a simple understanding of the company's business level from the reviews of other users who have already experienced it. With the development of digital technology the company also wants to change the status quo according to this development trend, improve customer development capabilities, establish

a convenient digital service platform for its own business, use digital marketing tools, change the traditional customer development methods, and allow the company to develop more of the value that it has.

Research Objective (s)

1. To analyze the market environment of Chin Cheng Domestic Services Company in the industry using SWOT.
2. Explore customer behavior through questionnaires.
3. Establish a digital service platform to enhance customer development and develop digital transformation strategies.

Hypotheses

H1: Users will often need housekeeping services due to busy work
H2: Domestic service use is related to customer age, income and behavior habits
H3: Can digital transformation properly solve related problems

Literature Review

The current situation of the domestic industry in China

Domestic service for Chinese residents began at the beginning of the reform and opening up in the late 1970s. In recent years, with the evolution of family structure and social and economic development, career-oriented, difficult (families with elderly, children, and sick people in need of care) and a large number of affluent families emerged, the market for domestic service in the Chinese industry began to mature over time. Li Yanmei (2008) analyzed the current situation of China's domestic service industry from three aspects, such as the emergence and development of domestic service industry in China, the current situation and problems of domestic service industry, and thoughts on improving the laws and systems related to domestic service industry, so that we can more clearly understand the current problems of domestic service industry under the influence of different factors. Zhang Zhuyin (2009) studied the development of China's domestic service industry from two aspects, including the analysis of discordant factors in China's domestic service industry and the countermeasures to promote the harmonious development of China's domestic service industry. In addition, the increasing trend of small family size and aging society, the increase of knowledge-based mobile population in large and medium-sized cities, and the continuous improvement of urban residential areas and neighborhood committees to communities provide the necessary development space and market conditions for the socialization of home services. As a result, the domestic service industry serving communities and families has emerged.

Analysis of customer behavior in the home care industry in China by previous scholars

According to Li Fuzhi (2007), modern home economics is closely related to customer behavior, and in order to do a good job in home economics, we need to observe and analyze customer behavior, and understand customer needs through customer behavior in order to do a good job in home economics, and customer analysis in home economics is usually determined by age, gender, income, and some habits and perceptions of home economics. According to Jing Li (2009), the current lack of skills and low quality of domestic service workers leads to low wages, which also affects their motivation to participate in domestic service work, and at the same time, it is easy to give customers a bad impression, and the quality of service can greatly affect the fluctuation of customer behavior. Therefore, it is necessary to provide formal training to domestic helpers before they start

working. Through training, help them to correct their mindset, establish good professional ethics, and at the same time master the skills necessary to engage in domestic service. We can learn from the experience of "senior and star-rated domestic service groups" in Guangzhou and Shenzhen, and train senior domestic service workers on a pilot basis to create a senior and star-rated domestic service team to meet the high-level market demand. At the same time, the training should be in accordance with the requirements of the labor department skills training, according to the professions and types of jobs engaged in training in stages, and then unified to hold the examination, the corresponding vocational qualification certificate issued to those who pass.

The importance of digital transformation and its implementation in the home care industry

Li Yao and Zhou Shixun (2009) argued that online marketing with big data is an important tool for current corporate marketing and that industrial digital transformation strategies can bring new power to traditional industries. Yu, Xiaobing (2017) by analyzing the current situation and countermeasures of online marketing development of SMEs a popular research topic also in emphasizing the importance of digital transformation for SMEs. Li Ruixin (2017) through the analysis of enterprise network marketing effect assessment and business risk management to some extent emphasizes the impact of network marketing in the current era. Yi Chen (2017) discusses that when the current era of the network economy marketing strategies under the transformation of many traditional industries have begun to undergo new changes, such as domestic services and catering takeaway services are therefore undergoing greater changes.Many researchers have their own unique insights into the home service industry and digital marketing, and by reading this literature and combining it with the feedback results obtained from my own research, I hope to get more practical implications and give it new power in combination with the ever-changing technology of the times

Methodology

The study used an online survey method. In order to obtain scientifically sound data, 400 questionnaires were distributed and analyzed in this study through an online platform. This study used SPSS for descriptive statistical analysis to obtain the means and correlations of the variables. Then, the results of this study were analyzed using inferential statistics.

The sample was collected in the form of an online questionnaire and distributed to consumers of different genders, ages, and different monthly incomes. Preliminary analysis of the study data revealed that in terms of demographic characteristics, participants were mainly female with 62.75%, participants were mainly between 30-39 years old with 35%, and their economic level was mostly between 8,000-10,000 RMB with of 61.5%.

The study is divided into the following three stages.

Phase I: SWOT analysis of the local domestic service industry market.

Phase 2: Questionnaire survey and collection of feedback for analysis.

Phase 3: Give recommendations on how to establish a digital service platform and how to change the image of the company among customers.

The following is the framework of the paper, through questionnaires and statistical analysis of customer behavior to consider how to rationalize the implementation of digital transformation strategy of home service companies.

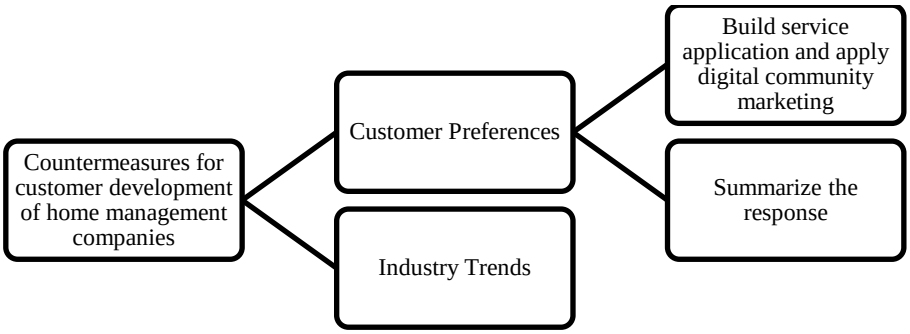


Figure 1: Conceptual Framework

Results

Phase I: SWOT analysis of the local domestic service industry market

This stage is mainly through SWOT analysis of Chin Cheng domestic service company's external and internal strengths, weaknesses, opportunities, dangers and other related

S (advantage analysis):

1. Chin Cheng Home Management Co., Ltd. is a local enterprise, which understands the specific situation of the local area better and has the geographical advantage.

2. Established in 2020, the service tends to be mature and has a certain foundation in the market, with a good reputation and good word-of-mouth effect.

3. in the "58 the same city" and other new media diversion, online and offline customer resources interactive development, the performance of the completion of a large amount of contact with a relatively significant amount of customer traffic, laying the groundwork.

4. have a good team foundation, the company can develop so far and continue to grow, because there is a very good team team, to promote the development and growth of the company.

W (disadvantage analysis):

1. although the business engaged in personnel in the service skills have experienced some training, but for some details still need to pay attention to, especially the ideological awareness still need to learn.

2. the speed of response in dealing with customer feedback is not very timely, resulting in some unnecessary losses.

3. Easy way of enterprise customer management. Too simple customer information management to employees and customers inconvenience, no special CRM software to assist play the existence of quality customer relationship management value.

4. Individual relevant business personnel appear to take private work, forming a certain impact on the market price and causing no small trouble to the company's profit margin.

O (opportunity analysis):

1. Competitors competing in the same industry. The horizontal competition in the market provides the company with the opportunity to learn and train for reference. Self-correction by identifying and correcting its own problems and deficiencies and learning from competitors' strengths based on the analysis of competitors' data.

2. Broad prospects for customer development. Enhance the sense of responsibility, implement diversified service programs, meet the humanized and diversified needs of customers, and transform ordinary customers into key customers. Transformation of key customers into important customers, maintenance of important customers, and further development of customers' development potential.

3. Gradually improve customer relationship management management methods and business process management. Good customer relationship management methods and business process management are sound and can promote institutional reform of enterprises, learn and train excellent relevant expertise and methods from all over the world and closely integrate them with their own business conditions, thus promoting the upgrading and development trend of quality customer relationship management management methods.

4. Chin Cheng Home Management understands the necessity of excellent talents. To understand the necessity of excellent talents in the company according to the actual situation, to continue to improve the quality of the company's employees, and to attach great importance to and introduce high quality talents.

T (Presentation Analysis):

1. With the arrival of industry competition, the level of market competition is getting higher and higher. With the trend of economic development and social development, more and more competition within the industry enters, leading to a decrease in market share. Only companies with strong overall strength can survive.

2. Work pressure from other competitors in the same industry. The company is engaged in business processes and suffers from the pressure of strong competitors.

3. The implementation of our current policies. The relevant policies in force in China break the original strategic positioning and sales market, and the change of the current policy will ripple through the development trend of the company.

4. Changes in customer and market demand. Customer demand and market will endanger the profit of the enterprise, which is difficult for the enterprise to grasp and will not be manipulated by the enterprise.

SO WO ST WT Strategic Analysis :

SO Strategy	WO Strategy
● Take advantage of the Company's localization and other advantages to play the potential of customer resources, seize the moment and establish a good image for the Company ● Enhance customer satisfaction and loyalty to the Company by improving the service awareness and level of business personnel	● Learn from the same industry, improve the enterprise management system and reduce the phenomenon of staff turnover, and improve the requirements of business personnel ● Improvements in customer management and business of U-Talk can improve service awareness, optimize business management, and reduce customer complaint rates
ST Strategy	**WT Strategy**
● Use the advantages of brand localization and other advantages to establish their own strengths and good services that can satisfy customers ● Through very good execution and good conditions, enhance their own strengths and introduce advanced service and management concepts	● Improve the requirements for personnel to provide good service and business for customers ● Upgrade the enterprise management system, improve its own management and enhance competitiveness ● Implement differentiated customer management strategies and diversified development strategies

Phase 2: Questionnaire survey and collection of feedback for analysis

In this phase, 400 questionnaires were collected and distributed, the results were counted, and the feedback was inferred and analyzed.

Table 1: Gender

Options	Subtotal	Proportion
Male	149	37.25%
Female	251	62.75%
Effective number of people	400	

Analysis conclusion: The number of valid fillings for this question was 400, of which 149 were males and 251 were females. The proportion of females was 62.75%, slightly higher than the 37.25% of males. It means that women pay relatively high attention to domestic service, we can focus on this customer group some idea.

Table 2: Age

Options	Subtotal	Proportion
Below 20 years	2	0.5%
20-29 years	121	30.25%
30-39 years	140	35%
40-49 years	116	29%
50-59 years	21	5.25%
Above 60 years	0	0%
Effective number of people	400	

Analysis conclusion: Based on the data table for this single choice question, we can conclude that The largest number of people in this survey sample are between 30 and 39 years old, with a percentage of 35%;The next largest number of people were between the ages of 20 and 29, with a share of 30.25%;The number of people aged between 40 and 49 was 116, with a share of 29%;The number of people aged less than or equal to 20 and greater than or equal to 60 was relatively small, at 2 and 0, respectively The number of people in the sample aged 50 to 59 years old was 21, accounting for 5.25%. In summary, the sample for this single question had the largest number of people aged 30 to 39 years old, while the number of people aged 20 to 29 and 40 to 49 years old was also relatively high.

Table 3: what is your income ?

Options	Subtotal	Proportion
2000RMB	1	0.25%
2000-5000RMB	7	1.75%
5000-8000RMB	85	21.25%
8000-10000RMB	246	61.5%
Above 10000RMB	61	15.25%
Effective number of people	400	

Analysis conclusion: According to the data table, the following conclusions can be drawn:

The majority of people earn between 8000-10000RMB, accounting for 61.5%. The number of people in the 5000-8000RMB income range is also relatively high, with a percentage of 21.25%. The high income group (10,000RMB and above) accounted for 15.25%, which is relatively small. The number of people in the income range of 2000RMB and below is the lowest, with only 1 person filling in the question, accounting for 0.25%. The valid number of people filling in this question is 400, so the data sample is relatively small and the conclusion may have some bias.

Table 4: Do you need housekeeping services in your daily life?

Options	Subtotal	Proportion
Need	400	100%
Unnecessary	0	0%
Effective number of people	400	

Analysis and Conclusion: According to the data table, a total of 400 people participated in this radio question, of which 100% said they needed domestic help, while no one thought they did not. Therefore, it can be concluded that all of the people who participated in this survey need domestic help.

Table 5: How often do you need to call for Housekeeping service in a year?

Options	Subtotal	Proportion
Once a week	302	75.5%
1/month	30	7.5%
2/month	12	3%
4/year	0	0%
Every day	56	14%
Effective number of people	400	

Analysis conclusion: Based on the data tables, the following conclusions can be drawn: The majority of people (75.5%) need weekly housekeeping services, 14% need daily services. 7.5% needed once a month service and only 3% needed twice a month service. No one chose to have service four times a year. Taken together, the majority of people need frequent housekeeping services, with weekly services in particular being the most common need.

Table 6: The reason why you not need Housekeeping Service?

Options	Subtotal	Proportion
Have enough time for myself and my family to do housework	255	63.75%
Distrust of housekeeping companies	115	28.75%
Household income factor	13	3.25%
Already have a permanent housekeeper	17	4.25%
Effective number of people	400	

Analysis and conclusion: According to the data table, 63.75% of the respondents chose that they and their family members have time to do housework as the reason for not needing domestic service, 28.75% of the respondents said that they do not trust domestic service companies, 4.25% of the respondents already have a regular housekeeper, and only 3.25% of the respondents considered the family income factor as the reason for not needing domestic service. Therefore, time and trust issues are the main factors affecting people's choice of housekeeping services, and housekeeping companies need to strengthen their reputation and service quality to attract more customers.

Table 7: Which items of housekeeping service would you most prefer? (Multiple choice)

Options	Subtotal	Proportion
Hourly cleaning	362	90.5%
Family nanny	224	56%
Laundry and cooking escort	190	47.5%
Appliance cleaning	61	15.25%
Effective number of people	400	

Analysis conclusion:

The most popular option was hourly cleaning, with 90.5% choosing this option.

The next most popular option was homemaker, with 56% of people choosing this option.

Laundry and cooking escort was also a more popular option, with 47.5% of people choosing this option.

Home cleaning was the least popular option, with only 15.25% of people choosing this option.

On the whole, hourly cleaning, house-sitting and laundry and cooking escort are the most popular housekeeping services and can be the focus of business for housekeeping service providers.

Table 8: What is the most important thing for you to choose a housekeeping service company? (Multiple choice)

Options	Subtotal	Proportion
Company profiles	375	93.75%
Service fee	396	99%
Service quality	394	98.5%
Service quality	344	86%
Is there a perfect service tracking system to facilitate the solution of the employer's problems	353	88.25%
Effective number of people	400	

Analysis of the conclusions:

According to the data table, we can draw the following conclusions:The most important factor when choosing a home service company is the price of the service, with 99% of validly completed trips choosing this option.

The next most important factor is the quality of service and the quality of service personnel, with 98.5% and 86% of the validly completed visits choosing these two options respectively.

The company's popularity and whether it has a perfect service tracking system to solve customers' problems in time are also factors to be considered when choosing a home service company, with 93.75% and 88.25% of the validly completed visits choosing these two options respectively.

It can be seen that the service price is the most important factor when choosing a domestic service company, while the service quality and the quality of service personnel are also valued.

To sum up, while improving service quality and service personnel quality, home service companies also need to take into account the price factor to attract more customers. At the same time, the establishment of a perfect service tracking system is also an important means to improve customer satisfaction.

Phase 3: Give recommendations on how to establish a digital service platform and how to change the image of the company among customers.

This phase is based on the feedback from the questionnaires to determine what kind of digital service platform we need to build and how we can target to deepen the image of our company among the consumers.

Table 9: How do you know about local service? (Multiple choice)

Options	Subtotal	Proportion
A friend recommended	387	96.75%
Intermediary company	308	77%
Professional Housekeeping Service Software	377	94.25%
Network lookup	41	10.25%
Property recommendation	41	10.25%
Community advertisement or magazine	11	2.75%
Effective number of people	400	

Analytical conclusion:

According to the data table, the valid number of people who filled out this question was 400. Among these 400 people, 96.75% learned about local home services through friends, which is the most important way. The next most popular way is through home service software, with 94.25% of people learning about the service in this way. Agencies were also a common route, with 77% learning about services through agencies. Internet lookups and property referrals were the same, both at 10.25%. Community advertisements or magazines were the least common route, with only 2.75% of people learning about services this way. Thus, friend referrals and home service software are the most effective ways to promote home services, while community ads or magazines are relatively ineffective.

Table 10: Your satisfaction with the current local industry market?

Options	Subtotal	Proportion
Very dissatisfied	0	0%
Dissatisfied	0	0%
Generally	188	47%
Satisfy	210	52.5%
Very satisfied	2	0.5%
Effective number of people	400	

Analysis conclusion:

The number of valid fillings for this multiple choice question is 400.

When hiring domestic staff, the most concerned issue is the integrity of the service personnel, accounting for 100%.

The next most important issue is whether the family members are adaptable, accounting for 96%.

The attitude and character of the service personnel accounted for 97% and 81.25% respectively, and were also of greater concern to the employers.

To sum up, for employers who hire domestic helpers, the integrity of the helpers is the most important factor to consider, followed by whether the family members can adapt, while the attitude and character of the helpers are also factors to consider.

Table 11: Do you want our company to provide a self-built housekeeping service platform?

Options	Subtotal	Proportion
Yes	399	99.75%
No	0	0%
Other	1	0.25%
Effective number of people	400	

Conclusion: According to the data table, 400 people filled out this radio question and 99.75% of them chose "Yes", indicating that they would like the company to build its own domestic service platform. Only 0.25% chose "other" and no one chose "no". Therefore, it can be concluded that the vast majority of people support the idea of a company building its own domestic service platform.

Table 12: What aspects do you worry about when hiring domestic service personnel?

Options	Subtotal	Proportion
Can the family adapt	384	96%
Integrity of service personnel	400	100%
Attitude of service staff	388	97%
Personality of the service staff	325	81.25%
Effective number of people	400	

Analysis Conclusion:

According to the data table, 88.25% of people would choose domestic service when they are busy at work, indicating that domestic service is widely demanded in modern society. Only 0.25% of people do not trust domestic helpers, indicating that the domestic service industry needs to strengthen the management and training of service workers in order to improve service quality and customer satisfaction. Meanwhile, 5.5% of people want to try domestic service, indicating that the market potential of the domestic service industry has not yet been fully explored.

Discussion

Discussion

1. what is the current situation derived from the study?

This study explores the analysis of customer behavior of home service companies from the perspective of Chin Cheng Home Service Company in Yunnan, China. The purpose of this study is to enable more small and medium-sized domestic service companies to better exploit the value they possess through this study. The results of the study show that there is still a lot of room for development in the Chinese domestic service industry market. Although there is still little research data on the domestic service industry in China, we can see that there is a lot of room for the domestic service industry to grow, and the development of digital technology and the improvement of social awareness will make the domestic service market rise rapidly and become more competitive in the coming years.

2. What is the customer behavior?

The needs of different user groups are differentiated. In the wave of digital upgrading, customers have more and more information available to them, and they have more and more options to compare. We can target our operations on digital media and show our business reputation through online media evaluation.

Middle-aged people are relatively family-oriented, and they usually consider many aspects, such as whether their families are suitable for them, and whether the domestic helpers can get along well with their employers in addition to being trustworthy, etc. The middle-aged customer group is quite generous in income, and many of them relatively prefer home-based babysitting, cooking and cleaning, and taking care of their families. We can take advantage of their needs to take appropriate measures, especially to do a good job of word-of-mouth marketing between friends, and to maintain a stable and high-quality service through the service of old customers to promote the influence of customers between social.

Conclusion

According to the development of the study, we can probably come up with several strategic suggestions for strategic sub-points

3.1 establish a convenient and stable enterprise digital service platform, with special emphasis on improving the service and feedback module of the digital service platform, preferably within the reach of consumers anytime and anywhere.

3.2 Community platform maintenance, through the WeChat community to some stable quality customers for emotional word-of-mouth maintenance, timely feedback to solve problems while deepening customer trust in the enterprise, of course, the company also needs to be prepared for the corresponding, perfect equipment and quality service personnel are essential to provide a better treatment environment for employees to create a sense of belonging and motivate employees to work

3.3 The current network blogger short video is relatively popular, enterprises can create an exclusive enterprise number to regularly share some interesting promotional story video and so on to let people browse to deepen the impression of the enterprise, grasp the customer consumption trend, in line with customer demand, using good digital means to achieve intimate links between enterprises and customers, so as to better tap the needs of consumers, to provide customers with a better service experience and also better help enterprises to explore More value for themselves.

References

Chen, Yi. (2017). On the transformation of marketing strategy in the era of network economy. *China Collective Economy*, (06). 52-53.

Dai, Xi.(2017). The revision and challenge of online marketing to traditional marketing management. *Business Manager*, (05), 259.

Editorial Department of Home Economics Research. *Home Economics Research*. Jilin Agricultural University Science and Technology Press.

Li, Fu., Li, H. *Introduction to modern home economics*. Machinery Industry Publishing Co.Publishing House.

Li, J. (2009). "How to strengthen the moral cultivation of domestic helpers". *Journal of Liaoning Teachers College*, (6).

Li, R. (2017). An analysis of enterprise network marketing effect assessment and business risk management. *Modern Business*, (08),12-13.

Li, Y, Zhou, S. (2017). Exploration of network marketing countermeasures based on big data *Industry and Technology Forum*, (08), 254-255.

Li, Y.(2008).Analysis of the Current Situation and Scale Construction of Domestic Service in China. *Social Scientist*,(7).

Yu, Xi. (2017). Analysis of the current situation and countermeasures for the development of network marketing in small and medium-sized enterprises. *Business Economics*, (03),112-114.

Zhang Z. "*Promoting the harmonious development of China's domestic service industry in the study of countermeasures"* . Theoretical study.
Zhong Y. (2000). *Home economics*. Sichuan People's Publishing House.

EFFECT OF SERVICE QUALITY ASSESSMENT ON CUSTOMER SATISFACTION IN POST COVID-19 ERA: A CASE STUDY OF OUTDOOR FOOD CENTER IN BANGKOK

Pramemika Sirivisakevong[1*] and Nattakan Permchom[2]

[1]Department of Restaurant Business Management, Faculty of Food Business Management, Panyapiwat Institute of Management, Thailand
[2]The Shops at Dos Lagos, The United States of America (USA)
[*]**Corresponding Author, E-mail:** pramemikasir@pim.ac.th

Abstract

The purpose of this research is to study the effect of service quality on customer satisfaction in post Covid-19 era: a case study of outdoor food center in Bangkok. The research collected information from 400 customers who used to dine in the outdoor food center during post Covid-19 in Bangkok. This research is the quantitative research methodology with purposive sampling was applied in this study and the data were analyzed by using descriptive statistics such as frequency, percentage, mean, standard deviation and the statistics inference using the multiple regression analysis.

The result found that the effect the service quality on customer satisfaction in post Covid-19 era: a case study of outdoor food center in Bangkok was empathy ($\bar{x}$=4.46, S.D.= 0.62), followed by responsiveness ($\bar{x}$=4.39, S.D.= 0.55) and reliability ($\bar{x}$=4.31, S.D.= 0.63), respectively. The most respondents satisfaction on purchasing food for dining in the outdoor food center, in post Covid-19 era: a case study of outdoor food center in Bangkok because their satisfy the safety management regarding Covid-19 prevention and control ($\bar{x}$=4.53, S.D.= 0.75), followed by parking management ($\bar{x}$=4.51, S.D.= 0.72), and cleanliness food preparation management ($\bar{x}$=4.49, S.D.= 0.69), respectively. The result of hypothesis found that the four aspects of service quality effecting on customer satisfaction in post Covid-19 era: a case study of outdoor food center in Bangkok were tangibility, reliability, assurance and empathy statistically significant at a level of 0.05. The service quality can predict that 69.40 percent of the consumer satisfaction. Thus, the result of the service quality on customer satisfaction in post Covid-19 era: a case study of outdoor food center in Bangkok could be written in the form of Equation Model as follows:

$$\text{Customer satisfaction} = 0.523_{(\text{Constant})}+0.097_{(\text{Tangibility})}+0.122_{(\text{Reliability})}+0.113_{(\text{Assurance})}+0.540_{(\text{Empathy})}$$

Keywords: Service quality, Outdoor food center, Customer satisfaction, Covid-19

Introduction

The outdoor food center, where the customers can enjoy the international and local street food in Bangkok such as Thai, American, Chinese, Japanese, Italian and so on. This place is not only attract foreigners who living in Thailand but also be favorite of Thais customer. Customer can enjoy the food with local live music, handcrafted cocktails and local craft beers. Although, the food center team managements selected the food entrepreneurs in criteria of provide good taste, variety of food menus, food stalls image and variety type of food stalls but the operations need to realize the service quality

to satisfy customer which key for a long-term sustainable operation. The post pandemic of Covid-19 affecting all business more challenging especially the food business that had to adapt and offer a service that gives a consumer trust and confidence comply with the Ministry of Public Health (MDOH) practices. (Sukkwan, 2020) Most of outdoor food court businesses started to apply a technology for supporting the food service such as touchless payment, touchless ordering, contracting with the third party for delivery and the others process that concerns about customer safety standard. (Ruangkam, Masorree and Kanchanakhuha, 2021) In the practices of food servers, the operations need to educate them for food safety and service leading to increase the image of outdoor food center and create a customer satisfaction. Service quality is an essential part in creating customer satisfaction which connect between service quality and customer satisfaction. (Diab, Mohammed, Mansour and Saad, 2016) Hence, the importance of service quality consists of 5 dimensions; tangibility, reliability, responsiveness, assurance and empathy is an important variable to create a customer satisfaction of service quality that affecting the sale volume, customer revisit and communicate to the others for the further service.

From the information above, the researchers is interested in conducting the effect of service quality on customer satisfaction in post Covid-19 era: a case study of outdoor food center in Bangkok. The research result can be a guideline for restaurant entrepreneur to improve and develop their restaurant service quality and set up a restaurant standard service quality that response the consumer expectation.

Research Objective

To study the effect of service quality on customer satisfaction in post Covid-19 era: a case study of outdoor food center in Bangkok.

Literature Review

Service Quality

According to Parasuraman et al. (1988), defined service quality as the ability of the organization to meet or exceed customer expectations. The evaluation of quality service by comparing a perceived service satisfaction and expected service. The satisfaction occurs when the satisfaction exceed or meet the expected satisfaction. In the other hand the dissatisfaction occurs when the satisfaction below the expected satisfaction. The service quality in this research consists of five dimensions, as follows: (Ge, 2017)

1) Tangibles refers to the physical evidence of the outdoor food center, such as the appearance of the facility or the quality of the materials used.

2) Reliability refers to the ability of the food serves and food stall owners to deliver the service consistently and accurately.

3) Responsiveness refers to the willingness of the food serves and food stall owners to provide prompt and helpful service to the customer.

4) Assurance refers to the competence, courtesy, and professionalism of the food serves and food stall owners when deliver the service to the customer.

5) Empathy refers to the food providers pay attention, understand to meet the needs of customer.

Customer satisfaction

Zarraga et al. (2018), referred customer satisfaction is the expression of an emotion that customers has about a product or service at a given moment that can be lasting or transitory; for this reason, it is necessary to fulfil what organizations promise their customers in a standardized way so that there are no distortions in the requirements of the product or service.

Monroy and Urcádiz. (2020), customer satisfaction is the result or response of the consumption experience, specialists define satisfaction as an emotional response to experiences related to the purchase of certain products and services.

Outdoor food center

Ministry of Public Health. (1992). referred Act Public Health. A.D. 1992, the outdoor food center means a huge restaurant where customer dining area located outside the building and decorating with a pool and garden around the dining area. The waitress and waiter must wear a uniform. At this present, the outdoor food center has a variety name such as open-air food market, open-air food court and change a former of outdoor food center from single store to collaborate a food stalls and install in the food center.

Related research

Thanasuwichagon, P., Visitnitikija, C., and Tanphan, I. (2007) studied Service Quality of Krua Mai Nam Restaurant. The result found that the service quality, concrete aspects of the service, reliability, response, confidence, and attention influenced the service satisfaction of Krua Mai Nam Restaurant.

Tansuwannarat, R. (2021) studied service quality that affects satisfaction of consumers of Mc Donald's Bangsaen Branch, Chonburi province. The result found that there were 3 aspects, namely tangibility reliability and assurance which affected the satisfaction of consumers of McDonald's Bangsaen branch, Chonburi province.

Boonpienpon, N. (2017) studied approaches to restaurant service quality development for international touristsin Hua Hin, Prachubkirikhan found that the tourists were satisfied with the service quality in terms of assurance, empathy, reliability, responsiveness, and tangibility, respectively. The comparison of the international tourists' expectation and their perception towards restaurant service quality shows that the tourists' expectation and awareness of the restaurant service quality in Hua Hin, Prachuabkirikhan are different both in overall and each area, which appeared to be significant ($p< 0.05$)

Tawinunt, K., Thammapattanukun, M., Chusuwan S., and Totansombat, S. (2019) studied Service Quality and Corporate Social Responsibility Affecting on Customer Satisfaction of Starbucks Coffee Shop at Central Plaza Phitsanulok. The result found that service quality factors which consisted of tangibility, assurance and empathy as well as corporate social responsibility factors which included ethics, philanthropy, and environment were affected to customers' satisfaction at Central Plaza Phitsanulok with a significant at level of 0.05

Hypothesis

H_1 Service quality in tangibility factor effecting customer satisfaction in post COVID -19 era: a case study of outdoor food center in Bangkok

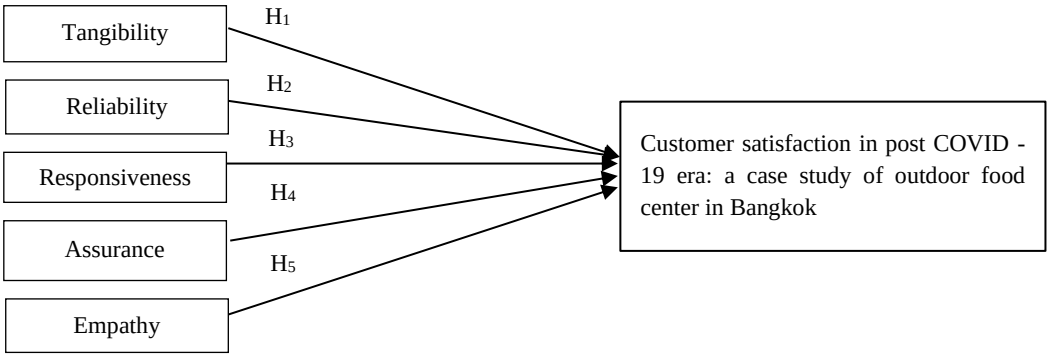
H_2 Service quality in reliability factor effecting customer satisfaction in post COVID -19 era: a case study of outdoor food center in Bangkok

H_3 Service quality in responsiveness factor effecting customer satisfaction in post COVID -19 era: a case study of outdoor food center in Bangkok

H_4 Service quality in assurance factor effecting customer satisfaction in post COVID -19 era: a case study of outdoor food center in Bangkok

H_5 Service quality in empathy factor effecting customer satisfaction in post COVID -19 era: a case study of outdoor food center in Bangkok

Conceptual framework



Picture 1: Conceptual framework

Methodology

This research is the quantitative research methodology with purposive sampling was applied in this research and used questionnaire to collect data that was tested a validity from 3 experts and the Item-Objective Congruence (IOC) is 0.84. The tool was tested by a similar population for 30 people for testing reliability with Cronbach's Alpha Coefficient is 0.95 which more than 0.70. Hence, this questionnaire was considered as a reliable. The data was analyzed by percentage, mean and standard deviation and multiple regression analysis.

The population in this research were consumers who used to dining in the outdoor food center, age of over 20 years old live in Bangkok, which not know the amount of population.

The sample size was calculated by Cochran's formula to determine the confidence level of 95% with an error 5. (Cochran, 1977). The total sample size is 385 samples. In this study we additional 4% to the sample. Thus, the total sample size in this study is 400 samples.

Results

The most respondents were male (55.80%) and female (44.30%), age between 26-35 years old (47.00%), highest education were bachelor's degree (53.50%), the occupation were private company employee (57.50%), and had income per month under 20,001-30,000 baths (47.30%).

The consumer behavior of purchasing food for dining in the outdoor food center, most respondents bought local Isaan food (34.50%). The frequency of dining in the outdoor food center were 1-2 times per week (52.50%) , were dining in between 18:00– 22.00 pm. (56.00%) , were mostly visit on Friday (47.50%) , were approximately spent 1,000-1,500 bath per times per person (49.50%) and were come for hanging out with their friends (42.70%)

Table 1: Means and standard deviation of service quality

Service quality	Level of Satisfaction		
	$\bar{x}$	S.D.	Interpret
Tangibility	4.30	0.75	Strongly satisfied
Reliability	4.31	0.63	Strongly satisfied
Responsiveness	4.39	0.55	Strongly satisfied
Assurance	4.29	0.64	Strongly satisfied
Empathy	4.46	0.62	Strongly satisfied
Total	4.35	0.64	Strongly satisfied

From Table 1, it shown that the effect the service quality on customer satisfaction in post Covid-19 era: a case study of outdoor food center in Bangkok was empathy ($\bar{x}$=4.46, S.D.= 0.62), followed by responsiveness ($\bar{x}$=4.39, S.D.= 0.55) and reliability ($\bar{x}$=4.31, S.D.= 0.63), respectively.

Table 2: Means and standard deviation of consumer satisfaction on purchasing food for dining in the outdoor food center, in post Covid-19 era: a case study of outdoor food center in Bangkok

Consumer Satisfaction	Level of Satisfaction		
	$\bar{x}$	S.D.	Interpret
Atmosphere management	4.39	0.83	Strongly satisfied
Product and service management	4.38	0.86	Strongly satisfied
Safety management regarding Covid-19 prevention and control	4.53	0.75	Strongly satisfied
Cleanliness food preparation management	4.49	0.69	Strongly satisfied
Parking management	4.51	0.72	Strongly satisfied
Total	4.46	0.77	Strongly satisfied

From Table 2, it shown that the most respondents satisfaction on purchasing food for dining in the outdoor food center, in post Covid-19 era: a case study of outdoor food center in Bangkok because their satisfy the safety management regarding Covid-19 prevention and control ($\bar{x}$=4.53, S.D.= 0.75), followed by parking management ($\bar{x}$=4.51, S.D.= 0.72), and cleanliness food preparation management ($\bar{x}$=4.49, S.D.= 0.69), respectively.

Table 3: Result of multiple regression analysis of the service quality on customer satisfaction in post Covid-19 era: a case study of outdoor food center in Bangkok

Service quality	b	SE.b	β	t	Sig.
(Constant)	0.523	0.147		3.554	0.000*
Tangibility (x_1)	0.097	0.039	0.119	2.494	0.013*
Reliability (x_2)	0.122	0.045	0.125	2.703	0.007*
Responsiveness (x_3)	0.023	0.049	0.021	0.471	0.638
Assurance (x_4)	0.113	0.042	0.119	2.704	0.007*
Empathy (x_5)	0.540	0.044	0.544	12.399	0.000*
R=0.833	R Square = 0.694			Adjusted R Square = 0.690	
Std. Error of the Estimate=0.341 F=178.457 P=0.000*					

* Significant level at 0.05

A predicting of the service quality on customer satisfaction in post Covid-19 era: a case study of outdoor food center in Bangkok was 69.40% (adjusted r square), and the standard error was 0.341. The service quality effecting customer satisfaction in post Covid-19 era: a case study of outdoor food

center in Bangkok at significant 0.05. Thus, the result of hypothesis found that the four aspects of service quality were tangibility, reliability, assurance and empathy effecting on customer satisfaction in post Covid-19 era: a case study of outdoor food center in Bangkok and could be written in the form of Equation Model as follows:

$$\text{Customer satisfaction} = 0.523_{(\text{Constant})} + 0.097_{(\text{Tangibility})} + 0.122_{(\text{Reliability})} + 0.113_{(\text{Assurance})} + 0.540_{(\text{Empathy})}$$

Discussion and Conclusion

The result of service quality effecting on customer satisfaction in post Covid-19 era: a case study of outdoor food center in Bangkok. In generally, the level of satisfaction were strongly satisfied ($\bar{x}$=4.35, S.D.=0.64)

The most respondents strongly satisfied was empathy aspect ($\bar{x}$=4.46, S.D.= 0.62), The food servers in the outdoor food center needed to be well-trained to understand the need of customer, and delivered the food and beverage for fulfilling their need. Food servers can offer a value option of selling food and beverage for customer. Food stall entrepreneurs should have a various payment methods and also offered a sell funnel via food ordering support technology such as Lineman application, Grab application and Line official application. It was correspondent with Thanasuwichagon, P., Visitnitikija, C., and Tanphan, I. (2007) suggested that the restauranteur had to organize the activities in terms of communication to promote the business, educating service personnel to identify restaurant products that they can recommend to the customers, provided service personnel suitable for the workload, training personnel to work in accordance with international standards, developing a service personalities in terms of hygiene, hygienic uniform in order to build trust among customers in taking care of and responding to customer needs.

Secondly, was responsiveness aspect ($\bar{x}$=4.39, S.D.= 0.55), Food servers should provide quick and friendly of service, always be ready to give a customer service with service mind. The outdoor food team management had to have enough food servers and they had to quick response when customer need. However responsiveness aspect was not effecting on customer satisfaction in post Covid-19 era: a case study of outdoor food center in Bangkok which correspondent with Tansuwannarat, R. (2021) that the level of consumer satisfaction overall was strongly satisfied but the responsiveness aspect was not affecting satisfaction of consumers of Mc Donald's Bangsaen Branch, Chonburi province.

Third, was reliability aspect ($\bar{x}$=4.31, S.D.= 0.63), food stall entrepreneur had a menu display which clearly menu description and prices, showed a certificated of SHA/SHA+ in the food stalls, Food servers can give customer a food and beverage recommendation, delivered food and beverage accurately. Food stall entrepreneurs must have a consistently on flavor, texture, quality and quantity of food and beverage. According to Boonpienpon, N. (2017) found that customer satisfied when the restaurant has a clearly display of restaurant name, price, menu and other certificates.

Next, was tangible aspect ($\bar{x}$=4.30, S.D.=0.75), the outdoor food stalls decoration had to be neat, clean and bright, food servers outfit were clean and profession, dining area had enough capacity when crowded, food servers watched over the cleanliness of the dining area and tableware, food stall entrepreneurs offered customer called food servers, ordered and made a payment with QR code on the table. The result in this research correspondent with Tawinunt, K., Thammapattanukun, M., Chusuwan

S., and Totansombat, S. (2019) found that service quality factors which consisted of tangibility, assurance and empathy were affected to customers' satisfaction at Central Plaza Phitsanulok.

Finally, was assurance aspect ($\bar{x}$=4.29, S.D.=0.64), food servers gave a politely service, provided a service with the same standard, practiced the service comply by MDOH such as wearing mask during the service and provided hand sanitizer on the dining table. It was correspondent with Tansuwannarat, R. (2021) that concerned about employees can give an accuracy and clearly information to customer.

Recommendation for the next research

To enable the results of this study to be expanded in a broader perspective the researcher would like to suggest for the next research. Conducting the other factors that affect customer satisfaction should be study such as marketing mix factors, attitude and perceive of customer. Conducting a qualitative research should be added along with quantitative research through in-depth interviews or focus group discussions on the next study.

Acknowledgments

The authors gratefully acknowledge Fourth-year students from in the faculty of Food Business Management, Panyapiwat Institute of Management, namely, Mister. Pongnatee Chaisiri, Miss Kanyarat Narkkongkam, Miss Kusumaporn Meemuk, Miss Yaneekit Heawkuntod, Miss Khuanchanok Attajag Miss Supichpat Atipattanan, Miss Kanthima Wisat, Miss Phakakan Kumphan and Mister Jirapat Khumwang for a research assistant, fieldwork and data collection and Panyapiwat Institute of Management, Thailand for supporting this research.

References

Boonpienpon, N. (2017). Approaches to Restaurant Service Quality Development for International Touristsin Hua Hin, Prachubkirikhan. https://he02.tci-thaijo.org/index.php/Veridian-E-Journal/article/view/79940

Diab, D. Mohammed, H. Mansour, E. and Saad, O. (2016). *Investigating The Impact Of Key Dimensions Of Service Quality On Customers' Satisfaction And Loyalty: Evidences From The Restaurant Industry In Sudan*. https://www.researchgate.net/publication/332481918_Investigating_the_impact_of_key_dimensions_of_service_quality_on_customers'_satisfaction_and_loyalty_Evidences_from_the_restaurant_industry_in_Sudan

Ministry of Public Health. (1992). *Act Public Health. A.D. 1992.* http://www.legal.moph.go.th/index.php?option=com_remository&Itemid=813&func=fileinfo&id=13 09

Parasuraman, A., Zeithaml, Valerie A. & Berry, Leonard L. (1988) "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality". *Journal of Retailing, vol. 64*(1),12-40.

Ruangkam,K. Masorree,Y. and Kanchanakhuha, K. (2021). *The Marketing Mix Factors in Adaptation Strategy under the Circumstances of Covid-19 for Restaurant Business "Ribs mannn" in Pak Chong District, Nakhon Ratchasima Province.* https://so01.tci-thaijo.org/index.php/JLASI/article/download/249553/168414/906557

Song, G. (2017). *Food Quality, Service Quality, Physical Environment, and Health Concern Affecting Chinese Tourists' Decision to Choose Thai Restaurant Services in Bangkok.* http://dspace.bu.ac.th/bitstream/123456789/2660/1/ge_song.pdf

Sukkwun, W. (2020). *Consumer Attitudes towards Restaurants Adapting during the Covid-19 Crisis in Bangkok.* https://mmm.ru.ac.th/MMM/IS/twin-8/6114154060.pdf

Tansuwannarat, R. (2021). *Service Quality that Affects Satisfaction of Consumers of McDonald's Bangsaen Branch, Chonburi Province*. https://mmm.ru.ac.th/MMM/IS/twin92/6214154559.pdf

Tawinunt, K., Thammapattanukun, M., Chusuwan S., and Totansombat, S. (2019). *Service Quality and Corporate Social Responsibility Affecting on Customer Satisfaction of Starbucks Coffee Shop at Central Plaza Phitsanulok.* https://so01.tci-thaijo.org/index.php/bahcuojs/article/download/198233/138028/

Thanasuwichagon, P., Visitnitikija, C., and Tanphan, I. (2007). *Service Quality of Krua Mai Nam Restaurant*. https://so04.tci-thaijo.org/index.php/nakboot/article/download/240268/164152/829810

MARKETING STRATEGY FOR THE POIZON APPLICATION, HOW TO INCREASE THE NUMBER OF CUSTOMERS

Jingjin Zhang[1*] and Anna Davtyan[2*]

Master of Science in International Digital Business
International College, Rangsit University, Thailand
[*]**Corresponding Author, E-mail:** jingjin.z65@rsu.ac.th, anna.d@rsu.ac.th

Abstract

Due to the continuous advancement and expansion of competition in the market, different Marketing Strategies and models are also advancing and expanding. The expansion of the corporate POIZON Application is intrinsically linked to the revision of Marketing Strategies.

The goal of the study is to analyze and get an in-depth understanding of the significance of Customer Satisfaction, Marketing Strategies, and an analysis of the POIZON Application Customer Satisfaction and link to Marketing Strategy. As well as create a guideline to increase the number of customers.

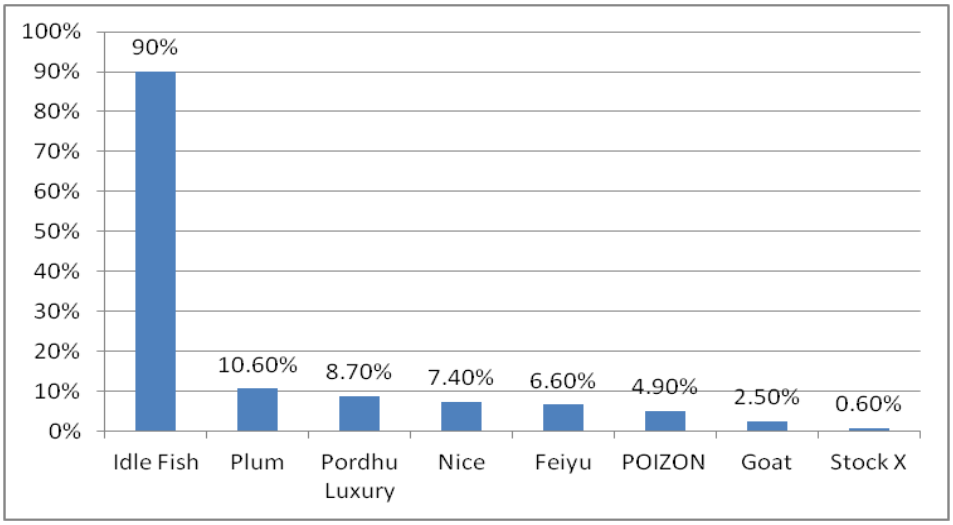
This study used an online questionnaire to collect data and interviewed 403 consumers, of which 283 were valid responses. Pearson correlation and linear regression analysis were performed using the data collected via questionnaires.

Findings showed that they are a positive correlation between POIZON and Generation Z POIZON Consumers. It will give a guideline to POIZON Application for increasing the number of customers on the Marketing Strategy aspect.

Keywords: Marketing Strategy, POIZON application, Generation Z, Customer Satisfaction

Introduction

Chinese consumers now make up a sizable portion of the market for international fashion trends. Daniels (2021) estimates that Chinese consumers' spending on fashion trends contributed to around two-thirds of the growth in world GDP, or $115 billion. By 2025, China's consumption of global fashion trends may account for 40% of total global consumption. The POIZON application is one of many that are vying for this market share in a very competitive environment.



Picture 1.1: The Share of Respondents Who are Aware of Online Second-Hand Fashion Platforms in China as of June 2021
Source: Statista, 2021, Statista.com

According to the data (Picture 1.1), It can be seen that POIZON Application still has much space to increase the number of customers, So it is essential to research the POIZON Application's Marketing Strategy.

POIZON is a Shanghai fashion information technology online shopping portal. POZION is a marketplace for genuine designer and luxury brand shoes, clothes, bags, watches, and accessories. (Aio, 2022) Also, it is a social e-commerce platform popular among Generation Z and trend-obsessed Chinese millennials for both socializing and purchasing. In the C2B2C model, which combines solutions like B2C e-commerce, leads the world market. C2C sales of fashion accessories like sneakers and watches, online Q&A, authentication against counterfeiting, and other community services. (Song, 2022)

The authors read a large amount of literature and found that many articles studied the POIZON application using C2B2C models.

According to Zhang and Peng, (2022), the service was a pioneer of the C2B2C trading model, which evolved gradually and deeply in the subdivision of the fashion trend. It also addressed the challenge of locating genuine products on the market and catered to the needs of the target user groups. To analyze the distinctive development with other platforms based on the C2B2C concept.

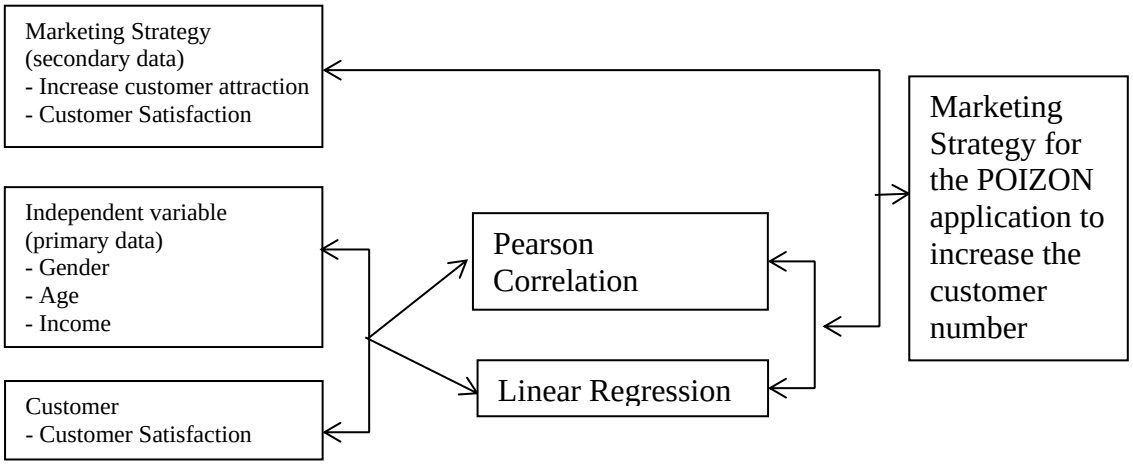
In this paper, the author will conduct an online survey. It mainly analyzes Customer Satisfaction and gives some suggestions to increase the number of customers, and improve Customer Satisfaction. It starts from the angle of customer-centered analysis to explore whether this strategy applies to the development of the POIZON application.

1. Objective of the Study

1.1 To analyze and study POIZON Application's current Marketing Strategy.

1.2 To develop a guideline of Marketing Strategy for POIZON Application in order to increase customer attraction.

2. Research Scope



Literature Review

Customer Satisfaction Marketing Strategy in the POIZON Application

Under the POIZON operation model, Customer Satisfaction presents a new feature compared with the traditional model:

Together with meeting their financial wants, young consumers also seek out their spiritual and self-satisfaction needs. They want to elevate their social position and feeling of respect, and they hope to do so with the help of friends and coworkers. In Curtis (2001). In less than ten years, consumption upgrading has largely replaced other forms of development, with Generation Z acting as its primary driving force. (Li, 2021)

On the POIZON app, there is no communication between buyers and sellers. They exclusively exchange messages with the platform's customer support. After the goods are sold, each process step is documented on the platform so that customers may check it themselves. That simplifies the procedure considerably. Also, it is beneficial to increase customer satisfaction and loyalty. (Liu, 2015)

In order to offer professional identification services for fashion purchasers on other platforms, POIZON has created a paid online fashion identification service. This draws customers to some extent and increases their satisfaction. (Jiang et al., 2022)

POIZON also launched a trading service for second-hand goods, which the platform will identify. If counterfeit goods are found to be sold, the platform will not deliver second-hand goods to the buyer but will also punish the seller's ID for second-hand goods. It can improve the platform's user experience, and improve Customer Satisfaction. (Sun, 2023)

Community + e-commerce ", unlock the new trading mode; POIZON Application not only attracts the participation of fashion lovers, but more and more celebrities and fashionistas use POIZON Application as their "moments", posting their favorite trendy items and daily life, and improving POIZON App. Increase the utilization rate of POIZON and increase the Satisfaction of POIZON customers. (Wang, 2021)

Taking Customer Satisfaction as the dependent variable, the influence model of consumers on Customer Satisfaction was constructed, which also concluded that the higher the Customer Satisfaction, the more people using POIZON. Therefore, proposes :

H1: The E-commerce platform increasing consumer attraction is closely related to strategy.

Generation Z's Attitude Toward Using POIZON Application

In recent years, as China's global economic status and influence increased, it is rapidly becoming a leader in the Asian consumer market and a significant major consumer of fashion trend goods (Audrius& Juodzbalis, 2019). Generation Z has been the most widely mentioned and most promising consumers. According to the report "Digital Economy Panorama White Paper-Generation Z User Insights" in 2022, Generation Z is defined as those born from 1998 to 2009. According to the National Bureau of Statistics, China's population of Generation Z in 2022 reached 260 million, and Generation Z digital users accounted for about 20% of the total user scale. In the face of such a powerful consumer group, each brand party is trying to occupy their consumer's mind; it can be said that "Generation Z gets the world". (Chen, 2022)

A quarter of the world's population was born after 1995, while in China, the size of the post-1995 generation has exceeded 300 million. It can be said that China's main consumer has been tilted toward Generation Z. In 2018, about a quarter of the e-commerce users were born after 1995, using e-commerce platforms to visit e-commerce websites at least once a day. Generation Z accounts for nearly half of the mobile Internet. (Shen, 2019) New consumption gradually becomes a new trend in China's economic development. Through the platform mechanism and the new consumption culture, the circle of consumers promotes Generation Z to form a player-type consumption attitude, gamified consumption cognition, and radical consumption behavior. (Wang, 2023) traditional enterprises and brands actively seek digital transformation, and have to Application from the user's "real" and "quality" demand, relying on the Internet and innovation of digital service mode, for more new power brand can assign, from the design, production, circulation, consumption each link help brand stronger, with a younger, more open brand cater embrace young consumer market. (Chen et al., 2017)

Xinhua joint POIZON Application to report "China's fashion trend brand young consumption insight" in 2022, with young consumers most gathered "POIZON Application" as the research samples, through the China-fashion industry perspective, brand case analysis, young consumer trends and so on three dimensions, new fashion, new culture, new technology, new life, new holidays and so on five scene data release and analysis. (Carrey, 2023)

Under POIZON Application provides a variety of shopping guide scenes for new power brands. 47% of Generation Z consumers in China said they would stick with the brand they like, so many brands leverage customer relationships and improve their shopping experiences to improve brand loyalty and consumer stickiness. In order to better meet the consumer demand of Generation Z users for new products. (J. Chou et al, 2020) The application creates the exclusive IP of "We Super New Products" for the standard products and provides omnichannel traffic support to create the main track for new product growth. According to different user characteristics, accurately match new products and differences, and constantly improve operational efficiency. (Xi, 2021)

POIZON said that one out of every three young people uses POIZON. Nevertheless, when you open an app store, you can see a score of 3.3. This data shows that nearly four of every ten users gave terrible reviews. It positions itself as helping users understand, acquire, and share everything that makes them happy. However, the actual situation is going astray, only willing to do it well, not to live up to the love of young people. (Wang, 2021)

The author uses POIZON's use as the dependent variable to construct the effect of Generation Z on the degree of POIZON usage. The more consumers who use it, the more people use POIZON in the Z era. Therefore, it supposed that:

H2: Generation Z is positively correlated with POIZON's use.

Customer Satisfaction, Marketing Strategy

How do you define customer satisfaction? Customer satisfaction is a perennial subject that is researched in all kinds of organizations and occasions. It must constantly be developed due to its scope. Customer satisfaction and service excellence go hand in hand. Businesses learn crucial details about the wants and needs of their clients, which improves their ability to deliver services that are up to par with their expectations. When it comes to business operations, a customer-oriented mindset is the most profitable because, if it works, it earns the full trust of a sizable customer base(Pennington, 2016).

According to the current definitions, the authors find that:

Fair perspective. Customer Satisfaction is different when customers are compared to others. Huppertz (1978) argued that the magnitude of perceived fairness determines Customer Satisfaction. The customer exchanges with the merchant during purchase, comparing the reward ratio to other costs. When the client knows the proportion is fair, he will be satisfied.

Cognitive perspective. Customer Satisfaction is mainly influenced by product or service preferences, which come from customer expectations. Oliver summarized the expected negation theory in 1993. He describes the theory through two processes. The first is the process that generates expectations, and the second is the cognitive process. Preferences that influence absolute Customer Satisfaction come from the denial of expectations.

Evaluation perspective. The theory suggests that a preference for a product or service is a customer's expectation of many other elements of the service or product. The customer will evaluate all of the elements and show their satisfaction. Berry noted in 1985 that the level of Customer Satisfaction could be influenced by ten factors: access, communication, competence, politeness, understanding, reliability, credibility, responsiveness, security, and tangible.

So, Customer Satisfaction is an integral part of the whole Marketing Strategy, which is a Marketing Strategy to achieve marketing goals based on the Internet.

Methodology

This study conducted an online survey that used questionnaire star platform. Particularly focusing on Customer Satisfaction and marketing strategies related questions. This study is a quantitative and quantitative study that used SPSS and Excel software to analyze the data. Online questionnaires were used to collect the data, 403 responses were successfully collected. Pearson correlation was effectively used, as well as linear regression analysis to reliably test Customer Satisfaction.

Result & Discussion

There were 403 questionnaires available, But there were 283 previous POIZON application users (70.33%), So the valid data about who used the POIZON application were 283 people.

The survey started with several simple background questions. There are 217 male consumers and 182 female consumers, and 265 (65.8%)persons between 20-29. The most potential users are 20-29. Also, 283 people (70%) have used this platform, 120 people (30%) have not used this software, and many have yet to use the POIZON application. Moreover, 104 people (36.7%) used it 3-10 times a year, which shows that most customers used it with high frequency, but most people still used it only once a year. The most significant number of users (35.3%) with monthly revenue of 2000-5000RMB,

(H1):

Table 1: Satisfaction Pearson Correlation

Pearson correlation							
	average	standard deviation	Product Quality	Product price	Customer Service	Product logistic	degree of satisfaction
Product Quality	1.570	3.079	1				
Product price	1.610	3.101	0.978**	1			
Customer Service Attitude	1.630	3.097	0.974**	0.981**	1		
Product logistic	1.740	3.196	0.980**	0.986**	0.976**	1	
degree of satisfaction	0.110	2.044	0.917**	0.917**	0.922**	0.915**	1

* $p<0.05$ ** $p<0.01$

Product Quality and Product price, Customer Service, Product logistics, and Satisfaction are all significant. The correlation coefficient values are 0.978, 0.974, 0.980, and 0.917, and the correlation coefficient values are more than 0, which means Product Quality. There is a positive correlation between the four items of Product price, Customer Service, Product logistics, and degree of Satisfaction.

The product quality, product price, customer service, product logistics, and the presented significant correlation between the degree of Satisfaction are noted as X1, X2, X3, and X4, which are independent variables, overall satisfaction is the cause. The variable is marked as Y, and ai (i=1,2,3,4) is set to the unknown coefficient. The chosen equation form is the multivariate linear regression equation.

$$Y=a0+a1x1+a2x2+a3x3+a4x4 \quad (1)$$

Table 2: Results of the Linear Regression Analysis

Results of the linear Regression Analysis (n=100)						
	Non-standardized coefficients		Standardization coefficient	t	p	VIF
	B	standard error	*Beta*			
constant	-0.886	0.090	-	-9.821	0.000**	-
Product price	0.052	0.179	0.079	0.292	0.771	49.412
Product Quality	0.195	0.143	0.293	1.359	0.177	31.234
Customer Service Attitude	0.318	0.142	0.481	2.235	0.028*	31.136
Product delivery speed	0.051	0.166	0.080	0.307	0.759	45.130
R^2			0.858			
Adjust R^2			0.853			
F			F (4,95)=144.060, p=0.000			
D-W value			2.250			

Dependent variable：degree of satisfaction

* $p<0.05$ ** $p<0.01$

The regression coefficient value of the Product price is 0.052 (t=0.292, p=0.771> 0.05), meaning that the Product price is the degree of Satisfaction. The regression coefficient of Product Quality is 0.195 (t=1.359, p=0.177> 0.05), meaning that Product Quality is not correct. Satisfaction influences relationships. The regression coefficient value of Customer Service was 0.318 (t=2.235, p=0.028 <0.05),

implying that Customer Service and degree of Satisfaction have a significant positive effect relationship. The regression coefficient value of Logistic is 0.051 (t=0.307, p=0.759> 0.05), which means that Product delivery speed (product logistics speed) does not affect the degree of Satisfaction.

Y= -0.886 + 0.052 * X1 + 0.195 * X2 + 0.318 * X3 + 0.051 * X4, the model R square value is 0.858, meaning that Product price, Product Quality, Customer Service, and logistics can explain 85.8% of the degree of Satisfaction

(H2):

Table 3: Gen-Z Pearson Correlation

			Pearson Correlation								
	Average	standard deviation	Gen-Z brand	Gen-Z feedback	rejuvenation	The Gen-Z product appearance	feature	Gen-Z view	Gen-Z marketing	Gen-Z word	POIZON'S use
Gen-Z brand	1.740	3.161	1								
Gen-Z feedback	1.580	3.056	0.960**	1							
rejuvenation	1.830	3.232	0.972**	0.968**	1						
The Gen-Z product ppearance	1.800	3.210	0.979**	0.974**	0.990**	1					
feature	1.510	3.043	0.961**	0.961**	0.972**	0.978**	1				
Gen-z view	1.820	3.220	0.977**	0.969**	0.983**	0.988**	0.972**	1			
Gen-Z marketing	1.450	3.013	0.953**	0.961**	0.962**	0.969**	0.975**	0.958**	1		
Gen-Z word	1.650	3.128	0.967**	0.969**	0.981**	0.989**	0.979**	0.978**	0.973**	1	
POIZON'S use	0.020	1.974	0.943**	0.934**	0.938**	0.931**	0.914**	0.935**	0.922**	0.927**	1

* p<0.05 ** p<0.01

Gen-Z brand, Gen-Z feedback, rejuvenation, Gen-Z product appearance, feature, Gen-Z view, Gen-Z marketing, Gen-Z words, and POIZON' S use all showed significance among the eight items. The correlation coefficient value is 0.960, 0.972, 0.979, 0.961, 0.977, 0.953, 0.967, and 0.943 respectively. The correlation coefficient values are all greater than 0, which means Gen-Z brand, Gen-Z feedback, rejuvenation, Gen-Z product appearance, Gen-Z feature, Gen-Z view, Gen-Z marketing, Gen-Z words, and POIZON' S use have a positive correlation among the 8 items.

Gen-Z brand, Gen-Z feedback, rejuvenation, The Gen-Z product appearance, feature, Gen-Z view, Gen-Z marketing, Gen-Z words, and the presented significant correlation between the POIZON 's use are noted as N1, N2, N3, N4, N5, N6, N7, N8 are 8 independent variables, the overall satisfaction is the cause. The variable is marked as Y, and bi (bi=1, 2, 3, 4, 5, 6, 7, 8) is set to the unknown coefficient. The chosen equation form is the multivariate linear regression equation.

$$Y=b0+b1N1+b2N2+b3N3+b4N4+b5N5+b6N6+b7N7+b8N8 \quad (2)$$

Table 4: Results of the Linear Regression Analysis

Results of the linear Regression Analysis (*n*=100)						
	Non-standardized coefficients		Standardization coefficient	*t*	*p*	VIF
	B	standard error	*Beta*			
constant	-1.004	0.073	-	-13.685	0.000**	-
Gen-Z brand	0.379	0.102	0.607	3.726	0.000**	27.275
Gen-Z feedback	0.198	0.096	0.307	2.062	0.042*	22.765
Rejuvenation	0.344	0.139	0.564	2.478	0.015*	53.167
The Gen-Z product appearance	-0.514	0.212	-0.835	-2.424	0.017*	121.989
Feature	-0.195	0.120	-0.301	-1.626	0.107	35.191
Gen-z view	0.143	0.138	0.233	1.037	0.303	51.876
Gen-Z marketing	0.179	0.105	0.273	1.704	0.092	26.410
Gen-Z word	0.073	0.149	0.116	0.491	0.625	57.375
R^2			0.911			
Adust R^2			0.904			
F			*F* (8,91)=117.055, *p*=0.000			
D-W value			2.263			

Dependent variable: POIZON'S use

* $p<0.05$ ** $p<0.01$

The regression coefficient value of Gen-Z brands was 0.379 (t=3.726, p=0.000 <0.01), which means that Gen-Z brands will significantly positively affect POIZON's use. The regression coefficient value of Gen-Z feedback was 0.198 (t=2.062, p=0.042 <0.05), which means that Gen-Z feedback significantly affects the relationship on POIZON's use. The regression coefficient value of rejuvenation is 0.344 (t=2.478, p=0.015 <0.05), meaning that rejuvenation will significantly positively affect POIZON's use. The regression coefficient value of The Gen-Z product appearance is-0.514 (t= -2.424, p=0.017 <0.05), which means that the Gen-Z product appearance will significantly negatively affect POIZON's use. The regression coefficient value of Feature is-0.195 (t=-1.626, p=0.107> 0.05), meaning that Feature does not have a relationship with POIZON 's use. The regression coefficient value of the Gen-Z view was 0.143 (t=1.037, p=0.303> 0.05), meaning that the Gen-Z view does not have a relationship with POIZON' S use. The regression coefficient value of the Gen-Z marketing was 0.179 (t=1.704, p=0.092> 0.05), meaning that the Gen-Z marketing does not have a relationship with POIZON 's use. The regression coefficient value of the Gen-Z words was 0.073 (t=0.491, p=0.625> 0.05), and Gen-Z words do not affect POIZON' S use.

According to Table 4, Gen-Z brand, Gen-Z feedback, rejuvenation, Gen-Z product appearance, feature, Gen-Z view, Gen-Z marketing, and Gen-Z words are used as independent variables and are used as dependent variables for linear regression analysis. Showed up from the above table that the model formula is:

Y= -1.004 + 0.379*N1 + 0.198*N2+ 0.344*N3-0.514*N4-0.195*N5+ 0.143*N6 + 0.179*N7+ 0.073*N8

The model R square value of 0.911 implies that the Gen-Z brand, Gen-Z feedback, rejuvenation, and Gen-Z product appear.

Conclusion

Through the Pearson correlation analysis and the Linear Regression Analysis, we can get the following conclusions:

(H1): As can be seen from the Pearson Correlation analysis (Table 1),there is a positive correlation between the four items: Product Price, Customer Service, Product Logistics, and Degree of Satisfaction. In the linear regression, Customer Service and degree of Satisfaction have a significant positive effect relationship.

Linear Regression (Table 2) The model R square value is 0.858, which shows that Product Price, Product Quality, Customer Service, and logistics are having the 85.8% of the Degree of Satisfaction. This means that if customers have better experiences.

Testing the second hypothesis, which makes a statement that Gen-z is positively correlated with POIZON use.

(H2): As can be seen from the Pearson Correlation（Table 3),the Gen-Z product appearance, Gen-Z wanted feature, Gen-Z view, Gen-Z marketing, Gen-Z words, and POIZON’ S use have a positive correlation.

Linear Regression (Table 4), the Gen-Z brands, Gen-Z feedback, and rejuvenation have a significant positive relationship on POIZON’s use, while the other factors remain unchanged, the more brands, feedback and advertisements of Gen-Z will improve the use of customers.

From the data analysis, it has been found that the POIZON application as one of the trending online shopping platforms for C2B2C mode in China, which contains much information about the effectiveness of the POIZON application and analyzes the information provided by users. The survey showed that the customers were satisfied with the POIZON application. Because the authentification function of the POIZON application, which effectively increases customers' trust in the POIZON application. The credibility and functionality of the platform have a significant impact on customer loyalty. After analyzing the POIZON application’s marketing and Gen-Z's impact on the POIZON application, it was found that every Marketing Strategy is customer-centered. In order to increase the number of customers, we should constantly understand customer needs, change the Marketing Strategy, and have a deeper understanding of customers wants and needs.

The POIZON application's main trend for the future is consumer evaluation of services and goods, which will fuel the growth of e-commerce and lead to an improvement in platform users and services.

With the development of e-commerce, the POIZON application has become a new e-commerce platform based on the originality in e-commerce world, which helps customers quickly find the goods they want to buy, and improve the purchasing efficiency and purchasing experience. In order to achieve good product publicity through shopping, the POIZON application need to do an excellent job in advertising and publicity. For example, after sharing your purchase experience or sharing good things in the UCG community or any other app platform, there are also restrictions. For example, How many likes to send coupons?

Suggestions

This paper proposes the following strategies for improving the quality of customer service:

Raise the cost of logistics for the business, improve its corporate image, and step up publicity and advertising. It is advised that the POIZON application gradually increase the use of mechanized and automated warehouses to reduce manual operations in order to decrease the time for item identification, storage, delivery, sorting, and assembly. Customers can select express delivery by

using SF express and YUAN express in addition to optimizing and enhancing the platform's express query system, which enables customers to understand the status of express deliveries in transit, information about delivery personnel, and other factors.

Improve employee training. Prior to anything else, focus on improving employee quality by enhancing employee training, bringing in experts to train employees at various levels, and setting up a reliable training system. Second, talents should be developed through high-paying excavation and focused training in universities and colleges. Encourage staff to put in extra effort to raise the level of their business. Last but not least, instill the idea of providing services to all customers among all employees, carry out tasks with this orientation, pay attention to customer feedback and opinions, and pay attention to how well customers rate your customer service. Increase the number of customer service representatives, respond to messages from customers effectively and promptly, and fulfill their needs.

The POIZON application's primary user base is the Gen-Z, which has strong communication and consumption skills. To attract the attention of this consumer group, many businesses now opt to create a corporate image for the business when promoting their brand or use a younger image as their brand identity. It's critical to comprehend how GEN-Z consumers are assessed in terms of their demand for the platform, associated cognition, and key characteristics. Therefore, you need to make the corporate image younger and incorporate more cutting-edge technologies if you want to use products for Gen-Z more effectively.

The word "appearance" has gained a lot of popularity recently. According to research findings in recent years, Gen-Z consumers give brands' "appearance" an increasing amount of attention, and they combine their aesthetic aptitude and visual experience to select their favorite brand. When consumers interact frequently with beautiful items, their psychological experiences will be enhanced visually, and they will also perceive an improvement in their quality of life. As a result, when the platform selects products, it must take into account the psychological and cultural makeup of its target consumer groups as well as the logo's aesthetics.

For the platform, focusing on general consumer groups when selecting products can achieve better results and gain an advantage in market competition. Therefore, only by subdividing consumer groups and conducting targeted research can the POIZON application develop steadily in the increasingly harsh market environment in the future. The student group, especially the Gen-Z consumer group with substantial spending power, is becoming more and more critical in the overall consumption contribution of the market. Therefore, the perceptual thinking of the platform needs to be carried out as soon as possible, especially for the GEN-Z consumer group.

In the current era of globalization, Gen-Z’s thinking is becoming more and more open and inclusive. Products designed based on national culture may be adopted by Gen-Z consumer groups who are open-minded, but whether they can be recognized is debatable. Born in countries with different cultural backgrounds, Gen-Z consumers may have different perceptions and understandings of products due to different cultural backgrounds, and their aesthetics also have merits. Therefore, it is necessary to localize the brand and choose to adopt more domestic brands and attract more consumers. However, when targeting Gen-Z consumer groups, building a global brand needs to make full use of Gen-Z’s open and inclusive thinking, and there must be commonalities in the responses of Gen-Z consumers around the world in choosing brands, and these commonalities can also be improved.

References

Aio. (2022, September,14). *WHAT IS POIZON? INSIDE CHINA'S STREETWEAR MARKETPLACE DEWU*. https://www.aiobot.com/what-is-poizon/.

Analysys. (2022).Digital Economy Panorama White Paper: Gen Z User Insight. Retrieved May 04, 2022. from http://www.199it.com/archives/1428247.html .

Audrius,& Juodzbalis. (2019). *Factors that determine the buying habits of Gen Z luxury consumers*. [Doctoral dissertation] Shanghai International Studies University.

Berry, Leonard L., Valarie A. Zeithaml, and A. N. A. N. T. H. A. N. A. R. A. Y. A. N. A. N. Parasuraman. (1985). "Quality counts in services, too." Business horizons 28.3: 44-52.

Carrey. (2023, March, 09). POIZON 'S product analysis report —— community hatched out of the trend pioneer. https://www.woshipm.com/evaluating/5774456.html .

Chen, H. L. (2022). Through the z era of consumption power analysis label design new needs. *Labeling technique* (2), 31-32.

Chen, Z., Li, Y., Wu, Y., & Luo, J. (2017). The transition from traditional banking to mobile internet finance: an organizational innovation perspective-a comparative study of Citibank and ICBC. *Financial Innovation*, 3(1), 1-16.

Curtis, S. (2001). *A consuming faith: The social gospel and modern American culture*. University of Missouri Press.

Daniel, Shirlysia D. (2021)."The Effects of COVID-19 On China's Luxury Retail Market." Honors College Theses. 602.

Huppertz, John W., Sidney J. Arenson, and Richard H. Evans. (1978). "An application of equity theory to buyer-seller exchange situations." *Journal of marketing research* 15(2), 250-260.

Jiang, Q., Gu, C., Feng, Y., Wei, W., & Tsai, W. C. (2022). Study on the continuance intention in using virtual shoe-try-on function in mobile online shopping. Kybernetes, (ahead-of-print).

Li, B.Q. (2021). The importance of good customer relationship management in enterprise marketing. *China Small and Medium Enterprises* (11), 222–224.

Liu, F. (2015). *Research on the construction and operation of an e-commerce integrated logistics platform*.

National Bureau of Statistics. (2022). POIZON: Fashion culture. Retrieved February 22, 2023. from http://www.myzaker.com/article/63f31ed28e9f09223a2c6694 .

Oliver, Richard L. (1993). "A conceptual model of service quality and service satisfaction: Comparative goals, different concepts." Advances in service marketing and management 2: 65-85.

Pennington, A. 2016. The Customer Experience Book. How to design measure and improve customer experience in your business. United Kingdom: Pearson.

Shen, G. L. (2019). Face Generation Z: How should brands innovate and adapt? Chinese advertisement.

Song, S. L. (2022, May,11).China's trendy e-commerce App Dewu (Poizon) Bets on Video Content. https://walkthechat.com/chinas-trendy-ecommerce-app-dewu-poizon-bets-on-video-content/.

Sun, Y. (2023). Is the truth or false?IT Times, 004.

Wang, B. (2023). How the new consumer culture affects Generation Z: mechanism, risk, and response. *The China Youth Research Institute* (3), 8.

Wang, M. J. (2021). —— Take the Dewu APP as an example. *Western Leather* (03), 38-39.

Wang, S. Z. (2021, February ,22).DEWU application : Willing to live up to the love of young people. https://www.pressreader.com/china/china-marketing/20210222/281792811751067 .

Xi, N., & Hamari, J. (2021). Shopping in virtual reality: A literature review and future agenda. *Journal of Business Research*, 134, 37-58.

Zhang, Y.Q, Peng, L.Q (2022). Analysis of the APP competitiveness of the trend e-commerce platform under C2B2C mode [J]. *Operation and Management*, (10),46-51. DOI:10.16517/j.cnki.cn12-1034/f. 20220426.001.

Zhou, F. Poh, C. Zhang, D. Zipser. (2020). China's Gen Z Are Coming of Age: Here's What Marketers Need to Know, in China consumer report 2021 Understanding Chinese Consumers: Growth Engine of the World Special edition, McKinsey & Company.

SERVICE QUALITY ASSESSMENT ON USER'S SATISFACTION TOWARDS COMMUTER TRAIN SYSTEM (RED LINE)

Jennisa Bannapich[1*] and Bruce Weeks[2]

Master of Science in International Digital Business (International Program)
International University, Rangsit University, Thailand
[*]**Corresponding Author, E-mail:** bannapich@gmail.com

Abstract

Bangkok is the city with the highest population density in Thailand with high traffic issues. Electric trains are the alternative transportation which help reduce traffic issue. There are four major electric public transportation providers; MRT, BTS, Airport Rail Link, and SRT. This research is mainly focused on SRT. There are 3 research objectives 1) To study the commuter train system user's profile and behavior, 2) To study the service quality of the commuter train system that affects the satisfaction of SRT users, and 3) To collect problems and suggestions of using the commuter train system to improve services. Based on the study of Bambale (2020), Service Quality Gap Model (SERVQUAL Model), which have the impact to customer satisfaction include (1) Tangible, (2) Reliable, (3) Responsibility, (4) Assurance, and (5) Empathy factors. These factors are used in our research. Our methodology relies on quantitative analysis through online questionnaires. Descriptive statistical techniques, and inferential statistical technique will be used. There are 3 key findings; 1) Age and income are 2 significant demographic characteristics. SRT line should target the users within the age of 41-50 years old and the monthly income between 30,001-50,000 THB, 2) There is a significant difference of satisfaction level among different service quality. Hence to further improve these factors, the researcher gives recommendations on each factor, 3) The target customer, having monthly income between 30,001-50,000 THB, give high importance to reliability factor.

Keywords: Public Transportation, State Railway of Thailand, SERVQUAL factors, Traffic Issues, Service Quality

Introduction

Bangkok, the capital city of Thailand, has the highest population density in the country. With a total population of 69,799,978 people, divided almost equally between males and females, Bangkok had a population of 8,280,925 people in 2016. The city serves as the center for governance, education, transportation, banking, commerce, and prosperity. Despite occupying only 1,568.74 square kilometers, Bangkok has a population density rate of 3,616.64 people per square kilometer, which can lead to issues such as overcrowding and traffic. Pathum Thani, one of the provinces in the Bangkok Metropolitan Region, also plays a significant role in the region's economics, industry, education, society, and urbanization, with a population of approximately 938,000 people. Traffic in Bangkok and surrounding areas is a growing issue due to the high usage of personal cars rather than public transportation, which cannot efficiently serve the population's needs. Electric trains are a viable solution for avoiding traffic during rush hours and ensuring safe and efficient travel. The four main categories of electric trains in Bangkok are the BTS, MRT, SA Express, and the commuter train system (Red Line). The BTS has two lines with a total of 60 stations and a distance of 72 kilometers, while the MRT has two lines with a total of 54 stations and a distance of 71 kilometers. The SA

Express operates with eight stations over a distance of 28 kilometers and connects to the BTS and MRT interchange stations. The commuter train system (Red Line) consists of two routes, the Dark Red Line and the Light Red Line, covering a distance of 26 and 15 kilometers, respectively, with a total of 10 stations. These electric train systems help alleviate traffic congestion, reduce accidents, and promote environmental friendliness. The traffic problem tends to increase in Bangkok and its surroundings because most Thai people use individual cars, instead of using public transportation. Public Transit Service systems are buses, trains, and boats, which cannot be handled efficiently and cannot satisfy the need of the population. Hence, people tend to be hurry during rush hours. Furthermore, the electric train is one of the options to avoid traffic jams in the city during rush hours. There are four main categories of electric trains; the Bangkok Mass Transit System Skytrain (BTS), the Metropolitan Rapid Transit Subway Project (MRT), Suvarnabhumi Airport Rail Link and City Air Terminal (SA Express or SA City Line), and the commuter train system (Red Line). Its purpose is to facilitate, save time and ensure the safeness of traveling for people.

Research Objectives

This research paper analyses the satisfactions of the commuter train system users under the following study objectives:

1) To study the commuter train system user's profile and behavior (demographic characteristics)
2) To study the service quality of the commuter train system that affects the satisfaction of SRT users.
3) To collect problems and suggestions of using the commuter train system to improve services.

Literature Review

According to the public transportation theory, sustainability is a key topic that is analyzed using various theories and frameworks. The definition of sustainable transportation varies in academic research, but often includes affordability, environmental-friendliness, and equity for passengers. Manheim proposed a holistic approach that considers social, economic, legal, environmental, and other factors in transport system assessment. Schiller, Bruun, and Kenworthy (2010) argue that sustainable transportation benefits the community and environment, while reducing financial costs. Technical aspects, such as fuel usage and traffic systems, are important, but long-term sustainable transportation systems require consideration of multiple dimensions, such as land use and community visioning.

CSAT is a critical performance indicator that measures how satisfied customers are with a company's goods or services. Theories explaining the connection between disconfirmation and discontent include the theory of assimilation and the theory of contrast. Festinger's theory of dissonance serves as the foundation for the theory of assimilation, which states that customers alter their judgments of a product to align with their expectations to prevent dissonance.

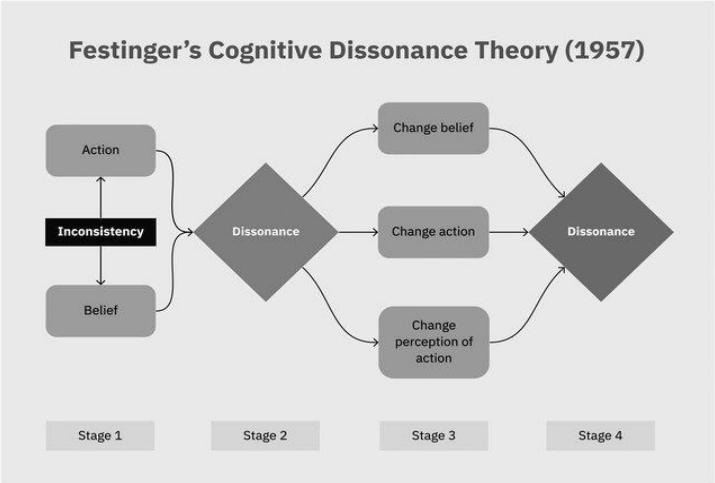


Figure 1: Conceptualised framework developing from Festinger's cognitive dissonance theory
Source: Cairns, Ritch, & Bereziat (2022)

Chowdhury, Alam, and Ahmed (2015) analyzed the connection between the quality aspects of train service and the level of satisfaction among customers based on passengers' perceptions and expectations. The research project used a survey methodology to gather information from the subjects in order to evaluate the link between the quality of service features and the level of satisfaction felt by passengers. According to the findings of this research, the quality of the service delivered was a significant factor that contributed to overall customer satisfaction. In every facet of service quality, passengers' expectations were higher than their perceptions of the actual level of the service.

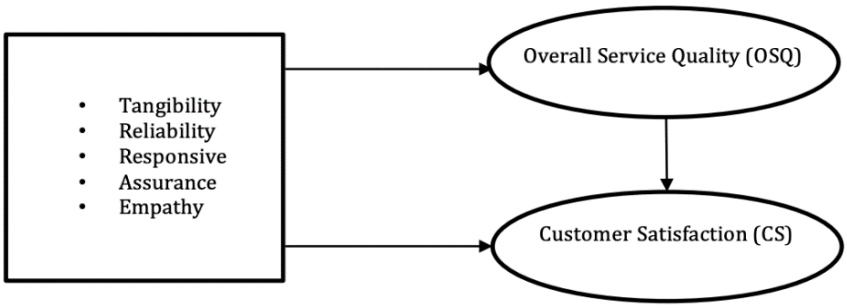


Figure 2: Framework for service quality attributes (SERVQUAL)
Source: Chowdhury, Alam, & Ahmed (2015)

In addition, the theory of contrast, mainly contributed by Hovland, Harvey, and Sherif, presents a different approach, stating that customers exaggerate the disparity between their own views and the attitudes reflected by opinion expressions to reduce the imbalance between their expectations and perceived product or service performances.

Methodology

This researcher is a quantitative study based on primary data that collect from passengers who using the electric train in Pathum Thani to do the questionary survey in the google form. The demographic and services factor will be asked in the questionnaire. First, in demographics will be focusing on gender, age, occupation, and monthly income. However, services factor will be focusing

on Service Quality Gap Model (SERVQUAL Model) which consist of Tangibles, Reliability, Responsiveness, Assurance, and Empathy. The research has these following hypotheses:

Hypothesis I: Demographic characteristics will not associate with service satisfaction of the commuter train system users.

Hypothesis II: There will be a significant relationship between service quality of the commuter train system and the satisfaction of SRT users.

Hypothesis III: Problems and suggestions (problematic factors and its importance) for using the commuter train system to improve services are not different across user's profile and behaviour (demographic characteristics)

For data analysis, the Five Point - Likert scale will measure the satisfaction intensity of the passenger. The rating of 5 to 1; five is representing highly satisfied, four is representing satisfied, three is representing general, two is representing dissatisfied, and one is representing highly dissatisfied. To collect a large population size in quantitative research. As a result, researcher should reduce the population to correct sufficient, and acceptable sample size for data collection from researcher fields by processing reference number analyzed from samples which called Statistics and back to population parameters called population. The sample size for this survey is 400 respondents. Data collection was conducted during in January to February and the questionnaires are distributed through the google form to collect the data easily.

Results

Table 1: Summary of respondents' demographic characteristics

Demographic Characteristics	Number of Respondents	% of Total Respondents
Gender		
Male	168	42
Female	175	43.75
Others	57	14.25
Age		
Below 20 years old	39	9.75
21-30 years old	184	46
31-40 years old	105	26.25
41-50 years old	56	14
Above 60 years old	16	4
Occupation		
Student	157	39.25
Entrepreneur, Business owner	37	9.25
Company employee	125	31.25
Government official, State enterprise official	43	10.75
Freelance, Self-employed	34	8.5
Others (e.g., housewife)	4	1
Monthly Income		
Below 15,000 THB	139	34.75
15,001 - 30,000 THB	158	39.5
30,001 - 50,000 THB	54	13.5
Above 50,000 THB	49	12.25

The demographic characteristics of 400 respondents shows that most of them are female, representing 43.75%, while male respondents are 42 % of total respondents. Age demographic shows that most of respondents are in the age range of 21-30 years (46%). Followed by the age range of 31-40 years (26.25%). Occupation demographic shows that majority are students (39.25%), followed by company employees (31.25%). Majority of respondents are having monthly income of 15,001-30,000 THB per month (39.5%), followed by monthly income less than 15,000 THB (34.75%).

Table 2: Summary of users' behavior

Behavior	Number of Respondents	% of Total Respondents
Residential Location		
Rangsit	81	25.63
Don Mueang	44	13.92
Ladprao	44	13.92
Rama 9	35	11.08
Din Daeng	29	9.18
Sukhumvit	28	8.86
Chaengwattana	31	9.81
Others (e.g., Saimai)	24	7.59
Likeliness to use Red Line Train by paying via digital payment method		
Yes	277	87.66
No	39	12.34
Influential Factors of using Red Line Train		
Tangible Factors	71	22.47
Reliability Factors	123	38.92
Responsive Factors	46	14.56
Assurance Factors	45	14.24
Empathy Factors	31	9.81

The demographic characteristics of 400 respondents shows that majority have used Red Line train before (79%). The frequency of usage is at 1-2 times per week (54.11%), followed by 3-4 times per week (21.84%). Majority pay by using cash, representing 68.35%, followed by using QR code, representing 43.04% of total respondents. Their favorite payment methods are Bank application/ QR code and cash (61.08% and 41.46%). Most of them live in Rangsit area (25.63%), followed by Don Mueang and Lad prao area (13.92% each). Pay by digital method can increase the likeliness of using Red Line train (87.66%). The most influential factor of using Red Line train is reliability factors (38.92%), followed by tangible factors (22.47%)

Table 3: Mean score and Standard deviation of Service Quality factors

Factors	$\bar{x}$	S.D.	Level
Tangible Factors			
SRT seats are comfortable	3.98	0.91	High
SRT train and train station are clean and hygienic	4.02	0.87	High
SRT staff uniforms are clean and formal	4.01	0.89	High

Factors	x̄	S.D.	Level
SRT always have adequate safety equipment	3.93	0.85	High
Total	3.99	0.8	High
Reliability Factors			
SRT trains depart on time	3.30	1.01	Medium
SRT trains arrive on time	3.38	0.98	Medium
SRT staffs perform their tasks with precision	3.91	0.83	High
SRT stations have a clear signage and information for passengers	3.84	0.89	High
SRT has clear announcements for passengers	3.88	0.86	High
Total	3.66	0.77	High
Responsiveness Factor			
SRT gives priority to special needs passengers	3.87	0.86	High
SRT is a greater value for money compared to other transportation options	3.80	0.83	High
Whenever there is a complaint or difficulty SRT staffs are responsive in solving the complaint or difficulty	3.82	0.88	High
Whenever you have a question, SRT staffs always try to answer the question	3.84	0.8	High
Total	3.83	0.72	High
Assurance Factors			
SRT staffs inspire and give you confidence when riding the train	3.79	0.88	High
SRT staffs always give aid to passengers in need	3.83	0.78	High
SRT staffs are always polite and courteous	3.77	0.87	High
SRT staffs create trust in their passengers by their attitude	3.79	0.87	High
Total	3.79	0.77	High
Empathy Factor			
SRT staffs frequently communicate with the passengers in case any issue happened	3.78	0.88	High
SRT staffs attempt to provide attention to all passengers	3.74	0.81	High
SRT staffs always shows a positive attitude	3.7	0.88	High
Total	3.74	0.8	High
Service Quality			
Safety and cleanliness	3.99	0.97	High
Punctuality and accuracy	3.61	0.96	High
Worthiness	3.73	0.94	High
Customer support and service provided	3.87	0.88	High
Customer care	3.82	0.87	High
Total	3.81	0.8	High

The mean score and standard deviation of tangible, reliability, responsiveness, assurance, empathy, and service quality factors shows that the overall mean score is high, accounted for 3.99, 3.66, 3.83, 3.79, 3.74, and 3.81, respectively.

Table 4: Summary of satisfaction level among different demographic characteristics

Demographics Characteristics	n	$\bar{x}$	S.D.	F	df	Sig.
Age						
Below 20 years old	27	3.61	0.95	3.743*	3	0.011
21-30 years old	163	3.71	0.89			
31-40 years old	85	3.93	0.51			
41-50 years old	41	4.08	0.72			
Gender						
Male	125	3.84	0.73	0.214	2	0.808
Female	143	3.77	0.85			
Others	48	3.82	0.83			
Occupations						
Student	131	3.66	0.97	2.072	4	0.084
Entrepreneur, Business owner	27	3.98	0.71			
Company employee	101	3.88	0.67			
Government official, State enterprise official	33	3.96	0.5			
Freelance, Self-employed	23	3.93	0.58			
Monthly Income						
Below 15,000 THB	106	3.67	0.97	4.601*	3	0.004
15,001 - 30,000 THB	138	3.76	0.74			
30,001 - 50,000 THB	42	4.12	0.54			
Above 50,000 THB	30	4.07	0.54			

One-Way Anova test result shows that the significant level for age, gender, occupations, and monthly income are 0.011, 0.808, 0.084, and 0.004. Thus, we can conclude that there is a significant difference of satisfaction level among different age, and monthly income only

Table 5: Summary of satisfaction level among different age pairs and monthly income pairs

(I) Age	(J) Age	Mean Difference (I-J)	Sig.	(I) Monthly Income	(J) Monthly Income	Mean Difference (I-J)	Sig.
Below 20 years old	21-30 years old	-0.09	0.581	Below 15,000 THB	15,001 - 30,000 THB	-0.09	0.387
	31-40 years old	-0.31	0.075		30,001 - 50,000 THB	-0.45*	0.002
	Above 40 years old	-0.47*	0.018		Above 50,000 THB	-0.40*	0.015
21-30 years old	Below 20 years old	0.09	0.581	15,001 - 30,000 THB	Below 15,000 THB	0.09	0.387
	31-40 years old	-0.22*	0.037		30,001 - 50,000 THB	-0.37*	0.009
	Above 40 years old	-0.38*	0.007		Above 50,000 THB	-0.31	0.053
31-40 years old	Below 20 years old	0.31	0.075	30,001 - 50,000 THB	Less than 15,000 THB	0.45*	0.002
	21-30 years old	0.22*	0.037		15,001 - 30,000 THB	0.37*	0.009
	Above 40 years old	-0.16	0.301		Above 50,000 THB	0.06	0.762
Above 40 years old	Below 20 years old	0.47*	0.018	Above 50,000 THB	Less than 15,000 THB	0.40*	0.015
	21-30 years old	0.38*	0.007		15,001 - 30,000 THB	0.31	0.053
	31-40 years old	0.16	0.301		30,001 - 50,000 THB	-0.06	0.762

LSD test result shows that the satisfaction level of electric train user in the age below 20 years old is significantly lower than the satisfaction level of the electric train user in the age above 40 years old. The satisfaction level of electric train user in the age of 21-30 years old is also significantly lower than the satisfaction level of the electric train user in the age range of 31-40 and above 40 years old. The satisfaction level of electric train user with the income below 15,000 THB is significantly lower than the satisfaction level of the electric train user with the income between 30,001-50,000 THB and above 50,000 THB.

Table 6: Summary of relationship between satisfaction level and service quality factor

Service Quality	Level of Satisfaction		
	n	**Pearson Correlation**	**Sig.**
Tangible Factor	316	.717*	0.000
Reliability Factor	316	.624*	0.000
Responsiveness Factor	316	.631*	0.000
Assurance Factor	316	.584*	0.000
Empathy Factor	316	.627*	0.000

Pearson's Correlation test result shows that the significant level is 0.000, which is less than 0.05 (Sig. < 0.05), thus, we reject the null hypothesis. There is a significant difference of satisfaction level among all different service quality factors.

Table 7: Problematic factors and its importance among different demographics

Demographic Characteristics	Problematic Factors and Importance					Total
	Tangible	**Reliability**	**Responsiveness**	**Assurance**	**Empathy**	
Gender						
Male	27 (21.60)	52 (41.60)	17 (13.60)	13 (10.40)	16 (12.80)	125 (100.00)
Female	34 (23.78)	52 (36.36)	22 (15.38)	23 (16.08)	12 (8.39)	143 (100.00)
Others	10 (20.83)	19 (39.58)	7 (14.58)	9 (18.75)	3 (6.25)	48 (100.00)
Total	**71 (22.47)**	**123 (38.92)**	**46 (14.56)**	**45 (14.24)**	**31 (9.81)**	**316 (100.00)**
Age						
Below 20 yrs.	6 (22.22)	11 (40.74)	5 (18.52)	2 (7.41)	3 (11.11)	27 (100.00)
21-30 yrs.	36 (22.09)	57 (34.97)	26 (15.95)	27 (16.56)	17 (10.43)	163 (100.00)
31-40 yrs.	21 (24.71)	37 (43.53)	11 (12.94)	9 (10.59)	7 (8.24)	85 (100.00)
Above 40 yrs.	8 (19.51)	18 (43.90)	4 (9.76)	7 (17.07)	4 (9.76)	41 (100.00)
Total	**71 (22.47)**	**123 (38.92)**	**46 (14.56)**	**45 (14.24)**	**31 (9.81)**	**316 (100.00)**
Occupation						
Student	32 (24.43)	37 (28.24)	23 (17.56)	22 (16.79)	17 (12.98)	131 (100.00)
Entrepreneur	5 (18.52)	14 (51.85)	4 (14.81)	2 (7.41)	2 (7.41)	27 (100.00)

Demographic Characteristics	Problematic Factors and Importance					Total
	Tangible	Reliability	Responsiveness	Assurance	Empathy	
Company Employee	22 (21.78)	48 (47.52)	10 (9.90)	13 (12.87)	8 (7.92)	101 (100.00)
State enterprise official	9 (27.27)	13 (39.39)	5 (15.15)	5 (15.15)	1 (3.03)	33 (100.00)
Freelance, Self-employed	3 (13.04)	11 (47.83)	4 (17.39)	3 (13.04)	2 (8.70)	23 (100.00)
Monthly Income						
Less than 15,000THB	31 (29.25)	27 (25.47)	13 (12.26)	18 (16.98)	17 (16.04)	106 (100.00)
15,001 - 30,000 THB	27 (19.57)	65 (47.10)	22 (15.94)	15 (10.87)	9 (6.52)	138 (100.00)
30,001 - 50,000 THB	11 (26.19)	18 (42.86)	5 (11.90)	7 (16.67)	1 (2.38)	42 (100.00)
Above 50,000 THB	2 (6.67)	13 (43.33)	6 (20.00)	5 (16.67)	4 (13.33)	30 (100.00)
Total	**71 (22.47)**	**123 (38.92)**	**46 (14.56)**	**45 (14.24)**	**31 (9.81)**	**316 (100.00)**

Chi-square test result shows that there is a significant difference of importance of problematic factors among different income. Majority of users with the income less than 15,000 THB give importance to tangible factor (29.25%). Majority of users with the income 15,001-30,000, 30,001-50,000, and above 50,000 THB, give importance to reliability factor, representing 47.10%, 42.86%, and 43.33%, respectively.

Discussions

There are two significant demographic characteristics; 1) age, and 2) income. For age, according to the mean score, the users in the age 41-50 years old has higher satisfaction on the electric train service than other age groups. In addition, the LSD test result also shows that the satisfaction level of electric train user in the age of 40-51 years old is also significantly higher than the satisfaction level of the electric train user in the age range of below 20, and 21-30 years old. For income, according to the mean score, electric train user with the monthly income between 30,001–50,000 THB has highest satisfaction level at 4.12 ($\bar{x}$ = 4.12). Hence, SRT line should target the users within the age of 41-50 years old and the users with the monthly income between 30,001-50,000 THB. There is a significant difference of satisfaction level among different service quality of tangible, reliability, responsiveness, assurance, and empathy factor. In addition, there is a significant difference of importance of problematic factors among different income. Majority of users with the income between 30,001-50,000 THB, the target customer, give high importance to reliability factor, representing 42.86% of total score among this income group.

Conclusion

The future research should mainly focus on the target customer, being the user within the age of 41-50 years old and the users with the monthly income between 30,001-50,000 THB. Therefore, future research should focus on understanding their behaviors. In addition to improve the reliability factor, which the target group gives the highest importance, future research should focus on the ways to improve this reliability factor. This could be done by conducting the qualitative research of focus group interview. Hence, SRT can understand the underlying factors to improve its service quality.

References

Anderson, R. (1973). Consumer Dissatisfaction.: The Effect of Disconfirmed Expectancy on Product Performance. *Journal of Marketing, Research, 10*, 38–44.

Asian Engineering Consultants. (n.d.). *Airport Rail Link. Asian Engineering Consultants*. https://www.aec-th.com/airport-rail-link/

Bak, M., Borkowski, P., & Pawlowska, B. (2012). ypes of solutions improving passenger transport interconnectivity. *Transport Problems, 7*(1), 27-36.

Bangkok Population 2022. (n.d.). https://worldpopulationreview.com/world-cities/bangkok-population

Bongardt, D., Schmid, D., Cornie, H., & Litman, T. (2011). *Sustainable Transport Evaluation*. GIZ.

Cairns, H., Ritch, E., & Bereziat, C. (2022). Think Eco, Be Eco? The tension between attitudes and behaviours of millennial fashion consumers. *International IJC, 46*(2), 1262–1277.

Chaisomboon, M., Jomnonkwao, S., & Ratanavaraha, V. (2020). Elderly Users' Satisfaction with Public Transport in Thailand Using Different Importance Performance Analysis Approaches. *Sustainability, 12*(21), 9066.

Chowdhury, S., & Ceder, A. (2013). The effects of interchange attributes on public transport users' intention to use routes involving transfers. *Psychology and Behavioral Sciences, 27*(1), 5-13.

Clark, J. (2021). Bangkok Urban Rail Transit Update – 2021 Edition. *Future Southeast Asia*. https://futuresoutheastasia.com/bangkok-urban-rail-transit-2021/

Dawes, R., Singer, D., & Lemons, P. (1972). An experimental Analysis of the Contrast Effect and its Implications for Intergroup Communication and Indirect Assessment of Attitude. *Journal of Personality and Social Psychology, 21*(3), 281–295.

Hovland, C., Harvey, O., & Sherif, M. (1957). Assimilation and contrast effects in reaction to communication and attitude change. *Journal of Abnormal and Social Psychology, 55*(7), 244–252.

Ibrahim, A., Borhan, M., Yusoff, N., & Ismail, A. (2020). Rail-based Public Transport Service Quality and User Satisfaction – A Literature Review. *Promet - Traffic & Transportation, 32*(3), 423–435.

Jomnonkwao, S., Champahom, T., & Ratanavaraha, V. (2020). Methodologies for Determining the Service Quality of the Intercity Rail Service Based on Users' Perceptions and Expectations in Thailand. *Sustainability, 12*(10), 4259.

Manheim, M. (1979). *Fundamentals of Transportation Systems Analysis (1st ed.)*. MIT Press.

THE INFLUENCE OF TIKTOK SHORT VIDEOS ON UNIVERSITY STUDENTS' CONSUMPTION DECISIONS

Yongjie Zhang[1*] and Suttisak Jantavongso[2]

Master of Science in International Digital Business (International Program)
International University, Rangsit University, Thailand
[*]**Corresponding Author, E-mail:** zhangyongjie360@gmail.com

Abstract

All sorts of short video social platforms have emerged in recent years, from the very beginning, "Xiaohuoshan" video to later "Kwai," "TikTok," and other short video social platforms. After 2018, TikTok pressed the short video social platform to its peak. Online transactions have also developed into the backbone of individuals' consumption with the arrival and expansion of the digital era. As a result, digital marketing has become a driving force in marketing channels. This study examines the impact of online marketing factors on university students' consumption decisions on the TikTok short video platform and suggests recommendations. The main objectives of this research are (i) to investigate the current situation and (ii) to identify the factors affecting students' consumption in Guangxi, China. Thus, two hypotheses were formulated. The online questionnaire on Microsoft Forms targeting university students in Guangxi, China, was carried out in February 2023. The invitations were sent to the students' WeChat groups at Guangxi University for Nationalities, Guangxi University of Finance and Economics, and the Guilin University of Technology. Four hundred and one questionnaires were collected. Descriptive, correlation, and inferential statistics were used. The results revealed that online celebrity products and TikTok's opinion leaders influence university students' consumption decisions. Finally, the study proposed five marketing suggestions: (i) optimizing countermeasures of product marketing on the TikTok platform; (ii) continuously innovating and creating online celebrity products; (iii) enhancing the quality of products and the reputation of users; (iv) cooperating with TikTok opinion leaders to promote products; (v) enhancing technology and improving user experiences.

Keywords: TikTok, short video, online marketing, consumption decision-making

Introduction

TikTok is a short social video application that can be consumed on smartphones, founded and operated by "ByteDance" company in China. Users can record videos from twenty seconds to one minute and three to ten minutes. In addition, the users can upload their videos and photos. Since its launch, TikTok has been placed for young generations in China as a short music video community. Moreover, with applications for User-Generated Content (UGC) short videos of vertical music, they have been gaining rapid growth in user size, in addition to the electronic commerce (e-commerce) platform on TikTok.

Since 2013, all kinds of short video social applications have emerged. Among them, TikTok jumped out of the world, combining individual personalized requirements for social networking with small (short), beautiful, precise videos, combining personalized visual impact and rhythmic music to meet people's diverse needs psychologically. Not only is it quick and memorable, but it also has the magic of making people open TikTok and not stop. With the advent and development of the online

economy, online transactions have increasingly become a key part of an individual's daily consumption. Hence, online digital marketing has become a driving force in marketing channels. In the business model context, all short video social media platforms have undeniable business value and potential.

TikTok was launched in 2016, a 20-second creative music video social networking application for young people. This creates a more immersive and live experience, allowing users to select songs, shoot, and create compositions. With the entry of other platforms, stars, companies, and Influencers who have developed in TikTok, while they bring traffic to TikTok, they also influence consumption. According to Li (2018), TikTok has over 150 million daily users and over 300 million monthly users in China. The main user group of TikTok has risen from 18 to 24 years old in the early days to 24 to 30 years old users, and the share of users in this age group is now over 40%. Considering consumption and decision-making ability, this study emphasizes university students.

Consumption decision-making is the final decision decided by individuals, societies, entrepreneurs, households, or classes of individuals concerning their consumption activities during the relevant period. There are primary choices of decision ideas, objectives, factors, methods, and strategies for their implementation. The connotation of consumption decisions includes purchasing decisions about which product brand, quantity, where, and when to consume.

Online digital marketing has changed traditional marketing into the new digital media era. The growth of self-media platforms has led to current trends in online digital marketing. In addition, the expansion of emerging technologies and e-commerce has made online marketing an essential part of many sellers' strategic decisions. However, improving marketing efficiency is the main issue marketers have to deal with in TikTok marketing, and there are no studies on marketing effectiveness analysis and business recommendations for this application.

Research Objectives

This paper examines the impact of some online marketing factors on the consumption decisions of university students on the TikTok short video platform and suggests recommendations. Two research objectives are as follows.

1. To understand the current circumstance of university students' consumption in Guangxi, China.
2. To know what factors affect university students' consumption in Guangxi, China.

Literature Review

Duan (2019) believed that the more videos of the same products that TikTok users perceive, the lower the user experience. Duan also suggested that the product's quality in the videos will affect users' consumption. Li (2018) indicated that TikTok's algorithm makes the content homogenized, and the low quality of content seriously affects consumers' consumption decisions. Zhao (2019) stated that young generations have a strong desire and purchasing power, and any goods that can satisfy their consumption pursuit can stimulate their interest and demand, thus prompting the establishment of their consumption decisions.

Relevant product videos pushed by TikTok

The TikTok platform differs from other social platforms because it employs big data messaging to deliver short videos to users featuring personalized recommendations. This approach does not rely on a fan base, as any individual can access video resources, which can be chosen by the user, enhancing the user experience. However, as TikTok pushes the videos through big data

calculations, users are not very selective in their choice of videos, so their consumption decisions heavily rely on them.

TikTok has too numerous videos of the same products, which can cause aesthetic fatigue or, worse still, resentment among some users, so when there are too many videos of the same products, some users will abandon their purchases. In addition, many scholars in China have revealed in their research that the amount of video content moves consumer consumption.

There are certain issues with the quality of TikTok short video tweets, such as the method of mixing several detergents to create clean wash tutorials, which may seem reasonable, but after experimenting with the quality of the product, this method is not scientific videos such as these are commonplace in "Shakeology." For the user, the varying quality of the products in the videos can reduce the user experience.

Moreover, Li & Zhang (2019) suggested that the low threshold for entry into video leads to a spread of the same videos, affecting users' purchases. Liu (2019) stated that quality TikTok video content could sell goods live.

Consumer conformity behavior of university students

The university customer group is imaginative, sensitive, and innovative. Old traditional ideas do not easily bind them, and worldly prejudices like new things and keeping up with trends. They tend to be unique, different, and beautiful in their consumption behavior, and they are keen to consume more contemporary products to showcase their lifestyle and gain the admiration of others. They are eager to consume more modern products to demonstrate the modernity of their lifestyles, to achieve the respect and support of others, and to gain social convenience. They are also keen to consume more contemporary products to showcase their lifestyle, earn the appreciation and acceptance of others, and achieve social comfort.

Consequently, the new services or products launched by the TikTok short video platform, or popular products with fashionable personalities, will arouse the desire and interest of university students and influence their consumption decisions. Referring to the psychology of online consumers, it is clear that university students are both decisive and responsive in consumer psychology. Nevertheless, they are susceptible to emotional impulsiveness. Thus, conformity has become characteristic of its consumption motivation. In consumer decision-making, university students first attach importance to the novelty and beauty of products, then focus on quality and price rather than the rational and comprehensive analysis of outcomes. Many students distinguish the good and bad of products by their preferences and intuition to form a choice for products. Therefore, the formation of university students' consumption decisions is random and volatile.

Wang (2019) pointed out that in TikTok, many false and fake videos affect their resolution, so their consumption decisions are vulnerable to the influence of the public. Furthermore, the trend and advertising in TikTok videos easily jeopardize the idea of young customer groups, significantly affecting consumer decisions to follow the crowd. According to Han (2018), TikTok spreads too quickly, and a large amount of commodity information can easily confuse them in making perceptual consumption decisions.

The influence of TikTok opinion leaders

Opinion leaders have a convincing influence on interpersonal relationships. The rise in commercial power is clear in its change. Many researchers believe that TikTok opinion leaders are individuals or groups who are active in TikTok, have many followers, and have a substantial discourse impact.

The development of digital media has put the existing marketing model for fans' consumption onto the stage, particularly TikTok, which has revealed a variety of platforms for fans' aggregation.

The consumption process of fans is different from that of regular consumers. The fan culture is continually evolving. Worship is a significant feature of fan culture. The impact TikTok opinion leaders can transform their fans into brand or product fans and deliver economic and commercial benefits to marketers. Celebrity promotion is a direct and common method of online marketing. For example, in the online marketing of the TikTok platform, "Haidilao" released the video "*Haidilao, a popular way to eat*," which led by Key Opinion Leaders (KOL) such as "Netfame" and then triggered a nationwide trend following and "viral" communication. For the brand to expand its communication and influence, it requires the participation of celebrities to promote new demand and lead the trend.

Huo (2019) suggested that fans' appreciation of brand recognition of opinion leaders' endorsement and opinion leaders meaningfully. The more the credibility of opinion leaders, the more the regulatory role of opinion leaders on consumers' purchase intention. Zhang (2019) pointed out that online celebrity recommendation has a huge impact on public consumption, and the online celebrity economy can lead to the young generation's consumption taste. Finally, Pan (2019) suggested that by breaking social media platform barriers, the guidance of celebrities, online celebrities, and other opinion leaders can easily positively impact consumer consumption decisions by enhancing user participation.

Methodology

The overall research model adopted in this paper follows the research model by Jantavongso & Fusiripong (2021) and Jantavongso (2022).

Population and samples

This research used an online questionnaire targeting university students in Guangxi, China. The questionnaires were distributed and collected on Microsoft Forms in February 2023. The invitations to participate were sent to the students' WeChat groups at Guangxi University for Nationalities, Guangxi University of Finance and Economics, and the Guilin University of Technology. During this period, 401 questionnaires were collected.

The instrument

The twenty-three questions (the instrument) were developed based on the research objectives and hypotheses. These questions also applied the Likert scale type questions. Three experts evaluated the instrument using the Index of Item Objective Congruence (IOC). Only items (questions) rated above 0.5 were included.

Data Analysis

Descriptive and correlation statistics were used to analyze the data. The descriptive statistics deals with research objective 1 (understanding the basic situation of university students' consumption in Guangxi, China) to describe the participants in terms of percentages and frequencies. The correlation statistics examine consumption decisions and measuring variables (factors affecting university students' consumption) to answer research objective 2. Finally, the inferential statistics addressed the hypothesis employed in this study.

Results

Results of descriptive statistics

According to the survey results, the characteristics of TikTok university students are shown in Table 1.

Table 1: Information on the university students' TikTok consumption

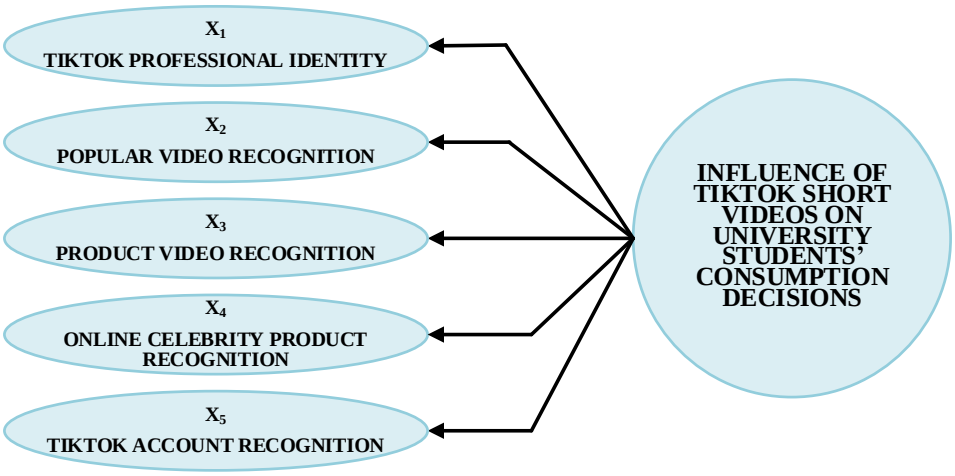
Statistical variables	Classification	Frequency	Percentage
Genders	Male	193	48.10
	Female	208	51.90
University's levels	Year 1 Freshmen	110	27.40
	Year 2 Sophomore	90	22.40
	Year 3 Junior	101	25.20
	Year 4 Senior	100	24.90
Following video types	Fashion/clothing	84	20.95
	Books/movies/music	144	35.91
	Star/gossip	92	22.94
	Food/snack	54	13.47
	Funny/pet	17	4.24
	Games/e-sports	5	1.25
	Fitness/exercise	5	1.25
Favorite video formats	Fashionable personality & sense of musical	64	15.96
	Strong sense of art	70	17.46
	Shocking video	71	17.71
	Rich in content & funny	58	14.46
	Have connotations &can learn knowledge	55	13.72
	Field professional video	45	11.22
	Star's video	38	9.48
Buying the products recommended by online celebrities	Willing to buy	239	59.60
	Not willing to buy	162	40.40
Searching online for product evaluation when consuming	Yes	251	62.59
	No	150	37.41

From Table 1, the difference between male and female students was 3.8%, among which 52.6% were first-years and juniors.

Focus on many areas, including life, entertainment, and learning. The top three were books/movies/music (35.91%), star/gossip (22.94%), and fashion/clothing (20.95%). Most of the favorite video types are shocking videos (17.71%), a strong sense of art (17.46%), and fashionable personality (15.96%), which shows university students' pursuit of individuality and entertainment, as well as their strong demand for beauty and artistic sense.

Results of correlation analysis

The correlation statistics examine consumption decisions and the factors affecting university students' consumption, see Picture 1. The dependent variable is the consumption decision (X_0). The independent variables are the TikTok professional identity (X_1), the popular video recognition (X_2), the product video recognition (X_3), the online celebrity product recognition (X_4), and the TikTok account recognition (X_5). These variables were adapted from the study by Wang (2021).



Picture 1: An model of the consumption decision factors

Multiple regression analysis

The multiple regression analysis was conducted on the consumption decision (X_0), and the independent variables are the TikTok professional identity (X_1), the popular video recognition (X_2), the product video recognition (X_3), the online celebrity product recognition (X_4), and the TikTok account recognition (X_5). The results analysis is presented in Table 2.

Table 2: Results of multiple regression analysis

Variable	Standardization coefficient (Beta)	Sig value
TikTok professional identity (X_1)	0.202	.001*
Popular video recognition (X_2)	-0.039	.513
Product video recognition (X_3)	0.026	.934
Online celebrity product recognition (X_4)	0.245	.000*
TikTok account recognition (X_5)	0.040	.897
R-Square (R^2)	.29	
Remarks	If the p-value is less than .05, it is considered significant and denoted by "*"; if p is less than or equal to .05, it is considered insignificant.	

The model was assessed using the R-Square (R2) statistic and Sig. value (p-value). As a result, a model (R^2 = .29) explained 29% of the variance. Therefore, based on Jantavongso & Fusiripong (2021) recommendations, this model is satisfactory.

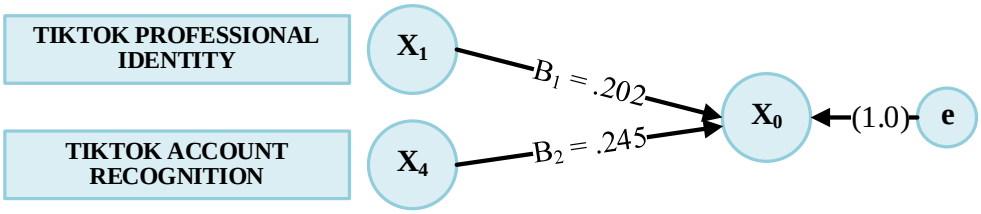
Jantavongso & Fusiripong (2021) suggested applying the beta values under the "Standardized Coefficients" column to evaluate the influence of each independent variable. The biggest value represents the variable with the most contribution describing the dependent variable.

The following task is to look into each variable's contribution to projecting the dependent variable.

Thus, the p-value is less than .05. The beta values indicate two statistically significant variables. Ranked in order of importance, they are "Online celebrity product recognition" (X_4) and "TikTok professional identity" (X_1). "Popular video recognition" (X_2), "Product video recognition" (X_3), and TikTok account recognition (X_5) were not statistically significant.

Path analysis

Picture 2 presents a path model.



Picture 2: A path model of the consumption decision factors

Regression equation

A regression equation provides the predicted consumption decision value as follows:

$$X_0 = 1.968 + .202\ (X_1) + .245\ (X_2),$$

where X_0 = the consumption decision, X_1 = the TikTok professional identity, and X_2 = the popular video recognition.

Therefore, each added degree of increase in the TikTok professional identity and the popular video recognition increases the consumption decision by .202 and .245.

Results of inferential statistics

The first hypothesis (H_1)

There are significant differences in the consumption decision between males and females.

Accept H_0 if $T \leq 1.65$ at a = .05, df = 399

Where: df = degree of freedom = 401 participants – 2 groups

An independent sample t-test was conducted. The t-test value is 3.675 with Sig. = .056. The critical value for T(df = 399), at a 5% significant level, is 1.65 as the t-test value is more than the critical value and the Sig. value (.056) is greater than .05. The results indicate that it is dissimilar between males and females.

The second hypothesis (H_2)

The consumption decisions significantly differ between university levels.

Accept H_0 if $F \leq 2.62$ at a = .05, df_1 = 3 and df_2 = 397

Where: df_1 = degree of freedom 1 = 4 groups - 1

df_2 = degree of freedom 2 = 401 participants – 4 groups

A one-way analysis of variance (ANOVA) was conducted to study the influence of the university's levels on consumption decisions. From the above calculation, the F value is 0.619 with Sig. = .603. According to the F table, the critical value for F(3, 397) at a 5% significant level is 2.62. The test F value is less than the critical value, and the Sig. value (.603) is more than .05. Thus, the null hypothesis is accepted. The results of the test indicate that there is no significant difference in consumption decisions across the university levels.

Five recommendations on the consumption decisions of university students on the TikTok short video platform

Optimizing countermeasures of product marketing on the TikTok platform

Facing university students, and a consumer market with a development opportunity, TikTok is an extremely mature and open platform that offers a new idea for online marketing businesses. With TikTok short videos, marketers can perform marketing tasks efficiently and cheaply. However, when performing marketing tasks, marketers must increase present sales channels according to the characteristics of university students and detailed conditions to enhance sales conversion rate. Based on considering TikTok's short video platform for effective marketing of university students, this study puts onward the following recommendations.

Cooperating with TikTok opinion leaders to promote the product

The opinion leaders with a certain influence on the TikTok short video platform are certainly influencing the consumption decisions of university students. Therefore, TikTok opinion leaders play an important role in the TikTok platform. Hence, TikTok can join opinion leaders with a fan base and train "grassroots" users to convert into opinion leaders. As a result, it can generate more traffic to the platform while expanding the user base. Furthermore, cooperating with opinion leaders to promote and market the products can generate more business value for the platform while realizing commercial benefits to achieve a win-win situation.

Enhancing the quality of a product and the reputation of a user

The product video effect is not the main factor affecting university students' consumption decisions. However, university students are becoming rational and will pay closer attention to the quality of products. Hence, the focus should be on the product's quality improvement while using video effects to attract consumers. Quality is the absolute principle of the product or brand.

Endlessly innovating and creating online celebrity products

Creating online celebrity products means people must pay much attention and interest, inseparable from good creativity and continuous innovation. The students knew that their fields of concern are concentrated in life, entertainment, learning, and other related areas.

The video with a strong sense of shock is more likely to attract their eyes, showing the university student's pursuit of highly personalized things and enthusiasm for new items. TikTok can grasp this feature of university students and attempt to make more video forms and content innovations to meet user needs. Create videos with creative and personalized content, make products more prominent, achieve viral marketing, entice attention, and build popular online celebrity products throughout the network.

Constantly embracing technology and improving the experience of users

The TikTok platform relied excessively on algorithm recommendation, which makes users miss many new products because users receive very few videos. This is not helpful to the user experience and may drop user engagement. Now, there are many methods to recommend. For example, popular, friend, and star recommendations. TikTok's homepage recommendation is very simple, and due to the characteristics of the software itself and other reasons, the utilization rate of its focus function bar is not high. TikTok can increase functions in its function bar to aid users in exploring the use value of the product. The diverse functions and technology will expand the user experience, making the product trusted and deeply loved.

Discussion

The results of this study could be explained for several reasons. Firstly, there is a wealth of research on the factors that influence consumer opinion leaders. For example, the findings are consistent with Li (2018) that communication between individuals is more trustworthy and influential than traditional media communication. Consumer opinion leaders can inspire the beliefs, attitudes, and behaviors of others by giving product information and purchasing decision assistance to other consumers through word-of-mouth communication.

Secondly, the reputation of consumer opinion leaders influences other consumers' purchasing behavior. This happens through reputation communication activities. In the context of the work reported here, a point need to be noted that highly engaged opinion leaders may recommend relevant brands to relatives and friends. They may also increase consumers' willingness to buy through positive word-of-mouth communication.

Lastly, in the findings, the willingness to buy the products recommended by online celebrities and search online for product evaluation when consuming shows that the majority agreed (Table 1). The results are also consistent with the study by Jiang, Wang, Sun, & Ruan. (2022).

Conclusion

The product marketing of the TikTok opinion leaders positively impacts university students' consumption decisions in Guangxi, China. This coincides with previous research. Celebrity effect significantly affects consumers' final decisions, whether in online or traditional marketing, and is no exception in TikTok's marketing. On the other hand, the products in popular videos may not substantially impact students' consumption decisions. From this perspective, popular videos' entertainment, viewing, or dissemination value is more important than the purchase value of products. Hence, the popularity of videos does not lead to the popularity of products.

Moreover, online celebrity products have an important positive impact on university students' consumption decisions. From this result, the popularity of products is a major factor to give attention to. In contrast, the marketing of users following TikTok numbers has no substantial impact on university students' consumption decisions.

Next, due to its algorithm, function, and usage, university students have ignored the following TikTok number when making consumption decisions.

Finally, the study proposed five marketing suggestions: (i) optimizing countermeasures of product marketing on the TikTok platform; (ii) continuously innovating and creating online celebrity products; (iii) enhancing the quality of products and the reputation of users; (iv) cooperating with TikTok opinion leaders to promote products; (v) enhancing technology and improving user experiences.

References

Duan, Y. (2019). Analysis of marketing strategies in the era of network economy. *China Market*, (13), 121-123.

Han, Q. (2018). On the influence of TikTok marketing on university students' consumption behavior. *Communication Research, 2* (30), 98.

Huo, C. & Wang, X. (2019). Research on the decision-making mechanism of celebrity micro-blog marketing affecting fans' consumption behavior. *Journal of Liaoning University (Philosophy and Social Sciences Edition)*, *47*(01), 79-88.

Jantavongso, S. (2022). Toward global digital literate citizens: A case of Thailand's aging generation. *The Electronic Journal of Information Systems in Developing Countries*, *88*(2), e12207. https://doi.org/10.1002/isd2.12179

Jantavongso, S., & Fusiripong, P. (2021). Ethics, big social data, data sharing, and attitude among the millennial generation: A case of Thailand. *The Electronic Journal of Information Systems in Developing Countries*, *87*(5), e12179. https://doi.org/10.1002/isd2.12179

Jiang, S., Wang, Z., Sun, Z., & Ruan, J. (2022). Determinants of buying produce on short-video platforms: the impact of social network and resource endowment—Evidence from China. *Agriculture*, *12*(10), 1700. ttps://doi.org/10.3390/agriculture12101700

Li, C. (2018, June 12). Douyin released the latest data: 1 million daily active users, users aged 5-24 years old. TMTPost. https://www.tmtpost.com/3297805.html

Li, J. & Zhang, L. (2019). Problems and countermeasures of TikTok short video APP. *Audiovisual*, (02), 124-125.

Li, Q. (2018). Analysis of the problems and countermeasures of the TikTok short video app. *News Research Guide*, (23), 68-69.

Liu, Y. (2019). Discussion on the marketing value based on TikTok short video. *Modern Marketing (Later Issue)*, (4), 76.

Pan, Y. (2019). E-marketing Innovation of Haidilao. *Enterprise Management*, (03), 57-60.

Wang, T. (2019). On the impact of consumer psychology on online marketing strategies. *China Business Review*, (6), 61-62.

Wang, T. (2021, February 22). *Research on the influence of TikTok short video on university students' consumption decisions*. https://www.docin.com/p-2604147715.html

Zhang, K. (2019). Marketing guide for enterprises to "shake the store." *Knowledge-Economy*, (11), 108-110.

Zhao, X. (2019). Research on the Impact of TikTok short videos on young people. *Consumer Behavior and Countermeasures*, *28*(02), 58-61.

短视频电商平台的购买体验对重复购买意愿的影响研究-以抖音为例

THE IMPACT OF SHORT VIDEO ECOMMERCE PLATFORM'S BUYING EXPERIENCE ON THE INTENTION OF REPEATED BUYING TAKING TIKTOK AS AN EXAMPLE

田心娜 [1*]，刘一书 [2]，陈千里 [3]
Xinna Tian[1*], Yishu Liu[2], and Qianli Chen[3]

[1,2] **泰国正大管理学院中国研究生院**
[3] **中国深圳壹**账通智能科技有限公司
[1,2]Chinese Graduate School, Panyapiwat Institute of Management, Thailand
[3]Shenzhen OneConnectSmart Technology Co., Ltd., China
[*]**Corresponding Author, E-mail:** 116585905@qq.com

摘要

伴随着手机网络技术发展，短视频电商平台应运而生。当代消费者越来越青睐并认可短视频电商平台，因而平台成为时下最受欢迎的购物方式之一。但深入分析发现短视频电商平台普遍存在用户忠诚度不高，产品同质化现象严重等问题。基于此，短视频电商平台应积极探索如何提高用户重复购买意愿，形成重复购买的行为，这不仅有利于企业获得长期盈利、发展，同时可促进企业维持品牌竞争优势。本文通过分析消费者的网购体验，论述各因素对消费者重复购买意愿的影响，利用调查问卷采集 1107 名有过在抖音短视频电商平台进行在线购物经历的用户作为样本数据，通过统计软件定量研究抖音短视频电商平台在线购物体验与重复购买意愿间的影响机制。最终实证分析结果显示：抖音短视频电商平台在线购物体验对重复购买意愿有显著正向影响；在线购物体验各维度（情感体验、感官体验、思维逻辑体验、行动关联体验）对重复购买意愿有显著正向影响。根据研究结果，提出政策建议：1. 从感官体验入手，提高顾客的购买满意程度；2. 从情感体验切入，打造消费者的“乌托邦”；3. 从思维逻辑体验出发，引导顾客的自我思考；4. 从行动关联体验切入，优化采购强化顾客归属。

关键词: 短视频电商平台 顾客体验 顾客重购意愿 **路径分析**

Abstract

With the development of mobile network technology, short video e-commerce platform came into being. Contemporary consumers increasingly favor and recognize the short video e-commerce platform, so the platform has become one of the most popular shopping methods at present. However, in-depth analysis found that short video e-commerce platforms generally have problems such as low user loyalty and serious product homogeneity. Based on this, the short video e-commerce platform

should actively explore how to improve users' willingness to repeat purchase and form repeat purchase behavior, which is not only conducive to long-term profit and development of enterprises, but also can promote enterprises to maintain brand competitive advantage. By analyzing consumers' online shopping experience, this paper discusses the impact of various factors on consumers' willingness to repeat purchases. 1107 users who have had online shopping experience on the Tiktok short video e-commerce platform were collected by questionnaires as sample data, and the impact mechanism between online shopping experience and willingness to repeat purchases on the Tiktok short video e-commerce platform was quantitatively studied through statistical software. The final empirical analysis results show that the online shopping experience of Tiktok short video e-commerce platform has a significant positive impact on repurchase intention; Each dimension of online shopping experience (emotional experience, sensory experience, logical thinking experience, and action-related experience) has a significant positive impact on repeated purchase intention. Based on the research results, policy recommendations are proposed: 1. Starting from sensory experience, improve customer satisfaction with purchasing; 2. Starting from emotional experience, create a "utopia" for consumers; 3. Starting from the logical experience of thinking, guide customers' self-thinking; 4. From the perspective of action related experience, optimize procurement and strengthen customer belonging.

Keywords: Short Video E-commerce Platform, Customer Experience, Customer Repurchase Intention, Path Analysis

引言

研究背景

2022 年 6 月发布的《第 49 次中国互联网络发展状况统计报告》显示，2021 年，我国互联网用户规模持续平稳增长。2021 年 12 月即时通信用户的使用率达到 97.5%，用户规模突破 10.07 亿；短视频用户的使用率达到 90.5%，用户规模达到 9.34 亿。新媒体电商正是在此背景下形成的，随着电子商务与新媒体的融合与发展，彰显新媒体电商可实时传播信息、用户基数大，宣传方式影响力大等特点，这些是传统电商所无法媲美的。因此，新媒体电商如沐春风得到快速发展。

短视频电商是以消费者为中心，通过直播、热点事件等创作短视频，同步流通转化商品与内容，形成营销效果。从运营方式、营销模式方面分析，短视频平台较传统网上购物更便捷、更简单，有利于经营者节省成本。商家可通过此类营销方式与消费者互动，促进消费者获得参与感。短视频平台有各类内容诙谐、有趣的视频，深受消费者青睐，有利于消费者获得良好的消费体验。那么哪些因素会影响消费者在抖音短视频平台上的购买体验呢？如何促进消费者获得良好的消费体验，并成长为平台的忠诚客户，产生重复购买的意愿呢？上述问题都有较大的研究价值，解决这些问题有利于抖音短视频平台维护客户，提高营销效率。基于上述的问题，本文以抖音短视频平台为例，对影响消费者重复购买意愿可能的体验因素进行研究并提出解决对策及建议。

研究目的

近年来，我国各城镇、乡村短视频平台下沉绩效显著。短视频内容卖货、平台直播卖货是伴随着互联网发展而发展的带货模式。此类新型商务发展模式的购物页面区别于其他网购平台，如京东、天猫等。短视频平台的优势主要体现在售卖视频、直播内容，形成平台优势，有利于提高消费者体验，促进消费者重复购买。短视频平台能否实现联动持久的发展很大程度取决于其能否为消费者创造良好的购买体验，这决定了消费者是否会形成重复购买的欲望。本文以抖音短视频电商平台为例，综合路径分析与方差分析了解消费者在该平台的购买体验及其重复购买意愿的关系，最后针对性的提出相关对策建议。本文研究结论对短视频带货应用有较大的参考价值，促进平台科学制定发展决策，培养消费者购买习惯，留住现有客户，吸引并挖掘潜在用户。

文献综述

短视频电商平台相关研究

从内容上看，一是传播视角：大部分的学者对传播渠道、传播内容、传播效果进行了研究。蒋一洁 (2019) 以快手为案例，对其在网络营销中的作用和发展方向进行了探讨，指出与传统的长视频相比，短视频在传播模式、传播主体和自我更新方面都有着不可替代的优越性。赵玉霞和王冰 (2019) 在新的历史条件下，短视频可以更直观、更直观、更容易理解地表现出传统的文学作品，从而提升阅读兴趣，在某种意义上促进了传统文化的继承。二是管理视角：大多数的研究把焦点集中在短视频的发展历程、现状、发展过程中的问题以及发展的战略与动向。例如在对短视频平台进行研究时，华金香 (2018) 指出当前平台的内容过于单一，要实现更深入的发展，必须将“为用户提供有价值的服务”放在首位，并对其进行扶持。在短视频行业快速发展的今天，曾经出现过一个混乱的时期。王超凡 (2019) 建议各平台要制定一个更为完善、更为严密的监管体系，以促进短视频健康发展。三是营销视角：学者将重点放在了短视频的广告营销上，并对其竞争机制、营销策略等进行了探讨。Xu et al. (2013)从短视频平台上建立的社会网络，发现它为企业和品牌带来了大量的商机。四是用户视角：主要从用户的使用行为、购买意愿、参与行为等方面进行分析，探讨其背后的影响因素。戚旭然 (2016) 通过美拍对短视频使用者的消费动机及消费习惯进行分析，研究发现消费者的社会特性能提高购物吸引力。戴德宝和顾晓慧 (2017) 探讨了在短视频情境中，使用者的参与对其知觉价值和忠诚的作用机理，并给出了相关的建议。

消费者体验维度的相关研究

在顾客体验的层面上， Chen et al.（2008）从网上购买的角度出发，将购买体验划分为互动体验、感知交易体验和实现体验。贺爱忠和龚婉琛 (2010) 将购物体验分为感官、情感、思维、行动和关联体验。罗谷松 (2011) 将体验分为五个层面：功能、信息、过程、技术、审美。宋巍 (2012) 将客户体验分为三个层次：情感层次、功能层次和品牌层次，来探究顾客体验对忠诚的影响。郭红丽和王晶 (2013) 从网站特征、顾客特征、顾客参与、交易费用四个方面对顾客体验的影响进行了论述。谭涵梦 (2019) 根据有关资料，本文选取了感官体验、服务

体验、便利体验和交互体验作为实体店消费体验的四维度。石丹萍 (2019) 将网上购买体验分为感官体验、情感体验、思维体验、行为经验、相关经验，对重复购买意向进行探讨。

消费者体验影响因素的相关研究

鲍富元 (2020) 从旅游消费不满角度，对文本数据分析，进而针对此从企业管理水平、完善旅游公共服务、加强旅游市场监管、创新治理机制层面为游客创造良好的消费环境和体验。刘鹏和佘翠霞 (2021) 以年轻消费群体为研究对象，采用结构方程模型研究新零售环境下影响消费体验的因素，以产品品质、价格、门店位置环境、线上平台和服务质量为自变量进行分析。结果表明，质量、种类、包装是关键因素，而服务的态度和速度也会产生一定的正向影响。段冬东（2017）实现了随时随地的预订和消费，场景营销，根据用户画像对商品进行推荐和组织；针对旅游消费需求的准确预测、跨行业销售、利用信用数据提高消费效率、推动旅游组织模式的转变、为旅游企业提供更好的服务。郑金标 (2021) 利用内容分析法研究顾客的消费体验。

重复购买意愿的影响因素研究

林丛辰 (2020) 对影响电子商务客户重购行为的因素进行研究，指出信任、满意度以及转移成本是主要影响因素。其中网站美学、账单透明以及产品准时性显著影响信任。徐鹏鹏 (2020) 研究结果表明，消费者的个性化、感知价值和质量的关注程度要高于传统的网络消费；消费者对商品的满意程度和对商品的依赖路径都会对重购产生影响。秦泽家 (2020) 通过对消费者心理契约的重复购买机制的分析，得出消费者重复购买的净效用和转换成本都可以显著提高消费者的重复购买意愿。刘佳 et al., (2021) 运用结构方程模型探讨了影响电子商务购物效果的因素，发现顾客的认知品质与认知价值对其购物意向有正面的作用；感知的服务品质也会间接地影响消费者的消费意向；在消费者消费行为的认知过程中，享受性认知价值对消费者的消费意向起到了一定的调节作用。

文献评述

本文发现现有文献涉及消费者购买体验的研究多以传统购物为主。这方面的研究较为丰富与完善，鲜少涉及网络背景用户购买体验。当前关于短视频购物平台的相关研究尚处于浅层面。不同的适用领域，研究用户体验的方法、分类依据也有所不同， 其分别呈现出不同的特征。综上，本文结合短视频平台购物模式的特点，基于新兴互联网背景，具体分析视频电商平台中，消费者的购买体验，具体围绕平台内容、线上网络、平台界面以及购买便捷度等方面分析消费者的购买体验，综合学者的研究成果分析消费者的线上体验感受； 在已有的调研基础上，根据石丹萍 (2019) 所做的分析，根据目前的调研结果，从感官体验、情感体验、思维逻辑体验、行为联系体验四个层次来构建用户体验的维度；问卷调查的设计与研究将从四个层面进行；为深入研究消费者在多个层面上的购物经历对其再次购买意向的作用机理打下了理论依据。

研究方法

本文研究在阅读大量文献和实践材料的基础上，利用文献调研法、问卷调查法、统计分析法基础上得出本文的研究结果。

文献调研法

在全面系统的总结目前在短视频平台、短视频电商平台直播带货、消费者体验、重复购买意愿等方面的相关文献研究基础上，开展适合本研究的理论模型。

问卷调查法

根据已有的文献资料，建立理论模型，并提出研究假设，并在此基础上设计了问卷调查。通过预调研数据进行信效度测试，验证所测得的量表设计是否合理，进而得出最后的问卷。最后，通过问卷网调查平台、微信、现场等方式发放问卷，回收整理得到的调查数据。

统计分析法

本文利用 SPSS、AMOS 等分析软件对调查的数据从信效度分析、差异性分析、相关分析和路径分析等统计分析法验证研究假设，最后得出研究的实际模型和研究结果。

研究结果

问卷设计

本文结合 Parasuraman et al. (2015) 和 Chiu et al. (2013) 两个学者的成熟量表测量顾客重复购买意愿，其问卷共设置 27 个题目，可以从下列四个方面进行介绍，具体如下：

1. 是介绍语，对问卷的目的，隐私性和答案无正确之分仅代表个人感受进行说明，鼓励有短视频平台购物的人们积极参与调查。

2. 是确定条件问项，对最近一年内有短视频平台购买经历的消费者进行调查，若是没有此经历的直接结束调查问卷的填写。

表1: 是否为被调查者的情况表

序号	题项	来源
1	您是否有使用抖音短视频平台浏览或购买商品的经历？	自编

3. 是个人基本情况，了解消费者的概况，比如可支配收入、学历、职业、性别等。综合现有文献资料认为消费者的观念、能力、偏好等可能与消费者的上述情况有关。因而本部分研究有较大的价值。

表2: 被调查者基本情况表

序号	题项	来源
2	您的性别？	自编
3	您的年龄？	自编
4	您的学历？	自编
5	您的月收入？	自编
6	您的职业？	自编
7	您接触并使用短视频平台的时间？	自编
8	您在短视频平台的年均购物次数？	自编

4. 体验量表测项（表 3）。本研究在划分移动在线购物体验维度方面参考了 Schmitt (1999) 的相关研究，并借鉴该学者及 Pullman 和 Gross (2003) 等学者所提出的测量题项，立足国内短视频平台购特点设定测量题项。本次研究的测量题项共有 15 个。这些题项主要涉及如下几方面：一是关于感官体验的题项，具体题项是第 9-13 题；二是测量情感体验的题项，具体指 14-16 题；三是测量消费者思维逻辑体验的，具体指 17-20 题；四是测量消费者行动关联体验的，具体指第 21-24 的题项。

本文研究中参考 Parasuraman et al.（2015）和Chiu et al. (2013) 等学者的研究成果建立重复购买意愿量表，综合考虑移动购买的特点，对短视频购物平台重复购买意愿量表进行修改。修改后的量表共有测量题项 5 个。表3 为初始测量题项。

在采用的是李克特五级量表，从 1-5 数值表示非常不同意、不同意、中立、同意、非常同意，也就是说数值越大表示越同意该观点，最后利用统计积分，具体题项如下表3 所示：

表3: 体验各维度及重复购买意愿量表

变量	题号	题项	来源
感官体验（SE）	9	平台整体使用感极佳（SE1）	Schmitt (1999)、Pullman 和 Gross (2003)、石丹萍 (2019)、李淑燕 (2016)
	10	平台的个人主页布局很合理（SE2）	石丹萍 (2019)、李淑燕 (2016)
	11	平台界面设置清晰，使用效果很佳（SE3）	石丹萍 (2019)、李淑燕 (2016)
	12	平台展示的商品信息很完善（SE4）	石丹萍 (2019)
	13	平台中的直播卖货界面设计很友好（SE5）	石丹萍 (2019)
情感体验（FE）	14	平台的商品性价比较高（FE1）	石丹萍 (2019)、李淑燕 (2016)
	15	商品推荐符合我的消费需求，像是特别了解我的人一样（FE2）	石丹萍 (2019)、李淑燕 (2016)
	16	短视频平台上购物，其过程可以让我的心情愉悦（FE3）	石丹萍 (2019)
思维逻辑体验（TIE）	17	平台能让我每次买到想要的商品，推荐服务很个性化（TIE1）	石丹萍 (2019)、李淑燕 (2016)
	18	平台上的产品售卖方式或文化能引起我对生活等方面的思考（TIE2）	石丹萍 (2019)
	19	平台可以提供与卖家或其他买家互动的机会（TIE3）	石丹萍 (2019)
	20	定期观看短视频平台的商品售卖活动（TIE4）	石丹萍 (2019)
行动关联体验（ARE）	21	在购物过程中该平台会提醒我参与一些活动（ARE1）	王桂琦 (2020)
	22	在购物时能帮我及时处理遇到问题（ARE2）	王桂琦 (2020)
	23	也可提供很多链接方便我查询或解决问题（ARE3）	王桂琦 (2020)、石丹萍 (2019)
	24	短视频购物是一种高效率、低成本的购物方式（ARE4）	李淑燕 (2016)
重复购买意愿（RP）	25	会继续在短视频平台上购买产品（RP1）	Parasuraman et al. (2015)、Chiu et al. (2013)
	26	线上购物时会优先考虑短视频购物平台（RP2）	Parasuraman et al. (2015)、Chiu et al. (2013)
	27	会推荐身边的朋友使用短视频平台购物（RP3）	Parasuraman et al. (2015)、Chiu et al. (2013)

通过上述各种方式共发放了 1200 份问卷（正式调研期间），最终回收 1154 份问卷。在此基础上，认真分析这些问卷，提出题项答案不合理，半年内没有移动购物的问卷，最终获得 1107 份有效问卷。

样本统计特征

如下表 4 所示，在被调查的用户中，其中男性所占比例为 46.34%，女性所占比例为 53.66%，相比之下，调研对象中女性多于男性。至于年龄，18 岁以下的占 1.17%，18-25 岁的占 26.38%，26-35 岁的占 35.77%，36-45 岁占 28.27%，45 岁以上占 8.4%。学历方面，在被调查的用户中，专科学历所占的比例最高，为 37.94%，接下来依次为本科、高中、高中以下和硕士文化。关于月收入，3000 元以下、3000-5999 元、6000-9999 元、10000-14999 元、15000 元及以上的用户分别占比为 12.47%、30.98%、31.89%、17.07% 和 7.59%。关于职业，公司职员、个体工商户所占比例最高，合计为 79.88%，其中分别占比为 49.77%、30.17%（学生人员占比 10.03%、政府及事业单位员工占比 7.32%，其他人员占比 2.71%）。可以看出，所选择的调查对象基本具有代表性。

表4: 被调查人群的统计特征

个人基本情况		频数	百分比(%)
性别	女	594	53.66
	男	513	46.34
年龄	18 岁以下	13	1.17
	18-25 岁	292	26.38
	26-35 岁	396	35.77
	36-45 岁	313	28.27
	45 岁以上	93	8.4
学历	高中以下	93	8.4
	高中	231	20.87
	专科	420	37.94
	本科	305	27.55
	硕士及以上	58	5.24
月度收入	3000 元以下	138	12.47
	3000-5999 元	343	30.98
	6000-9999 元	353	31.89
	10000-14999 元	189	17.07
	15000 元及以上	84	7.59
职业	学生	111	10.03
	公司职员	551	49.77
	政府及事业单位员工	81	7.32
	个体工商户	334	30.17
	其他	30	2.71

量表检验

本文运用的国内外较为成熟的量表，并经过了许多学者的验证，但样本的却与以往的调查结果有很大的出入，为了保证调查的严谨、科学、准确，在对有关数据进行分析前，应首先对数据进行信效度检验。

1. 信度分析

对消费者在短视频平台上的购物体验与重复购买意向进行了信度检验，结果如下表所示。通过表中的分析结果可发现，本研究中短视频电商平台购物体验总量表的整体信度系数为 0.926，说明该量表的可信度较高，其各维度的信度系数值分别为 0.806、0.717、0.745、0.744，结果显示，各项测验结果的可信度和内在一致性较好，所使用的各项测验指标都是相当可靠的。除此之外，短视频电商平台购物体验量表中的各题型校正项总计相关性数据均在 0.45-0.65之间，删除任何一个题型都不能提高短视频电商平台购物体验的信度系数值。

从表格中的数据可以看出，重复购买意愿问卷的总体信度指数为 0.722，高于最小基准 0.600，显示出了良好的可信性。另外，在重复购买意愿量表中各题目校正项总计相关性都在 0.50-0.60范围内，去掉任一题目，对重复购买意愿的信度系数都不会增加。从总体上来分析，目前的调查结果是可信的。

表8: 短视频电商平台购物体验信度分析

维度及测量题型		校正项总计相关性	项已删除的 α 系数	分量表 Cronbach α	总量表 Cronbach α
感官体验	SE1	0.597	0.766	0.806	0.926
	SE2	0.594	0.767		
	SE3	0.587	0.769		
	SE4	0.606	0.763		
	SE5	0.568	0.775		
情感体验	FE1	0.54	0.624	0.717	
	FE2	0.54	0.625		
	FE3	0.53	0.636		
思维逻辑体验	TIE1	0.545	0.683	0.745	
	TIE2	0.527	0.693		
	TIE3	0.506	0.705		
	TIE4	0.578	0.664		
行动关联体验	ARE1	0.573	0.664	0.744	
	ARE2	0.555	0.675		
	ARE3	0.463	0.724		
	ARE4	0.559	0.672		

表9: 重复购买意愿信度分析

变量	测量题项	校正项总计相关性	项已删除的 α 系数	Cronbach α 系数
重复购买意愿	RP1	0.508	0.675	0.722
	RP2	0.553	0.621	
	RP3	0.568	0.603	

2. 效度分析

效度指的是能够用来度量量表的有效性，即度量量表中的数据是否准确。一般的正式问卷选择内容、结构效度进行检验。

(1) 内容效度分析

在编制问卷初期，本研究对国内外探究短视频电商平台购物体验对重复购买意愿的影响等相关文献进行梳理，初测前对题项逐一评判其是否符合答卷人员的实际情况，同时本研究采用的问卷题项来源来源于已经被使用过多次，这已经在一定程度上对内容效度有了保证。

(2) 结构效度分析

KMO值介于0和1之间，若大于0.7，说明效度很好；Sig小于0.05，认为效度结果理想。

表10: 短视频电商平台购物体验KMO和Bartlett整体效度检验

Kaiser-Meyer-Olkin	度量	0.974
Bartlett`s 的球形度检验	卡方	7573.584
	自由度	120
	显著性 Sig.	0.000

上表为对短视频电商平台购物体验量表数据进行效度分析和检验，可以得到该问卷的 KMO 值为 0.974，检验的 P 值为 0，表明短视频电商平台购物体验量表问卷结构效度较好。

表11: 问卷结构效度分析结果

χ^2/df	RMSEA	GFI	AGFI	CFI	NFI	IFI
1.374	0.018	0.985	0.979	0.995	0.982	0.995

从上表可以看出该问卷的χ^2/df的值为 1.374，RMSEA的值小于 0.1，GFI、AGFI、NFI、CFI 和 IFI的值都大于 0.9，说明购物体验量表具有良好的结构效度。

(3) 相关分析

此种统计分析法，主要用于研究多个（两个或者两个以上）的随机变量（随机变量所处的地位是平等的）的相关性。下图为四个维度与用户重复购买意愿的相关性关系。

表12: 各变量的相关性结果

变量名	短视频电商平台购物体验	感官体验	情感体验	思维逻辑体验	行动关联体验	重复购买意愿
短视频电商平台购物体验	1.000					
感官体验	0.930**	1.000				
情感体验	0.875**	0.753**	1.000			
思维逻辑体验	0.915**	0.796**	0.758**	1.000		
行动关联体验	0.892**	0.762**	0.709**	0.754**	1.000	
重复购买意愿	0.819**	0.767**	0.720**	0.739**	0.732**	1.000

上表为短视频电商平台购物体验及其各个层面和重复购买意愿的相关性都是正的，且这些因素之间相关关系都是显著的，提出的假设得到印证。

(4) 路径分析

路径分析的本质是构建结构模型分析。此种分析法旨在验证假设，下文将综合 AMOS 软件进行路径分析。本文使用 AMOS，构建了购物体验对消费者重复购买意向的实证分析模型。

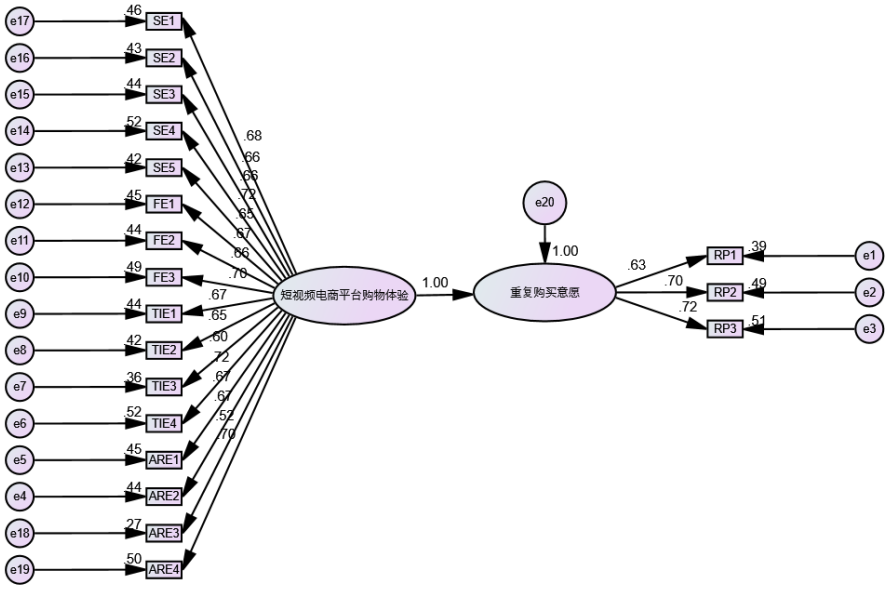


图1: 影响分析模型图（标准化）

表13: 模型适配度分析

统计检验值	X^2/df	RMSEA	GFI	IFI	TLI	CFI
临界值	<3	<0.08	>0.90	>0.90	>0.90	>0.90
检验结果数据	1.382	0.019	0.980	0.994	0.993	0.994
模型适配度判断	是	是	是	是	是	是

从上表可以看出 X2/df 为 1.382，，RMSEA 为 0.019，GFI、TFI、TLI、CFI 均大于 0.9，说明购物体验对重复购买意愿的影响分析模型适配度良好。模型输出结果如下表所示。

表14: 影响路径分析统计结果

模型	Estimate	S.E.	C.R.	P	标准化 Estimate
重复购买意愿 <--- 短视频电商平台购物体验	.942	.049	19.133	***	.999

从上表可以看出，路径“重复购买意愿 <--- 短视频电商平台购物体验”的标准化系数为 0.999，C.R.值为大于 2.58，同时该系数在 0.001水平上显著，研究假设得到证实。

讨论

本文主要探讨了短视频电商平台消费者重复购买意愿的问题，并以抖音为例，根据消费者在线购物体验，提出了消费者购物体验与重复购买意愿间的相关假设，并参考已有的成熟量表，设计调查问卷，搜集相关的数据；通过统计分析软件对 1107 份有效问卷进行分析，得出了如下结论：抖音短视频购物体验对顾客重复购买意愿存在显著的正向影响，而且自变量抖音短视频购物体验各个维度（感官体验、情感体验、思维逻辑体验和关联行动体验）产生影响也为显著正向的。

总结及建议

1. 从感官体验入手，提高顾客的购买满意程度。消费者对抖音短视频电商平台的满意度取决于感官体验，后者会对前者产生正向影响，继而促进消费者重复购买。基于此，电商企业应该积极建设并优化平台页面。电商企业可通过页面设计，即以图文并茂的方式从视觉上对消费者产生刺激，让消费者关注产品或者服务。电商企业应综合考虑各类产品、服务的特合合进搭配页面颜色。

2. 从情感体验切入，打造消费者的“乌托邦”。当消费者对抖音短视频电商平台形成良好的情感体验则有利于提高顾客的满意度，促进顾客形成重复购买的意愿。基于此，建议各大电商平台充分考虑消费者的情感诉求，强调让消费者获得良好的心理反应，促进消费者获得良好的购物体验。

3. 从思维逻辑体验出发，引导顾客的自我思考。消费者在接触抖音短视频电商平台的产品后，产生关联思考，即平台的思维体验。平台满足消费者渴望相关知识及好奇心理。电商企业多层次通过短视频、图片、文字等方式展示产品信息，消费者通过这些知识进一步丰富思维体验，从而提高对产品的认知。

4. 从行动关联体验切入，优化采购强化顾客归属。消费者在进行购物决策时受各因素影响，购物便利性是其中最主要的因素。电商企业应考虑消费者购物便利性，比如辨别商品真伪、查询商品来源、商品物流及退换货流程等。电商企业应该重视与消费者的互动频率，提高消费者对自身及相关产品、服务的归属感。

参考文献

王桂琦. (2020). *社区团购平台消费者使用意愿影响因素研究* [硕士论文]. 中央民族大学.

王超凡. (2019). 智能媒体时代短视频平台发展策略研究. *新媒体研究, 13,* 65-68.

石丹萍. (2019). *手机网购平台在线消费体验与客户重复购买意愿关系研究—感知价值的中介作用* [硕士论文]. 广西大学.

华金香. (2018). 移动短视频社交应用现状及未来发展探析. *出版广角, 14,* 68-71.

刘佳, 邹韵婕, & 刘泽溪. (2021). 基于 SEM 模型的电商直播中消费者购买意愿影响因素分析. *统计与决策, 7,* 94-97.

刘鹏, & 佘翠雯. (2021). 新零售环境下年轻群体消费体验的影响因素研究. *中小企业管理与科技(中旬刊), 12,* 170-172.

李淑燕. (2016). *移动购物全面消费体验对再购买意愿的影响机制研究* [博士论文]. 华侨大学.

宋巍. (2012). *B2C 电子商务顾客体验对顾客忠诚的影响研究* [硕士论文]. 山东大学.

林丛辰. (2020). 影响电子商务客户重购行为的因素研究. *商场现代化, 15,* 41-43.

罗谷松. (2011). 基于用户体验的 B2C 电子商务网站服务质量综合评价. *商场现代化, 1,* 100-102.

郑金标. (2021). 基于内容分析法的闽菜老字号顾客消费体验研究——以福州聚春园餐厅为例. *食品安全导刊, 32,* 133-136.

赵玉霞, & 王冰. (2019). 优秀传统文化短视频的网络传播. *青年记者, 29,* 4-5.

段冬东.（2017. 旅游移动互联网平台如何提升旅游消费体验. *旅游导刊.* 6，95-98

贺爱忠, & 龚婉琛. (2010). 网上商店购物体验对顾客行为影响的实证研究. *北京工商大学学报(社会科学版), 2,* 43-47.

秦泽家. (2020). *"直播+电商"模式下心理契约对顾客重复购买行为作用机理演化研究* [硕士论文]. 华中师范大学.

徐鹏鹏. (2020). 电商自营品牌重复购买行为与影响因素分析. *商业经济研究, 19,* 91-94.

郭红丽, & 王晶. (2013). 基于 TAM 模型的 B2C 客户体验模型研究. *科技管理研究, 19,* 184-188, 196.

戚旭然. (2016). *UGC 模式移动短视频社交平台使用动机与使用行为研究* [硕士论文]. 暨南大学.

蒋一洁. (2019). 短视频社交软件传播效果分析——以快手 APP 为例. *视听, 7,* 175-176.

鲍富元. (2020). 基于游客官方网站投诉的消费体验优化研究——以三亚为例. *石家庄学院学报, 6*，82-86.

谭涵梦. (2019). *电商实体店体验对消费者线上购买意愿影响研究* [硕士论文]. 重庆邮电大学.

戴德宝, & 顾晓慧. (2017). 用户参与行为、感知价值与忠诚度:基于移动短视频社交应用的分析. *消费经济, 2,* 58-65.

Chen, J., Ching, R., Luo, M. M., & Liu, C. (2008). Virtual experiential marketing on online customer intentions and loyalty .In *Hawaii International Conference on System Sciences*, (22), 45-47. IEEE.

Chiu, C. M., Fang, Y. H., Cheng, H. L., & Yen, C. (2013). On online repurchase intentions: antecedents and the moderating role of switching cost. *Human Systems Management*, (4), 283-296.

Parasuraman, A. (2015). E-s-qual a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, (3), 213-233

Pullman M. E., & Gross M. A. (2003). Welcome to Your Experience: Where You Can Check out Anytime You'd like, but You Can Never Leave. *Journal of Business&Management*, (3) ,215-232.

Schmitt B. (1999). Experiential Marketing. *Journal of Marketing Management*, (1) ,53-67.

Xu, C., Liu, J., & Dale, C. (2013). Understanding the characteristics of internet short video sharing: a youtube-based measurement study. *IEEE Transactions on Multimedia*, (5), 1184-1194.

高校财务风险管理文献综述
LITERATURE REVIEW OF FINANCIAL RISK MANAGEMENT IN COLLEGES AND UNIVERSITIES

董卫华 [1*], 蔡永红 [2], 张四海 [3]
Weihua Dong[1*], Yonghong Cai[2], and Sihai Zhang[3]

[1,2] 泰国正大管理学院中国研究生院
[3] 中国大理大学财务处
[1,2]Chinese Graduate School, Panyapiwat Institute of Management, Thailand
[3]Financial Department, Dali University, China
[*]**Corresponding Author, E-mail:** 710001492@qq.com

摘要

本文立足于中国高校规模化扩张的背景下，高校进入高等教育普及化时代，通过对高校财务风险、高校内部控制的内涵及结构的分析，以及高校财务风险的评价及测量、高校内部控制的维度及评价进行综述，厘清高校财务风险和内部控制的核心概念，为下一步的研究奠定坚实的基础。以高校财务风险来源和内部控制效果为访谈的主要内容，采用访谈法、问卷调查法、案例分析法等，定性与定量相结合的混合研究方法，研究了高校财务风险结构、高校内部控制的维度和不同人员对高校财务风险的感知程度。

关键词: **高校** 财务风险管理 **文献**综述

Abstract

Based on the background of the large-scale expansion of universities in China, universities have entered the era of higher education popularization, and the university financial risk evaluation and measurement, the university internal control dimension and the evaluation are summarized, clarifies the university financial risk and the internal control core concept, lays the solid foundation for the next step research. Taking the source of financial risk and the effect of internal control as the main content of the interview, the paper adopts the method of interview, questionnaire, case analysis and so on, this paper studies the structure of financial risk, the dimension of internal control and the perceived degree of financial risk of different personnel.

Keywords: University, Financial Risk Management, Literature Review

引言

20 世纪 90 年代以来，中国高等教育规模化扩张。高等教育毛入学率从 2012 年的 30% 到 2019 年毛入学率达 51.6%，正式迈入普及化时代。然而，国家财政投入巨大与办学经费短缺，举债办学与资源富集，资金短缺与浪费突出，这些现象几乎同时存在。高校财务风险是高校潜在的、高危的一个突出问题。高校财务风险控制是廉政建设的重要要求，高校教育经费投入持续提升增加了内部控制难度，高校财务风险的结构尚不明确，高校财务风险内部控制的维度还不够清晰，高校财务风险内部控制效果及其评价差异有待探索。在这样的背景下，本研究

有利于揭示公办高校财务风险的主要现状及相关问题，积极推进完善中国现代大学制度系统的构建，有助于我们完善高校财务管理理论。同时，有利于高校全面认识导致财务风险产生的原因，进一步分析高校财务风险管理的有关问题。

内容

高校财务风险、高校内部控制和风险管理的概念

高校财务风险

人们习惯于将不利事件发生的可能性称为风险。西方古典经济学家早在 19 世纪就提出了风险的概念，认为风险是经营活动的副产品。“风险”一词首先由亨瑞·法约尔于 1916 年引入到企业管理领域中，而“风险管理”得到推广和重视，并且成为独立学科是自 1950 年莫布雷等发表《保险学》以后。在七十到八十年代，风险管理发展迅速。最先开始财务风险研究的国家是美国，时间始于二十世纪八十年代中期，主要研究的方向是企业财务风险管理。风险管理不断受到各个领域的重视，相关的咨询公司在美国和加拿大也被设立，风险管理得到了全球的关注。刘家平（2013）认为财务风险会贯穿于所有企业财务活动的始终，任何一次财务活动就可能产生风险。卢新莲（2018）指出企业财务风险因素可分为内部原因和外部因素。朱杰（2013）认为，企业内部控制与稽核规范不完善，内部财务关系混乱导致财务风险。涂继盛（2019）认为，财务风险与决策是否规范科学、财务风险预警监控体系不完善有关。

高校作为非盈利性的事业单位，从自主筹资偿债付息的角度来看，高校财务风险更接近于狭义的财务风险，即在一定时期内和一定条件下，高校在自主办学过程中由于某些无法预测和控制的因素，财务状况与预期结果出现偏差而导致高校出现财务风险危机。马德敏（2007）认为：高校事业单位的属性，不太容易出现破产的现象。陈奕钰（2016）认为, 高校财务风险，主要反映为财务收支面临失衡的风险、高校贷款风险导致的债务风险。龚建英（2006）等人认为高校财务风险来源主要是内部因素，对高校教书育人的事业受到重大影响。张蕾（2018）认为除了筹资风险之外，高校容易出现投资风险，主要表现在学校基建投资，投资过大，超过投资总规模,造成资产大量流失、浪费的管理风险。李超（2015）认为高校财务风险与财务管理管理、债务管理不到位有关，也与缺乏内部控制有关。董朔（2015）认为高校财务风险除了债务和投资风险之外，还有流动性和制度性风险。成因是内部控制机制不完善，收支不平衡和负债过高。韦艳肖和韦海妮（2021）认为，地方高校财务风险与政府对地方高校的资金投入不足有关。综上，可以看出高校财务风险一定程度上表现为广义的财务风险，与学校的制度执行有关，与内部控制机制有关，同时与资金筹集、调拨、使用、结算及管理密不可分。

高校内部控制

内部控制是组织为最终实现本组织最高绩效目标要求而实施对各种风险进行管理过程的关键环节和主要方法，它通常与现代组织内部文化、员工能力、制度体系建立密切程度相关，为实现组织安全稳定高效运营、资产管理安全、提高公司信息质量效率和加强企业风险评估应对等能力水平提供了制度保障。

高校内部控制。《行政事业单位内部控制规范（试行）》将内部控制定义为:“内部控制是指单位为实现控制目标，通过制定制度、实施措施和执行程序，对经济活动的风险进行防范和管控”。这个定义明确了控制的客体是经济活动中的风险（没有扩大到全面业务的风险）。财政部《教育部直属高校经济活动内部控制指南（试行）》中，将高校内控定义为：“高校为实现办学目标，通过制定制度、实施措施和执行程序，对经济活动的风险进行防范和管控”。学者们也对高校内部控制进行了研究。乔春华（2014）为高校实施内部控制是高等学校为实现有效管

理履行公共资本受托责任，实现业务运行过程的效果和运作效率、财务报告内容的科学可信性保证和对其适用之法律、法规程序的全面遵从等而持续应对各种风险状况的具体过程。高校风险控制的主体应当包括全体教职员工，主要是管理层，特别是校长。吴雪娟（2014）认为高校内部控制是为了保证高校经济业务活动、财务会计信息和财产资金安全而建立起的一套自我协调、自我约束的控制系统。高校的人才培养、科学研究、服务社会的职能要求高校内部控制必须服务于高校办学目标；关注的客体是风险，即要识别风险状况和怎样防范这些风险。

风险管理

风险管理是指管理组织为有效实现其绩效目标,进行全面有效的风险识别、风险评估、风险预警监测和管理风险目标控制实现的一系列过程，需要组织自上而下全员共同参与，和组织的文化及员工能力相关的一个科学管理过程。财务风险管理可以被定义为是一种组织预控管理形式,它与整个企业的命运息息相关,与组织内各部门和内部各方面因素的统一管理密不可分。美国 COSO 委员会于 2017 年新修订推出的《企业风险管理框架》，将风险管理定义为：组织在创造、保持和实现价值的过程中，结合战略制定和执行，赖以进行管理风险的文化、能力和实践。从这个概念可以看出，COSO 对风险管理的定义，已拔高到了文化、能力和实践的高度，成了一种公司治理的理念。财政部 2018 年印发的《管理会计应用指引第 700 号——风险管理》中指出，风险管理是指企业为了实现风险管理目标，而对风险进行的有效识别、评估、预警和控制，发现和认定可能会影响公司价值的潜在风险，并采取相应的风险控制措施。

风险管理是处理风险和把握机会，以便创造或保持组织价值，以实现组织价值最大化。风险控制管理也是公司绩效管理当中的另一个重点部分，其运行模式是动态、连续，而又循环往复的，其目标是处置风险和控制风险。COSO 委员会在 2004 年新推出的框架《企业风险管理整合框架》（COSO-ERM 框架)中，企业董事会、管理层人员以及整个企业和所有组织其他关键员工等都要求必须参与企业的内部控制和企业风险监控管理。企业战略的制定者和企业内部各个层次的职能单位和关键部门才是实施风险控制管理过程的主体。对企业行为具有长期潜在消极影响且潜在风险暴露为本企业内部可允许接受风险范围的内部事项即是实施风险识别管理活动的目标对象。企业风险认识管理系统的总体构成及要素结构是：内部环境、目标设定、风险识别、风险评析、风险应对、控制措施、信息交流沟通和风险监控，它们源自于管理层对企业的经营方式，同时与管理过程融于一体。国资委在 2006 年颁布的《中央企业全面风险管理指引》强调企业必须围绕总体经营工作目标,把风险管理贯穿到企业管理全部过程。学界通常把风险管理分为下列三个重要阶段：风险因素的初始识别、风险因素的分析评价和对风险因素的控制。狭义的风险管理一般需要同时达到满足以下三种目的：事故前的预防和损失、事故处理中有效减轻损失、损失发生后弥补损失。邓建华（2018）指出，高校的风险管理必须紧紧围绕学校的发展规划以及管理目标，与学校的各部门的业务和相关环节的流程管理及教职工中的风险文化建设有着密切的关系。

高校财务风险的结构及测量

高校财务风险的结构

高校财务风险的来源。多数的学者都将高校财务风险分为受外部因素不可控因素影响的财务外部风险和学校内部因运营、制度、人员、文化等多种因素引发的财务内部风险，在此分类的基础上对风险及风险因素进行分析。外部风险因素中主要应考虑因素是包括来自政府层面实施的重大经济政策、银行对高校的贷款以及由此产生的债务、政府对高校的投入的政策调整及改变等等;来自学校的内部经营管理的因素分析中则主要是包括学校自身应该控制而控制不

当的债务风险、高校自身涉及校办产业及产学研成果转化过程中的投资引发的资金损失和债务纠纷和管理运营中各种因素导致的财务风险。

高校财务风险的外部因素。杨宗昊（2015）指出,高校财务风险首先具有政策局限性特征,受到国家政策的影响较为显著。王颖（2012）、徐明稚 et al. (2012)、朱清秀（2014）和刘泉兰（2015）等人认为，造成高校财务风险的一些外部制约因素主要有是高校负债持续扩张、国家和政策性银行之间的贷款资金市场供给空间不足、高校信贷投入激励政策滞后等相关体制模式和工作机制方面存在着弊端、政府部门自身监管建设不力。姚宇琦（2021）认为高校财务风险的

外部因素与国家相关法律法规的冲击有关，如生源的不稳定性、政府拨款年度存在差异和财务管理监督缺失等。

高校财务风险的内部因素。学者们认为导致高校财务风险的内部因素是内部控制不健全、管理制度不完善、投资决策失误、资金管理水平不高、风险意识淡漠和人员素质低下。黄维（2006）认为高校的薪酬制度缺乏激励，导致校办产业难以实现正增长，从而诱发财务风险。吴超群（2012）认为风险来源是超过高校承受能力的基建和僵化的人事制度。凌立勤和倪燕（2013）认为高校债务结构不合理和巨额利息是高校财务风险的原因。龚建英（2006）认为高校缺乏风险意识和信用意识，财务信息的公开度与透明度极差是财务风险的来源。刘义荣和刘静娴（2010）认为财务风险与学校定位不准，盲目跟从或攀比和成本核算与控制体系有待健全有关。管鹏（2011）认为高校法人地位有效性难以及时得到法律保证、财务内部治理制度结构存在不尽合理是导致高校财务风险的原因。黄泽晶（2016）提出高校为提升建设水平、改进基础设施，主要通过举债方式融资，致使高校无法控制负债风险。

表1: 企业与高校财务活动及财务风险区别表

观测点	企 业	高 校
经营（运营）环境	风险可以通过财务指标的恶化得以体现	财务风险难以通过财务指标衡量
财务活动目的	追求经济利益，以获取利润最大化	以创造社会效益为主，不以营利为目的
资金收入来源	资金收入相对简单	资金收入多样化
财务支出	成本、费用可直接从相应销售收入或营业收入中获得补偿	支出具有消耗性，除经营性支出外，其他支出均无相应的直接补偿
财务产出	投入产出可营利	投入产出不营利
财务周转	资金再生能力强	资金缺乏再生能力
风险评价侧重点	以营利能力为评价重点	以偿债能力、管理风险为评价重点
风险意识	普遍较强	普遍不强
财务信息公开	财务信息公开较好	财务信息公开不够
财务风险状况	显性、易于评价；经济影响大	隐蔽、难以评价、可控；社会影响大

高校财务风险的评价及测量

财务风险评价及测量。因子分析法：杨阳（2020）选取了能够反映企业同时具有持续盈利、偿债、营运、发展、现金流等这五种核心财务能力要素之一的 14 个国内外较成熟具有广泛代表性的核心财务指标，采用因子分析法建立财务风险评价模型。

层次分析法：张莉娜（2019）运用层次分析法,从筹资、投资、营运金流量和管理费用四个核心指标入手，构建发展完善了一个多层次财务风险评估综合分析方法模型。易雨河（2019）

根据财务报告的核心指标分析 H 公司内部控制中的问题，结合功效系数法和专家打分法进行评价。

功效系数法：许祎航（2014）综合运用熵值法和结合功效系数法，从公司盈利保证能力、营运维持能力、偿债维持能力、发展维持能力这四个能力方面构建完善了这一套的财务风险的预警体系。

F 分数模型分析法：从琳（2021）运用 F 分数模型方法对华远地产于 2017 年至 2020 年上半年实现的公司财务数据指标进行年度财务风险指标评定，通过与公司股东自身企业纵向分析对比及与国外同质行业企业横向分析对比、结合国外行业动态变化以及中国公司财务实际运作情况，分析判断造成本期财务风险差异的其他主要因素。姚依云和戴军(2021)运用 F 分数模型对 A 公司于 2016 年到 2020 年间的公司财务状况等进行全面财务风险监控分析，剖析出造成上述财务风险分析的基本原因并分别提出防范建议为全面合理分析防控公司当前面临财务的潜在风险，提出未来应重点及时推进优化战略投资增长战略、完善直接融资机制、加强应收账款管理的结论。

高校财务风险评价方法。张曾莲和吴雪琴（2011）课题组对位于北京市的 25 所教育部直属高校，对学校的财务数据进行深入分析和实证研究，选取了 19 个与财务风险密切相关的财务指标，利用因子分析法系统地构建了高校财务风险分析评价标准体系。徐明稚 et al. (2012) 从高校财务数据的分析出发，尝试从高校运营时现金流、投资现金流和筹资现金流这三个方面选取了高校财务有关的指标，从现金流这个关键独特的视角构建模型从而构建了高校财务风险评价体系。

田志刚（2013）采用建立了巴萨利模型和功效系数模型，从企业财务、事业财务两个不同的视角对高等学校财务风险程度进行了度量分析。李华军（2015）基于财务风险等级和财务运营管理水平，构建高校财务风险等级的综合分析评定的模型,同时借鉴气候、火灾等其他方面的预警方式，形象地将高校财务风险等级分为红色、橙色和黄色三个等级作为预警系统。宋慧晶 et al.(2014)指出对高校财务风险评价，首先应当考虑非财务指标，其次才是财务指标。

薛建辉（2012）运用模糊综合评价法对高校财务风险问题进行实证研究，并提出应当重点关注的风险因素。阮旭华（2011）运用信息熵分析法对全国高校财务风险熵进行实证分析并评价。

高校内部控制的维度及评价

高校内部控制的维度

在当今全球范围内的内部控制的框架已经众多,较为有权威和通行于国际上的主要是美国 COSO 的内部控制的框架。1992 年，美国 COSO 委员会发布的《内部控制——整合框架》（简称“COSO 报告”），成为内部控制领域最为权威的文献之一，标志着美国内部控制体系的形成。此后，COSO 委员会根据市场的变化和企业的实际，陆续于 2004 年、2013 年又推出新版内部控制框架。2013 年 COSO 委员会《内部控制—综合框架》中指出内部控制是一个持续且不断改进的过程。李维安和戴文涛(2013)提出企业的内部控制层级有三个：公司内部治理、管理控制和作业控制。杨有红和李宇立(2011)首次尝试把对内部控制的缺陷的认定问题作为进一步评价其内部控制有效性的关键所在。迟国华和王钰(2017)发现内部控制的缺陷常常与造成企业持续投资意愿不足风险及减少相关企业信息对外披露等之间存在一些相互关联。孙光国和李冰慧(2014)认为从充分保障全体投资者利益最大化的管理视角，内部控制无疑是一种更重要有效的机制，为此，要重视对内部控制有效性的评价。宋胜菊 et al.(2013)经问卷调查认为，国家机关和事业单位中内控环境、制度执行、监督检查这三个要素能影响内部控制目标的实现。

高校内部控制：马东亮(2011)认为高校目前存在对内部控制重要性认识不够，高校财务管理规章制度不够完善，提出应提高内部控制意识，建立内部控制考核制度。陈爱东和唐静(2009)基于内部治理的角度指出，高校内部控制改革没有跟上高校教育经费的来源多样化与教育经费决策、管理自由度加大的步伐，引发了财务风险，提出从完善高校治理结构和实行零基预算的角度完善高校内部控制。高庆峰（2013）对教育部直属 75 所高校的内部控制制度建设情况进行调查分析，梳理分析了当前高校内部控制制度存在的问题和取得的成效，指出应当从研究制定高校内部控制规范、编写高校内控制度制定的参考读本，营造良好内部控制制度建设环境、完善高校内控制度建设的监督和加强对内控制度的业务培训五个角度完善高校内控制度。综上，高校内部控制是指学校为实现办学目标，通过制定制度、实施措施和执行程序，对办学风险进行防范和管控的一系列工作。

内部控制环境方面，王雪峰（2008）基于现代企业集团内部风险控制管理环境体系的一般概念，参考部分高校实际情况，认为高校内部控制环境系包括了法人及其治理的结构、高校内部管理文化建设和管理人三方面。卿文洁（2013）指出目前国内高校的内部控制与环境建设研究中的高校法人治理结构、授权许可制度、权利相互制衡、高校文化、人力资源环境管理研究等几方面也存在的较多现实问题，应从改善法人治理结构、分离高校学术权力主体与相关行政权利、设立大学内部控制评估机构和全面改革现行高校学术评价监督的体制方面入手优化完善高校内部控制评估环境。陈留平 et al(2014)认为加强高校系统内部控制的建设应首先保证要营造基于高校良好运行的校园内部控制环境，关注经济合同质量管理、预算控制和内控流程信息化建设。

高校内部控制建设方面，黄建元 et al. (2019) 从财务管理角度，并结合高校实际发展状况，分别从组织机构、流程设计、控制工具、控制内容等方面上建立内控长效机制，通过内、外部共同监督内控执行情况，提高高校财务工作效率和内控水平。韩东海（2015）认为目前的高校控制建设也只是简单流于形式，在财务制度规范建设程序和控制活动方面等均依然存在着较多实际问题，建议学校采取设立负责人定期轮岗制度、货币资金岗位责任制度、完善财务授权管理制度，建立高校预算管理专门委员会、风险评估小组制度等多种方式手段全面完善规范高校内部控制。郎付山（2017）基于学校网络信息化治理工作角度提出要求高校可通过继续强化顶层设计、审视监管角色的定位、推动信息公开、突出加强内部稽核审计作用建设等四种渠道持续推进网站内部控制建设。

高校内部控制的评价

基于内部控制原则的内部控制评价。刘永泽和张亮（2012）界定了政府部门内部控制体系框架的目标、原则和要素。胡雅娟（2014）提出了健全高校内部控制体系的对策建议，以提升财务管理效益和财物安全。王小虹和张明哲（2015）从控制环境、控制风险、控制活动、信息与沟通、监督等五个方面确定了高校内部控制的评估指标体系。卿文洁（2013）提出调整内部治理结构，建立内部控制系统，养成内部控制意识改善高校内部控制环境。

基于业务层面的内部控制评价。刘巧华（2018）通过构建内部控制评价体系，对学科建设预算资金使用情况进行绩效评价。张蕾（2018）以大数据信息化为基础，建立了设备采购数据库，建立设备采购预算的评价体系，强化预算精细化管理。孙支南和王超辉（2016）提出高校应及时把控预算业务、教学与科研以及基建后勤等业务活动的风险，提高内部控制有效性。夏冬梅和刘东（2019）基于 COSO 理论，从高校单位层面的五个方面分析预算业务中存在的风险点，认为高校预算业务内部控制的重点就是把控关键岗位人员的职权。内部控制评价方法。

李玉兰（2015）采用层次分析法和模糊评价法对企业内部控制情况进行量化分析，构建内部控制评价指标体系。

现有文献述评

结合高校自身经济活动的特点研究财务风险不够

我国高校具有非营利性、注重社会效益等特殊性质，高校内部既有从事基本教学、科研业务的单位，也有从事服务性、生产性的单位既有国家财政预算拨款，各方无偿捐赠，又有学生上交的学费收入以及对外有偿服务收入。这就决定了高校存在多种性质的经济实体，财务核算体系比较复杂。通过对财务风险文献的检索和阅读，大多数研究者以企业财务风险的视角来研究高校财务风险，对高校自身特点和高校财务风险特征把握不够。我国高校同时具有非营利性、注重社会效益等这样一系列具有特殊公益办学机构性质，张蓉（2009）认为高校内部的组织具有复杂性，既有单纯从事教学和科研的部门，也有服务性和经营性的单位，收入方面既有财政拨款、学生自行上交的学费、住宿费，也有各方均有各种无偿和公益有偿捐赠和有偿社会公益的服务性收入。这种收入指出结构的复杂性，就决定了高校复杂的核算体系。尤其是高校作为一个较为松散的非营利组织的特质，高校教师为主体的教职工队伍相对社会其他组织成员而言,因其知识富集、强调创新意识等特征；而高校的事业单位属性决定了其财务风险主要是微观财政风险。意味着高校除了以投资风险、融资风险之外，管理风险则是高校财务风险中较为突出的风险；而高校因其特殊性，可以说人人都与财务管理有关，也可以说，人人都与财务风险相关。

从高校财务治理的角度对财务风险内部控制进行研究的较少

通过检索文献，我们发现从财务管理的视角研究大学财务治理的学者比较多。高校是典型的利益相关者组织，其内部与外部各类利益相关者对学校可能有相同、相似、相反的期望和要求，他们或结成利益群体、利益联盟，或将政府机构、社会组织、大众媒体作为利益代表，以或弱或强、或明或隐、或正式或非正式等各种方式参与学校事务，从而形成了不同的高校治理类型。虽然我国大学实行的是党委领导下的校长负责制，学校党委是最高决策机构。虽然治理结构成员大多具有教育管理背景，了解熟悉学校情况，熟悉高校的教学科研管理规律。但治理结构大多由高校内部产生，成员的内部化、程序的封闭性、职业的单一性，使得治理结构开放性、决策程序科学性、过程和结果的透明度都有很多不足。财务管理领域的决策、执行和监督都有差距，内部审计机构的权威性、专业性不足，学校风险管理体系严重滞后。这些，给高校财务风险内部控制带来新的挑战。由于历史发展路径、所处的社会制度环境不同等原因，各高校的治理模式和治理体系不尽相同。学校经济行为的选择也会有所差异。而由此带来的财务风险也各有不同。

对财务管理全过程中风险管理和控制的研究不多

通过深入广泛系统地查阅研究现有大量国内外有关专业文献资料，我们大致可以得出如下结论，西方发达国家对企业的风险管理和内部控制研究起步比较早，可以说已经发展到一定的高度和深度。风险管理已经拓展到企业全面风险管理，内部控制作为风险管理的一个工具和手段，也已经不再是侠义的会计控制，而发展成为外延宽泛而内涵丰富的一个现代组织管理的主要路径。从国内的研究看，多数研究都还是操作层面的探讨（尽管也不乏学者认为 COSO 委员会推出的一系列框架都仅属于操作层，理论性比较弱），对如何在财务管理全过程提高风险管理的效果，加强内部控制的有效性的政策法规的研究还比较少。通过研究，还发现许多学者对风险管理和内部控制的某一领域进行研究，例如公司治理、财务报告质量、审计风险等与风险管理及内部控制的关联性。对于全流程的研究还有不足。我国高校风险风险管理起步较晚，

截至目前，几乎没有哪一所高校设置了风险管理的委员会及专门的机构对风险进行管理。内部控制建设在财政部和教育部的推动下，逐渐取得一些成效。与之相应的相关研究也较为薄弱，对高校财务管理全过程中的风险管理和控制缺少较为深入而全面的研究。

结论与建议

通过文献综述能够看出，虽然有学界已经开始重视高校财务风险问题的研究，但相较企业财务风险而言，高校财务风险的研究还存在未能充分解决的问题，部分研究还未能形成体系，对财务风险管理等深层次的要素研究不够。现有的研究对高校的较为复杂的财务活动特点把握不足，大多数仅是借鉴了企业财务风险的分类及研究方法，与高校的财务活动及风险特点不够契合；关于高校财务风险管理策略方面的文献研究大多集中在微观层面和系统性财务风险的研究，非系统性，即财务指标之外的财务风险因素研究较少涉及。通过研究，界定了高校财务风险的来源及观测指标，三个财务风险来源分别是治理与文化、财务管理绩效和财务监督；得出了高校财务风险内部控制的维度，包括组织结构、机制与流程和文化三个维度；对高校财务风险、内部控制效果评价进行了探索。鉴于研究者的经验还有欠缺，个别矩阵建构还不尽合理，高校财务风险的特征还不够鲜明，在高校科研经费、科研成果转化、投资等方面的财务风险的研究还有一定的研究空间。

参考文献

马东亮.（2011）.高校内部控制制度建设现状及对策研究.*中国流通经济* 25 (4), 119-122.
马德敏. (2007). *高校财务风险成因及其防范* [未出版之硕士论文]. 安徽财经大学.
王小虹, 张明哲. (2015). 高校财务内部控制评价体系的构建. *财会月刊* (02),37-40.
王雪峰. (2008). 高校内部控制环境探析. *财会月刊（综合版）* (4), 16-17.
王颖. (2012). 高校财务风险的成因与管理策略初探.*会计之友*（12）,124-126.
韦艳肖, & 韦海妮. (2021). 地方高校财务风险防控策略研究. *内蒙古煤炭经济* (17), 229-230.
从琳. (2021). 基于 F 分数模型的华远地产财务风险分析. *现代商业* (5), 190-192.
邓建华. (2018). 高校经济活动风险识别与应对. *会计师*(3), 67-69 .
卢新莲. (2018). 企业财务风险及其控制研究. *行政事业资产与财务*(24), 73-74.
田志刚. (2013). 高校财务风险评价与预警双模型实证研究. *会计之友* (6), 122-125.
朱杰. (2013). 论企业财务风险产生的原因与防范对策. *经济研究导刊*(15), 162-163.
朱清秀. (2014). *防范高校财务风险的审计预警机制研究* [未出版之硕士论文]. 安徽财经大学.
乔春华.(2015). 行政事务控制是行政单位内部控制的主要部分——再评《行政事业单位内部控制规范（试行）》. 会计之友（17），73-76.
刘义荣, & 刘静娴. (2010). 高校规模扩张中的财务风险探析. *现代教育科学* (3), 143-145.
刘巧华. (2018). 高校学科建设专项资金绩效预算模型探讨. *会计之友* (7), 126-129.
刘永泽, & 张亮. (2012). 我国政府部门内部控制框架体系的构建研究. *会计研究* (01), 10-19.
刘泉兰. (2015). 高校财务风险的成因及控制对策研究. *会计师* (11), 34-36.
刘家平. (2013). 企业财务风险的成因与防范. *交通企业管理* (1), 66-68.
池国华 & 王钰. (2017). 内部控制缺陷披露与投资不足: 抑制还是加剧? *中南财经政法大学学报*(06), 3-10+158.
许祎航. (2014). *基于熵值法与功效系数法的太龙药业财务风险预警研究* [未出版之硕士论文]. 湖南大学.

阮旭华. (2011). 基于信息熵法的高校财务风险评估探析. *会计之友旬刊* (9), 102-103.
孙支南, & 王超辉. (2016). 论高校内部控制与风险管理.*高教探索* (01), 16-19.
孙光国, & 李冰慧.(2014). 内部控制有效性评价理论框架研究——基于投资者保护的视角 .*财经问题研究*(02), 95-101.
李玉兰. (2015). 民营中小企业内部控制有效性的模糊综合评价. *统计与决策* (21), 186-188.
李华军. (2015). 高校财务风险综合预警模型构建——基于风险等级和风险管理水平双维度. *财会月刊* (35), 48-51.
李维安 & 戴文涛. (2013). 公司治理、内部控制、风险管理的关系框架——基于战略管理视角. *审计与经济研究* (04)，3-12.
李超. (2015). 我国普通高等学校财务风险控制研究. *中国管理信息化* (1), 4-4.
杨有红, & 李宇立. (2011). 内部控制缺陷的识别、认定与报告 .*会计研究* (03),76-80.
杨阳. (2020). *A 公司财务风险评价与控制研究* [未出版之硕士论文〕. 安徽财经大学.
杨宗昊. (2015). *高等学校财务内部控制问题研究* [未出版之硕士论文]. 安徽财经大学.
吴雪娟. (2014). *我国高校内部控制体系研究* [未出版之硕士论文]. 安徽财经大学.
吴超群. (2012). 高校财务风险的成因及治理对策. *产业与科技论坛* 11(20), 222-223.
宋胜菊,胡波 & 付连军,等. (2013). 内部控制规范实施效果的影响因素分析——基于《内部会计控制规范——货币资金》执行情况的调查.*会计之友* (24),86-90.
宋慧晶，王同孝, & 孟凡斌等. (2014). 高校财务风险评价与预警. *财务与金融* (1), 42-46.
张莉娜. (2019). *XSMD 股份有限公司财务风险控制研究* [未出版之硕士论文]. 安徽财经大学.
张曾莲, & 吴雪琴. (2011). 高校财务风险综合评价与预警研究. *高等财经教育研究* 14 (1), 1-7.
张蓉. (2009). *高等学校内部财务控制研究——以 X 校为例* [未出版之硕士论文]. 安徽财经大学.
张蕾. (2018). 高校设备采购预算应用制约于优化. *实验技术与管理* 35 (4), 258-261
陈奕钰. (2016). 高校财务风险成因及其防范. *合作经济与科技* (10), 158-159.
陈爱东, & 唐静. (2009). 论高校内控制度的完善和财务风险的管理——基于内部治理的视角分析. *会计之友* (11),42-43.
陈留平, 魏微 & 张猛超. (2014). 论我国高校内部控制建设——基于江苏高校的调查. *高校教育管理* 8(1), 29-35.
易雨河. (2019). *H 公司财务风险控制研究* [未出版之硕士论文]. 安徽财经大学.
郎付山. (2017). 基于网络治理视角的高校内部控制建设. *财会月刊* (6), 23-26.
胡雅娟. (2014). 浅谈高校财务内部控制体系的构建与完善. *财经界* (24), 193+242.
姚宇琦. (2021). 高校财务风险管控思考. *合作经济与科技* (4), 142-143.
姚依云, & 戴军. (2021). 基于 F 分数模型的 A 公司财务风险分析. *会计师* (7) ,25-26.
夏冬梅, & 刘东. (2019). 基于流程和风险视角的高校预算控制优化研究. *会计之友* (5), 99-103.
徐明稚, 张丹, & 姜晓璐. (2012). 基于现金流量模型的高校财务风险评价体系. *会计研究* (7), 57-64.
卿文洁. (2013). 高校内部控制环境存在的问题及改进对策探析. *湖南财政经济学院学报* 29 (6), 87-93.
凌立勤, 倪燕. (2013). 高校财务风险预警模型的实证研究.*同济大学学报：社会科学版* 24(5), 117-123.
高庆峰. (2013). 高等学校内部控制制度建设问题及对策. *会计之友* (2), 126-128.
涂继盛. (2019). 企业财务风险的成因及防范对策. *经营与管理* (3), 118-120.

黄泽晶．(2016).高校财务风险与控制对策研究．*求知导刊*（01）,45-46．
黄建元, 王静梅 & 王紫红. (2019). 高校财务内部控制的问题及对策. *价值工程* (32), 49-51.
黄维. (2006). 高校财务风险的防范与控制. *高教与经济* (1), 12-14.
龚建英. (2006). *普通高校财务风险管理研究* [未出版之硕士论文]. 安徽财经大学.
董朔. (2015). 我国高校财务风险控制对策研究. *产业与科技论坛* (14), 248-249.
韩东海. (2015). 高校内部控制建设现状、问题与对策探析--以河北省 H 大学为例. *会计之友* (15), 115-117.
管鹏. (2011). 浅析高校财务风险管理. *会计之友* , (33), 68-70.
薛建辉. (2012). *高校财务风险预警模型的建立及应用研究* [未出版之硕士论文]. 安徽财经大学.

共享经济对在线法律服务用户购买意向的影响研究

THE INFLUENCE OF SHARING ECONOMY ON THE PURCHASE INTENTION OF ONLINE LEGAL SERVICE USERS RESEARCH

陈锐嶂 [1*]，汪洋 [2]
Ruizhang Chen[1*] and Yang Wang[2]

[1] 泰国工商大学国际管理学院
[2] 中国上海木志科技有限公司
[1]International School of Management, Rattana Bundit University, Thailand
[2]Shanghai Muzhi Technology Co., Ltd., China
[*]**Corresponding Author, E-mail:** Cruizhang@outlook.com

摘要

共享经济在过去一段时间是全世界流行的消费方式，这种消费方式对于消费者的行为产生了多种影响。法律是一种解决问题的工具，法律服务消费者群体日渐壮大，共享经济对于法律服务消费者的购买意愿具有影响。依托互联网的高速发展和大数据的支撑，在线法律服务是许多消费者接受法律服务最为便捷的方式。本文以 TAM 技术接受模型作为理论框架，结合感知风险理论，探究支付风险、隐私风险、感知易用性、感知有用性、使用意愿之间的关系，得到感知风险对于感知有用性和感知易用性均产生显著的负向影响，并且感知有用性和感知易用性对于感知风险和使用意愿时间具有部分中介效应。最后，基于数据分析，本文以消费者感知为视角为法律服务专业机构优化业务提出建议。

关键词: 技术接受模型（TAM） 共享经济 在线法律服务 感知风险

Abstract

The sharing economy has been a popular consumption method all over the world in the past period, and this consumption method has had various impacts on consumer behavior. Law is a tool to solve problems. The group of legal service consumers is growing day by day. The sharing economy has an impact on the purchase intention of legal service consumers. Relying on the rapid development of the Internet and the support of big data, online legal services are the most convenient way for many consumers to receive legal services. This paper uses the TAM technology acceptance model as a theoretical framework, combined with the perceived risk theory, to explore the relationship between payment risk, privacy risk, perceived ease of use, perceived usefulness, and willingness to use, and obtains the impact of perceived risk on perceived usefulness and perceived ease of use. Both have significant negative effects and perceived usefulness and perceived ease of use has partial mediating effects on perceived risk and willingness to use time. Finally, based on data analysis, this paper puts

forward suggestions for professional legal service organizations to optimize their business from the perspective of consumer perception.

Keywords: technology acceptance model (TAM), sharing economy, online legal services, perceived risk

引言

近年来，共享经济在全世界产生了很大范围的流行，中国消费市场出现了如共享自行车、共享汽车、共享充电宝等诸多新类型的服务，从多个维度影响着消费者的购买意向与决策。共享经济作为一个概念，主要特点是具有一个第三方搭建的信息技术平台，参与者通过该平台与他人共享自己的知识、经验，输出给产品或服务的需求方。目前，共享经济还没有一个准确的定义。共享经济作为一种服务模式，对诸多服务行业产生了影响，其影响具有普遍性。在法治社会的背景下，中国国民的法律意识大幅度提高，法律成为人们所认可的解决问题的工具，这推动了法律服务消费市场的发展。法律服务作为消费者从市场购买的一种专业服务，受到了共享经济的影响。例如，具有共享经济特性的在线法律服务平台可以为潜在的消费者提供格式化的法律文书，这种情况下潜在消费者将不再需要通过消费就能获得满足需要的法律服务。专业服务人士和专业服务机构只有能够识别共享经济对法律服务业务产生的影响，对这种影响具有的规律进行研究，才能够不断调整自身业务范围、资源投入，为法律服务消费者提供更有价值的专业服务。

研究目的

本研究针对共享经济对在线法律服务消费者决策的影响，通过不同的维度进行衡量，探讨共享经济对在线法律服务消费者购买决策的影响因素。本研究的研究目的具有以下两点：

（1）以消费者行为理论中的技术接受模型 TAM 为基础，结合法律消费中感知风险的维度，研究共享经济对法律服务消费者购买意向的影响。

（2）为法律专业服务机构提供业务优化的理论依据，同时可以对类似的专业服务机构对未来发展进行调整产生启发。

文献综述

技术接受模型用于解释消费者行为已经有大量的研究产生。诸多研究都把技术接受模型对于消费者行为的分析聚焦在日常消费领域，在专业服务领域的研究较少。也有一些研究针对法律服务公司的内部管理优化提出建议，但和消费者行为的结合程度较低。

在共享经济的交易环境下，服务是基于互联网平台来进行的，用户所有的操作都通过互联网来完成。随着由支付风险、隐私风险、时间风险构成的感知风险会降低用户使用在线法律服务平台的感知有用性与感知易用性。感知易用性是指消费者在使用一项新技术时的简便程度。消费者使用知识技能共享平台时，感觉使用界面简单，购买过程简单；感知有用性是指消费者首次使用某种新技术时，这种技术能够增加消费者效用的程度，即某种技术能够增加消费者多少效用（彭建军，2022）。李蕊（2019）通过 TAM 模型与感知风险理论，验证了来源风险、支

付风险、隐私风险、身体风险、时间风险、社会风险对于消费者感知有用性和感知易用性的不同影响程度。综上所述，从风险感知对感知有用性和感知易用性的影响角度，本文提出以下假设：

H1：风险感知负向影响感知有用性。

H2：风险感知负向影响感知易用性。

施颖（2017）研究发现感知风险的程度会减小消费者的网购行为的频次。吴昕桐等（2019）发现消费者的商品风险意识对消费者的购买意愿有着影响，风险态度对风险感知和购买意愿起着中介作用。焦勇兵（2007）基于科技接受模型的角度对顾客使用网上银行的前置因素进行了研究，该研究证明了感知风险会对客户是否选择使用网上银行产生负面影响。综上所述，从风险感知对使用态度的影响角度，本文提出以下假设：

H3：风险感知负向影响使用态度。

技术接受 TAM 模型作为一个成熟的研究载体，被大量应用于针对消费者行为的研究中。感知有用性和感知易用性是 TAM 模型的重要组成部分。主观感知会影响消费者的行为选择，当消费者能够感知到使用某一系统能够实现目的、易于操作时，对于该系统的使用意愿将会提高。袁丹丹（2018）运用 TAM 模型最终验证了感知有用性对消费态度有正向影响。刘大为（2018）以特定年龄的青年群体为研究对象，对其使用移动设备支付使用意愿的影响因素展开研究，发现感知易用性对感知有用性有正向影响。感知风险可以通过感知有用性和感知易用性影响使用意愿。综上所述，从感知有用性和感知易用性对使用意愿的影响角度提出以下假设：

H4：感知有用性对感知风险和使用意愿具有中介作用。

H5：感知易用性对感知风险和使用意愿具有中介作用。

研究方法

本文的研究方法是基于问卷调查的定量研究，通过测量风险感知维度对消费者行为的影响来最终确定几个维度中影响共享经济下法律服务消费者最终产生购买行为的程度。

本文问卷的内容设计为两部分，第一部分是问卷填写者的基本情况，第二部分是针对感知风险、感知有用性、感知易用性等变量进行设计量表，题项通过李克特五级量表进行测定。

本研究的问卷收集工作从 2023 年 5 月 13 日持续到 2023 年 5 月 15 日。收集方法为通过问卷星平台对问卷进行发布，在使用过付费在线法律服务的用户群体内进行传播，进行线上收集。本文基于感知风险、感知有用性、感知易用性、使用意愿一共 28 个问题。

本研究共计回收问卷 230 份，排除不符合规范的无效问卷 19 份，最终进行数据分析的问卷一共 211 份。

研究结果

1.描 述性分析

表 1: 调查样本描述性统计分析

变量	选项	频率	百分比
性别	A 男	121	57.30%
	B 女	90	42.70%
教育背景	A 与法律专业有关	52	24.60%
	B 与法律专业无关	159	75.40%
职业	A 法律职业	23	10.90%
	B 不是法律职业	188	89.10%
文化程度	A 本科以下	60	28.40%
	B 本科	108	51.20%
	C 硕士	33	15.60%
	D 博士	10	4.70%

从数据表格可得，本题有效填写人次为211人，其中男性占比57.35%，女性占比42.65%。可以看出，男性参与本题的人数略多于女性，但两者的差距不是非常大。年龄方面，年龄在21岁-30岁的人占比最高，达到63.51%，其次是31岁-40岁的人，占比为18.96%。年龄在20岁及以下的人占比为6.64%，40岁以上的人占比均不足6%。填写该问卷的人以21岁至30岁的年轻人居多。学历方面，本科及以上学历的人数占比达到了71.56%，其中本科人数最多，占比为51.18%。而本科以下学历的人数占比为28.44%。此外，硕士和博士的人数分别为33人和10人，占比分别为15.64%和4.74%。受访者的学历普遍较高。专业背景方面，有24.64%的人的教育背景与法律专业有关，而75.36%的人的教育背景与法律专业无关。职业背景方面，有23人选择了“A 法律职业”，占比10.9%；有188人选择了“B 不是法律职业”，占比89.1%。参与调查的大多数人不从事法律职业。

2. 信度分析

表 2: 信度检验表

变量	Cronbach α 系数值	项数
支付风险	0.957	4
隐私风险	0.754	4
时间风险	0.963	2
感知易用性	0.945	5
感知有用性	0.981	4
使用意愿	0.969	3

本文各个变量 Cronbach α 值均大于 0.7，说明量表具有较好的一致性、稳定性、可靠性。

3. 效度分析

表 3: 效度检验表

KMO 取样适切性量数。		**0.964**
巴特利特球形度检验	近似卡方	7160.076
	自由度	231
	显著性	0

从上表可知，本文问卷各个问卷题项效度良好，数据真实且有效，各个题项与各个变量的相互关系符合研究要求，问卷收集和调查方面具有显著随机性。

4. 相关分析

表 4: 相关性分析表

		感知易用性	**感知有用性**	**使用意愿**	**感知风险**
感知易用性	皮尔逊相关性	1	.942**	.910**	-.832**
	Sig.（双尾）		0	0	0
	个案数	211	211	211	211
感知有用性	皮尔逊相关性	.942**	1	.932**	-.833**
	Sig.（双尾）	0		0	0
	个案数	211	211	211	211
使用意愿	皮尔逊相关性	.910**	.932**	1	-.829**
	Sig.（双尾）	0	0		0
	个案数	211	211	211	211
感知风险	皮尔逊相关性	-.832**	-.833**	-.829**	1
	Sig.（双尾）	0	0	0	
	个案数	211	211	211	211

** 在 0.01 级别（双尾），相关性显著。

相关分析结果如上表所示，可以看出感知风险、感知有用性、感知易用性、使用意愿三个变量在 99%的显著性水平上均存在显著的相关性。

感知风险和使用意愿之间的相关系数为-0.829，相关系数小于 0，为负相关关系。感知风险和感知易用性之间的相关系数为-0.823，相关系数小于 0，为负相关关系。感知风险和感知有用性之间的相关系数为-0.833，相关系数小于 0，为负相关关系。

5. 回归分析

表 5: 感知风险与感知有用性回归分析表

感知风险与感知有用性回归分析						
	非标准化系数		标准化系数	t	p	VIF
	B	标准误差	Beta			
常数	6.473	0.176	-	36.706	0.000**	-
感知风险	-1.093	0.050	-0.833	-21.774	0.000**	1.000
R^2	0.694					
调整 R^2	0.693					
F	F (1,209)=474.114,p=0.000					
D-W 值	1.799					
因变量：感知有用性						
* p<0.05 ** p<0.01						

从上表分析可知，感知风险的回归系数值为-1.093(t=-21.774，p=0.000<0.01)，意味着感知风险会对感知有用性产生显著的负向影响关系。总结分析可知：感知风险全部均会对感知有用性产生显著的负向影响关系。

表 6: 感知易用性与感知风险回归分析表

感知风险与感知易用性回归分析结果						
	非标准化系数		标准化系数	t	p	VIF
	B	标准误差	Beta			
常数	6.331	0.171	-	37.061	0.000**	-
感知风险	-1.053	0.049	-0.832	-21.653	0.000**	1.000
R^2	0.692					
调整 R^2	0.690					
F	F (1,209)=468.846,p=0.000					
D-W 值	1.793					
因变量：感知易用性						

从上表分析可知，感知风险的回归系数值为-1.053(t=-21.653，p=0.000<0.01)，意味着感知风险会对感知易用性产生显著的负向影响关系。总结分析可知：感知风险全部均会对感知易用性产生显著的负向影响关系。

表 7: 感知风险与使用意愿回归分析表

感知风险与使用意愿回归分析结果						
	非标准化系数		标准化系数	t	p	VIF
	B	标准误	Beta			
常数	6.445	0.180	-	35.716	0.000**	-
感知风险	-1.103	0.051	-0.829	-21.471	0.000**	1.000
R^2	0.688					
调整 R^2	0.687					
F	F (1,209)=461.013,p=0.000					
D-W 值	1.624					
因变量：使用意愿						

从上表分析可知，感知风险的回归系数值为-1.103(t=-21.471，p=0.000<0.01)，意味着感知风险会对使用意愿产生显著的负向影响关系。

6. 中介效应分析

本研究采用乘积系数法检验对感知易用性、感知有用性在感知风险和使用意愿之间是否存在中介作用进行检验。

表 8: 感知易用性中介效应检验表

感知易用性中介作用检验结果汇总										
项	c 总效应	a	b	a*b 中介效应值	a*b (Boot SE)	a*b (*z* 值)	a*b (*p* 值)	a*b (95% BootCI)	c' 直接效应	检验结论
感知风险=>感知易用性=>使用意愿	-1.103**	-1.053**	0.750**	-0.790	0.090	-8.795	0.000	-0.758 ~ -0.417	-0.313**	部分中介

依据中介作用分析的最终结果，感知易用性和对于变量感知风险和使用意愿之间具有部分中介效果。

表 9: 感知有用性中介效应检测表

感知有用性中介作用检验结果汇总										
项	c 总效应	a	b	a*b 中介效应值	a*b (Boot SE)	a*b (*z* 值)	a*b (*p* 值)	a*b (95% BootCI)	c' 直接效应	检验结论
感知风险=>感知有用性=>使用意愿	-1.103**	-1.093**	0.799**	-0.874	0.052	-16.727	0.000	-0.754 ~ -0.548	-0.229**	部分中介

依据中介作用分析的最终结果，感知有用性对于变量感知风险和使用意愿之间具有部分中介效果。

7. 检验结果

表 10: 假设验证汇总表

假设	验证
H1：风险感知负向影响感知有用性	成立
H2：风险感知负向影响感知易用性	成立
H3：风险感知负向影响使用态度	成立
H4：感知有用性对感知风险和使用意愿具有中介作用	成立
H5：感知易用性对感知风险和使用意愿具有中介作用	成立

通过数据分析可以最终得出结论，本文的假设成立情况如上表所示。感知风险对于感知有用性、感知易用性、使用意愿均具有明显的负向影响。感知风险程度越高，用户的的感知有用性、感知易用性、使用意愿随之降低。感知有用性和感知易用性在感知风险和使用意愿之间具有部分中介的作用

讨论

本文从消费者感知风险的维度中选取了支付风险、时间风险、隐私风险三个维度来进行测量，对感知有用性和感知易用性进行研究，验证本文的假设。经过分析可以得出，由支付风险、时间风险、隐私风险三个维度构成的感知风险对于消费者选择使用在线法律咨询服务具有显著的负相关性。

在互联网消费领域，由于服务提供者与消费者的接触点变少，信息传递更为局限，消费者对于使用的服务更容易快速感知到风险的存在。对于法律咨询服务领域，消费者选择在线咨询最大的要求就是在最短的时间内获取有效信息，时间风险在感知风险中尤其值得被重视。

总结与建议

总结

从最终数据分析可以得出结论，感知风险对于感知有用性、感知易用性、使用意愿均具有明显的负向影响。感知风险程度越高，用户的的感知有用性、感知易用性、使用意愿随之降低。感知有用性和感知易用性在感知风险和使用意愿之间具有部分中介的作用。

感知风险通过感知有用性和感知易用性影响用户的使用意愿，通过降低用户的主观感知风险可以提高用户对于付费在线法律服务系统的使用意愿。

建议

1. 把提升用户体验作为付费在线法律服务的优化方向

如今，消费者获取法律服务的途径已经越来越多，不同类型不同层级的法律服务机构可以在不同的阶段为用户提供法律服务。从产业链角度来看，诉讼前法律服务、诉讼中的法律服

务和诉讼后的法律服务是法律服务用户的主要关注类型。对于个人用户而言，法律服务这种专业服务并不是像购买工业产品一样容易得出自己的判断，只能在信息交换中不断认识。

在过去，在线法律咨询服务总是希望用一个平台一种交互模式去吸引各种不同类型的用户，这并不能很好的完成与公共法律服务之间的差异化竞争。在线法律服务的提供机构应该在坚持客观服务结果的同时持续优化用户在咨询过程中的主观体验，才能让付费用户更有获得感。

2. 注重与用户的感性沟通。如今，很大一部分的法律咨询服务都可以通过大数据检索来获取结果，不同服务平台之间的主要差异已经从客观结果的差异变成用户的感性感受的差异。TAM 模型从用户感知角度为在线法律服务提供了新的思路，用户的感性认知最终较大程度影响了对于服务结果的评价。传统的法律服务机构拥有较强的专业能力，却往往容易忽视用户的感性诉求。注重与用户的感性沟通，并且以此来优化整个服务流程，有助于引导用户选择合适的的服务类型。

3. 打造专家型业务的在线法律服务产品。专业服务中的客户服务可以被分为三种类型，专家服务、经验服务和程序服务（Maister, 2012）。不同层级的员工可以对应提供不同层级的服务，不同层级员工与业务类型的组合构成了专业服务机构的效益基础。在线法律服务的专家服务并不应该由专业知识的需求程度来进行简单划分，而是依据与用户的沟通交流互动程度来定义，最终能够提升用户的感知有用性和感知易用性。

4. 降低用户对于使用风险的感知。客户在接受在线法律服务时，一般需要将其个人信息和案件信息提供给法律服务平台（吴姗姗，2019）。感知风险程度与用户使用意愿呈现显著的负向关系，在线法律服务平台首先要最大程度降低用户的感知风险，才能建立用户对于服务系统的信任。作为专业服务平台，用户在进行在线法律咨询的时候提供的信息具有更高的隐私性，平台需要有明确的公告或是说明，强调用户的个人信息与数据仅会被用于和法律服务相关的使用。降低用户感知风险可以通过赋予用户选择权的方式，在法律服务精准程度和用户风险敏感程度间取得平衡。

参考文献

彭建军. (2022). *共享知识技能购买意愿的影响研究* [硕士学位], 江西师范大学.

李蕊. (2019). *共享经济环境下感知风险对消费者行为的影响研究* [硕士学位], 西安工程大学.

施颖. (2017). 消费者的网络消费行为特征与影响因素实证分析. *商业经济研究* (04), 43-45.

吴昕桐, 梅祖宜, 宋瑞玲, 张英豪, & 丘依雯.(2019).消费者风险感知与消费意愿的关系——基于风险态度的中介作用. *中国商论* (02), 92-95.

焦勇兵. (2007). 顾客使用网上银行的前置因素研究——基于科技接受模型的观点. *山西财经大学学报* (6),94-100.

袁丹丹. (2018). C2C 型分享经济背景下消费者购买意愿影响因素的实证研究——技术接受模型视角. *中国物价* (9),84-87.

刘大为, & 史苗 .(2018).基于 TAM 模型的移动支付采纳影响因素研究. *生产力研究* (10), 37-42.

Maister, D. H. (2012). *Managing the professional service firm.* Simon and Schuster.

吴姗姗. (2019). *人工智能趋势下的法律服务业变革* [硕士学位], 东南大学

荔枝运输中的规模效益研究——以赤岗山村为例
STUDY ON ECONOMIES OF SCALE IN LITCHI TRANSPORTATION—A CASE STUDY OF CHIGANG MOUNTAIN VILLAGE

王小凤 [1*], 阎洪 [2]
Xiaofeng Wang[1*] and Hong Yan[2]

[1,2] 泰国正大管理学院中国研究生院
[1,2]Chinese Graduate School, Panyapiwat Institute of Management, Thailand
[*]**Corresponding Author, E-mail:** 958052281@qq.com

摘要

中国农产品的生产具有区域化。区域化的农产品只有运往全国各地的消费者市场，才能避免滞销现象，从而带动经济的发展。农产品的运输过程中将会面临运输成本与时间如何协调，才能让效益最大化的问题。

本文选取广东省揭阳市普宁市赤岗镇赤岗山村荔枝长途运输作为研究对象，通过搜集目前中国农产品物流概况的相关理论，整合时间与成本两大影响因素的理论知识。运用实地采访方法，列举访问提纲，与赤岗山村果农进行实地访谈，了解掌握赤岗山村荔枝的运输现状。通过案例分析法与数量经济学方法进行剖析，得出赤岗山村荔枝农产品运输过程中所面临的问题。根据问题，综合考虑分析，从规模效益角度提出解决的途径。

赤岗山村荔枝的物流运输环节中，地方政府要发挥主导作用，集结荔枝散户，完善物流体系建设，通过集成营运模式，发展邻村知名特产，形成“荔枝+地方特产”的运输模式，形成大规模的物流运输，从而降低荔枝运输成本，缩短运输时间，提高运输效率，增加果农们的收入，带动乡村经济的发展。

关键词: 荔枝 运输 成本 规模效益

Abstract

The production of agricultural products in China is regionalized.Only by transporting regionalized agricultural products to consumer markets across the country can we avoid unsalable phenomena and drive economic development.During the transportation of agricultural products, we will face the problem of how to coordinate the transportation cost and time in order to maximize the benefits.

This paper selects the long-distance transportation of litchi in Chigangshan Village, Chigang Town, Puning City, Jieyang City, Guangdong Province as the research object, and integrates the theoretical knowledge of the two major influencing factors, namely time and cost, by collecting the relevant theories of the current agricultural product logistics situation in China. By using the method of field interview, the outline of the interview was listed, and the fruit farmers in Chigangshan Village were interviewed on the spot to understand the transportation status of litchi in Chigangshan Village. Through case analysis and quantitative economics analysis, the problems faced in the transportation of litchi agricultural products in Chigangshan Village were obtained. According to the problems, comprehensive consideration and analysis are made, and the solutions are put forward from the perspective of scale benefits.

In the logistics and transportation of litchi in Chigangshan Village, local governments should play a leading role, gather retail litchi investors, improve the construction of logistics system, develop well-known specialties in neighboring villages through integrated operation mode, and form a transportation mode of "litchi+local specialties" to form a large-scale logistics and transportation, thus reducing the transportation cost of litchi, shortening the transportation time, improving the transportation efficiency, increasing the income of fruit farmers and promoting the development of rural economy.

Keywords: Litchi, Transportation, Cost, Scale Merit

引言

中国经济不断迅猛发展，农业有了质的飞跃，逐步加快了现代化的步伐，但也呈现出较多问题。中国农业遇到的问题主要体现在农业发展现状是以农民为主，每个地区都能盛产各自的特色产品，各具特色的农产品急需运往中国各地的市场，但是目前各地区的农业基本上都是农民自主种植销售，抑或是小村运作模式的小规模经济，缺乏大规模，完整运输链的农产品生产销售体系。这些产业产量大，供给大于需求，已经不只是满足当地的需求，大量过剩产品只有运往中国各地的消费者市场，才能解决产量增多，从而提高农民收入的问题。农产品如何运输，才能快速到达市场，这成为农业发展面临的危机。这一危机的化解需要采取系统的、综合的措施予以有力的调节和支持。

岭南六月，蝉鸣荔熟，满山遍野里的那一抹红，便又是到了荔枝丰收的季节。"世界荔枝看中国，中国荔枝看广东"。广东荔枝闻名中国，是中国最重要的荔枝产区之一，种植面积、产量均在中国各省区排名第一。

坐落在广东省揭阳市普宁市赤岗镇的赤岗山村，素有 "荔枝之乡" 之称。赤岗山村，地理坐标为东经 116°10' 33'',北纬 23°26' 26'',因村左侧有呈赤色而光秃的山岗，故名为 "赤岗山"。村民以农业为主。赤岗山村所处地形为半丘陵地，植被露盖率高，林茂草盛，山清水秀。全村共有耕地一千八百余亩，山地一千九百余亩，农业以种植荔枝为主。村民们基本上各家各户都种植荔枝，由 2019 年的 1600 多亩种植面积到 2022 年种植面积大约有 2100 亩，一共增加了接近 500 亩的面积。主要品种有玲珑（亦名 "龙鳞" "鳞珑"）、"凤花"、金钟 "风吹寮" 等。赤岗山村荔枝的种植历史长达一百多年，是远近闻名的 "岭南荔枝之乡"。

2022 年赤岗山村荔枝的产量达到一个空前的高度，年产量大约有 800 吨以上。通过对果农的了解，赤岗山村大约 80%的荔枝产量销往广东省内地区，仅有 20%的荔枝产量销往省外。但这 20%的销量分布在全国各地，分布区域广泛。以赤岗山村为坐标，半径距离最远可达新疆维吾尔自治区首府乌鲁木齐，但因距离较远，荔枝的运输要求高。荔枝到达乌鲁齐时，出现的损果较多。

每年荔枝成熟季节期间，荔枝的销售还是靠以往传统的销售模式。自己到果采摘之后，到路边或者水果市场进行贩卖。赤岗山村种植荔枝的村民占一半以上，都是荔枝散户，每年往外运输的荔枝都是靠亲朋好友互相介绍与推荐，达成的交易。总体而言，赤岗山村的荔枝产量大，销售模式单一，都有要销往外地的强烈需求。

但是荔枝运输过程中，昂贵的物流成本必然会提高了荔枝的成本。在这个规模效益的社会时代里，提高物流的规模效益，降低荔枝的物流单位成本，成为赤岗山村果农们迫切需要解决的问题。只有解决物流运输成本高的问题，才能让赤岗山村的荔枝销往外地。

研究目的

2020 年底广东省农业农村厅印发了《广东荔枝农业高质量发展三年行动计划（2021 至 2023 年）》，极力鼓励和支持村民对荔枝高接换种进行扩种，旨在推进荔枝产业高质量发展。赤岗山村村民响应号召，扩大荔枝种植面积，其产量逐年增加。荔枝产量的增加，销售途径以及销售效率将会成为赤岗山村目前急需解决的重要问题。荔枝往外销售，拓宽消费市场，才能让大量的荔枝出售，才可以避免滞销的现象。在运输过程中荔枝不易储藏、易腐烂、易变质、保质期短的特性，运输成本与时间成为了制约着荔枝运输的因素。对于荔枝运输面临的问题，提出了规模效益分析的策略。

文献综述

中国现代农业农产品相关研究

中国自从改革开放以来，经济整体上都保持了高速的增长状态。但是，近年来出现了许多阻碍中国经济增长潜力的问题，而农业问题是这些问题的突出表现。

现阶段中国农业生产属于农村土地家庭承包制下的小规模运作，这种分户经营模式，具有地区分化兼有地区特色集中化的特点。农产品区域集中化，普遍存在原产地产量过剩，产品滞销的现状，从而导致价格低，农产品很难在当地售卖出去，整个农产品都不同程度地出现了行业增量不增益，农民增产不增收的现象。农产品集中化生产过程中出现供大于求的局面，只有尽快出清过剩的产品，处理多产那一部分，推进各地区农产品走向全国市场。农产品流通起来，是增强农业持续健康发展的必要内生动力，才能带动经济的快速发展。

目前世界上对于农产品流通效率这一板块的研究取得了一定的成效，其中包括定义研究、评估与评价体系的制定，以及策略优化等方面（许翔宇, 2018）。有一些学者认为农产品流通关乎国民经济和人民生活的大事，通过对比现代农产品现有的流通模式的优缺点，提出了农产品高效流通的对策。就中国现阶段农产品现状而言，可从政府干预、企业合作、信息技术、供应链等多个维度着手，从而优化中国农产品的布局，有效解决农产品供需不匀称的困境（Liu, 2016）。有的学者提出以提升农产品的附加价值为途径，减少流通过程中的损失，节省成本，从而提高农产品的流通效率，让农民增加收入（Wu，2017）。也有学者对农产品流通过程中所涉及到的环节提出优化的思维，比如：信息流、金融服务等方面（Li, 2017）。针对农产品的生产供应链、物流节点、信息化水平、突发现状应急能力等方面存在的问题，从供应链集成的角度，提出了农业生产规模化、培养领头企业、信息无缝对接、重视农产品物流的互相依存的战略建议，来提高农产品的贸易效率（Qi, 2016）。农产品的生产极具集中化现象，出现了地区供需不平衡，其矛盾的主要方是在供给侧，主要表现为过剩农产品处置问题。针对现阶段农产品出现的这种难题，学者们从物流角度提出改善其流通率的策略，有助于提高农产品物流的流通效率，但是不同生产地还是要结合策略根据本区域的优劣势进行整合与规划，制定适合本区域农产品的流通方式。

中国农产品物流概况相关研究

当前中国农产品物流的运输效率较低，物流资源未能形成系统化的有效组合，仍然呈碎片化现象。农产品物流存在这种现象，是由于无法对这些农产品集中起来，再加上缺乏对承运商的资源合理整合以及物流服务未能形成高效的组织与管理。

查找相关资料，具体分析了中国农产品物流行业的发展困境，大致罗列为：农产品物流资源碎片化，物流运输效率低下；农产品物流运输环节中损耗率较高；农产品物流运输管理

处于粗放化阶段，专业化水平不高等多个方面的现状。目前农产品物流的组织管理模式已经无法有效解决农产品物流市场的困境，这些都对于农产品该如何从生产集中地运往全国市场，提出了新的物流要素的要求（李爽, 2020）。龚树生和梁怀兰（2006）在研究中指出，当前的农产品冷链物流网络主要是属于单个经济体的冷链物流网络。这类冷链物流网络，以具备一定规模的大连锁超市或者颇具规模的大型冷藏食品生产企业共同合作的形式存在，形成产、供、销一体化的物流网络模式；由于区域内配送中心的建设并不到位，区域内冷链物流网络的建设并未在全国范围内形成普及；跨区域的冷链物流网络则是由区域内的冷链物流网络相互联结、相互合作形成的。这一研究的提出为农产品跨区域的运输指明了方向，可以通过加强联系，构筑物流体系。

王新娥和王学剑（2014）提出新的思路，第三方农产品冷链物流企业或联盟以委托代理形式提供专业化的冷链物流服务，能提高冷链物流速度，降低冷链物流成本。同时，樊洪远（2014）将 B2C 电子商务与农产品冷链物流相结合，认为 B2C 电子商务企业必须与供应链上下游各主体形成合作，建立“农民＋农村合作社＋B2C 电子商务＋第三方物流”的合作模式。

近些年，随着信息技术的快速发展，电子商务的农产品物流的优化创新在电商迅速发展的背景之下，农产品供应链各环节的功能发生了变化，客户订购农产品更加方便，农产品物流体系的发展也随之发生了一定的变化。结合电子商务发展的新的特点，构建高效益、低成本的农产品物流发展模式，与第三方物流联结起来，共同寻找农产品物流体系创新的突破口，成为了当前农产品物流理论研究的聚焦点。但是这一措施的实行还需要农产品产出地当地政府提供强有力的支持，出台力度大的支持政策，才能把农产品的物流体系做大做强起来。

影响物流运输的两大要素——时间与成本

物流是物质的实体流动，由物质（Material)、流动（Flow)、主体（Party)、地域（Region)、时间（Time)、信息（Information)六要素组成。其中时间要素对于物流而言是一个隐性要素，看不见摸不着，但却能够被人们所感知，它与物流的质量、物流的效率密切相关。

美国经济学家克拉克 Clark（1923）提出的“不同目的，不同成本”思想，奠定了多维成本概念的理论基础。美国物流协会（American LogisticsCouncil, ALC) 定义物流成本（logisticscost)是以货币形式直接反映在各项物流活动中劳动消耗、劳动时间占用和成果之间对比关系的一系列综合性经济指标。

彭志忠（2002）在《现代物流与供应链管理》一书中指出“加快物流速度，缩短物流时间是物流必须遵循的一条经济规律”，物流时间的缩短能减少损失、减低能耗、节约资金。中国教育部全国高校物流类教学指导委员会（2007）设计思路中提出向时间要价值，物流的价值主要是时间价值。通过运输与储存系统优化，提升物流服务过程中的信息化程度，来达到物流时间价值最大化。秦四平和刘子玲（2014）在物流价值理论研究中提到物流时间价值的把握与经济效益是紧密相连的。这一研究的提出说明了时间要素在物流运输过程中起到非常关键的因素之一，只有妥善处理物流运输环节的时间要素，才能提升农产品的流通效率。在生鲜农产品物流中，时间要素表现得更为重要，比如：在物流运输过程中，生鲜农产品滞留的时间跨度越长，产品品质下降得越快，就算有冷藏设施，其新鲜度也可能难以保证，一旦产品质量的下降必然会影响其价值，会使价值遭到损失，进而收入也会随着降低。这种时间要素更体现在各种物流资源的投入与管理中，与物流运输过程中物流运作的及时性、稳定性要求更是关联密切。

黄福员和聂瑞华（2003）研究中针对物流链成本进行综合分析，建立一个物流系统的成本模型，结合效益与成本、服务质量均衡等要素对其成本进行整体优化，分析了运输距离、订货比例与总成本的关系。有学者还提出了一个在 VMI 系统下整合库存和运输决策的物流成

本代化分析模型。后来，深入研究了 VMI 模型，建立了基于时间发货策略的库存成本控制与物料配送模型，通过优化方法对模型进行求解得到了最优化发货周期、补货数量与最小库存成本。李贵春（2016）指出中国物流运输高成本存在 4 个方面的问题：第一，物流运输缺乏科学的规划和设计，存在小批量运输等问题；第二，核算成本不清晰，导致物流成本被低估；第三，物流基础设施未得到改善，无法满足物流增长的需求；第四，物流信息体系落后，信息更新速度慢。目前，中国农产品的物流运输出现了效益与成本的尖锐问题。农产品的运输过程中也缺乏科学的规划与设计，还停留在小批量的运输层面，对于中国各地消费者市场农产品的需求把握不准确，没有形成统一的信息流。姜波（2021）研究中提出在规定的服务水平条件下，改进服务效率，实现物流合理化的五大途径：第一，物流途径简短化；第二，运输共同化，扩大运输量；第三，设定合理库存量；第四，适宜的包装和科学的装卸；第五，科学的维护保养措施。这研究的提出为农产品的物流成本管理提出了合理的新策略。

综上所述，研究界的众多学者们，为农产品的物流运输提出宝贵的新思路与新策略，为笔者研究农产品荔枝的物流运输指明了方向，比如：控制运输成本与时间，物流基础设施的加强优化物流管理策略，大批量运输等等。

研究方法

案例分析法

本文研究的问题可以归纳为“广东省揭阳市普宁市赤岗山村果农们生产的生鲜类产品——荔枝，在物流长距离运输上面临的难题”，需要通过收集赤岗山村果农们荔枝长距离运输中的多个案例，经过收集到的不同数据进行简单的比对，从而归纳总结出赤岗山村果农们在荔枝的长距离运输上所面临的问题以及影响运输的各种因素。

本次实地调查将会选择赤岗山村极具有代表性的果农作为受访者，对受访者的初步筛选条件设定为长期从事荔枝种植，有着丰富的荔枝种植经验，且种植面积较多，荔枝生产量较大的荔枝种植户。而访问地点则选择在赤岗山村荔枝种植户家中，便于在真实环境中了解果农们的生活。最终笔者选定了五名荔枝种植户进行面对面的访谈。

实地采访方法

本文使用实地采访方法，通过访谈，获取赤岗山村荔枝长距离运输中出现的问题的相关信息，有利于更好地剖析问题。通过到荔枝原产地赤岗山村实地采访种植荔枝的散户，列举访问提纲，真实记录果农们在长距离运输荔枝过程中所遇到的问题，然后再进行整合归纳，有助于找出影响荔枝长距离运输中的各种因素。

通过赤岗山村果农们提供的数据以及相关网站数据的收集，整理出 2020 年至 2022 年，近三年的荔枝产量以及荔枝销售的区域、数量以及运输的方式。在与果农们的访谈中得出，2020 年荔枝运送到省外地区的数量是极其少的，原因在于快递公司认为荔枝不易存放，容易出现损果，会增大运输的难度。2021 年的快递运输数量逐步增多，到了 2022 年基本上就实现了全国各地荔枝的快递运输。

表1: 赤岗山村荔枝产量及其运输数量、方式

时间	产量（公斤）	广东省内地区的荔枝销售数量（公斤）	运输到省外的荔枝数量（公斤）	运输方式
2020 年	428000	406600	21400	少量快递运输
2021 年	612000	520200	91800	主要快递运输
2022 年	800000	640000	160000	基本上快递运输

通过整合访谈内容，归纳发现：赤岗山村荔枝的产量逐年增加，荔枝往外运输的数量也逐年增多，但是运输的方式还是比较的单一，因此，荔枝的物流运输面临着极大的挑战。

数量经济学方法

本文整理赤岗山村荔枝种植户的受访结果中关于荔枝长距离运输中数量以及所需费用的类别；把收集到的数据（荔枝长距离运输过程中的数量、运输距离）和物流运输的包装费用、物流基础费用、物流增值费用进行计算，得出下面的表 2。

表2: 多重案例分析

序号	顾客目的地	两地距离（公里）	购买荔枝数量（公斤）	第三方物流费用（元）	包装费（元）	全部物流成本费用（元）
1	广东省广州市天河区	294.2	1.5	17	7	24
2	江苏省南京市江宁区	1261	5	80	16	96
3	北京市东城区长安街	2111	10	160	22	182
4	新疆维吾尔自治区乌鲁木齐市天山区	4620	5	136	16	152

从上述表格中不难发现生鲜类产品荔枝物流中间一个尤为重要的问题：物流中间的高成本。基于多重案例计算出来的数据，对荔枝长距离物流运输过程中提出的规模效益的假设进行了检验。

假定荔枝运输的区域为广东省以外地区，通过计算出不同荔枝数量的不同运费，再平均分摊到 1 公斤荔枝的费用，得出下面的表格 3 荔枝长距离运输费用模拟计算。、

表3: 荔枝长距离运输费用模拟计算

序号	运输荔枝数量（公斤）	运输费用（元）	平均 1 公斤运输费用
1	1	38	38
2	5	96	19.2
3	10	182	18.2
4	15	240	16
5	25	355	14.2
6	500	4806.5	9.613

从表格 3 中可以得出：荔枝长距离的运输随着数量的增加，每 1 公斤的荔枝运费也会降低。当运输的数量越大时，荔枝的运输成本就会下降。

研究结果

通过实地访谈研究得出，自 2019 年赤岗山村实施荔枝新品种“玲珑”的高接换种，荔枝的产量也逐年大幅度的增加。2020 年赤岗山村的荔枝总量是 428000 公斤，到了 2022 年荔枝产量达到了 800000 公斤，荔枝产量的急剧骤增让当地荔枝市场出现了供大于求的现状，赤岗山村荔枝亟需向外销售，才有可能避免出现滞销的现象。荔枝本身不易储藏的特点，造成了物流的运输费用增高。从赤岗山村果农访谈中得知，目前荔枝长途运输的数量较少，大概都是集中在 5 公斤左右，一般情况下不超过 10 公斤，极少会出现 15 公斤。一方面是由于缺乏获取消费者市场需求的相关信息，长距离荔枝的售卖都是依赖周边亲戚朋友介绍的；另一方面在于运输方式上，因为荔枝的快递费用很高，一次运输的费用就相当于购买好几斤荔枝的价钱了。荔枝在生活中对于消费者而言也并非是必需品，所以弹性需求不大。

多种因素的叠加，必然增加了荔枝往外销售的阻力。阻力一旦不能得到妥善解决，必将会导致荔枝滞销，从而出现大量的损果，严重地影响了果农们的收入。本研究提出物流规模效益，来解决赤岗山村荔枝长距离运输面临的问题。针对赤岗山村荔枝运输出现的难题，整合出农产品物流规模效益对策及其实施途径：

规模效益降低运输成本

根据表 3 模拟计算表可以得出:1 公斤荔枝的运输费用为 38 元；5 公斤荔枝的运输费用为 96 元，平均到 1 公斤荔枝的运输费用为 19.2 元，5 公斤荔枝的运输费用比 1 公斤荔枝的运输费用下降接近一半；10 公斤荔枝的运输费用为 182 元，平均到 1 公斤荔枝的运输费用为 18.2 元；15 公斤荔枝的运输费用为 240 元，平均到 1 公斤荔枝的运输费用为 16 元；25 公斤荔枝的运输费用为 355 元，平均到 1 公斤荔枝的运输费用是 14.2 元；500 公斤荔枝的运输费用为 4806.5 元，平均到 1 公斤荔枝的运输费用是 9.613 元。由此可见荔枝在长距离运输过程中：运输的数量越大，平均 1 公斤的运输费用就会下降。1 公斤的荔枝运输费用为 38 元，如果增加运输荔枝的数量，从 1 公斤到 500 公斤，1 公斤荔枝的运输费用将会从 38 元下降到 9.613 元，运输的成本将会下降很多。因此荔枝的运输只有达到一定的数量，才能解决运输费用昂贵的问题。本研究提出的规模效益，有利于降低荔枝物流运输过程中高运费的难题，真正能解决赤岗山村果农们的痛点，为果农们增加收入。

地方政府要承接原产地与消费者市场之间的中间环节。

地方政府，特别是荔枝原产地赤岗山村“两委”班子要大力改善农产品物流现状，为荔枝的运输创造有利的社会环境。在促进荔枝农产品流通过程，赤岗山村“两委”班子应发挥积极作用，要组织带领果农们把当季的新鲜荔枝迅速运往全国各地的消费者市场。

帮助引导果农们组建多种形式的实体物流组织。

尽快发展一批农产品物流组织，有利于打破局限的运输方式、改变原有传统的售卖形式。着眼于赤岗山村果农们的长远发展，荔枝的物流运输应该要采取多形式、多渠道、多元化的措施，挖掘物流企业和组织在农产品物流运输的关键作用。要积极发挥赤岗山村“两委”班子领头羊的作用，对赤岗山村各散户召集起来，进行荔枝从采摘到消费者手中各环节的整合优化，积极引进和借鉴生鲜类农产品长距离运输过程中成功的管理案例、先进的技术和丰富的经验，结合赤岗山村现有的运输基础设施，赤岗山村“两委”班子要发挥核心力量，支持、鼓励果农们开展农产品销售服务和自办购销途径，协同组织各个果农之间的合作，调动大家团结合作的积极性，再运用管理手段和信息技术将它们连接在一起，从而开办第三方物流，使其更加

有效的远销味美新鲜大众的荔枝，让荔枝走出赤岗山村，走出潮汕地区，送往全国各地的消费者市场，从而达到共赢的效果。

提升赤岗山村“名”荔枝的影响力。

实施“名牌战略”，提高荔枝的知名度和消费者的认知度。赤岗山村要大力发展名、优、新、特、稀荔枝产品，需要加强荔枝特色品牌的推广和扩展，树立荔枝品牌形象，形成一批农产品的品牌效应，提高荔枝的市场占有率，实现荔枝物流运输的畅通，增进果农们的经济效益。荔枝一离枝就容易变质的特点，意味着物流运输难度大，其解决的途径可以提高荔枝的包装技术。包装对荔枝不只是保护和促销的功能，更重要的是根据荔枝极易变质的特性，包装做得好在一定程度上可以控制损果率，提高利润，这其中起到联结市场利润与物流成本的节点的功能。

组合农产品增加物流运输的规模。

注重农产品运输的多样化，除了运输荔枝外，多发展“名特稀”产品，可以结合赤岗山村周边其他村落的特产进行整合。赤岗山村位于赤岗镇的镇中心位置，与之相邻的村落都有其地方特产，比如：邻村农业基础有着得天独厚的资源优势，双枝山“红脚芥蓝”、上洞韭菜花、赤过鸟奶牛制品等特色产业，都有与荔枝盛产的季节相吻合，可以与荔枝一同运往消费者市场，扩大物流运输规模。

通过规模效益，整合赤岗山村荔枝的物流运输，形成一定的物流体系，降低运输成本，提高荔枝的流通效率，快速反应消费者市场，从而让荔枝行业增收，果农增益。

讨论

通过与赤岗山村果农们实地访谈，在记录过程中不难发现生鲜类产品荔枝物流中间一个十分尖锐的问题：物流中间的高成本。

物流中间的高成本主要体现在：第一，“水果之王”荔枝属于生鲜类产品，它的保鲜难度特别大。一方面原因是荔枝果皮上的壳不仅仅很薄，而且上面长得突起裂片造成内部组织之间存有空隙。当采摘后果实中的水分就会借着这些空隙散发出去，很难保鲜；荔枝果皮之下的果肉属于假种皮的种子附属物，本身就存有组织代谢快的问题，让其很短时间内就会与皮分离自己缩成一团；另一方面原因是“水果之王”荔枝果皮内部含有多酚氧化酶和过氧化物酶，一天下来就能自动将果实变为褐黑色。荔枝果实外的“铠甲”不但外壳非常薄，而且内部组织之间存有多的空隙，直接导致内部宝贵的水分都会借着空隙散发出去，留下了干巴巴的荔枝果实，让其保鲜变得非常难。第二，荔枝保鲜难度大，会增加保鲜服务费以及赤岗山散户们包装荔枝的难度，包装难度的增加直接增多打包荔枝的费用。以普宁市赤岗镇赤岗山村为坐标，向外运输荔枝，根据距离的远近不同，其第三方物流的费用也会随着增加。多种因素加起来导致了生鲜类荔枝物流运输过程中间的高成本问题。

物流集成中间的营运问题

走访赤岗山村果农们，通过与其交谈中发现了一个现象，也是果农们面临的一个急需待解决的难题。随着“玲珑”荔枝品种的推广，荔枝产量大幅度增加。原本是好的趋势，但是一想到往后的销售问题就不大乐观。原来近些年来，果农们销售荔枝的途径比较的传统单一，而且销售的数量不大，还是没能达到一定大规模的数量。一般除了在附近的水果市场、赤岗山村的公路边销售荔枝，其他的都是通过朋友或者亲戚的介绍，少量寄往外地或者周边的城市。由于荔枝是生鲜类产品，保鲜难度大，不易储存，这对于物流提出了更高的要求。物流要有及时性、时效性，物流成本肯定会随着增加。

据果农们介绍，生产的农产品基本上都是通过自己寻找物流途径运输农产品。运输的目的地分散，遍布全国各地，相当不集中。每次运输的荔枝数量都是几斤、十斤乃至二十斤以内，极少会超过二十斤。因此，物流运输的数量无法达到一定的规模，从而导致物流的成本昂贵。物流成本高了，消费者购买产品的费用也会随着增高。

目前，赤岗山村基本上家家户户都在种植荔枝，以散户的形式从事荔枝的售卖。各散户所采用的荔枝物流运输模式不利于荔枝流通，而荔枝物流运输存在的关键性问题要得以解决，那政府及第三方物流应该要做出多方面的尝试来帮助果农们更好的解决农产品外销所面临的物流难题。

总结及建议

本文通过与赤岗山村果农们的交流与访谈中，整合了荔枝在长途运输中出现的问题。对问题追根溯源，得出了以下的结论和建议：第一，物流业是一个高度分散、零散与随机的行业，但是物流的本质就是规模效益的体现，物流业的效益离不开规模化。一旦物流具有一定的规模化，其运输的数量将会增多，单位成本必将会大大的减低。农产品运输在实现大规模物流时，是通过低成本高效率让规模效益得以实现的。荔枝在运输过程中，可以通过提高农产品或者相关联的地方特产加以搭配运送，增加运输数量，扩大运输规模，增加效益来降低农产品提供物流服务的单位成本。

第二，赤岗山村人口众多，种植荔枝的规模宏大，但各种植户生产规模小且分散。赤岗山村的“两委”班子可以把分散的荔枝种植户和颇具小规模化生产的果农协同起来，起到纽带的作用，成为了促进赤岗山村农业发展、提高农村经济实力的重要载体，同时为农产品流通，提供流通服务筑造平台。赤岗山村的“两委”班子其根本性的作用是解决了“供给侧”和“需求侧”两者之间的矛盾，把生产地与消费者市场连接起来，使农产品流通所产生的成本得到了大幅度降低。流通效率的提升，流通渠道变得畅通，有助于赤岗山村荔枝散户定解决痛点，提高农民收入，帮助荔枝种植户解决物流运输存在的问题。

第三，赤岗山村荔枝种植户遇到的难题，目前在现有的研究文献方面尚未找到切实可行且全面的相关理论。本研究从规模效益角度提出解决问题的途径，赤岗山村荔枝只有大量的快速地销往中国各地区消费者市场，才能解决荔枝滞销的问题，从而增加果农的收益。荔枝物流运输策略的提出，不仅仅助力于当地荔枝产业快速发展，而且推动了乡村经济振兴。同时，这也填补了农产品区域化物流运输从规模效益分析角度研究上的空白。

第四，由于笔者在农产品物流运输这一方面认知的深度和广度还不够，对于现有先进的物流体系知识的掌握也不全面，导致在本研究中未能进一步的提出更具有创造性价值的策略。接下来，将以本研究为切入点和契机，继续学习物流运输体系的相关知识，用理论支撑实践，用知识化解难题，在实践中不断地累积经验，不断摸索，努力创造具有创新性思维的理论。

参考文献

王新娥，王学剑. (2014). 基于TPL的新疆农产品冷链物流体系构建研究. *湖北农业科学*, (5), 1214-1218.

许翔宇. (2018). *精准扶贫背景下农产品种植与流通公共服务的 DEA 绩效评价* [硕士论文]. 华南农业大学.

李贵春编. (2016). *物流管理学*.中国财富出版社.

李爽. (2020). *农产品共享物流平台的价值创造机理研究* [博士论文]. 北京交通大学.

姜波. (2021). *现代物流管理*.北京理工大学出版社.

秦四平，刘子玲主编. (2014). *物流经济学*.北京交通大学出版社.

黄福员, & 聂瑞华. (2003). 非线性规划多目标优化物流成本随机模型的研究. *华南师范大学学报：自然科学版*(3), 54-59+157.

龚树生, & 梁怀兰. (2006). 生鲜食品的冷链物流网络研究. *中国流通经济，20*(2), 7-9.

彭志忠著. (2002). *现代物流与供应链管理*.山东大学出版社.

樊洪远. (2014). 我国B2C 电子商务生鲜农产品冷链物流研究. *安徽农业科学*, (22), 7653-7655.

Clark, John Maurice. (1923). *Studies in the economics of overhead costs*. University of Chicago Press.

Li, P. (2017). Discussion on the Organization of Commodity Circulation Channels based on the Internet Economy. *Agro Food Industry Hi-Tech*, *28*(3), 1709-1714.

Liu, J. J. (2016). *Research on Agricultural Products Circulation Model and Countermeasures under the Background of Electronic Commerce* //Yingying S, Guiran C, Zhen L. ACSR Advances in Computer Science Research. PARIS: ATLANTIS PRESS.

Qi, X. (2016). *Research on the China's Rural Network Marketing of the Agricultural Products*.//LANCASTER:DESTECH PUBLICATIONS.

Wu, A. D. (2017). *Study on the Development of Green Logistics of Agricultural Products under the New Economic Status* //Xia Q, Zhou H. Advances in Social Science Education and Humanities Research. PARIS:ATLANTIS PRESS.

民宿品牌感知对游客行为意向的影响研究

THE RELATIONSHIP BETWEEN HOST-GUEST INTERACTION, BRAND PERCEPTION AND TOURISTS' BEHAVIORAL INTENTION OF HOMESTAY

符帅 [1*], 吕备 [2]

Shuai Fu[1*] and Bei Lyu[2]

[1,2] 泰国正大管理学院中国研究生院

[1,2]Chinese Graduate School, Panyapiwat Institute of Management, Thailand

[*]**Corresponding Author, E-mail:** 173105856@qq.com

摘要

在中国民宿行业的发展刚刚起步中，面对激烈的市场竞争，以及疫情这种无法抗力事件，关于民宿的经营与发展存在许多挑战。本研究以品牌关系理论为基础，通过对民宿品牌感知与游客行为意向的相关研究进行文献分析，构建"感知—行为"的理论模型并提出研究假设。然后，通过问卷调研和实证分析，得到以下研究结论：第一，民宿品牌感知对游客行为意向存在正向影响。第二，品牌感知对游客忠诚度与推荐度存在正向影响。第三，民宿品牌感知对游客忠诚度的影响比对推荐度的影响更加显著。

关键字: 民宿 品牌感知 游客行为意向

Abstract

In the fledgling development of the Bed and Breakfast industry in China, there are many challenges regarding the operation and development of Bed and Breakfast's in the face of fierce market competition and force majeure events such as epidemics. Based on brand relationship theory, this study analyzes the literature on Bed and Breakfast brand perception and tourists' behavioral intention, constructs a theoretical model of "perception-behavior" and proposes a research hypothesis. Then, through questionnaire research and empirical analysis, the following findings were obtained: First, there is a positive influence of Bed and Breakfast brand perception on tourists' behavioral intentions. Secondly, brand perception has a positive influence on tourists' loyalty and recommendation. Third, the effect of Bed and Breakfast brand perception on tourists' loyalty is more significant than the effect on recommendation.

Keywords: Bed and Breakfast, Brand Perception, Tourists' Behavioral Intention

引言

民宿是民宿主利用自有闲置住宅资源，向游客提供休闲娱乐以及富有当地文化特色的住宿设施 (Knight & Schmidt, 2002；Jamal et al., 2011)。随着互联网的迅速发展，途天下、小猪、游天下等提供短租、日租的在线平台出现，解决了供求与需求匹配问题，同时图片、短视频、VR 等多元化的房屋介绍形式，极大地提高了用户的预定体验，进一步推动了民宿的快速发展。

中国民宿行业从 2016 年至 2019 年取得的高速增长，在民宿房源不断上升的同时，民宿的线上交易额呈直线上升趋势。2016 年民宿线上交易额为 43.2 亿元，2017 年为 78.1 亿元，2018 年为 127.9 亿元，2019 年为 209.4 亿元。当民宿行业拥有如此大的发展空间，越来越多的资本开始涌入民宿行业，64% 的民宿主仍为个人/家庭经营，18% 的民宿有小型团队管理经营，另外 18% 的民宿是又第三方委托或专业公司经验，专业团队的进入使得民宿行业的竞争越来越激烈。因此，在中国民宿行业的发展刚刚起步中，面对激烈的市场竞争，以及 2020 年疫情这种无法抗力事件，中国民宿行业如何寻找自身定位与发展方向是一个急需考虑的问题。

研究目的

关于民宿的经营与发展存在许多挑战，在酒店、宾馆以及众多同行的竞争下，如何为自身寻找差异化以吸引更多的游客，同时如何提升游客满意度，从而增加民宿口碑与复购成为民宿行业最大的难题。本研究以民宿品牌形象为切入点，提出以下对以下问题的思考：民宿品牌建设能够让自己在众多同行中脱颖而出，吸引更多的游客？游客对民宿的品牌感知对游客行为意向存在什么样的影响？基于对以上问题的思考，本研究探讨民宿品牌感知与顾客行为意向之间的影响机理，目前关于民宿品牌的研究非常少，本研究从中国民宿品牌感知为出发点，从游客对民宿品牌认知和品牌体验两个角度对中国民宿在发展中的品牌建设情况进行剖析，从而丰富民宿品牌感知方面的研究。

研究综述

通过对相关文献梳理，发现在民宿发展中关于游客行为意向的研究非常重要，同时本研究发现目前极少有学者关注民宿的品牌建设与品牌形象感知与游客行为意向的相关性，而本研究认为在民宿行业竞争如此激烈的行业现状下，民宿必须有自己特色的品牌形象，才能通过差异化获得更多的客源。

民宿品牌感知的相关研究

民宿（Bed and Breakfast）最初是农民将将闲置的房屋经过改造和布置，提供给一些贵族游客，让他们休闲度假，并感受当地生活。在酒店行业迅速扩张的当下，民宿的发展面临着巨大的挑战，Nuntsu et al.（2004）对 36 家民宿进行调研，发现这些民宿在经营中普遍面临着行业同质性严重、缺乏创业家的创造力、地方政府支持有限和缺乏融资渠道等问题。同时，Kuo et al.（2018）认为民宿的同质化也是民宿发展越来越困难的原因，因此他们通过与 30 位民宿主进行交流访谈，提出民宿发展的几个重要因素如个人价值、幸福感、对社区的贡献、家

庭认同、主题民宿经营、生态旅游等是民宿寻求差异化竞争的方向。而民宿的品牌感知将为民宿提供差异化，即游客通过与不同性格特点的民宿主交流沟通，产生不同的认知感知与情感感知，从而对民宿品牌产生不同的评价。

品牌感知（Brand Perception）是消费者对每一个品牌的综合评价，当顾客对品牌感到满意，会激发他们购买该品牌的行为，因此许多学者认为如果一个消费者对某一个品牌的感知程度越强烈，就越有可能做出购买行为，即品牌感知能大大提升消费者的忠诚度（Yun et al., 2019；Hwang et al., 2019）。Kervyn et al. (2012) 认为消费者感知品牌的方式与感知人的方式是相同的，提出了品牌意图能动框架---消费者评估品牌的感知和能力会产生不同的情绪，从而产生不同的品牌行为。品牌感知的相关研究为民宿品牌感知的研究提供了新的方向，游客需要对民宿品牌认同感，从而选择入住该民宿，进而对民宿品牌产生更深的了解，在这种品牌关系的交互中，影响游客的行为。

游客行为意向的相关研究

在旅游行业，游客是旅游行为的实施主体，因此研究游客行为对旅游业相关参与者至关重要。行为意向（Behavior Intention）来源于心理学的态度理论，主要应用于市场营销学中，用来研究消费者的消费行为，即消费者进行某一种行为的主观概率。行为意向，也可解释为行为倾向或行为意愿，Harrison et al.（1997）提出在消费者的某购买/消费行为意向越强烈，越可能进行该行为。不同的学者从不同的维度对行为意向进行的研究，Zeithaml et al.（1996）从消费者的正面行为意向与负面行为意向分析消费者在使用/体验某产品或服务后的行为。Tavitiyaman 和 Qu（2013）研究了游客对目的地形象和满意度对其行为意向的影响，发现居住酒店质量、文化与自然景点等旅游目的地形象会显著影响游客的整体满意度，高满意度会对游客行为意向有积极影响。

另外，Pramod 和 Nayak（2018）、Choe 和 Kim（2018）从消费者的再购意愿与推荐意愿分析的消费者行为意向，Jeong 和 Shin（2020）研究了使用智能旅游技术对游客体验、满意度和重访意愿的影响，发现只能旅游技术的信息性、互动性和个性化是影响游客满意度和重访意愿的关键因素。Soliman（2021）构建了计划行为理论的扩展模型对游客重访意向进行了研究，通过对 302 位访客进行调查发现，旅游动机、目的地形象、目的地熟悉度对游客重访行为意向有显著影响（Dean & Suhartanto, 2019）。

民宿品牌感知与游客行为意向相关性的研究

很少有学者研究民宿品牌感知与游客行为意向的相关性，但是 Lam 和 Hsu（2006）提出游客的旅游态度、感知行为控制和过去行为都会对其选择旅行目的地的行为意向产生影响。Tavitiyaman et al.（2021）发现对旅游目的地的熟悉程度会影响他们对旅游地选择的行为意向，如果游客在网上搜素到旅游地的信息越多，对目的地形象感知越强，越有旅游行为意向（Lu et al., 2016）。由此可见，游客对民宿的熟悉度（品牌感知程度）越高，越有可能选择该民宿。

文献评述

通过对相关文献的梳理发现，民宿发展面临着巨大的挑战，而不论是游客的首次购买选择，还是游客的重访行为都与游客对目的地的熟悉程度相关。根据品牌关系理论，Blackston（1992）认为品牌关系是指品牌对消费者的态度与消费者对品牌的态度之间的相互作用。一方面，品牌以自身的品牌形象展示在消费者面前，即客观品牌。另一方面，消费者会对品牌形象产生自己的态度，即主观品牌。而品牌关系就是主观品牌与客观品牌之间交互过程。品牌关系理论能很好地运用于旅游行业中，特别是本研究的民宿品牌中，游客需要对民宿品牌认同感，从而选择入住该民宿，进而对民宿品牌产生更深的了解，在这种品牌关系的交互中，影响游客的行为。因此，运用品牌关系理论研究民宿品牌对游客行为意向的影响是可行的。

研究设计

民宿提供的是一种非标准化居住服务，因此民宿品牌建设至关重要，只有当民宿确定了清晰的品牌定位，才能利用多元化、特殊化和差异化吸引目标游客。游客入住民宿后，根据民宿设施、民宿环境、民宿主提供的服务等，会对民宿产生满意或不满意的评价。如果游客对民宿的觉得不满意，他们可能进行各种补救行为，如向民宿主索求赔偿等直接行为，或者向家人朋友抱怨等间接行为。相反，如果游客觉得满意，游客会在下次游玩民宿所在地时再次选择入住，也可能向同事、朋友或家人推荐该民宿。而民宿的设施、环境和服务等构成了民宿品牌，因此对民宿品牌感知会影响游客的行为意向。具体影响路径为：民宿品牌感知（服务、设施、环境）——游客满意度——行为意向，由此可见，游客对民宿的品牌感知越好，居住满意度也就越高，从而再次入住或向其他人推荐民宿的可能性越大（Yun et al., 2019；Hwang et al., 2019）。本研究认为游客行为意向是指游客在旅游过程中对服务与体验进行主观的感知与评价后，产生的重复购买或推荐宣传的行为倾向。因此本研究将对游客行为意向进行游客忠诚度与游客推荐度两个维度的拆解。

因此提出以下假设：

H1：民宿品牌感知对游客行为意向有正向影响。

H2：民宿品牌感知对游客忠诚度有正向影响。

H3：民宿品牌感知对游客推荐度有正向影响。

变量界定

1. 解释变量的测量: 在对品牌感知的相关研究进行梳理和分析的基础上，本研究对品牌感知作出如下界定：“游客对品牌全方面信息的认知和体验，即本研究选取品牌认知和品牌体验来衡量民宿品牌感知”。在此基础上，本研究参考 Sheth et al.（1991）研究中对品牌感知的衡量，从民宿的个性化服务、房间配套、建筑装修印象、景观环境特色、设施设备与周边配套、居住心情、新奇服务活动、乡风民俗体验与社交体验对民宿品牌感知的题项设计如下表 1 所示。

2. 被解释变量的测量: 在对游客行为意向的相关研究进行梳理和分析的基础上，本研究对游客行为意向作出如下界定：“游客行为意向是指游客在旅游过程中对服务与体验进行主

观的感知与评价后，产生的重复购买或推荐宣传的行为倾向”。在此基础上，本研究参考 Boulding et al.（1993）对游客行为意向的测量，结合本研究关注的游客忠诚度与游客推荐度两个维度，从游客再次入住倾向、游客对涨价的态度、游客遇到服务问题的策略、游客像其他人推荐的可能性与游客在社交平台分享的可能几个方面对游客行为意向进行测量。游客行为意向的初始量表的具体题项设计如下表 1 所示。

表1: 民宿品牌感知与游客行为意向的量表

变量	代码	题项
品牌感知	BP1	民宿主人满足客人个性化需求，能感受到家的温情
	BP2	民宿房间干净整洁，床单、洗浴用品等配套完备
	BP3	民宿建筑与装修风格给我良好的视觉印象
	BP4	民宿的庭院景观与周围环境充满吸引力
	BP5	民宿提供的设施设备令我满意
	BP6	民宿居住经历让我身心放松
	BP7	民宿让我体验了一些新奇的服务和活动
	BP8	民宿让我体会了当地独特的乡风民俗
	BP9	民宿给我提供了与他人互动的机会
	BP10	民宿经历让我认识了一些新朋友
忠诚度	VL1	如果再来当地旅游，该民宿是我的首选
	VL2	如果民宿涨价，我还是会选择该民宿
	VL3	如果在该民宿遇到服务问题，我会向民宿主诉说
推荐度	VR1	如果有亲戚朋友同事来旅游，我会向他或她推荐该民宿
	VR2	我会在网上或朋友圈称赞该民宿

模型构建与数据说明

1. 模型构建

本研究的假设 1 是民宿品牌感知对顾客行为意向的影响，为验证该假设构建模型 1。

$$BI = \alpha_0 + \alpha_1 BP + \alpha_2 SEX + \alpha_3 AGE + \alpha_4 EDU + \alpha_5 CAR + \alpha_6 INO + \alpha_7 FT \quad \text{（模型 1）}$$

本研究的假设 2 是民宿品牌感知对游客忠诚度的影响，为验证这个假设构建模型 2。

$$VL = \alpha_0 + \alpha_1 BP + \alpha_2 SEX + \alpha_3 AGE + \alpha_4 EDU + \alpha_5 CAR + \alpha_6 INO + \alpha_7 FT \quad \text{（模型 2）}$$

本研究的假设 3 是民宿品牌感知对游客推荐度的影响，为验证这个假设构建模型 3。

$$VR = \alpha_0 + \alpha_1 BP + \alpha_2 SEX + \alpha_3 AGE + \alpha_4 EDU + \alpha_5 CAR + \alpha_6 INO + \alpha_7 FT \quad \text{（模型 3）}$$

以上模型中，BP 为品牌感知，BI 为游客行为意向，LV 为游客行为意向维度一忠诚度，LR 为游客行为意向维度二推荐度。其他变量为控制变量，具体包括：性别 SEX，年龄 AGE，受教育程度 EDU，职业 CAR，月收入 INO，出游方式 FT。

数据说明

本研究的数据通过问卷调查的方式获取，在进行问卷的设计阶段，为确保本问卷设计的严谨性，对以往研究品牌感知、游客行为意向的文献进行梳理，参考权威学者较为成熟的量表 Sheth et al. (1991) 、Boulding et al. (1993) ，并根据本研究的研究对象进行调整，设计出问卷初稿。然后为提高本问卷的质量，对各题项的规范性和逻辑性询问了导师、旅游专业教授以及博士生的建议，对相近题项进行整合，对语言表述进行完善，最终形成了较为科学的正式问卷。本研究的问卷设计为三个部分，除受访者的基本信息外，其他部分问卷主要采用 Likert 五级量表进行测量，1 表示完全不同意，2 表示比较不同意，3 表示不确定，4 表示比较同意，5 表示完全同意。

本研究在进行问卷收集中，考虑到人力、财力等情况，问卷的采集通过网络方式进行。在专业调研网站问卷星生成问卷网络链接后，通过同事、朋友、家人以及校友资源，在微信、QQ 等社交媒体上进行快速扩散，用红包领取审核的方式控制问卷填写质量。最终回收有效问卷 711 份，通过问题设置，剔除没有居住过民宿的游客样本 8 个，最终得到有效样本数为 703 个，样本有效率为 98.87%。另外，获取的样本总量是测量题项的 33 倍以上，符合问卷调查对样本量的要求，且能够保证模型检验的稳定性。

研究方法

问卷调查法

通过对研究主题主客互动、民宿品牌感知、游客行为意向进行概念与变量界定，然后结合相关研究中成熟量表对本研究的主要变量进行量表设计。然后进行大规模调查问卷的发放，最后，对收集到的问卷数据进行 SPSS 数据处理与分析，从而验证本研究的理论模型。

实证分析法

在理论分析确定了研究主题以后，本研究对三个主变量之间的关系进行分析，提出研究假设，并构建研究模型。然后在对问卷进行信度与效度的检验后，对问卷获得的数据进行描述性统计分析、相关性统计分析与模型回归分析，从而验证本研究提出的研究假设。

研究结果

本研究首先验证民宿品牌感知对游客行为意向的影响，发现民宿品牌感知对游客行为意向有显著的正向影响，即游客对民宿个性化需求、房间配套、建筑装修风格、庭院设计、设施设备与服务体验等越满意，越愿意采取积极的行为，如再次入住，发现问题与民宿主沟通，向朋友或社交平台推荐该民宿。进一步的将游客行为意向分为游客忠诚度和游客推荐度，发现民宿品牌感知对游客忠诚度有显著的正向影响，民宿品牌感知对游客推荐度有显著的正向影响。

实证分析

1. 问卷信度分析：本研究用 Cronbach's α 系数检测问卷量表各个测量题项的异质性，用修正测项总相关系数（Corrected-Item Total Correlation，CITC）剔除影响测量信度的题项，提高量表的准确性。本研究用 SPSS24.0 对游客行为意向与品牌感知变量进行信度分析，结果如下表 2 所示。表 2 中各个变量的 Cronbach's α 系数均大于 0.7，说明量表各个变量的题项具备较高的一致性，符合问卷设计的基本要求。

表2: 量表题项的Cronbach's α 系数和CITC系数

变量	代码	题项总体相关系数	删除题项后的α系数	α系数
忠诚度	VL1	0.631	0.700	0.768
	VL2	0.658	0.719	
	VL3	0.623	0.685	
推荐度	VR1	0.645	0.842	0.784
	VR2	0.645	0.865	
品牌感知	BP1	0.614	0.833	0.853
	BP2	0.611	0.834	
	BP3	0.711	0.815	
	BP4	0.695	0.818	
	BP5	0.642	0.828	
	BP6	0.691	0.827	
	BP7	0.717	0.822	
	BP8	0.700	0.825	
	BP9	0.694	0.826	
	BP10	0.619	0.840	

2. 问卷效度分析：本研究的被解释变量游客行为意向、解释变量品牌感知在通过因子分析对 15 个测试项进行测量前，需先对各个测试项进行 KMO 检验和 Bartlett's 球形检验，从而验证各个测试项之间相关关系，从而确定这些题项是否适合进行因子分析。下表 3 是测

试项的 KMO 和 Bartlett's 球形检验分析，由表中数据可见，各个变量的 KMO 统计量均大于 0.6，说明各个变量的相对程度较高，进行因子分析。同时所有变量的 Bartlett's 的统计值均在 1% 的显著水平上显著，因此所有变量之间有较强的相关性，适合进行因子分析。

表3: 测试项的 KMO 和 Bartlett's 球形检验

变量	KMO	巴特利特球形度检验		
	取样适切性量数	近似卡方	自由度	显著性
BP	0.845	1594.436	10	0.000
VL	0.683	476.571	3	0.000
VR	0.650	376.176	3	0.000

3. 研究假设线性回归分析：为了验证民宿品牌感知对游客行为意向的影响，对模型 1 进行回归，结果见下表 4Part_A 所示，模型 1 的调整 R^2 为 0.532，F 统计值为 115.13，且在 1% 水平上显著，由此说明模型 1 的拟合度较好，具有显著地统计学意义。解释变量民宿品牌感知 BP 与被解释变量游客行为意向 BI 的相关性回归，BP 的系数为 0.642，T 检验值为 28.08，且在 1% 水平上显著，由此可见民宿品牌感知对游客行为意向有显著的正向影响，即游客对民宿个性化需求、房间配套、建筑装修风格、庭院设计、设施设备与服务体验等越满意，越愿意采取积极的行为，如再次入住，发现问题与民宿主沟通，向朋友或社交平台推荐该民宿。因此本研究的假设 1 得到验证。

为了验证民宿品牌感知对游客忠诚度的影响，对模型 2 进行回归，结果见下表 4Part_B，解释变量民宿品牌感知 BP 与被解释变量游客忠诚度 VL 的相关性回归，模型 2 的调整 R^2 为 0.479，F 统计值为 93.45，且在 1% 水平上显著，由此说明模型 2 的拟合度较好，具有显著地统计学意义。BP 的系数为 0.371，T 检验值为 25.22，且在 1% 水平上显著，由此可见民宿品牌感知对游客忠诚度有显著的正向影响，因此本研究的假设 2 得到验证。

为了验证民宿品牌感知对游客推荐度的影响，对模型 3 进行回归，结果见下表 4 Part_C，解释变量民宿品牌感知 BP 与被解释变量游客推荐度 VR 的相关性回归，模 3 的调整 R^2 为 0.398，F 统计值为 67.36，且在 1% 水平上显著，由此说明模型 3 的拟合度较好，具有显著地统计学意义。民宿品牌感知 BP 对游客推荐度 VR 的影响，BP 的系数为 0.271，T 检验值为 21.28，且在 1% 水平上显著，由此可见民宿品牌感知对游客推荐度有显著的正向影响，因此本研究的假设 3 得到验证。

通过三个模型回归结果对比，发现 Part_B 中 BP 的系数为 0.371，T 检验值为 25.22，Part_C 中 BP 的系数为 0.271，T 检验值为 21.28，由此可见民宿品牌感知对游客忠诚度的影响比对推荐度的影响更加显著。

表4: 民宿品牌感知与游客行为意向回归分析

变量		Part_A	Part_B	Part_C
		BI	VL	VR
自变量	BP	0.642 ***	0.371 ***	0.271 ***
		（28.08）	（25.22）	（21.28）
控制变量	SEX	0.143 **	0.136 ***	0.006
		（2.21）	（3.28）	（0.17）
	AGE	-0.083	-0.133 **	0.050
		（-1.23）	（-3.06）	（1.32）
	EDU	0.190 **	0.077	0.113 **
		（2.39）	（1.51）	（2.54）
	CAR	-0.055	0.007	-0.062 *
		（-0.83）	（0.17）	（-1.69）
	INC	-0.049	0.009	-0.059
		（-0.60）	（0.18）	（-1.28）
	FT	-0.038	-0.015	-0.022
		（-0.60）	（-0.38）	（-0.63）
调整 R^2		0.532	0.370	0.398
F 检验		115.13 ***	59.97 ***	67.36 ***
N		703	703	703

注：*为在 10% 水平上显著；**为在 5% 水平上显著；***为在 1% 水平上显著。

讨论

本研究以品牌关系理论为基础，通过对民宿品牌感知与游客行为意向的相关研究进行文献分析，构建“感知—行为”的理论模型并提出研究假设。然后，通过问卷调研和实证分析，得到以下研究结论。

民宿品牌感知对游客行为意向存在正向影响

游客对民宿个性化需求、房间配套、建筑装修风格、庭院设计、设施设备与服务体验等越满意，越愿意采取积极的行为，如再次入住，发现问题与民宿主沟通，向朋友或社交平台推荐该民宿。同时，游客更可能因为较高的服务水平、更多的新奇活动与对乡风民俗的体验，产生积极的行为。

品牌感知对游客忠诚度与推荐度存在正向影响

游客对品牌的设施、环境与服务体验等的满意度会提高游客再次入住与推荐该民宿的意愿。同时，民宿品牌感知对游客忠诚度的影响比对推荐度的影响更加显著。

总结与建议

研究总结

通过实证研究发现，游客对民宿个性化需求、房间配**套、建筑装修**风格、庭院设计、设施设备与服务体验等越满意，越愿意采取积极的行为，如再次入住，发现问题与民宿主沟通，向朋友或社交平台推荐该民宿。同时，游客更可能因为较高的服务水平、更多的新奇活动与对乡风民俗的体验，产生积极的行为。

研究建议

打造无法复刻的民宿品牌感知。本研究发现游客对民宿个性化需求、房间配套、建筑装修风格、庭院设计、设施设备与服务体验等越满意，越愿意采取积极的行为，如再次入住，发现问题与民宿主沟通，向朋友或社交平台推荐该民宿。同时，游客对民宿新奇的活动、认识更多朋友等体验比民宿、环境、配套等更**在意。因此**，**民宿改善**环境氛围、卫生条件、硬件设施的同时，更应注重服务体验的完善，如咨询建议、个性服务（儿童拖鞋、果汁、饮品等）、互动体验（手工活动等），为民宿品牌无法复刻的品牌标识。

参考文献

Blackston, M. (1992). Observations: Building brand equity by managing the brand's relationships. *Journal of Advertising Research*, *32*(3), 79-83.

Boulding, W., Kalra, A., Staelin, R., & Zeithaml, V. A. (1993). A dynamic process model of service quality: from expectations to behavioral intentions. *Journal of Marketing Research*, *30*(1), 7-27.

Choe, J. Y. J., & Kim, S. S. (2018). Effects of tourists' local food consumption value on attitude, food destination image, and behavioral intention. *International Journal of Hospitality Management*, *71*, 1-10.

Dean, D., & Suhartanto, D. (2019). The formation of visitor behavioral intention to creative tourism: the role of push–Pull motivation. *Asia Pacific Journal of Tourism Research*, *24*(5), 393-403.

Harrison, D. A., Mykytyn Jr, P. P., & Riemenschneider, C. K. (1997). Executive decisions about adoption of information technology in small business: Theory and empirical tests. *Information Systems Research*, *8*(2), 171-195.

Hwang, E., Baloglu, S., & Tanford, S. (2019). Building loyalty through reward programs: The influence of perceptions of fairness and brand attachment. *International Journal of Hospitality Management*, *76*, 19-28.

Jamal, S. A., Othman, N. A., & Muhammad, N. M. N. (2011). Tourist perceived value in a community-based homestay visit: An investigation into the functional and experiential aspect of value. *Journal of Vacation Marketing, 17*(1), 5-15.

Jeong, M., & Shin, H. H. (2020). Tourists' experiences with smart tourism technology at smart destinations and their behavior intentions. *Journal of Travel Research, 59*(8), 1464-1477.

Kervyn, N., Fiske, S. T., & Malone, C. (2012). Brands as intentional agents framework: How perceived intentions and ability can map brand perception. *Journal of Consumer Psychology, 22*(2), 166-176.

Knight, S. M., & Schmidt-Rinehart, B. C. (2002). Enhancing the homestay: Study abroad from the host family's perspective. *Foreign Language Annals, 35*(2), 190-201.

Kuo, C. M. M., Tseng, C. Y., & Chen, L. C. (2018). Choosing between exiting or innovative solutions for bed and breakfasts. *International Journal of Hospitality Management*, 73, 12-19.

Lam, T., & Hsu, C. H. (2006). Predicting behavioral intention of choosing a travel destination. *Tourism Management, 27*(4), 589-599.

Lu, C. Y., Yeh, W. J., & Chen, B. T. (2016). The study of international students' behavior intention for leisure participation: Using perceived risk as a moderator. *Journal of Quality Assurance in Hospitality & Tourism, 17*(2), 224-236.

Nuntsu, N., Tassiopoulos, D., & Haydam, N. (2004). The bed and breakfast market of Buffalo City (BC), South Africa: Present status, constraints and success factors. *Tourism Management, 25*(4), 515-522.

Pramod, S., & Nayak, J. K. (2018). Testing the role of tourists' emotional experiences in predicting destination image, satisfaction, and behavioral intentions: a case of wellness tourism. *Tourism Management Perspectives, 28*, 41-52.

Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of business research*, *22*(2), 159-170.

Soliman, M. (2021). Extending the theory of planned behavior to predict tourism destination revisit intention. *International Journal of Hospitality & Tourism Administration*, *22*(5), 524-549.

Tavitiyaman, P., & Qu, H. (2013). Destination image and behavior intention of travelers to Thailand: The moderating effect of perceived risk. *Journal of Travel & Tourism Marketing, 30*(3), 169-185.

Tavitiyaman, P., Qu, H., Tsang, W. S. L., & Lam, C. W. R. (2021). The influence of smart tourism applications on perceived destination image and behavioral intention: The moderating role of information search behavior. *Journal of Hospitality and Tourism Management, 46*, 476-487.

Yun, J. T., Pamuksuz, U., & Duff, B. R. (2019). Are we who we follow? Computationally analyzing human personality and brand following on Twitter. *International Journal of Advertising, 38*(5), 776-795.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing, 60*(2), 31-46.

农家乐软硬件发展的探索及研究

THE DEVELOPMENT OF SOFTWARE AND HARDWARE FOR FARMHOUSE ENTERTAINMENT

周映帆 [1*]，徐明 [2]

Yingfan Zhou[1*] and Ming Xu[2]

[1,2] **泰国正大管理学院中国研究生院**

[1,2]Chinese Graduate School, Panyapiwat Institute of Management, Thailand

[*]**Corresponding Author, E-mail:** 347724599@qq.com

摘要

农家乐作为支持乡村游发展、吃住游一体化的补充，在农村旅游发展中占据重要地位，农家乐旅游作为一种新型的旅游方式，得到了社会大众的青睐。但是从我国当前我国农家乐的发展现状来看，农家乐在配套设施、管理服务方面依然存在一些问题。特别是农家乐的配套设施上，由于软硬件的配套不到位，导致农家乐在提升游客的满意度上，存在着很大的缺陷，造成了营收能力较低、顾客体验度不够等问题。在此背景下，本文以成都市农家乐为研究对象，在2022年4月份通过开展实地调研的方式，对成都农家乐进行走访，探究农家乐在软硬件设施方面存在的现状，共走访了农家乐五家，代表了三种层次的发展水平，高层次的农家乐更注重对软硬件设施的配置，但是总体都存在设施不齐全的现状，通过了解农家乐软硬件设施的配备状况，能够持续提升农家乐的服务能力和服务水平。

通过对五家农家乐进行走访调研，研究发现当前成都农家乐在软硬件设施上存在着配置不到位的情况，与消费者的希望存在着较大的差距，特别的并从厨房、餐饮、住宿和综合管理上探究软件和硬件配置存在的问题，体现在配备设施落后、高科技类设施不足、存在卫生安全隐患等，也制约了成都农家乐当前的发展。

最后结合实际调查情况，探究农家乐在软硬件设施上存在的商机，如在软件上，可以进行适合铜仁地区农家乐的预定、点餐、财务软件的开发或者售卖；在硬件设施上，可以生产针对农家乐餐饮、住宿、娱乐的设施研发，并据此提出针对化商机和发展建议，以期提升成都市农家乐的健康发展，也为其他地区农家乐的发展提供参考，也为大众投资提供建议。

关键词: 农家乐 **成都市** 软硬件设施

Abstract

Under the background of rural revitalization, rural ecotourism has become a new development road to promote rural development and help farmers become rich. In the development of rural eco-tourism, agritainment, as a supplement to supporting the development of rural tourism and the

integration of food, housing, and tourism, plays an important role in the development of rural tourism. As a new tourism mode, agritainment tourism has been favored by the public. However, from the perspective of the current development status of farmhouse in China, there are still some problems in supporting facilities and management services. In particular. in terms of supporting facilities, the lack of software, software and hardware support has led to a lot of defects in improving the satisfaction of tourists, resulting in low revenue generating capacity, insufficient customer experience and other problems. Under this background, this paper takes Chengdu as the research object, and through field research, visits Chengdu Agritainment to explore the status quo of its hardware and software facilities. Currently, Chengdu Agritainment attaches importance to the configuration of hardware and software facilities and continues to improve its service capacity and service level.

The research found that the software and hardware facilities of Chengdu Agritainment were not well configured, and there was a big gap between them and consumers' hopes. It also explored the problems in software and hardware configuration from the kitchen, catering, accommodation, and comprehensive management.

Finally, based on the actual investigation, the paper explores the business opportunities of rural recreation in terms of software and hardware facilities, and puts forward targeted suggestions, with a view to improving the healthy development of rural recreation in Chengdu, providing reference for the development of rural recreation in other regions, and providing suggestions for public investment.

Keywords: Agritainment, Chengdu, Software and Hardware Facilities

引言

随着信息智能化时代的高速发展和普及，新兴的软硬件配置建设已成为居民消费发展新模式，正以几何倍数的高速增长，如何适应市场环境变化，迎合当下消费群体的消费习惯，在经营模式上有所创新，使其成为新的利润增长点，成为当下企业关注的焦点。党的十九大报告中明确提出的乡村振兴战略，推动构建完善的现代农业产业体系与经营体系，乡村旅游的发展成为了乡村振兴的重要途径，对促进农民增收、农村发展具有十分重要的意义。乡村旅游的特点在于乡村，借助于农村的美丽环境、区位优势、资源优势等，吸引大批城镇民众体验生活、观赏美景、休闲娱乐，乡村生态旅游将农村居民与城市旅客紧密地结合在一起，推动城乡的结合发展。

农家乐的软硬件设施影响着消费者的消费热情，旅游者就为寻求休闲娱乐或特色餐宿而参与到农家乐旅游中，若软硬件设施无法满足，必然造成客户的流失，降低消费者的粘性。在研究的基础上，本文针对农家乐发展讯在的这些问题提出了，提升软件技术服务水平、强化监督知道体制、增强农民电子商务意识，用硬件技术提升厨房及住宿设施等措施提升农家乐旅游经营的吸引力，真正发挥农家乐旅游在农民增收、乡村发展的作用。

研究目的

乡村生态旅游可以将农村居民与城市旅客紧密地结合在一起，对推动乡村振兴及三农的发展具有重大的理论和现实意义。农家乐旅游依据于地区特有的田园风光和人文风情为顾客吃喝住行娱乐等一站式服务而吸引大量游客。从农家乐的发展现状来看，多数农家乐是农民利用农闲时间开展的经营活动，甚至在一些旅游资源丰富的地区，农家乐的经营成为该地区农民创收增收的主要途径。但是由于农家乐自身的特点以及其发展根基，可以看到，当前我国农家乐的发展过程中存在很多的问题，如经营管理不到位、服务水平低、专业服务人员少等现象。特别是农家乐的软硬件设施配套上存在的问题更多，软硬件是吸引消费者和餐消费者的主要因素。一些农家乐卫生不达标、休闲娱乐产品少、住宿服务不到位等，极大减弱消费者对农家乐的粘性和吸引力。这样就不能发挥其农家乐旅游在推动乡村振兴和服务三农的重要作用，在此基础上，本文以农家乐的软软硬件配备条件及存在的问题为研究重点，探究农家乐发展过程中存在的问题，并为这些问题的解决提供策略，以提升农家乐未来的可持续健康发展。

文献综述

农家乐兴起于 19 世纪 30 年代的欧洲，但是当时把它定义为乡村旅游，意思是发生在乡村地区的旅游活动，由于当时欧洲的工业化和城市化给生活带来便利的同时，也造成了污染。影响了市民的旅游目的地，而乡村拥有干净、原生态的自然环境，受到游客的青睐。乡村旅游的核心和卖点就是乡村，涵盖乡村的特有自然景观、人文景观和特产，学者们开展了一系列的研究。

在乡村旅游的可持续发展及面临的问题上，(Arie Reichel,2000）在开展的研究中，指出了乡村旅游的服务质量对开展乡村游具有重要的作用，并据此提出了相应的发展对策和建议。（Ardichvil,2003）认为一个地区的乡村旅游是否能够得到持续性的发展，与当地的政府政策和财政支持有关。基础服务设施的完善度和当地居民的文化素养水平。以及提供的服务能力也具有较大的关联性；（Barbieri,2015）认为发展资金不足、资源开发过度且不合理、基础设施滞后，是当前乡村游发展滞后的原因；（Solvoll S, et al,2015）提出乡村旅游对于保护当地生态环境具有显著正向作用。乡村游的发展必须注重可持续性。（Oppermann,1996）通过研究发现乡村旅游业的发展具有明显的季节性的影响，并且通过调研德国南部乡村进行实证，并提出乡村旅游业很难实现规模；（Ribeiro,2002）对乡村旅游发展带来的影响研究时，选取葡萄牙乡村地区进行实证研究，发现乡村旅游存在大量的漏损现象。

20 世纪 80 年代，随着我国经济社会的不断发展，城镇居民收入水平的提升。乡村旅游作为一项休闲娱乐形势逐步发展到 90 年代以后。旅游业与农业的发展紧密结合。此时，农村各项条件日益改善，城市居民收入增加促进了农家乐旅游的发展。在推动乡村旅游发展上学者们都开展了研究和思考。(何景明 ,2002）认为乡村旅游是以农村为基础，具有以优美的自然环境、丰富的娱乐活动为保证，满足游客的多种形式的需求。(肖佑兴 ,2016）认为乡村旅游中存在着政府职能发挥不到位的情况，并提出了强化政府职能在乡村旅游中的优化对策。(王佳琪 ,2018）研究表明，乡村文化产业由具有先天优势，可以大力发展文化产业，促进农村文化的发展和经济的发展。(孙冬玲 ,2015）发展我国乡村经济，必须重视分析文化、环境、经济等因素，

同时指出。开展正确引导和管理，是推动乡村旅游健康发展的前提条件。(卢可 ,2019）通过对乡村旅游进行研究，认为乡村旅游作为一种新兴产业，具有良好的发展前景，并结合我国旅游业的发展现状，提出相应的对策。同时他指出，乡村旅游不仅能够解决农民的贫困问题，而且还可以促进农业、旅游业的有效结合，促进乡村经济的可持续发展。(耿松涛&张伸阳 ,2021）通过研究指出乡村旅游振兴应更加注重培育文化旅游新业态，助推乡村旅游经济可持续发展。

从国内外学者的研究现状可以看出，学者们对乡村旅游的研究时间较早，特别是近些年来，学者们对乡村旅游的研究更趋于增多，且均认为乡村旅游的发展在促进农村经济发展起到了较大的推动作用，但是乡村旅游的发展也存在一系列的问题，学者们也针对这些问题开展了丰富的研究。在此基础上，本文以农家乐旅游为研究对象，探讨农家乐旅游存在的问题，探寻农家乐发展的过程中存在的商机，通过软硬件设施的配备提升农家乐的发展空间，推动农家乐的健康发展。

研究方法

文献检阅法：是指通过寻找并阅读文献来搜集相关信息的方法，该方法贯穿本研究的始终。通过查阅国内外相关文献，明确当前农家乐旅游发展的相关理论，初步了解农家乐旅游的发展现状，存在的问题，特别是对农家乐软硬件的配套上存在的问题进行总结，为最终提出针对性的建议提供依据。

案例分析法：农家乐当前的经营问题存在普遍性，本文以成都市周边的农家乐为研究对象，通过实地走访，探究成都市农家乐的特有问题和共性问题，据此提出针对性建议，对其他地区农家乐的发展提供参考。

实地调查法：是研究者用提前经过设计的内容，通过书面方式与被调查者交流，确认被调查者真实想法，从而搜集到可靠资料的一种方法。在本研究中，将通过实地走访成都市周边的农家乐，收集相关经营者对农家乐经营存在的问题和发展现状的描述，为文章的撰写奠定材料基础。

研究结果

本人于 2022 年 5 月 1 日-5 月 30 日对成都市周边的农家乐开展了调研，对 5 家农家乐开展了调研，由于当前疫情原因，受到疫情的管控，一些农家乐在调研当日顾客稀少，在与管理人员攀谈的过程中，便于走访现场和细致的交谈。在交谈中可以看出，多数管理人员对当前农家乐的经营现状不是很满意，在疫情大环境的影响下，农家乐的营业受到影响，收入锐减，一些农家乐甚至出现裁员的现象，更是影响了农家乐在软硬件设施的完善和被配上。本节内容将通过展现部分访谈内容的形式，描述当前农家乐的软硬件配备现状。为五家农家乐进行编号和基本情况介绍。

表1:　五家农家乐基本情况

编号	名称	性质	经营范围	开业时间	地址	备注
1	锦绣巴蜀乡村食府	个体工商户	住宿、餐饮		郫都区鱼塘坎村轩圃路	团建、聚会
2	农家乐湖田居	个体工商户	住宿、餐饮		锦江区三圣乡	团建、聚会
3	梁氏农家乐	个体工商户	餐饮	2018	大邑县晋原镇梁平村	团建、聚会
4	溪地阿若兰度假村	有限责任公司	住宿、餐饮	2019	大邑县南岸美村	团建、聚会
5	续园农家乐	个体工商户	住宿、餐饮	2019	双流区黄水镇	团建、聚会

餐饮设备上

从餐饮设备所表现的商机来看，主要包括有形的设施设备，通过这些设备提升消费者的服务感受；而软件的设备上，包括订餐、报餐、呼叫系统等，通过先进的软件设备实现消费者的高科技的体验乐趣。

1. 餐饮硬件设施配备上

有形设备属于餐饮服务质量也即酒店依托其所拥有的设施设备，为宾客提供服务，以其在使用价值上能够适合和满足宾客物质需要和精神需要。有形产品体现在硬件设施上，由此推断酒店餐饮服务质量是指通过提高餐厅的有形产品和无形产品的质量，用以满足宾客物质上的和精神上的需要。对于顾客而言，不仅能够获得硬件设施所带来的服务，还能够获得一些无形服务，顾客对于酒店餐饮服务质量的满意程度主要取决于酒店所提供的服务能否达到其预期值。因此，酒店餐饮服务质量可以从两个方面进行反映，分别是有形产品的质量和无形产品的质量：其中有形产品质量主要包**括酒店**实物产品质量（如食品质量、顾客用品质量等）和服务环境质量（如用餐环境）。

2. 餐饮软件设施配备上

餐厅的服务主要体现在快速、及时、高效以及丰富的餐品提供上、优美的进餐环境是消费者追求的主要热点。保证快速、及时、高效的报餐以及提供餐食服务，除了农家乐根据自身规模配备足够的服务人员之外，还可以借助高新技术，如呼叫系统、订餐系统、电子菜单等技术的应用，使得消费者能够在落座的第一时间通过系统自助点餐、传菜系统报菜提供较快的餐食服务。应当促使农家乐餐食传递的规范化，一些高端餐厅食物的传递会通过几道程序才能到达餐桌，这种规范化的操作能够提升传参的效率，另外还可已借助自动传菜机器人，一方面由于该设备的先进性能够吸引消费者前来体验，另一方面，传菜机器人可以高效的进行菜品的传递，提高了传菜效率，优美的进餐环境需要农家乐进行总体的设计和环境的打造，日益成为餐饮空间设计中的重点，有个性的特色空间开始出现在中餐厅设计当中，比如餐厅的空间与室内外的自然相融合，以提高观景效果，从内部的设计观点来考虑，在界面的布局、空间的包围等因素对人们的视觉和经验都有很大的冲击，它还体现在人们的空间意识上。

厨房设备

从厨房设备上看，硬件设施主要体现在饮食烹饪所需要的各类厨电设施，从软件设备上看，涵盖提供多样化的餐食及完善的规章制度。

1. 厨房硬件设备上

厨房设备对于农家乐来说非常重要，更是农家乐服务的核心之一，从当前的农家乐的厨房设备现状来看，多数农家乐仍然使用传统的灶具，对于高新技术的灶具使用概率不高。我们要研究农家乐饮食烹饪这件“事”，就不能单纯研究“物”（厨房设施），必须从研究“事”开始，“事”“物”“人”“空间”相辅相成互相影响。完成厨事的主体，厨师在厨房空间里面完成活动；厨具是完成厨事活动的工具。在详细研究人、事、物、空间关系的前提下，研究厨房设计。“民以食为天”，具有烹制食物基本功能的厨房，一直是中国生活的重要场所。现代一体化厨房的概念大约出现于20世纪90年代，海尔、方太、美的、格兰仕、欧派等品牌，是中国最具影响力的家电厨房厨具设计品牌。但是当前多数农家乐的厨房依然停留于厨房直接装上所谓“整体橱柜”的理念，忽略国人的文化和烹饪习惯，储物和操作不便，不能很好地处理空间布局和功能的统一和优化。相关企业越来越重视厨房的设计和研究，以厨房的完整性和系统性来满足需求。首先，吊箱过矮容易撞到头部，如果高度过高，就会影响到取拿东西。其次，尽管衣柜和角落都有空间，但在取出时必须先将最外面的东西取出，然后再将里面的东西重新放回原处，这是一个非常复杂的步骤。同时，橱柜是多层的，从上面搬起橱柜的东西很吃力，而且很难找，也很难整理。随着生活的改变，厨具的数量成倍增长，而悬挂式橱窗的设计更有助于创造更加合理和人性化的厨房。除了厨房中的储存空间问题之外，各种炊具、调味品的存放和放置也常常成为影响厨房做饭的一个主要因素。各种调料的使用频繁，但都是杂乱无章地堆放在桌面上，造成了获取的困难。厨具的储藏使得空间的选取非常关键，所以要清楚的放置和放置。因中国烹饪常炒，煎，炸，烘焙会造成油烟的出现，市场上的吸油烟器虽能减轻油烟问题，却无法从根源上消除，浓烟和噪声使工人们深受影响。在运行期间，油污堆积，油渍不断地往下掉，温度和湿度也会跟着发生改变，夏天的情况最多；使人感到肮脏，粘糊糊等不舒服。长期下来，厨房不但成为家中最大的空气污染场所，污垢不易清除，更易于滋生病菌，造成环境问题。由于长时间的湿气，厨具和橱柜容易发霉生锈。有些橱柜在底部安装了带有图案的不锈钢板，以防止凝结液滴在橱柜地板上，并能避免霉变和柜体弯曲等问题，延长橱柜的使用年限。然而，这并不能彻底地改变洗碗机的霉变。

2. 厨房软件设备上

厨房结构会直接或间接地作用于人们的生产资料、消费方式及生活行为。人们的时间可分为工作和休息两部分，对于人们的需求可通过衣、食、住、行、用、游、交往几个方面的观察和分析进行定位，根据用户的生活形态，来创造满足用户需求的厨房。以生活方式为导向的产品设计，已从过去的单项研究（仅限于对消费者进行分类），转变为关注生活内容，研究生活方式影响下消费者真正的潜在需求。厨房应也配备电子化的信息系统，连接餐厅的点菜系统和传菜系统，使得厨房的工作人员能够第一时间掌握餐厅消费者的情况以及报菜情况，有序开展菜品的配置，厨房应该有规范化的规章制度，为厨师及工作人员配备一体化的服装设施，确保良好的卫生环境，在食品质量方面鼓励菜品创新，丰富菜肴品种，伴随人们消费水平的提高，顾客对餐饮产品的要求也越来越高，厨房餐饮部应加强菜品的创新，不断研发新菜品，丰富菜肴品种。可根据市场调研，根据每位用餐顾客反馈的问题，了解常来的顾客的喜好、个人口味，以此开发出顾客喜好的菜品，增加客人的用餐满意度，弥补其他方面客人不满或未达客人期待所带来的不好印象。其一，可实行奖励制度，对研发出一道可行的菜品者予以奖励，

在研发新菜品的同时，还需保证菜品种类搭配达到平衡，**确保价格和菜品搭配合理**，**菜品**组合完成后，各个菜品尽可能直观体现出各自的档次，以满足一些顾客的心理需求。**其二**，**要注重菜品的**营养以及适应人群和禁忌人群，可在菜单上备注清楚一些菜品的特性，将一些注意事项备注在菜单上，或经由专人对直接服务人员进行培训，使其能了解这些菜品的禁忌和适宜类型，这不单单可以帮助顾客快速点餐，也可以避免因饮食不当出现不必要的麻烦。

3. 住宿设备

住宿设施在几家农家乐中都存在配备不到位的情况，从硬件设施上看，能够使得消费者在农家乐中享受到住宿的舒服感；从软件设施上看，主要是能够提升消费者住宿期间的服务感受上。

住宿硬件设施上

客房是游客使用的私人场所，需要结合度假人群的心理行为需求，尽可能为客房提供安全安静的私人空间、良好的朝向、多样化的客房种类，以旅游景区农家乐式度假酒店家庭式的住宿要求为出发点，营造鲜明的主题氛围和多元的装饰氛围，避免不够人性化的房间陈设，为游客提供全身心的度假旅行休闲感受和民宿式的体验，住宿要营造家的氛围，舒适是第一位，取暖制冷设备必须具备，同时智能化电视观影系统、吹风机、呼叫器、舒适的床垫等设备需要一应俱全。

住宿软件的建设

软件设施建设主要为服务质量的提升上，包括人性化的住宿设置，提供叫醒服务、接机服务、预定服务、洗衣服务、儿童床服务、送餐服务、多种房型设置等，也可通过专门的信息化系统建设，将住宿者的全部需求予以登记，并按时高质完成这些服务。房间住宿的信息化系统成为未来研发的重点，具有较大的潜在商机。旅游景区农家乐民宿还可以选择以旅游景点的生活方式为客房的主题，把文化与酒店和谐融合，使消费者在消费过程不仅能够感受到物质上的获取，更有文化的交流和精神的愉悦，并具有多彩多样的装修风格并与当地的民族文化相关联，不论是大堂还是房间，甚至楼道的拐弯处，都可通过墙面装饰画等装饰品展现本地文化风情，使得游客在此入住之后完全按照本地的生活方式体会原汁原味的情怀。

综合管理系统

综合管理系统包括农家乐的食品卫生保障、园区安全保障及消防安全上，通过制定安全管理制度，开发综合管理系统提升农家乐的卫生和安全需求。

1. **硬件配**备方面

卫生管理上，食品卫生关系着人的生命健康，因此对厨房厨师开展规范化管理至关重要。餐饮和餐饮的卫生关系到消费者的健康，特别是在当前的疫情形势下，消费者对健康的需求越来越高，而农家乐饭店的安全和健康水平还不能让消费者感到安心和满足。饭店必须重视饭店和饮食的清洁，并要强化饭店的环**境**卫生。一是要定时进行卫生和空气流通，餐厅地面、窗户、餐桌等要经常清洁。第二，食物和饮品要有良好的营养和清洁，不要有腐败的菜肴，要有一泡、二洗、三清、四次煮。第三，有关人员必须持有健康证书，经过严格的训练后方可进入岗位，注意个人的卫生。第四，建立一个透明的厨房，向消费者展现食物处理和烹调的全流

程，以提升消费者的满意和安心，也可以让客人自己动手做。

消防安全上，**疏忽了安全通道**，**多数**农家乐并不注重安全出口，没有在这方面多加考虑,**是**杂物堆在安全出口，逃生指示模糊，应急灯光长期不维护导致衰老，灭火器的数量不足和使用时间不够等。农家乐应在每一层的服务台、电梯前室、餐厅和厨房等容易起火的地方配备相应的轻易灭火设备，更要配置相应的消防设备和逃生装置，如安全绳、缓降器、软梯和救生带。

安全保卫上，可以强化对监控设备的布局，采用高清摄像设备，能在夜间照清楚发生的各类状况；人员保安上，若规模较小的农家乐，可以通过安装自动化系统控制门禁，保障消费者的人身和财产安全。因此监控设备、自动化门禁系统、消毒设备的研发将成为未来农家乐重要设备的配置方向。

2. 综合管理服务软件方面

在综合服务设施上，农家乐的整体布局可以通过中庭，通过中庭将优美的户外景色带入室内。在设计中，各平面的主体景观应该选用通透、轻盈的材料，以丰富的感官感受为基础，实现内外贯通，提升空间的经验。不论是新建或改造的农家乐度假村，采用中庭都是改善建筑物品质的常见方法，在观光胜地的民宿型度假村，通过立体切割的形式，使内部获得了采光和视野的开阔。通过采用不同的采光方式，参观者可以看到室外的天空、流云和植物；水体等，充分的日光照射入房间，让游人产生置身户外的感觉，同时在这里，游客可以感受到天气的变化，感受到四季的变化。当前**我国多数**农家乐并不在意园区的整体布局上，关注度低，使得农家乐的整体布局不合理，没有充分利用装饰和布局优化环境，在农家乐的设计、布局上也具有发展的空间。

讨论

投资策略

从上文的研究分析中，可以看出当前农家乐由于资金不足、经营观念落后导致对硬件设备的采购、软件设备的建设主动性不足，据此可从本文研究中发现一些投资商机。

商机 1：为农家乐开展集体采购

如建立农家乐联盟，农家乐联盟可以对农家乐开展集体设备的采购，以降低采购成本、提升采购效率、确保采购质量。

实现方式:开展集体采购，需要确定采购数量，开展采购之前，需要成立一个采购团队，需要包含懂农家乐设备的人，通过与各厂家进行沟通，一定的数量可以给与多少的折扣，首先需要确定农家乐的数量，由于成都周边的农家乐数量非常多，无法做到精确的统计，对美团上显示的农家乐进行大概统计，显示的农家乐超过 50 家，为了方便计算，暂定为 50 家，要是能在所有的农家乐中同时为 50 家农家乐开展服务，团购就体现出了相应的价值。在该种想法的支配下，本人通过阿里网站考察了一种农家乐专用的污水处理系统，该系统一台价格为2.36 万元，而采购 10-20 台，可以减少一千元；20 台以上价格可低至 2.08 万元，如果按照 50 家来计算，可以至少为每家节省费用 2800 元，50 家则可以节省 14 万元，而牵头采购者则可以按照一定的提成获取利润，如按照 10%收取提成，可获取总利润 1.4 万。

商机 2：成立农家乐联盟

还可以通过农家乐联盟对成都农家乐进行图文并茂的对外宣传，提升这些农家乐的知名度，增加农家乐的曝光度，提升农家乐的客流量和营业收入。

实现方式：成立农家乐联盟，可以通过微信公众号的方式开展，联盟的前期需要一定的资金投入，而投资者如果不想投资过多的资金的话，可以通过探寻几家优秀的农家乐作为初始入股者。联盟在具有一定的知名度之前，可能整体会处于亏损状态，但是当趋如成熟期后，降会以最少的运营成本，或者最多的盈利。通过对调研的几家农家乐来看，多数农家乐期望有一个宣传自我的平台，当前的 OTA 平台收费较多，而且服务不精准，所以为了吸引更多的流量，建立联盟具有较大的商机，不仅可以将成都的农家乐推广出去，而且联盟不仅可以赚取服务费，后期还可以开展咨询服务，引导初始投资、集团采购等服务，多项附加值也为联盟的开展带来更多的收入。在对农家乐的费用收取上，可以低于当前的 OTA（15%）平台，定为 10%，且由于有更加针对性的宣传，会取得农家乐乐意接受。若 50 家农家乐在平台开展宣传和营销，平台月营业收入为 100 万，平台将获取宣传费用 10 万。

商机 3：成立农家乐经营培训中心

还可以建立农家乐经营主体的经营培训，成立专门的培训专班，当前成都市周边的农家乐数量众多，并在未来会更加增多，培训班可对当前经营主体的科学经营、经营观念、经营思路和当前最新的经营经验进行分享，提升经营者的经营能力。在农家乐当前的硬件设施上，也可选择一些便利化的硬件设施进行开发，并于农家乐未来的装备使用。培训班的成立初始投资包括租房费用、简单的专修费用及培训教师的费用，地址可以选择在成都的郊区，因为农家乐都集中在城郊地区。

商机 4：农家乐的软硬件设施上

投资农家乐及农家乐的软硬件基础设施，必须要同我国的实际出发。在选择进入该投资领域之前，应当进行充分且深入的实地调研。特别是对于农家乐所需的厨房设备、餐饮设备、住宿设备等要考虑我国人民的消费习惯、使用习惯。可参考国外的先进经验，但不可照搬。只有这样才能够生产出具有广大市场的农家乐软硬件设施。

尽管如此，投资任何行业都应持有谨慎态度，在当前新冠肺炎疫情的影响下，国内外市场经济都遭受了严重的撞击，消费水平下降也是当前我国经济面临的主要形式。因此，无论开展任何投资，都需要进行充分的、实地的考察，投资需谨慎，任何投资都会面临不同程度的风险，对于农家乐以及农家乐的软硬件设施投资来说亦是如此。农家乐的投资必须依据足够大的人流，能够有一定的产品特色和良好的基础设施服务，并且在有足够资金保障的基础上才可考虑进行投资。而对于投资农家乐的软硬件设施上，应充分认识当前我国农家乐的发展现状以及所能承受的成本的最大接受范围，尽管在未来农家乐将会朝着更加完备的基础设施建设前进，也会以更加规范的姿态出现在市场中，以适应消费者高质量的需求，但是在当前的投资阶段，研发新的适用于农家乐的软硬件产品是有发展前景的，但是也不适宜投入大量的资金。毕竟在当前以及未来一段时间内，经济的恢复是需要一定时间的，可考虑逐步投入，慢步研发，并且对开发的新产品积极寻求接受者以获取资金流的保障。

总结与建议

通过对农家乐住宿、餐饮、游乐设 施以及综合管理设备等方面的软硬件上存在的问题为出发点，探究当成都农家乐在这些方面软硬件设备上存在的一问题。进而提出了针对农家乐的投资商机，并提出了相应的投资建议。通过分析，确定四种农家乐投资商机，包括为农家乐开展集体采购、成立农家乐联盟、成立农家乐培训中心、进行农家乐软硬件设施的工厂制造等四个方面，并对这四个方面进行了详细的分析，同时确定了投资成本和利润水平，为投资者提供参考。对于集体采购的投资机会，可通过获取中间差价获利，同时使得经营主体也能获得较多的折扣；对于农家乐联盟，可以通过对农家乐开展宣传获取广告和推广盈利；对于农家乐培训中心，可以通过培训收入获取盈利；对于农家乐软硬件设施的投资上，可以通过制造、售卖、安装等获取利润。

参考文献

Ardichvili A,&Cardozo R.(2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing,18*(1)，105-123.

Arie Reichel. (2000). Oded Lowengart Rural tourism in Israel: service quality and orientation. *Tourism Management*, (21), 451-459.

Barbieri C,&Xu S Y, et al.(2015). Agritourism, Farm visit, or...? Abranding assessment for recreation on farms. *Journal of Travel Research*,(10)，1-15.

Geng S T,&Zhang S Y.(2021).乡村振兴背景下乡村旅游与文化产业协同发展研究.*南京农业大学学报(社会科学版)*, (3)，121-126

He J M,&Li L H.(2002).关于乡村旅游概念的探讨.*西南师范大学学报, 28*(5)，125-128.

Lu K,&Ma L Q.(2019).乡村振兴战略背景下乡村旅游发展研究.*农村经济与科技*, (2)，121-128

Oppermann M.(1996). Rural tourism in southern germany. *Annals of Tourism Research, 23*(1): 86- 102.

Ribeiro M,&Marques C.(2002). Rural tourism and the development of less favored areas. *International Journal of Tourism Research, 4*(3).

Solvoll S,&Alsos G A.(2015). Tourism entrepreneurship- review and future directions [J].*Scandinavian Journal of Hospitality and Tourism,15*(1)，120-137.

Sun D L.(2015)，旅游业的高级化发展与旅游经济增长关系探析.*企业技术开发*, (1)，29-34

Xiao Y X.(2016),旅游对文化传承的影响机制研究——以黔东南州西江苗寨为例.*广州城市职业学院学报*,(3)，221-226

中国广西大健康产业高质量发展布局优化与发展质量评价

DEVELOPMENT QUALITY EVALUATION AND HIGH-QUALITY DEVELOPMENT LAYOUT OPTIMIZATION OF CHINA GUANGXI'S BIG HEALTH INDUSTRY

陆崇芳 [1*], 任旭 [2]

Chongfang Lu[1*] and Xu Ren[2]

[1,2] 泰国正大管理学院中国研究生院

[1,2]Chinese Graduate School, Panyapiwat Institute of Management, Thailand

[*]**Corresponding Author, E-mail:** 2815699422@qq.com

摘要

近几年来，广西正找准产业发展着力点推动大健康千亿元产业稳健着实高质量发展，根据"医、养、管、食、游、动"全产业链要素，以新发展理念、人民健康为中心为引领，对增强广西大健康产业发展质量提出了新的要求。为此，本文科学提出了广西大健康产业与一二三产业深度融合高质量发展功能定位和产业发展布局优化具体路径，从产业综合实力、产业可持续发展能力、产业创新能力和产业成长能力这 4 个方面来对产业发展质量展开综合分析，构建出了一套与之相对应的评价指标体系和评价模型，运用模糊灰色综合评价方法，对广西大健康产业发展质量效果进行评价，以期为今后加强广西大健康产业发展质量体系建设，增强广西发展大健康及其产业的竞争力，促进广西大健康及其产业加快发展提供有益借鉴。

关键词: 大健康产业 发展质量 灰色模糊层次分析法 评价模型

Abstract

In recent years, Guangxi has been identifying the focus of industrial development and promoting the steady, solid, and high-quality development of the big health industry with a value of one hundred billion yuan. Based on the entire industry chain elements of "medicine, nursing, management, food, tourism, and sports", with new development concepts and people's health as the center, new requirements have been put forward to enhance the quality of the development of Guangxi's big health industry. Therefore, this article scientifically proposes the positioning of high-quality development functions and specific paths for optimizing the industrial development layout of the deep integration of Guangxi's big health industry and the primary, secondary, and tertiary industries. It comprehensively analyzes the quality of industrial development from four aspects: industrial comprehensive strength, sustainable development ability, innovation ability, and growth ability, and constructs a corresponding

evaluation index system and evaluation model, The fuzzy grey comprehensive evaluation method is used to evaluate the quality and effectiveness of the development of Guangxi's big health industry, in order to provide useful references for strengthening the construction of Guangxi's big health industry development quality system, enhancing the competitiveness of Guangxi's development of big health and its industry, and promoting the accelerated development of Guangxi's big health and its industry in the future.

Keywords: Big Health Industry, Development Quality, Grey Fuzzy Analytic Hierarchy Process, Evaluation Model

引言

当前，广西大卫生事业大发展迎来十年的关键发展期，广西恰逢推动大卫生事业可持续发展的重大战略机遇。广西的经济一直处于中高速、稳定的发展状态，这将为卫生行业的融合和高质量发展打下良好的基础，而人口老龄化也将为卫生行业的发展提供广阔的市场空间。广西正在围绕"医、养、管、食、游、动"全产业链要素及促进全产业链形成，推进"四个一百"的大健康产业发展，为广西的大健康产业发展做出贡献。然而，面对目前的经济增速下滑，广西的生态、资源等方面的优势并没有转化为发展的优势，广西的大健康产业发展较为迟缓；广西的大健康产业还没有形成完整的大健康产业体系，存在着较大的市场竞争能力和可持续发展的问题。在目前广西经济转型和转型的重要时刻，解决广西大健康产业发展中存在的竞争力不足、产业发展缺乏持续性等问题，具有十分重要的现实意义。为此，有必要对广西大健康产业发展质量体系进行深入研究，并对其进行系统评估，为广西大健康产业高质量发展提供理论贡献和事实依据。

研究目的

新时代背景下，无论从国家层面还是从广西区层面，大健康产业的发展都已经成为未来社会经济需要重点发展的战略性支柱产业，其产业发展不仅关系到经济层面的优质高效增长，更关系到社会层面的全民健康、幸福与和谐。因此，针对广西大健康产业持续健康发展进行深入的研究，其目的是摸清目前广西大健康及其产业持续发展的现状，提出广西大健康及其产业深度融合及高质量发展功能定位与产业发展布局优化具体路径，构建了广西大健康产业发展质量评价指标体系和评价模型，运用模糊灰色综合评价方法，对广西大健康产业发展质量效果进行评价，给出落地可行的政策与建议，这无论从完善健康产业发展理论还是从推进广西健康产业发展实践都极具价值和重要意义。

基于以上目的，本篇论文的研究思路是：在具备充分调研的基础上进行论文研究，深入分析广西大建康产业高质量发展的区内外综合环境，提出广西大健康及其产业深度融合与高质量发展功能定位和产业发展布局优化具体路径，从产业综合实力、产业可持续发展能力、产

业创新能力和产业成长能力这 4 个方面来对产业发展质量展开综合分析，构建出了一套与之相对应的评价指标体系和评价模型，开展广西大健康产业发展质量评价研究，并科学研究广西大健康产业高质量发展布局的支持政策体系，以期为自治区党委、政府进行相关政策决策提供理论和实践参考。

文献综述

十几年来，国内众多产业管理专家、学者重视对大健康产业发展研究，产生了许多研究成果。沈雪（2020）指出，主动落实“健康中国”国家战略的成都市温江区，定下了医学、医药、医疗即“三医”融合、全域深耕大健康产业发展道路，以，即“三医融合”产业之城、创新开放进取之城、便捷高效畅通之城、天蓝地绿亲水之城、文明和谐幸福之城的“五个之城”建设为路径。张伯礼 et al.（2017）通过对中药大健康产业发展现状、存在的问题和不足的详细分析，提出了一个战略中心、两个战略重点、四个发展方向（即以服务健康需求为中心、规划监管与提质增效两个战略重点及规范种植、新品研发、商贸物流、国际发展四个发展方向）和六项重点任务。关雪凌（2019）对卫生产业创新发展进行了研究，对卫生产业创新生态系统的子系统进行了研究。以社区为依据，详细剖析了该制度的运作机理。她对目前卫生行业中所存在的问题进行了较深层次的探讨。对于怎样提升产品共同体的质量，完善集成共同体体系，扩大应用共同体的规模；如加强对环境的支持等现实问题的讨论提出了相应措施和建议。司富春 et al.（2019）展开相关调查，调查结果表明，在偏远地区，大健康行业有着较好的医疗资源，但由于其自身的发展，其所处的区域受到了较大的影响。对大健康产业的发展没有给予足够的关注，尤其是在顶层设计和规划方面尤为疏忽。除此之外，在大健康行业发展过程中，存在的一大问题就是缺乏科技创新能力以及人才驱动力。黄蓉和傅智能（2020）对黄冈市的大健康行业进行了调查，结果表明，大健康行业的结构比较合理，医药行业处于领先地位，而健康服务行业处于领先地位。从目前的发展态势来看，我国卫生行业发展前景广阔。程宁波 et al.（2021）从“科技支持链”的角度出发，建立了一个城市科技支持平台整体分布的分析模型，对其在城市中的作用和影响进行了宏观上的剖析，并在上述基础之上，对成都的科技支持平台系统建设提供了 4 条思路。史赵捷 et al.（2019）等学者对黑龙江省大健康产业进行了调查，结果表明，黑龙江具有丰富的农业、医疗资源，但目前仍面临着一些问题，如：产业布局不够科学，产业整合程度不高，附加值不高，人才外流现象比较突出。于杰（2020）的调查结果表明，怎样才能建立一个以人才为核心，集研发、生产、营销于一体的新型大健康服务经营体系；将服务培训和营销融为一体，是促进大健康行业成长和发展的重要途径。杜夏露（2020）认为，我国居民的卫生观念正在发生变化，目前的卫生发展体制、卫生服务设施、卫生人才等方面存在不足；目前，我国医疗卫生行业的信息化水平还不足以适应社会对医疗卫生行业的多层次和多元化需求。薛冰（2019）在新公共管理学的基础上，对秦皇岛市在城市环境、区位优势、以及大健康农业、大健康制造业等领域中的优势进行了分析；该成果从我国服务业现状出发，对目前我国服务业发展中出现的问题和成因进行了剖析，并从顶层政策设计，加强人才培养，重点发展优势行业等方面提出了相应的建议。李墨（2020）和胡嘉靖（2020）分别在滨海新区和内蒙两个

区域进行了实证研究。结合国内外有关大健康行业发展的文献，对广西大健康行业发展的整体水平进行了全面的评估和评估，但尚无一项较为全面的评估工作。为此，基于已有的国内外研究成果，本课题对广西大健康及相关产业的高质量可持续发展进行了系统的功能定位，并对其进行了系统的规划，为广西大健康产业的发展提供了理论依据。本研究旨在通过对广西大健康行业发展的质量效应的评估，为进一步提高广西大健康行业的综合竞争能力，提高其综合实力，提出一些建议和建议。

研究要点与研究方法

广西大健康及其产业高质量持续发展功能定位与布局优化策略

1. 广西大健康及其产业高质量持续发展功能定位

广西大健康及其产业高质量持续发展布局定位：推进“一先行试验区两示范区一合作试验区一大健康+经济带”建设。

——以南宁1小时都市经济圈为核心，打造南宁国际民族医药养生养老先行试验区。重点发展民族医药康体健身、文化体验和养老地产业，政策上先行先试，大胆创新，加强与东盟各国医疗医药交流与合作，推进广西面向东盟民族医药产业国际化，打造南宁面向东盟国际民族医药健康产业基地和南宁国际民族医药养生养老扩散效应示范区。

——桂西推进康养与旅游结合，打造桂西国际长寿康养产业发展示范区。依托巴马世界长寿之乡国际养生旅游度假区，发展以休闲养生、康体健身、文化体验和旅游度假等为特色的养生养老产业，增加大健康产品数量，重点建设巴马世界长寿之乡国际养生养老服务集聚区。扶持开发健康长寿食品、护理用品、民族医药品等一批老年产品，打造一批大健康重点产业园区。

——桂北推进养生与旅游结合，打造桂北国际旅游养生融合发展的大健康产业示范区。以桂林市、柳州市等主要城市为核心，重点发展休闲式旅游、民族医药养生度假游、异地居住游等旅游产业和健康食品加工生产、养生养老地产开发、医疗康复服务与民族医药养生健康服务、民族医药健康职业教育与培训服务等民族医药养生产业。

——北部湾经济区推进医药与养生、旅游结合，打造北部湾经济区医养健康产业开放合作试验区。以南宁市、北海市、防城港市和钦州市四市为核心，重点发展滨海旅游和养老地产，打造国际滨海医养健康产业基地。

——打造百色-南宁-钦州-防城港高速公路大健康+经济带。以百色，南宁，钦州，防城港四市为核心，重点发展民族医药康养产业、长寿康养产业、滨海旅游观光产业，打造百色-南宁-钦州-防城港高速公路大健康+经济带。

2. 广西大健康产业高质量发展布局优化策略

(1) 突出发展健康养老产业

一是打造健康养老上下游产业及产业链。支持发展老年居家、老年服饰、老年电子、老年健康、老年文化体育、老年沟通与信息辅具、老年医药等健康养老产品上下游产业及产业链。二是增加对养老产业和相关产业链的财政支持。培育并创建一批主导产业突出、产

业链条完整、服务功能完善的健康养老产业园区，并支持具备一定规模的连锁经营的品牌养老机构。积极推进建立集中养老，医疗，老年用品的建设；集健康食品和健康职业教育和训练为一体的健康工业园区。三是要抓住国家对广西的优惠政策，大力发展具有地区特色的老年服务业。重点抓好南宁养老服务综合改革试验区，深圳巴马大卫生合作特别试验区，贺州全国医养融合示范城市建设；以桂北旅游、健康、健康、医疗、健康、旅游、医疗、卫生、健康、文化、旅游等为中心，大力发展北部湾旅游、旅游、旅游等特色产业，并起到示范和带动的效果。充分利用名村名镇，特色城镇的优势，以休闲养生，健康养老，生态疗养为主题；以中医健康和健康食品等为主要内容，创建一批广西特色的健康老区。

(2) 大力发展健康旅游产业

持续推动旅游与健康产业的深度融合，提高提供的服务质量，并使健康旅游的产品更加丰富，以我区为基础，以拥有良好的生态和长寿的优势资源为基础，推动中医药健康、康复疗养、休闲度假等方面的发展。健康会展、节庆及其它健康旅游业。加速推进巴马“世界寿星之都”、桂林“全国养生旅游示范城市”、“绿色之都”“南宁”“中药养生旅游示范城市”的创建工作。在广西大力创建一批康养旅游的国家示范基地、中医药健康旅游的示范基地和示范基地，打造一批健康旅游的示范区域和集聚区，促进健康旅游的产业化和集聚发展。加快在阳朔兴坪休闲疗养地、天湖高寒生态疗养地、广西南丹温泉疗养地等自治区重点规划的重点工程的实施，推动广西的养生旅游业向高端化、高级化发展。创建一批滨海度假型、山水养生型和森林生态型的城市；以温泉康养类、中药养生类为主要的健康旅游项目为主体，加强广西健康旅游的健康功能，提升其品牌的价值。

(3) 发展壮大健康医疗医药产业

一是要凸显广西的地域特点，大力发展中医、壮医、瑶医等医药事业。在此基础上，继续健全“中、壮医”和“瑶医”的城乡卫生服务系统，大力发展中、壮和瑶药的康养服务，提升“中、壮医和瑶医”的养生和健康服务，大力推进“中、壮医药”和“瑶医药”的创新，开发“中、壮医药和文化旅游业，促进”“中、壮医药和文化”的深度融合和发展。二是大力发展以优质卫生健康为核心的高端卫生服务业。对地区内的医疗资源进行平衡配置，建立“15分钟步行的医疗卫生服务圈”，提高基层的医疗服务质量，推动社会办医的持续、健康、规范的发展，并鼓励在医疗资源紧缺的领域中，将社会资本的资金重点投入其中；特别是在特殊需求方面，大力发展高端医疗和康复服务行业。

(4) 培育发展健康管理产业

一是加强卫生健康服务体系的构建，并通过建立卫生信息、卫生检查、卫生干预等方式，促进社会资金进入卫生健康行业；以个体照看管理、家庭医生和健康保险等为主要内容，大力发展健康体检、专业护理、康复和心理健康等专业健康服务机构，并将专业健康体检机构转变为综合的健康管理机构，或者将其改造成专病健康管理中心。二是加速完善“智慧医疗”和“健康云”等信息化服务系统，形成健康医疗产业的服务系统，并以此为契机，积极引导和扶持“智慧医疗”、“互联网”等新型医疗产业的发展，实现“健康医疗”、“远程医疗”等产业的“后追赶”与“前移”。

(5) 积极发展健康食品产业

以全区高质量的有机稻米、茶油、茶叶和其他绿色长寿食品为主要特征，加速一批富硒食品、绿色食品、营养食品等产品的创建；公司以食用菌和中草药为主要原料，以广西特有的健康食品为原料。依托现代化特色农业示范园、特色农产品加工基地、中药种植与研究中心，大力发展以“养生滋补”为主要内容的绿色、有机健康产品，大力发展壮大农村合作社、龙头企业、家庭农场；拥有专业大户等新型生产经营主体，形成产业化、规模化的发展模式，将我区的生态农林业资源优势转变为产业优势。

(6) 着力发展健康运动体育产业

一是以“绿色生态”为立足点，以“七大”为重点，推动“七大”体育产业的发展。立足于山区，立足于海河，与东盟国家相毗邻；以少数民族聚集的区域环境和自然条件为依托，发展健身休闲，山地户外，海河水上运动；汽车，摩托车，航空运动，时尚运动；七个民族体育的绿色化和生态化。着力打造“中国-东盟”四大体育产业，打造“绿色生态山地户外运动”、“蓝色休闲水上体育”、“少数民族传统体育产业”和“国际体育”等特色产业。二是要加速发展竞技和演艺事业，打造出既有东盟又有对外交流的国际性区域性活动枢纽。创建国际品牌赛事，自主品牌赛事，职业体育赛事；特色品牌活动，全民健身系列品牌活动活动系统。鼓励地方主动引入重要的国际性赛事，支持社会团体在国内外举办品牌赛事，并通过社会资本投资，创造出拥有独立知识产权的运动比赛和表演品牌。三是把健身和其它行业有机结合起来，积极打造国家级的健身旅游示范基地。以“体育+”、“+体育”等为载体，将健身体育与旅游休闲、城镇建设、林业、农业有机结合起来；将民族文化与健康、卫生等行业的深层次结合起来，推动大众健身与健康在理念、机制、政策、规划、组织、设施等方面的发展；团队，8项活动深入融合。

大健康产业发展质量灰色模糊综合评价模型设计

1. 建立综合评价指标体系，确定因素集 U

本文的选题原则是：客观科学性、系统合理性、可行性的原则，在向国内众多产业管理方面的专家进行了广泛的调研之后，经过了科学的研究，最终决定从产业综合实力、产业可持续发展能力、产业创新能力和产业成长能力这 4 个方面来对产业发展质量展开综合分析，构建出了一套与之相对应的评价指标体系，在每个一级指标下都有对应的二级指标。其中， W 为各层次工业发展能力的综合评估数值。设 W 表示目标层产业发展竞争力评价综合值。U表示准则层一级评价指标 Ui 所组成的集合，记为 $U=\{U_1, U_2, U_3, U_m\}$ ，分别代表产业综合实力、产业可持续发展能力、产业创新能力和产业成长能力；U_i 表示指标层二级评价指标 U_{ij} 集合，记为 $U_i=\{U_{i1}, U_{i2}, 。。U_{ij}\}$，其中，j 为第 i 类因素的第 j 个子因素。如表 4-1 所示。

2. 确定评价指标 U_i 和 U_{ij} 的权重

本文采用 AHP 对一个复杂系统中的各种要素以及它们之间的联系进行了研究，将问题条理化，分层，并构建了一个层级模式，采用“1~9”尺度方法对属于相同上层的要素成对比对，并对判定结果进行了定量化，从而构建了判定矩阵 A。ui、uj（i, j＝1, 2,…, n）表示因素，aij 表示 ui 对 uj 相对性数值，并有 aij 组成判断矩阵 A=(aij)n×n (i,j=1, 2, …, n)。本

文采用科学实用、简便易行的“方根法”进行近似计算。计算判断矩阵每一行元素的乘积 $Mi=\prod_{j=1}^{n}a_{ij}$ （$i=1,2,\cdots,n$），求 M_i 的 n 次方根 $\overline{W_i}=\sqrt[n]{M_i}$，然后对向量 $\overline{W}=[\overline{W}_1,\overline{W}_2,\cdots\overline{W}_n]$ 作归一化处理，即 $Wi=\overline{W_i}/\sum_{j=1}^{n}\overline{W_j}$，则 $W=[W_1,W_2,\cdots W_n]$ 即为所求的特征向量，最后计算判断矩阵的最大特征根 $\lambda_{\max}=\sum_{i=1}^{n}(AW)_i/nW_i$，（$(AW)_i$ 表示向量 AW 的第 i 个元素）。

3. 确定评语集和样本矩阵

评估集是评估人员对于被评估目标所作出的各项评估的总和。用 V 进行表达，V={v1, v2, v3, …, vn}，其中，vj 代表着第 j个评价结果，n为总的评价结果数。

在该模式下，当 n 是 5 时，V={V1、V2、V3、V4；5}= {出色、好、中、坏；并对其分配 5、4、3；2,1，即指数级别介于两个级别的中间，对应的分数为 4.5, 3.5, 2.5, 1.5。

由 10 名行业管理领域的专家学者组成专家评审组，按照评分从 1 到 5 的范围内进行评分，然后由专家评分表组成抽样矩阵。

4. 建立评价的灰类和白化权函数

利用灰度评定法，对各指标进行权重矩阵的确定。按照以上评估的指数 Cij 的评估级别标准，设置 5 个评估灰色类别，灰色类别编号为 e，也就是 e=1、2、3、4；5，代表的是优秀，良好，中等，较差，差。根据灰色类别对各个质量指数进行了权重函数。对于五种灰色类别，其相应的白化权重是：

第一灰类：“优” { e=1}，$\otimes_1\in[0,5,10]$，白化权函数为 f_1：

$$f_1\left(d_{ijk}^{(s)}\right)=\begin{cases} d_{ijk}^{(s)}/5 & d_{ijk}^{(s)}\in[0,5] \\ 1 & d_{ijk}^{(s)}\in[5,10] \\ 0 & d_{ijk}^{(s)}\notin[0,10] \end{cases}$$

第二灰类：“良” { e=2}，$\otimes_2\in[0,4,8]$，白化权函数为 f_2：

$$f_2\left(d_{ijk}^{(s)}\right)=\begin{cases} d_{ijk}^{(s)}/4 & d_{ijk}^{(s)}\in[0,4] \\ (8-d_{ijk}^{(s)})/4 & d_{ijk}^{(s)}\in[4,8] \\ 0 & d_{ijk}^{(s)}\notin[0,8] \end{cases}$$

第三灰类："中"｛e=3｝，$\otimes_3 \in [0,3,6]$，**白化**权函数为 f_3：

$$f_3\left(d_{ijk}^{(s)}\right)=\begin{cases} d_{ijk}^{(s)}/3 & d_{ijk}^{(s)} \in [0,3] \\ (6-d_{ijk}^{(s)})/3 & d_{ijk}^{(s)} \in [3,6] \\ 0 & d_{ijk}^{(s)} \notin [0,6] \end{cases}$$

第四灰类："较差"｛e=4｝，$\otimes_4 \in [0,2,4]$，**白化**权函数为 f_4：

$$f_4\left(d_{ijk}^{(s)}\right)=\begin{cases} d_{ijk}^{(s)}/2 & d_{ijk}^{(s)} \in [0,2] \\ (4-d_{ijk}^{(s)})/2 & d_{ijk}^{(s)} \in [2,4] \\ 0 & d_{ijk}^{(s)} \notin [0,4] \end{cases}$$

第五灰类："**差**"｛e=5｝，$\otimes_5 \in [0,1,2]$，**白化**权函数为 f_5：

$$f_5\left(d_{ijk}^{(s)}\right)=\begin{cases} 1 & d_{ijk}^{(s)} \in [0,1] \\ (2-d_{ijk}^{(s)})/1 & d_{ijk}^{(s)} \in [1,2] \\ 0 & \end{cases}$$

5. 计算灰色评价系数

对于评价指标U_{ij}，**第S个指**标属于第e个评价灰类的灰色评价系数为 $x_{ije}^{(s)}$，则有：

$$x_{ijt}^{(s)}=\sum_{k=1}^{p} f_e\left(d_{ije}^{(s)}\right)$$

对于评价指标U_{ij}，**第S个指**标属于各个评价灰类的总灰色评价系数为 $x_{ij}^{(s)}$，则有：

$$x_{ijt}^{(s)}=\sum_{e=1}^{4} f_e\left(d_{ije}^{(s)}\right)$$

6. 计算灰色评价权向量及权矩阵

$$\underset{\otimes}{\tilde{A}} = \left[(a_{1,}0)(a_2,0)\ldots(a_{m,}0)\right]$$

（七） 计算综合评价值

$$\underset{\otimes}{\tilde{B}} = \underset{\otimes}{\tilde{A}} \circ \underset{\otimes}{\tilde{R}} = \left[(\sum_{1}^{n} a_k \bullet v_{kj}, \prod_{k=1}^{n} (1 \wedge (v_k + v_{kj}))) \right]_m$$

研究结果

为了验证建立的产业发展质量评价指标体系的科学性、合理性和评估模型的可操作性和适用性，选取了广西大健康产业作为评价对象，进行产业发展质量综合评估。

1. 建立综合评价指标体系，确定评价指标 U_i 和 U_{ij} 的权重

运用“1~9”尺度方法，对各因子之间的重要性进行了对等对比，得出了主要因子层次的判定矩阵 A，见表 6。对判断矩阵 A 每一行元素的乘积 M_i 进行计算，计算 M_i 的 4 次方根 $\overline{W_i}$，之后对向量进行归一化处理 $\overline{W} = (\overline{W}_1, \overline{W}_2, \overline{W}_3, \overline{W}_4)$，$Wi = \overline{W_i} / \sum_{j=1}^{4} \overline{W_j}$，则 $W = (W_1, W_2, W_3, W_4)$ =(0.1296，0.4824，0.2048，0.1833) 即是所求的特征向量，并且 CR=0.0094<0.1，这说明了判断矩阵 A 具有满意的一致性，所以 $W = (W_1, W_2, W_3, W_4)$ 的每个成份可以被用作 $U=\{u_1, u_2, u_3, u_4\}$ 的权重系数。详细的计算成果如表 1,2,3;4,5,6 所示

表 1: Ui的权重表

U	U1	U2	U3	U4	Wi
U1	1	1/4	1/2	1/3	0.1296
U2	4	1	2	2	0.4824
U3	2	1/2	1	1/2	0.2048
U4	1/3	1/2	2	1	0.1833

表 2: U1i的权重表

U1	U11	U12	U13	U14	W1i
U11	1	1	2	1/2	0.2274
U12	1	1	2	1/2	0.2274
U13	1/2	1/2	1	1/3	0.1221
U14	2	2	3	1	0.4232

表 3: U2i的权重表

U2	U21	U22	U23	U24	W1i
U21	1	1/4	1/3	2	0.2098
U22	1	1	1/3	2	0.2098
U23	3	3	1	4	0.4644
U24	1/2	1/2	1/4	1	0.1161

表 4: U3i的权重表

U3	U31	U32	U33	U34	W3i
U31	1	2	2	2	0.4000
U32	1/2	1	1	1	0.2000
U33	1/2	1	1	1	0.2000
U34	1/2	1	1	1	0.2000

表 5: U4i的权重表

U4	U41	U42	U43	U44	W4i
U41	1	1/2	1/2	1/2	0.1429
U42	2	1	1	1	0.2857
U43	2	1	1	1	0.2857
U44	2	1	1	1	0.2857

表 6: 广西大健康产业发展质量综合评价指标及各指标权重

	一级评价指标	权重 W	二级评价指标	权重 a_{ij}
广西大健康产业发展质量综合评价指标体系	产业综合实力U_1	0.1296	产业规模U_{11}	0.2274
			产业增加值率U_{12}	0.2274
			产业年贡献值占 GDP 总量的比重U_{13}	0.1221
			产业年利税总额U_{14}	0.4232
	产业可持续发展能力U_2	0.4824	产业发展环境U_{21}	0.2098
			产业保障政策U_{22}	0.2098
			产业市场绩效U_{23}	0.4644
			产业市场拓展能力U_{24}	0.1161
	产业创新能力	0.2048	产业资源U_{31}	0.4000
			产业能力U_{32}	0.2000
			产业效益U_{33}	0.2000
			产业技术进步率U_{34}	0.2000
	产业成长能力 U_4	0.1833	产业发展集中度U_{41}	0.1429
			产业市场构成U_{42}	0.2857
			产业利润率U_{43}	0.2857
			企业发展现况U_{44}	0.2857

2. 确定评语集和样本矩阵

由10名行业管理专家组成的专家评审团，按照评分从1到5取值，对每一项指标进行评分，然后由10名专家组成的评分表，得出一个评估矩阵 D，具体为：

$$D=\begin{pmatrix} 3 & 3.5 & 4.5 & 4 & 4 & 3.5 & 3.5 & 3 & 3.5 & 3.5 \\ 5 & 4.5 & 5 & 5 & 4.5 & 4 & 5 & 4.5 & 4 & 5 \\ 4.5 & 3.5 & 4 & 4.5 & 4 & 4 & 4.5 & 5 & 5 & 4.5 \\ 3.5 & 4 & 4.5 & 3.5 & 4 & 4.5 & 4 & 3.5 & 4 & 4.5 \\ 4.5 & 4.5 & 5 & 4 & 3.5 & 4 & 3.5 & 4.5 & 3.5 & 5 \\ 4 & 4.5 & 3.5 & 4.5 & 4 & 4.5 & 4 & 3.5 & 3.5 & 3.5 \\ 3 & 3.5 & 3 & 3.5 & 3.5 & 3 & 3 & 3.5 & 3 & 3.5 \\ 4 & 3.5 & 3.5 & 4 & 3.5 & 3 & 4 & 3.5 & 3 & 3 \\ 4 & 4 & 3.5 & 4 & 4 & 3.5 & 4 & 4 & 3.5 & 3.5 \\ 4.5 & 4 & 4 & 4.5 & 4.5 & 4 & 3.5 & 4.5 & 4.5 & 4 \\ 3 & 2.5 & 3 & 2.5 & 3 & 2.5 & 2.5 & 3 & 2.5 & 2.5 \\ 4 & 3.5 & 3.5 & 4 & 3 & 3 & 3.5 & 3 & 3.5 & 3.5 \\ 3.5 & 3 & 3 & 3.5 & 3 & 3 & 3.5 & 3.5 & 3 & 3 \\ 3.5 & 3.5 & 4 & 3.5 & 4 & 3 & 4 & 3.5 & 3.5 & 3 \\ 5 & 4.5 & 4 & 4.5 & 4.5 & 4 & 4 & 4.5 & 4.5 & 4 \\ 3.5 & 4 & 4.5 & 4 & 3.5 & 4.5 & 4 & 4 & 4.5 & 3.5 \end{pmatrix}$$

3. 根据白化权函数，计算灰色评价权向量及权矩阵

$$R_1=\begin{bmatrix} r_{11} \\ r_{12} \\ r_{13} \\ r_{14} \end{bmatrix}=\begin{bmatrix} 0.275 & 0.334 & 0.305 & 0.086 & 0.00 \\ 0.419 & 0.378 & 0.203 & 0.00 & 0.00 \\ 0.373 & 0.380 & 0.236 & 0.011 & 0.00 \\ 0.324 & 0.375 & 0.270 & 0.030 & 0.00 \end{bmatrix}. \quad R_2=\begin{bmatrix} r_{21} \\ r_{22} \\ r_{23} \\ r_{24} \end{bmatrix}=\begin{bmatrix} 0.351 & 0.366 & 0.251 & 0.031 & 0.00 \\ 0.318 & 0.367 & 0.275 & 0.040 & 0.00 \\ 0.236 & 0.295 & 0.333 & 0.136 & 0.00 \\ 0.261 & 0.329 & 0.313 & 0.094 & 0.00 \end{bmatrix}.$$

$$R_3=\begin{bmatrix} r_{31} \\ r_{32} \\ r_{33} \\ r_{34} \end{bmatrix}=\begin{bmatrix} 0.299 & 0.374 & 0.288 & 0.039 & 0.00 \\ 0.351 & 0.387 & 0.251 & 0.010 & 0.00 \\ 0.195 & 0.244 & 0.325 & 0.235 & 0.00 \\ 0.258 & 0.322 & 0.317 & 0.103 & 0.00 \end{bmatrix}. \quad R_4=\begin{bmatrix} r_{41} \\ r_{42} \\ r_{43} \\ r_{44} \end{bmatrix}=\begin{bmatrix} 0.231 & 0.288 & 0.337 & 0.144 & 0.00 \\ 0.269 & 0.336 & 0.309 & 0.085 & 0.00 \\ 0.373 & 0.391 & 0.236 & 0.00 & 0.00 \\ 0.324 & 0.375 & 0.270 & 0.030 & 0.00 \end{bmatrix}.$$

4. 计算综合评价值

(1) 对一级评指标 U_1 作出评价。一级评指标 U_1 的评价结果 B_1：

$B_1=W_1 \cdot R_1=$（0.340,0.367,0.282,0.034,0）

同理,我们可以计算 U_2，U_3，U_4 的综合评价值 B_2, B_3, B_4。

$$R=\begin{bmatrix} B_1 \\ B_2 \\ B_3 \\ B_4 \end{bmatrix}=\begin{bmatrix} 0.340 & 0.367 & 0.282 & 0.034 & 0.00 \\ 0.280 & 0.329 & 0.301 & 0.089 & 0.00 \\ 0.280 & 0.340 & 0.294 & 0.085 & 0.00 \\ 0.309 & 0.356 & 0.281 & 0.053 & 0.00 \end{bmatrix}.$$

(2) 计算综合评价值。由 R=（B_1， B_2, B_3, B_4）^{T}，且 W=（0.1296，0.4824，0.2048，0.1833），则综合评价值 B：B = W * R = (0.2931, 0.3411,0.2934,0.0744, 0)，设将各评价灰类等级按“灰水平”赋值，即第 1 灰类“优”取 5，第 2 灰类“良”取 4，第 3 灰类“中”取 3，第 4 灰类“较差”取 2，第 5 灰类“差”取 1，则各级评价灰类等级值化向量 C：C=（5，4，3，2，1），所以广西大健康产业发展质量模糊灰色综合评价值:

U =B * C^T= (0.2931, 0.3411,0.2934,0.0744, 0) *（5，4，3，2，1）^{T}=3.8589

讨论

通过灰色模糊层次分析 AHP 方法，得出了广西大健康产业发展的质量灰色模糊综合评判值为 3.8589，从以上的评判标准来看，广西大健康行业发展的质量在总体上处于较好的状态，但在高质量发展状态下还具有一定差距。

通过层次分析方法对一级指标与二级指标的权重进行了计算，结果表明：在一级指标中，企业的可持续发展与企业的自主创新两个指标所占据的比例较大；其比例为 48.24%、20.48%. 其中，行业的整体竞争力和行业成长性的比例比较低，只有 12.96% 和 18.33%。在二级指标中，产业年利税总额、产业市场绩效、产业资源和产业利润率等指标，而产业年贡献值占 GDP 总量的比重、产业市场拓展能力、产业效益；行业发展的集中程度和其他指数的比例偏低。这说明在广西大健康产业发展质量指标体系中，一级指标的产业可持续发展能力和产业创新能力相对来说占有较大比重，所以应该将产业可持续发展能力和产业创新能力建设放在重要位置，加强这两方面的建设；二级指标的产业年利税总额、产业市场绩效、产业资源和产业利润率也有较大比重，理应加强建设。虽然产业年贡献值占 GDP 总量的比重、产业市场拓展能力、产业效益、产业发展集中度等指标所占比重较小，但它们都是广西大健康产业发展质量指标体系不可缺少的组成部分之一，如果忽视它们的建设，将会对广西大健康产业发展质量体系的整体提升造成不良影响，因此，产业年贡献值占 GDP 总量的比重、产业市场拓展能力、产业效益、产业发展集中度这四方面的建设不应忽视，反而要重点加强建设。

总结与建议

本文将层次分析法和模糊灰色综合评价方法的理论知识相结合应用到广西大健康产业发展质量评估中，建立了科学实用的评价指标体系和模糊灰色综合评价模型。该模型可对广西大健康产业发展质量进行评价，系统地反映广西大健康产业发展质量体系中存在的优势和不足，为广西大健康产业发展质量评价体系建设提供决策依据。实例证明，用模糊灰色综合评价方法评估广西大健康产业发展质量效果，易于掌握、便于操作，具有良好的应用价值。

参考文献

于杰. (2020). 秉持“健康人生从头开始”理念布局大健康产业——记巨隆生物科技有限公司董事长刘冠军和他的蒙域养发品牌. *中国商界* (3), 104-105.

史赵捷, 张越, 仝泽昊, & 张志远.(2019). 黑龙江省健康产业发展研究. *商业经济*, (09), 14-15.

司富春, 高燕, & 宋雪杰. (2019). 加强科技创新力度推进民族地区大健康医药产业发展. *中医研究*, *32*(8), 3-6

关雪凌. (2019). 健康产业创新生态系统构建及发展对策研究. *卫生经济研究* (10), 61-64.

杜夏露. (2020). 我国大健康产业发展存在的问题及对策建议. *现代商业* (6), 73-74.

李墨. (2020). *滨海新区健康产业发展的现状, 问题与对策研究* [硕士论文]. 天津财经大学.

沈雪. (2020). “健康中国”战略下的温江大健康产业实践. *中国经济周刊* . (18), 90-91.

张伯礼, 张俊华, 陈士林, 段金廒, 黄璐琦, 孙晓波, & 薛晓娟. (2017). 中药大健康产业发展机遇与战略思考. *中国工程科学* (02), 16-20.

胡嘉靖. (2020). *内蒙古健康产业政策研究* [硕士论文]. 内蒙古师范大学.

黄坤锦. (2006). 大学通识教育的基本理念和课程规划. *北京大学教育评论*, *4*(3), 12.

黄蓉, & 傅智能 (2020). 大健康产业研究分析与对策探析——以湖北省黄冈市为例. *当代经济*, (6), 4-8.

程宁波, 范文博, 田丹, & 兰雪. (2021). 科技创新平台体系建构的理论,经验启示及成都路径. *决策咨询* (3), 6.

薛冰. (2019). *秦皇岛市大健康业发展对策研究* [硕士论文]. 燕山大学.