# FACTORS INFLUENCING THE INTENTION TO USE WECHAT PAYMENT IN GUANGXI UNIVERSITY OF FOREIGN LANGUAGES: A CASE STUDY OF UTAUT2 MODEL



MASTER OF BUSINESS ADMINISTRATION IN DIGITAL ECONOMICS AND MANAGEMENT INNOVATION (INTERNATIONAL PROGRAM) MAEJO UNIVERSITY 2024

# FACTORS INFLUENCING THE INTENTION TO USE WECHAT PAYMENT IN GUANGXI UNIVERSITY OF FOREIGN LANGUAGES: A CASE STUDY OF UTAUT2 MODEL



A INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN DIGITAL ECONOMICS AND MANAGEMENT INNOVATION (INTERNATIONAL PROGRAM) ACADEMIC ADMINISTRATION AND DEVELOPMENT MAEJO UNIVERSITY 2024

Copyright of Maejo University

## FACTORS INFLUENCING THE INTENTION TO USE WECHAT PAYMENT IN GUANGXI UNIVERSITY OF FOREIGN LANGUAGES: A CASE STUDY OF UTAUT2 MODEL

NAN YANG

THIS INDEPENDENT STUDY HAS BEEN APPROVED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN DIGITAL ECONOMICS AND MANAGEMENT INNOVATION (INTERNATIONAL PROGRAM)

APPROVED BY	Advisory Committee
Chair	
	(Assistant Professor Dr. Sutthikarn Khong-khai)
Committee	
	(Dr. Prayong Kusiris <mark>i</mark> n)
	······
Committee	
	(Dr. Winitra Leelapattana)
	<u> </u>
Program Chair, Master of Business	
Administration	
in Digital Economics and Management	(Associate Professor Dr. Siriporn Kiratikarnkul)
Innovation	
(International Program)	
CERTIFIED BY THE OFFICE OF	
ACADEMIC ADMINISTRATION	(Associate Professor Dr. Chaiyot Sumritsakun)
AND DEVELOPMENT	Acting Vice President

ชื่อเรื่อง	ปัจจัยที่มีอิทธิพลต่อการตั้งใจใช้บริการการชำระเงินผ่านแอพพลิเคชั่นวี
	แซท ในมหาวิทยาลัยภาษาต่างประเทศกว่างสี: กรณีศึกษา ส่วนขยาย
	ทฤษฎีรวมการยอมรับและการใช้เทคโนโลยี
ชื่อผู้เขียน	Miss Nan Yang
ชื่อปริญญา	บริหารธุรกิจมหาบัณฑิต สาขาวิชาเศรษฐศาสตร์ดิจิทัลและนวัตกรรมการ
	จัดการ (หลักสูตรนานาชาติ)
อาจารย์ที่ปรึกษาหลัก	ผู้ช่วยศาสตราจารย์ ดร.ศุทธิกานต์ คงคล้าย

# บทคัดย่อ

การศึกษานี้มีวัตถุประสงค์เพื่อศึกษาปัจจัยที่มีอิทธิพลต่อความตั้งใจที่จะชำระเงินผ่าน แอพพลิเคชั่นวีแซท (WeChat) ในกลุ่มนักศึกษามหาวิทยาลัย มหาวิทยาลัยภาษาต่างประเทศกว่างสี โดยใช้การวิเคราะห์การถดถอยพหุคูณ เพื่อประเมินผลกระทบของปัจจัยต่างๆ โดยนำแบบจำลอง ทฤษฎีรวมการยอมรับและการใช้เทคโนโลยีของโครงสร้างต่างๆ (Unified Theory of Acceptance and Use of Technology 2, (UTAUT2)) มาปรับใช้ เก็บข้อมูลจากศึกษาจำนวน 400 ราย เครื่องมือ ที่ใช้ในการเก็บรวบรวมข้อมูล คือ แบบสอบถามออนไลน์ ผลการศึกษาจำนวน 400 ราย เครื่องมือ ที่ใช้ในการเก็บรวบรวมข้อมูล คือ แบบสอบถามออนไลน์ ผลการศึกษาพบว่า อิทธิพลทางสังคม ปัจจัย ที่เกี่ยวกับสภาพแวดล้อม แรงจูงใจด้านความบันเทิง การรับรู้คุณค่าด้านราคา และนิสัย มีอิทธิพล อย่างมีนัยสำคัญต่อความตั้งใจที่จะชำระเงินผ่านแอพพลิเคชั่นวีแซท (WeChat) ในขณะที่ปัจจัยด้าน ความคาดหวังในประสิทธิภาพ และความคาดหวังในความพยายามไม่ได้มีอิทธิพลอย่างมีนัยสำคัญ แบบจำลองการถดถอยอธิบายความแปรปรวนขอความตั้งใจของผู้ใช้งานแอพพลิเคชั่นวีแซท (WeChat) เพื่อการชำระเงินร้อยละ 81.8 (R<sup>2</sup> = 0.818) โดยตัวแปรนิสัยเป็นตัวทำนายที่มีอิทธิพล มากที่สุด ผลการศึกษาในครั้งนี้ช่วยเพิ่มความเข้าใจเกี่ยวกับการนำการชำระเงินดิจิทัลมาใช้ในบริบท ทางวัฒนธรรมและเทคโนโลยีที่เป็นเอกลักษณ์ของมหาวิทยาลัยในประเทศจีน โดยให้ข้อมูลเชิงลีก สำหรับกลยุทธ์การนำเทคโนโลยีมาใช้ในอนาคตและการวิจัยเกี่ยวกับการผสานรวมเทคโนโลยีการ ชำระเงินใหม่และแบบดั้งเดิม

คำสำคัญ : โมเดล UTAUT2, ความตั้งใจใช้, การชำระเงินด้วยวีแชท, การทำธุรกรรมทาง อิเล็กทรอนิกส์

Title	FACTORS INFLUENCING THE INTENTION TO USE
	WECHAT PAYMENT IN GUANGXI UNIVERSITY OF
	FOREIGN LANGUAGES: A CASE STUDY
	OF UTAUT2 MODEL
Author	Miss Nan Yang
Degree	Master of Business Administration in Digital
	Economics and Management Innovation
	(International Program)
Advisory Committee Chairperson	Assistant Professor Dr. Sutthikarn Khong-khai

#### ABSTRACT

This study examines the factors influencing the intention to use WeChat Payment among college students at Guangxi University of Foreign Languages, employing multiple regression analysis to assess the impact of various constructs from the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) model. Analyzing data from 400 students through online questionnaires, the study finds that Social Influence, Facilitating Conditions, Hedonic Motivation, Price Value, and Habit significantly influence the intention to use WeChat Payment, while Performance Expectancy and Effort Expectancy do not. The regression model explains 81.8% of the variance in user intention ( $R^2 = 0.818$ ), highlighting Habit as the strongest predictor. These results contribute to the understanding of digital payment adoption within the unique cultural and technological context of a Chinese university, offering insights for future technology adoption strategies and research into the integration of new and traditional payment technologies.

Keywords : UTAUT2 Model, Intention to Use, WeChat Payment, E-business

#### ACKNOWLEDGEMENTS

As I near the completion of my independent study, I am filled with a mix of emotions. The past two and a half years spent as a postgraduate student at Maejo University International College (MJU-IC) have profoundly shaped my professional and personal development.

First and foremost, I wish to express my deepest gratitude to my advisor, Assistant Professor Dr. Sutthikan Khong-khai. Her meticulous approach and extensive research experience have been invaluable in overcoming the academic challenges I faced. Her dedication to rigorous scholarship, calm demeanor, and indefatigable spirit have set a benchmark for my lifelong learning.

I am also immensely thankful to the faculty and staff of Maejo University International College for their invaluable insights and constructive feedback. Special thanks are due to Associate Professor Dr. Siriporn Kiratikarnkul, Dr. Prayong Kusirisin, Dr. Winitra Leelapattana, Assistant Professor Dr. Thatphong Awirothananon, and Assistant Professor Dr. Kittinoot Chulikavit, whose collective wisdom has greatly inspired and contributed to my intellectual growth.

My heartfelt appreciation extends to all my peers and friends in the same major. You have all added vibrant colors to my academic journey, making each moment memorable. Our discussions have broadened my perspectives and introduced new ideas that have shaped my thinking.

To my parents, I owe a world of thanks. Your unwavering support and respect for my decisions have given me the strength to press forward unconditionally. Your selfless love is the foundation upon which I stand today.

The completion of my independent study marks not only the end of this chapter of my academic career but also the beginning of a new journey. I carry forward the lessons from my mentors and parents with a heart full of gratitude. Lastly, I extend my sincere thanks to all the professors who took time from their busy schedules to review my study and participate in my defense. I welcome your critiques and corrections with open arms.

Nan Yang



## TABLE OF CONTENTS

Pag	е
ABSTRACT (THAI)	2
ABSTRACT (ENGLISH)	)
ACKNOWLEDGEMENTS	Е
TABLE OF CONTENTS	ĉ
List of Tables	<
List of Figures	
	1
1.1 Research Background	1
1.2 Research Que <mark>stion</mark>	2
1.3 Research Objectives	2
1.4 Scope of the Study	3
1.4.1 Scope of Demography	
1.4.2 Scope of Area	
1.4.3 Scope of Content	3
1.4.4 Scope of Time	3
1.5 Research Significances	3
1.6 Definition of TSerm	4
1.6.1 WeChat Payment	4
1.6.2 Performance Expectancy (PE)	4
1.6.3 Effort Expectancy (EE)	4
1.6.4 Social Influence (SI)	4

1.6.5 Facilitating Conditions (FC)	5
1.6.6 Hedonic Motivation (HM)	5
1.6.7 Price Value (PV)	5
1.6.8 Habit (HA)	5
1.6.9 Intention to Use WeChat Payment	5
CHAPTER II REVIEW OF RELATED LITERATURE	6
2.1 WeChat Public Platform and WeChat Payment in Colleges and Universities	6
2.1.1 WeChat Public Platform	6
2.1.2 Research on the current situation of WeChat public platforms in colleg	
2.1.3 Application of WeChat Payment in Colleges and Universities	7
2.1.4 Application of WeChat Payment on WeChat Public Platform of Guangx University of Foreign Languages	8
2.2 Concepts, Theories, and Research Related to UTAUT	8
2.2.1 Unified Theory of Acceptance and Use of Technology (Abbreviation: UTAUT)	8
2.2.2 Extending the Unified Theory of Acceptance and Use of Technology	
(Abbreviation: UTAUT2)	11
2.3 Concepts, Theories, and Research Related to Intention	19
2.4 Related Research	20
2.4.1 Research Related to Willingness to Use Digital Payment	20
2.4.2 Research Related to UTAUT and UTAUT2 Models	22
2.5 Conceptual Framework	24
2.6 Research Hypotheses	25
CHAPTER III RESEARCH METHODOLOGY	26

	3.1 Research Design	26
	3.2 Research Process	27
	3.3 P Population and Sample	28
	3.3.1 Population	28
	3.3.2 Sample	29
	3.3.3 Sample Selection Method	29
	3.4 Research Instrument	31
	3.4.1 Construction of the Research Instrument	31
	3.4.2 Questionnaire Development Process	35
	3.5 Quality Testing of Research Instruments	36
	3.5.1 Validity Test of the Instrument	36
	3.5.2 Instrume <mark>nt</mark> Reliability Testing	37
	3.6 Data Collection	
	3.6.1 Primary Data	
	3.6.2 Secondary Data	39
	3.7 Data Gathering	39
	3.7.1 Survey Data Checking	39
	3.7.2 Data Coding and Entry	40
	3.7.3 Data Processing	40
	3.8 Data Analysis	40
CI	HAPTER IV RESULTS	43
	4.1 Descriptive Statistical Analysis	43
	4.1.1 General demographic characteristics of the respondents	43
	4.1.2 Descriptive Statistical Analysis of WeChat Payment Usage	45

I

4.1.3 UTAUT2 Factors Influencing the Intention to Use WeChat Payment	. 47
4.2 Correlation Analysis	. 51
4.3 Regression Analysis	. 53
4.4 Summary of This Chapter	. 59
CHAPTER V CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS	. 60
5.1 Summary of Results	. 60
5.2 Discussions	
5.3 Research Significance	. 62
5.3.1 Theoretical Significance	. 62
5.3.2 Practical Significance	. 63
5.4 Research Limitations	
5.5 Recommendations and Future Research	. 64
REFERENCES	. 66
APPENDIXES	.74
APPENDIX A QUESTIONNAIRES (In English)	. 75
APPENDIX B QUESTIONNAIRES (In Chinese)	. 85
CURRICULUM VITAE	. 93

J

## List of Tables

	Page
Table 1 Definitions and variables in the UTAUT model	10
Table 2 Definition and Measurement of Performance Expectancy	13
Table 3 Definition and Measurement of effort expectancy	14
Table 4 Definition and Measurement of social influence	15
Table 5 Definition and Measurement of facilitating conditions	16
Table 6 Definition and Measurement of hedonic motivation	17
Table 7 Definition and Measurement of price value	18
Table 8 Definition and Measurement of habit	19
Table 9 Summary of Studies on Factors Influencing Willingness to Use Digital	
Payment	21
Table 10 Examples of studies related to UTAUT and UTAUT2 models	23
Table 11 Elements of the research hypotheses	25
Table 12 Distribution and Recovery of Questionnaires by Faculty	
Table 13 KMO and Bartlett's Test	
Table 14 Reliability Analysis of Pre-survey Sample Data	
Table 15 Effort Expectancy (EE) Reliability Test	
Table 16 Descriptive Statistics of Demographic Information	
Table 17 Descriptive Statistical Analysis of WeChat Payment Usage	45
Table 18 Descriptive Statistical Analysis of UTAUT2 Factors Influencing the In-	tention
to Use WeChat Payment	
Table 19 Pearson Correlation Coefficient Reference Values	51
Table 20 Correlation analysis between variables	

Table	21 Results of linear regression analysis (N=400)	55
Table	22 Partial Research Hypotheses Testing Results	57



# List of Figures

	Page
Figure 1 Unified Theory of Acceptance and Use of Technology (UTAUT)	9
Figure 2 Extending the Unified Theory of Acceptance and Use of Technology	
(UTAUT2)	11
Figure 3 Research Framework	25
Figure 4 Research Process	27
Figure 5 Modified Study Model	58



#### CHAPTER I

#### INTRODUCTION

#### 1.1 Research Background

The digital economy is profoundly transforming human life, ushering in a new era. As the e-commerce model gains widespread acceptance, internet financial services such as third-party payments have experienced rapid growth. With the global economy's rapid development, competition in the payment service market has intensified, fostering financial innovation and the emergence of electronic payment tools. The widespread application of payment innovation technology and the need for epidemic prevention and control have accelerated the development of digital payments in many countries. A report by the Boston Consulting Group predicts that global digital payment revenue will grow by 7.3% from 2020 to 2025, reaching \$2.9 trillion by 2030. Several countries have actively introduced incentives to promote and popularize digital payments (Yang & Yang, 2022). The shift in global consumption patterns due to the epidemic, with online transactions becoming more prevalent, has accelerated the decline of cash payments and driven the rise in global digital payment transaction volumes. According to S&P Global's "Global Online Payments and FinTech Ecosystems Report 2021," the epidemic has shifted payment behavior significantly. Since 2020, one-third of global users have adopted digital payments, with more than half (52%) of consumers shifting all or most of their in-store purchases online, and 59% using at least one type of digital payment service (Qian, 2022).

WeChat, a social software launched by Tencent in 2011, quickly gained a substantial user base and became a popular social platform (Zheng & Dang, 2015). Building on WeChat, Tencent and the third-party payment platform CaiPaiTong launched an innovative mobile payment product, WeChat Pay. This mobile payment function, integrated into the WeChat client, provides users with safe, fast, and efficient payment services. It allows users to complete quick online payments via their mobile phones using bound bank cards (Wang, 2015). The initial phase of WeChat Pay includes QR code payment, public number payment, and mobile application payment (Liu, 2015).

The rise of online shopping and the development of instant social communication modes have driven the rapid development of WeChat technology. In 2016, statistics showed that WeChat Pay users reached approximately 400 million, with the platform driving life consumption to 11 billion yuan, primarily in entertainment, accounting for 5.891 billion yuan. As an independent function, WeChat Pay has shown strong vitality, expanding its payment functions and adding fun and simplicity to mobile payments (Chen, Gu, & Zhu, 2016). By August 15, 2018, Tencent's quarterly report indicated that the combined monthly active accounts of WeChat and Weixin reached

1.058 billion. Users can use WeChat Pay for various activities, such as visiting the doctor, shopping, dining, traveling, and paying utility bills, demonstrating its penetration into all aspects of life (Xiao, 2018).

College students, a young consumer group with diverse user experiences, increasingly use WeChat Pay and other online payment methods. These payment methods reflect various factors influencing college students' intention to use WeChat Pay (Yang, Cao, & Li, 2017). Contemporary college students have grown alongside China's rapid economic development and media business evolution. Influenced by the social preferences of their peers, many choose WeChat as their primary social media platform. Additionally, college students often rely on family support for income, with parents frequently using WeChat to provide daily pocket money, further cultivating the habit of using WeChat as a primary payment method. Displaying consumer information on the WeChat platform stimulates consumption desires and influences the shopping behavior of others (Fu, 2022).

To meet the growing demand for WeChat, a public platform module has been added, allowing users to follow public accounts by searching or scanning QR codes. This provides a new communication bridge between the media and users (Zhu, 2020). As mobile payment becomes more widespread, barcode payment offers the advantages of convenience and low application thresholds. Consequently, WeChat Pay, a non-cash payment method, is becoming more accepted. Colleges and universities should adapt to the new digital and informational era by expanding WeChat services and improving mobile payment functionalities, thereby creating a better, faster, more timely, accurate, and smarter fee collection system for students (Jiang & Luo, 2018).

Given the numerous WeChat public accounts associated with colleges and universities, each providing varying levels of information services, users often experience confusion. Hence, a study titled "Factors Influencing the Intention to Use WeChat Payment in Guangxi University of Foreign Languages: A Case Study of UTAUT2 Model" was conducted. This empirical investigation aims to understand the factors influencing continuous user intentions to improve the quality and optimize the official WeChat payment platform of the university.

#### 1.2 Research Question

How do the UTAUT2 model factors—performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit—influence the intention to use WeChat Payment among students at Guangxi University of Foreign Languages?

#### 1.3 Research Objectives

1. To analyze the levels of performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, habit, and intention

to use WeChat Payment among students at Guangxi University of Foreign Languages, China.

2. To determine the influence of performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit on the intention to use WeChat Payment among students at Guangxi University of Foreign Languages, China.

#### 1.4 Scope of the Study

#### 1.4.1 Scope of Demography

The study population includes current undergraduates at Guangxi University of Foreign Languages, encompassing both undergraduate and professional programs at both campuses. The university has an enrollment of 33,000 students (Guangxi University of Foreign Languages, 2023).

#### 1.4.2 Scope of Area

Guangxi University of Foreign Languages is located in Nanning, the capital of Guangxi, China, and comprises two campuses: Nanning Wuhe Campus and Airport Campus. According to the university's official website, the institution includes 16 faculties and departments, offering 60 undergraduate and specialized majors (including directions), with more than 33,000 full-time students (Guangxi University of Foreign Languages, 2023).

#### 1.4.3 Scope of Content

This study investigates the factors influencing college students' intention to use WeChat Payment, using the theoretical, conceptual, and research framework of the UTAUT2 model. The variables related to the study, "Factors Influencing Students' Intention to Use WeChat Payment at Guangxi University of Foreign Languages," are as follows:

• Independent Variables: Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation, Price Value, Habit.

• Dependent Variable: Intention to Use WeChat Payment.

#### 1.4.4 Scope of Time

The study will be conducted over six months, beginning in November 2023 and concluding in April 2024.

#### 1.5 Research Significances

This investigation offers several critical contributions to both scholarly and practical realms:

1. **Theoretical Insights**: It expands the empirical validation of the UTAUT2 framework within the context of digital payments among a university demographic, enriching the academic discourse on technology adoption models.

2. User Behavior Comprehension: The study elucidates the determinants shaping students' adoption of WeChat Payment, providing a nuanced understanding of young consumers' interaction with digital financial services.

3. **Strategic Implications**: The findings hold implications for educational institutions and policymakers, guiding the formulation of initiatives aimed at fostering a digital payment culture on campus.

4. **Payment Solutions Enhancement**: For fintech entities, this research offers user-centric insights critical for refining digital payment offerings to meet the preferences of a technologically adept cohort.

5. **Community Engagement Strategies**: Insights into social influences on digital payment adoption can inform the development of community-driven approaches to technology uptake, leveraging social networks for broader acceptance.

#### 1.6 Definition of TSerm

#### 1.6.1 WeChat Payment

WeChat Payment in this study primarily refers to the online payment service used by college students at Guangxi University of Foreign Languages based on the WeChat social platform.

#### 1.6.2 Performance Expectancy (PE)

Performance Expectancy (PE) is defined as the perceived efficiency and utility of WeChat Payment in enhancing transaction speed, productivity, and payment options for students at Guangxi University of Foreign Languages, China.

#### 1.6.3 Effort Expectancy (EE)

Effort Expectancy (EE) is defined as the perceived ease of learning, using, and becoming proficient with WeChat Payment for financial transactions among students at Guangxi University of Foreign Languages, China.

#### 1.6.4 Social Influence (SI)

Social Influence (SI) is defined as the extent to which students at Guangxi University of Foreign Languages, China, are influenced by the recommendations and usage patterns of respected peers and significant others to use WeChat Payment.

#### 1.6.5 Facilitating Conditions (FC)

Facilitating Conditions (FC) are defined as the extent to which students perceive the availability of resources, support, and compatibility with existing technologies that enable effective use of WeChat Payment at Guangxi University of Foreign Languages, China.

#### 1.6.6 Hedonic Motivation (HM)

Hedonic Motivation (HM) is defined as the degree of enjoyment and satisfaction students derive from using WeChat Payment for their financial transactions at Guangxi University of Foreign Languages, China.

#### 1.6.7 Price Value (PV)

Price Value (PV) is defined as the students' assessment of the cost-effectiveness and financial benefits of using WeChat Payment, considering the balance between its costs and the advantages it provides in their transactions.

#### 1.6.8 Habit (HA)

Habit (HA) is defined as the extent to which students at Guangxi University of Foreign Languages, China, use WeChat Payment automatically and routinely in their daily financial transactions.

#### 1.6.9 Intention to Use WeChat Payment

The Intention to Use WeChat Payment refers to the students' predisposition to adopt and consistently utilize WeChat Payment for their financial transactions at Guangxi University of Foreign Languages, China.

#### CHAPTER II

#### **REVIEW OF RELATED LITERATURE**

This chapter presents a systematic review of scholarly literature pertaining to the adoption of WeChat Payment by students within the university context. It underscores the critical role of WeChat Payment in enhancing campus life by offering a myriad of services tailored to the student populace. At the heart of this exploration is the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) model, which provides a theoretical framework to examine the determinants influencing students' predispositions towards WeChat Payment. These determinants include performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit, each of which significantly impacts students' adoption decisions. The organization of this chapter is as follows:

2.1 WeChat Public Platform and WeChat Payment in Colleges and Universities

2.1.1 WeChat public platform

2.1.2 Research on the Status of WeChat Public Platform in Colleges and Universities

2.1.3 Application of WeChat Payment in Colleges and Universities

2.1.4 Application of WeChat Payment on WeChat Public Platform of Guangxi University of Foreign Languages

2.2 Concepts, Theories, and Research Related to UTAUT

2.2.1 Unified Theory of Acceptance and Use of Technology (Abbreviation: UTAUT)

2.2.2 Extending the Unified Theory of Acceptance and Use of Technology (Abbreviation: UTAUT2)

2.3 Concepts, Theories, and Research Related to Intention

2.4 Related Research

2.4.1 Research related to willingness to use digital payment

- 2.4.2 Research related to UTAUT and UTAUT2 models
- 2.5 Conceptual Framework

2.6 Research Hypotheses

#### 2.1 WeChat Public Platform and WeChat Payment in Colleges and Universities

2.1.1 WeChat Public Platform

WeChat public platform refers to the information dissemination, business promotion, technical connection, and internet technical services provided by Tencent to users (Tencent, 2023). It is a platform for operators to provide information and services to WeChat users through public numbers (Zhang, 2020).

The WeChat public platform is mainly divided into subscription accounts, service accounts, mini programs, and WeChat Work:

• Subscription Account: Primarily conveys information for users, functioning similarly to newspapers and magazines by providing news and entertainment content.

• Service Account: Emphasizes service interaction, similar to banks, offering binding information and interactive services. Verified service accounts can apply for WeChat Pay merchant functions.

• Mini Program: Provides a new open capability, allowing developers to quickly develop small programs that can be easily accessed and distributed within WeChat, offering an excellent user experience.

• WeChat Work: Inherits all the capabilities of enterprise communication tools, providing professional communication tools, rich office applications, and APIs to help enterprises communicate and work efficiently (Tencent, 2023).

2.1.2 Research on the current situation of WeChat public platforms in colleges and universities

Research on the current situation of financial WeChat public platforms in Shanghai universities reveals low usage among teachers and students in some colleges and universities, with most platforms primarily focusing on "Important Notices" and "Operation Procedures" (Ma, 2021).

Similarly, a study on the WeChat public platform of the Finance Department at Bengbu Medical College found that, although the platform has been operational for three years and meets some financial processing needs of students and teachers, it still faces several issues. These issues include unreasonable function setup, poor crosssystem compatibility, low platform usage rates, and generally low levels of public account operation (Jiao & Meng, 2023).

2.1.3 Application of WeChat Payment in Colleges and Universities

To meet the unique needs and service requirements of college students, many universities have implemented various payment strategies utilizing internet technology. In addition to traditional manual payment methods and the "bank-school direct connection" mode, institutions have integrated Alipay and WeChat payment functions. The application of WeChat and Alipay in colleges and universities has achieved comprehensive coverage of campus life. These platforms are used for small payments, such as buying food in the cafeteria, shopping in campus supermarkets, recharging onecard accounts, and renewing network fees, as well as for large payments like tuition and accommodation fees (Tuo, 2020).

In recent years, the rapid development of informationization in colleges and universities has also spurred the growth of financial informationization. As an essential component of this development, the WeChat payment platform has been integrated with campus financial systems to provide third-party payment and query functions (Zhang, 2018).

2.1.4 Application of WeChat Payment on WeChat Public Platform of Guangxi University of Foreign Languages

According to the New Student Admission Guidebook, new students at Guangxi University of Foreign Languages are required to use the official WeChat public account for various essential activities. These include registering as new students, accessing class information, selecting dormitories, paying tuition fees, and applying for major changes. Additionally, the university has established a WeChat public account for the Finance Office, through which students pay their tuition fees, examination fees, and dormitory electricity fees each semester.

Furthermore, Guangxi University of Foreign Languages has created a WeChat public account called "Guangxi Foreign Language Institute Town." This platform offers a range of services, including campus logistics, student services, and food delivery. The integration of these various services has significantly increased the utilization rate of the university's WeChat public account and has also boosted the use of WeChat Payment among both teachers and students.

#### 2.2 Concepts, Theories, and Research Related to UTAUT

2.2.1 Unified Theory of Acceptance and Use of Technology (Abbreviation: UTAUT)

WeChat Payment is a product of the rapid development of information technology and shares the same characteristics. Therefore, the adoption behavior of WeChat Payment users can be explained using information technology acceptance theories. Among these theories, the Technology Acceptance Model (TAM) (Davis et al., 1989) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) are the most widely used models (Hu, 2016).

Venkatesh, Morris, Davis, and Davis (2003) synthesized classical theories on technology acceptance from past literature, compared eight previous models and theories, integrated consumer behavioral acceptance models, and proposed the integrated technology acceptance and use model (UTAUT). This model combines the Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), TAM/TPB Integration Model (C-TAM-TPB), Motivational Model (MM), Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT). UTAUT identifies four key constructs—performance expectancy, effort expectancy, social influence, and facilitating conditions—that influence behavioral intention to use a technology and/or actual technology use. Additionally, the model considers variables that may have a moderating effect on these relationships, proposing four moderators: age, gender, experience, and voluntariness of use.

The unified theoretical model is based on the similarities between the cited models of technology acceptance to explain and predict user behavior. The theory primarily emphasizes how the utilitarian aspects (extrinsic motivation) of a new technology affect people's willingness to use it (Mi, 2022). UTAUT has been widely applied as a foundational model in various research studies (Li, Wang, & Bao, 2021). The structure of this theoretical model is illustrated below:

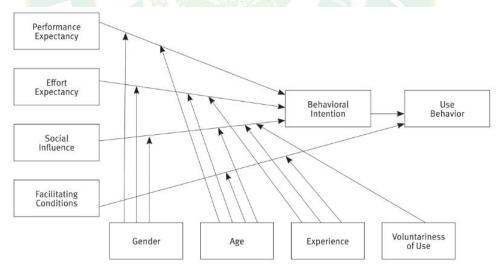


Figure 1 Unified Theory of Acceptance and Use of Technology (UTAUT) Source: Venkatesh, Morris, Davis and Davis, (2003).

The definitions and sources of the core variables in the UTAUT model are shown in the table below.

Construct	Definitions	Variables
		Extrinsic motivation (Motivational Model)
Performance	Performance The extent to which individuals believe that using	Useful Awareness (Technology Acceptance Model)
Expectancy	information systems will help them improve their job	Work adaptation (Model of PC Utilization)
	performance	Comparative advantage (Innovation Diffusion Theory)
		Expectation of results (Social Cognitive Theory)
		Complexity (Model of PC Utilization)
ETTOR	Ease of use of information systems by individuals	Ease of use (Innovation Diffusion Theory)
Expectancy		Ease of Use Cognition (Technology Acceptance Model)
	"The extent to which individuals perceive that	Subjective norms (Theory of Reasoned Action )
Jocial	significant others think they should use the new	Social factors (Model of PC Utilization)
וחונעפרוכפ	system"	Imaging (Innovation Diffusion Theory)
	"The extent to which individuals perceive	Behavioral control of cognition (Theory of Reasoned
Conditions	organizational and technological equipment to support their use of information systems"	Facilitating conditions (Model of PC Utilization ) Compatibility (Innovation Diffusion Theory )

Table 1 Definitions and variables in the UTAUT model

Source: Hu (2016)

2.2.2 Extending the Unified Theory of Acceptance and Use of Technology (Abbreviation: UTAUT2)

Since its publication, the UTAUT model has been widely used to explain and predict technology acceptance and usage behaviors. However, the UTAUT model primarily focuses on technology acceptance at the individual level. To adapt the model to consumer scenarios, Venkatesh, Thong, and Xu (2012) proposed a more inclusive model, UTAUT2, which removes the moderator variable of "voluntary use" from the original UTAUT model and adds three additional dimensions: "hedonic motivation," "habit," and "price value" (Sun, 2020).

The UTAUT2 model demonstrates a significant improvement in its ability to explain behavioral intentions compared to the original UTAUT, explaining 74% of behavioral intentions and increasing the explanation of actual technology use from 40% to 52% (Mi, 2022). According to Chen (2020), "The UTAUT model can mainly be used to explain the acceptance and adoption of new technologies by employees within an organization, while the UTAUT2 model can explain the acceptance and adoption of new technologies by consumers in different environments and has better explanatory power than the UTAUT model." The structure of this theoretical model is illustrated below:

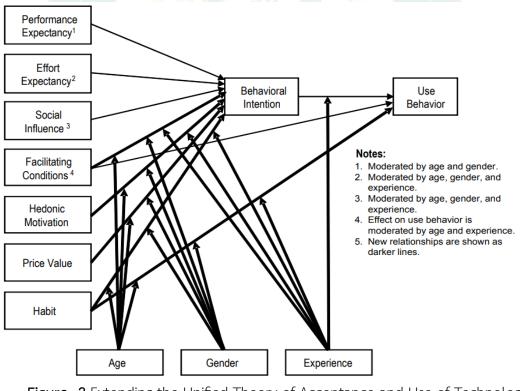


Figure 2 Extending the Unified Theory of Acceptance and Use of Technology (UTAUT2) Source: Venkatesh & Thong and Xu (2012) In this study, the UTAUT2 framework is employed to explore the factors influencing the intention to use WeChat Payment among students at Guangxi University of Foreign Languages, China. The investigation centers on seven key variables:

#### 1) Performance Expectancy (PE)

Performance expectancy refers to the degree to which users believe that using a technology product will provide good performance and meet their utilitarian expectations, thereby increasing their willingness to use the technology (Mi, 2022). Numerous studies have confirmed that higher performance expectancy correlates with a higher willingness to use the technology (Venkatesh et al., 2012; Sharma & Vaid, 2023).

In the context of WeChat Pay, consumers primarily consider whether this payment method can offer a more convenient, safe, and rich shopping experience. WeChat Pay integrates with the WeChat social platform, enabling real-time interaction between consumers and merchants. This integration allows consumers to stay informed about the products they need and make shopping decisions efficiently through fragmented social interactions. Consequently, consumers can enhance both their social activities and shopping efficiency. If consumers perceive that WeChat Pay is beneficial to their lives, they are more likely to choose it for future shopping activities.

Performance expectancy is associated with five variables from different models: perceived usefulness, extrinsic motivation, job adaptability, relative advantage, and outcome expectation. Therefore, a strong willingness to use WeChat Pay arises when users feel that it helps them accomplish tasks faster, improve their efficiency in learning or work, and provides more opportunities for advancement. Conversely, if users do not perceive these benefits, their willingness to use WeChat Pay decreases. As a result, the following hypothesis is proposed:

H1: Performance Expectancy (PE) positively influences the intention to use WeChat Payment.

Table 2 illustrates the measurement of Performance Expectancy, based on findings from the literature review.

Variable	Definition		Measurements	Sources
Performance	Performance	1.	Using WeChat Payment	Mi (2022);
Expectancy	Expectancy (PE) is		for transactions saves me	Venkatesh et
	defined as the		time compared to	al., (2012);
	perceived efficiency		traditional payment	Sharmar and
	and utility of WeChat		methods.	Vaid (2023)
	Payment in	2.	I find that using WeChat	
	enhancing		Payment enhances my	
	transaction speed,		productivity in managing	
	productivity, and		payments.	
	payment options for	3.	WeChat Payment enables	
	students at Guangxi		me to complete	
	University of Foreign		payments faster than	
	Languages, China.		other methods.	
		4.	WeChat Payment is a	
			valuable tool for	
			managing my daily	
			financial transactions.	
		5.	WeChat Payment expands	
			my options for making	
			and receiving payments.	

 Table 2 Definition and Measurement of Performance Expectancy

#### 2) Effort Expectancy (EE)

Users are more likely to express an intention to adopt a technology when they find it simple to use and easy to understand (Mi, 2022). In the digital economy, people's pace of life has accelerated significantly. If the current shopping payment method is as cumbersome as traditional payment processes, it is unlikely to be welcomed by consumers who lead fast-paced lives. WeChat Pay, developed on the WeChat social platform, is a simple and easy-to-understand payment method that caters to the needs of consumers in the mobile internet era, providing great convenience and a positive shopping experience for daily consumption activities. Consumers do not need to spend much time learning to use it.

The influence of effort expectancy is evident in users' willingness to adopt technological innovations such as WeChat Payment (Li & Xie, 2020), mobile internet (Wu, 2008), and mobile learning (Bao, 2017). In this study, the simpler the operation of using WeChat Payment, the less effort users need to put in, which increases their willingness to use it. Conversely, if the operation process is complicated and difficult

to understand, consumers' willingness to use it will decrease. Therefore, the following hypothesis is proposed:

H2: Effort Expectancy (EE) positively influences the intention to use WeChat Payment.

The measurement of Effort Expectancy is presented in Table 3, as derived from the literature review.

Variable	Definition		Measurements	Sources
Effort	Effort Expectancy	1.	I find it easy to become	Mi (2022);
Expectancy	(EE) is defined as the		proficient at using WeChat	Li and Xie
	perceived ease of		Payment for my	(2020);
	learning, using, and		transactions.	Wu (2008);
	becoming proficient	2.	WeChat Payment is user-	Bao (2017)
	with WeChat		friendly and	
	Payment for financial		straightforward for me to	
	transactions among		use.	
	stud <mark>ents at</mark> Guangxi	3.	My interactions with	
	University of Foreign		WeChat Payment are clear	
	Languages, China.		and easy to understand.	
		4.	Learning to use WeChat	
			Payment is straightforward	
			for me.	
		5.	I can use WeChat Payment	
			efficiently after a few tries.	

 Table 3 Definition and Measurement of effort expectancy

#### 3) Social Influence (SI)

Using WeChat for social networking is an essential part of contemporary life, and it offers great convenience as a third-party mobile payment method. Therefore, the tendency of college students to use WeChat as a third-party mobile payment method can be examined from the social attributes of WeChat. The social networking function of WeChat significantly influences their choice (Zhou & Chen, 2019). When people who are important to a user favor and support the use of a certain information technology, the user is likely to have a strong willingness to adopt it (Chen & Zhu, 2015). A strong willingness to use mobile payment occurs when users feel that people who are influential or important to them think they should use mobile payment and when they receive support and help from those around them in using mobile payment (Liu, 2014). Therefore, the following hypothesis is proposed:

H3: Social Influence (SI) positively influences the intention to use WeChat Payment.

Derived from the literature review, Table 4 presents the measurement of Social Influence.

Variable	Definition		Measurements	Sources
Social	Social Influence (SI) is	1.	People who are important	Mi (2022);
Influence	defined as the extent		to me recommend using	Zhou and Chen
	to which students at		WeChat Payment for	(2019);
	Guangxi University of		transactions.	Chen and Zhu
	Foreign Languages,	2.	Individuals whose	(2015);
	China, are influenced		opinions I respect sugg <mark>es</mark> t	Liu (2014);
	by the		th <mark>at I should use WeChat</mark>	Sharmar and
	recommendations		Payment.	Vaid (2023)
	and usage patterns of	3.	My friends and peers	
	respected peers and		frequently use WeChat	
	significant others to		Payment, which	
	use WeChat Payment.		influences my own usage	
			intentions.	
		4.	I am more inclined to use	
			WeChat Payment because	
			people I look up to are	
			using it.	

 Table 4 Definition and Measurement of social influence

#### 4) Facilitating Conditions (FC)

Willingness to use technology occurs when an individual perceives the situation as ideal for its use. Users will not be motivated to adopt new technology if there is no stable infrastructure to support it (Chung, Han, & Joun, 2015). Venkatesh et al. (2012) argued in the UTAUT2 model that enabling factors are the objective support conditions for users to adopt a new system and technology. If these objective conditions are convenient, they will increase users' willingness to use and actual usage behavior.

WeChat integrates interpersonal chat, financial payment, innovative financial management, and immersive marketing to make consumer transactions faster and more convenient (Xu, 2014). In this study, when college students have more facilitating conditions available for using WeChat Payment, their willingness to use it will increase. Conversely, if there are more obstacles and difficulties, their willingness to use it will decrease. Therefore, the following hypothesis is proposed:

H4: Facilitating Conditions (FC) positively influence the intention to use WeChat Payment.

Based on the literature review, Table 5 details the measurement of Facilitating Conditions.

Variable	Definition		Measurements	Sources
Facilitating	Facilitating	1.	Payment is compatible	Mi (2022);
Conditions	Conditions (FC) are		with the other digital	Chung, Han,
	defined as the		platforms and	and Joun
	extent to which		technologies I use.	(2015);
	students perceive	2.	I feel confident in my	Venkatesh et al
	the availability of		ab <mark>il</mark> ity to use WeChat	(2012);
	resources, support,		Pa <mark>yment</mark> effectively.	Xu (2014);
	and compatibility	3.	I possess the necessary	Sharmar and
	with existing		knowledge and skills to	Vaid (2023)
	technologies that		use WeChat Payment.	
	ena <mark>ble</mark> effective use	4.	There are sufficient	
	of WeChat Payment		resources available (e.g.,	
	at Guangxi University		tutorials, customer	
	of Foreign		service) to assist me in	
	Languages, China.		using WeChat Payment.	
		5.	When I encounter issues	
			with WeChat Payment, I	
			can easily find help and	
			support.	

 Table 5 Definition and Measurement of facilitating conditions

#### 5) Hedonic Motivation (HM)

Based on UTAUT, constructing a model of WeChat Pay user acceptance behavior reveals that the stronger a user's perception of WeChat Pay's entertainment value, the more willing they are to use WeChat Pay for transactions (Chen & Zhu, 2014). The satisfaction consumers derive from the pleasure they experience when interacting with a product or service positively affects their attitude toward that product or service. For college students, leisure and entertainment are essential parts of life. The active participation of college students in traditional leisure and entertainment activities, such as singing and watching movies, indicates that entertainment has a significant attraction for them (Hou & Zhou, 2018). WeChat, through the development of various entertaining functions (such as drift bottle, shake, grab red packets, etc.), offers users novelty and interest, which increases the frequency of using WeChat. The WeChat public number produces entertaining content that users enjoy reading, which brings them a pleasant mood. In this positive mood, consumers develop favorable feelings towards the service, influencing their behavioral intentions (Liu, 2016). Based on this analysis, the following hypothesis is proposed:

**H5**: Hedonic Motivation (HM) positively influences the intention to use WeChat Payment.

As derived from the literature review, Table 6 provides the measurement details for Hedonic Motivation.

Variable	Definition	ER	Measurements	Sources
Hedonic	Hedoni <mark>c Motiv</mark> ation	1.	I find using WeChat	Mi (2022);
Motiv <mark>a</mark> tion	(HM) is defined as		Payment to be	Chen and Zhu
	the degree of		enjoyable.v	(2014);
	enjo <mark>yment</mark> and	2.	Using WeChat Payment	Hou and Zhou
	satisfaction students		adds a pleasant aspect to	(2018);
	derive from using		my financial transactions.	Liu (2016);
	WeChat Payment for	3.	I find WeChat Payment to	Sharmar and
	their financial		be engaging and	Vaid (2023)
	transactions at		interesting.	
	Guangxi University of	4.	I prefer using WeChat	
	Foreign Languages,		Payment for transactions	
	China.		over traditional banking	
			methods due to its	
			enjoyable experience.	
		5.	Choosing WeChat	
			Payment for receiving or	
			making payments brings	
			me satisfaction beyond	
			just the transactional	
			need.	

Table	6	Definition	and	Measurement	of	hedonic	motivation
-------	---	------------	-----	-------------	----	---------	------------

#### 6) Price Value (PV)

When the benefits of using a technology are perceived to be greater than the monetary costs, price value shows a positive performance and positively influences

the intention to use (Venkatesh et al., 2012). Research on the impact of e-book users' intention to use found that price value has a positive effect on intention to use (Yang & Zhang, 2020).

In this study, when the perceived benefits, such as experience and costeffectiveness, of using WeChat Payment are greater than the costs incurred, consumers' intention to use WeChat Payment will increase. Conversely, if the perceived costs outweigh the benefits, their intention to use will decrease. Therefore, the following hypothesis is proposed:

H6: Price Value (PV) positively influences the intention to use WeChat Payment.

Drawing from the literature review, Table 7 outlines the measurement criteria for Price Value.

Variab <mark>le</mark>	Definition	E	Measurements	Sources
Price V <mark>a</mark> lue	Price Value (PV) is	1.	Using WeChat Payment	Mi (2022);
	defined as the		saves me money	Venkatesh,
	stud <mark>ent</mark> s' assessment		compared to other	(2012);
	of th <mark>e cost-</mark>		payment methods.	Yang and Zhang
	effectiveness and	2.	I consider the pricing of	(2020);
	financial benefits of		WeChat Payment services	Sharmar and
	using WeChat		to be reasonable for the	Vaid (2023)
	Payment, considering		benefits it provides.	
	the balance between	3.	The value I get from using	
	its costs and the		WeChat Payment justifies	
	advantages it		the costs, making it a	
	provides in their		worthwhile option.	
	transactions.	4.	The financial advantages	
			of WeChat Payment, such	
			as cost savings and	
			convenience, outweigh	
			any associated costs.	
		5.	I prefer WeChat Payment	
			because its cost-	
			effectiveness enhances	
			my overall transaction	
			experience.	

Table 7 Definition and Measurement of price value	Table	d Measureme	ent of price value
---	-------	-------------	--------------------

#### 7) Habit (HA)

Habit has been validated as one of the predictors of behavioral intention in previous research (Morosan & DeFranco, 2016). These scholars found that the habit factor plays a significant role in influencing consumers' intention to use NFC-MP, second only to the hedonic motivation factor.

In this study, habit can facilitate the transfer of behavior from a broader context to a specific context and impact the intention to use. Therefore, the following hypothesis is proposed:

H7: Habit (HA) positively influences the intention to use WeChat Payment.

Based on Hasistice measurement criteria for Habit. Based on insights from the literature review, Table 8 delineates the

Variab <mark>le</mark>	Definition	E	Measurements	Sources
Hab <mark>i</mark> t	Habit (HA) is defined	1.	Using WeChat Payment	Mi (2022);
	as the extent to		has become a routine part	Morosan &
	which students at		of my daily financial	DeFranco,
	Guan <mark>gxi Un</mark> iversity of		transactions.	(2012);
	Foreign Languages,	2.	I automatically think of	Sharma & Vaio
	China, use WeChat		WeChat Payment as my	(2023)
	Payment		go-to method for	
	automatically and		payments.	
	routinely in their	3.	I frequently use WeChat	
	daily financial		Payment without	
	transactions.		consciously thinking about	
			it.	
		4.	WeChat Payment is my	
			first choice for digital	
			transactions out of habit.	
		5.	The use of WeChat	
			Payment is integrated into	
			my daily life as a habitual	
			practice.	

#### 2.3 Concepts, Theories, and Research Related to Intention

Intention is an expression of one's attitude or belief about something and is related to the action component (behavior). When a person holds certain beliefs, they will exhibit behaviors that reflect those beliefs. Behavioral intention to use information technology is a predictor of actual usage behavior (Aditia et al., 2018). Assuming that words have significance and refer to real, functional constructs, there should be a high level of agreement regarding the understanding of intention and its operation. Research indicates substantial agreement among people in their judgments of intention—regardless of perspective or the presence of a definition—suggesting a commonly understood concept of how intention functions and its meaning (Malle & Knobe, 1997).

Intention can be conceptualized in various ways: as an action plan, a general motive, a representational schema for a future goal, or a framework combining desires and beliefs. Intentionality refers to a specific action performed purposefully and deliberately by an aware entity capable of executing that action. This definition aligns with the theory of planned behavior (Ajzen, 2011). Oliveira et al. (2016) state that consumers' willingness to use a technology or product can be understood as a level of recognition and acceptance, which affects the user's subsequent use behavior and recommendation behavior.

Teo and Lee (2010) described attitude toward use as individuals' reactions and dispositions toward an object. According to Wahid (2010), behavioral intention to use refers to the intensity of an individual's intention to engage in a particular behavior.

In this study, the intention to use WeChat Payment refers to the students' predisposition to adopt and consistently utilize WeChat Payment for their financial transactions at Guangxi University of Foreign Languages, China.

#### 2.4 Related Research

2.4.1 Research Related to Willingness to Use Digital Payment

Although direct research specifically using "WeChat Payment" as a keyword is limited, WeChat Payment, as a digital payment platform, can be examined through the broader lens of digital payment research. The concept of digital payment on the Internet generally falls into two categories: digital payment equivalent to digital currency and electronic payment (including online payment, mobile payment, telephone payment, etc.). There is a wealth of research on these types of payment products, providing valuable references for this study.

This study has collected extensive literature on the factors influencing users' willingness to use electronic payment, mobile payment, and third-party payment. The research objects, content, theoretical models, and selected variables from these studies have been systematically sorted and summarized, as shown in Table 9.

Authors	Research Content	Theoretical Model	Involved Variables
Zhou.et al. ( 2010 )	Mobile banking	TTF; UTAUT	Effort Expectations; Performance Expectations; Task-Technology Fit; Accommodations; Social Impacts
Liu (2015)	WeChat Payment	UTAUT	Performance Expectations, Effort Expectations, Trust, Social Influence, Facilitation, Satisfaction, Willingness to Use
Liu (2014)	Mobile payment	UTAUT	Performance Expectations; Effort Expectations; Social Influence; Perceived Risk; Payment Scenarios; Facilitators; Intention to Use;
	l		Use Behavior
Yuan ( 2018 )	WeChat Payment	UTAUT	Personality traits, perceived risk, perceived trust, perceived
Wang			Perceived ease of the nerreived theefulness community
( 2019 )	Alipay payment	TAM UTAUT	influence, marketing promotion, perceived risk, willingness to use
			Performance expectations, effort expectations, social impact,
Wei (2019)	Mobile paym <mark>en</mark> t	UTAUT	perceived risk, personal innovativeness, use scenarios, willingness
			to use
Zeng	Mobile navment	LITALIT	Communication and Interaction, Performance Expectations, Effort
(2022)			Expectations, Facilitators, Social Influence, Willingness to Use

#### 2.4.2 Research Related to UTAUT and UTAUT2 Models

The UTAUT model is widely used in studies on the adoption of various IT systems, often in conjunction with the UTAUT2 model.

Chen and Zhu (2015) analyzed their study based on the integration of UTAUT and TAM perspectives. They found that performance expectancy, perceived security, perceived entertainment, and effort expectancy were key factors affecting users' use of WeChat Pay. These findings provide valuable reference points for this study. Hu (2016) selected the UTAUT model as the base model, adding interactivity and perceived entertainment, and used gender, age, monthly disposable income, education level, and adoption group as moderating variables to construct a user WeChat Payment adoption model, which offered research ideas for this study.

Zhang and Lin (2016) constructed a research model based on the UTAUT2 model combined with social influence theory. Their study showed that college students aim to achieve daily communication and socialization goals under more convenient conditions and at a lower cost. This research expands the application scenarios of UTAUT2, enriching its development in new environments and providing guidance for this study.

Cao (2020), using the relevant theories of UTAUT2, perceived risk, and trust, combined with research on user behavior on social commerce platforms, adopted an empirical research method. After examining and correcting the rationality and consistency of the questionnaire's measurement items through a small-scale presurvey, a formal questionnaire was developed. Descriptive statistical analysis was conducted on 309 valid questionnaires, and the proposed theoretical model was verified using Structural Equation Modeling to clarify the important factors affecting users' use of WeChat online shopping applets. This study tested the mediating role of trust and further explored the moderating role of demographic variables and factors such as scene entrance through multi-cluster analysis.

Lv (2020) used the UTAUT2 model to explore key factors affecting consumers' intention and behavior to use unmanned supermarkets. Lu (2021) noted that the UTAUT2 model can explain 74% of the variance in users' intention to use the behavior and 52% of the variance in users' willingness to use the product. The study suggested that the explanatory power could be improved through reasonable expansion of the UTAUT2 model. Mi (2022) used UTAUT2 to predict factors influencing users' willingness to use a product, helping companies achieve higher quality commercialization.

Examples of the main studies of the UTAUT and UTAUT2 models are shown in the table below.

Literature Sources	Research Objectives	Conclusion of the study
Chen, & Zhu (2015)	WeChat Payment	Performance expectation, perceived security, perceived entertainment, effort expectation and initial trust have a positive effect on users' use of WeChat Pay, and social influence has a non- significant effect on the willingness to use WeChat Pay.
Hu (2016)	WeChat Payment	Perceived entertainment, performance expectation, and effort expectation all significantly and positively affect users' willingness to adopt WeChat Pay, while social influence and convenience conditions have no direct effect on users' willingness to adopt WeChat Pay. Interactivity can have a significant positive effect on users' willingness to adopt WeChat Pay through perceived entertainment.
Zhang and Lin (2016)	Instant messaging software	Performance expectations, convenience, value for money, habit and social influence have a positive effect on intention to use communication software. Effort expectations and hedonic motivation are not significant for communication software usage intention.
Cao (2020)	WeChat online shopping class small program	WeChat online shopping applets are most affected by trust, which in turn is affected by multiple factors, with facilitators, social influence and price value positively affecting trust and perceived risk negatively affecting trust. The effect of hedonic motivation on trust is more significant among women and the younger Post-95 cohort, and the effect of price value on willingness to use is more significant among women.
Lv (2020)	supermarket without human presence	Price value, hedonic motivation, individual innovativeness, performance expectation, would influence, technological trust, enabling factors, and effort expectation have a positive and significant effect on the willingness to use in the process of shopping in unmanned supermarkets, and the degree of influence decreases in the order of magnitude; the perceived risk has a significant negative effect on the willingness to use.

 Table 10 Examples of studies related to UTAUT and UTAUT2 models

Table 10 Examples of studies related to UTAUT and UTAUT2 models (CONT.)

Lu (2021)	"Internet "+medical platforms	Performance expectations, effort expectations, social influence, promotional conditions, habits, and trust directly and positively influence users' willingness to use the Internet + healthcare platform. Value trade- offs have no significant effect on users' willingness to use the Internet + healthcare platform.
Mi (2022)	AR Beauty	1. "Performance Expectation", "Hedonic Motivation" and "Social Influence" significantly and positively influence users' willingness to use. 2. "Perceived Risk" and "Privacy Concern" have a significant negative relationship with users' willingness to use. 3. Perceived Risk" and "Privacy Concern" are significantly negatively related to users' willingness to use. 3. Users' age moderates the effect of "Social Influence" on users' willingness to use, and users' " Income level" moderates the influence of "privacy concern" on users' willingness to use.

01

Li, Wang, and Bao (2021) found that UTAUT2 is an effective model for studying user acceptance behavior by screening 102 articles and selecting nearly 50 empirical research-type articles for close reading, and they argued that additional modifications or additions to the variables of UTAUT2 can be made to better explain consumer acceptance and usage behaviors in different industry segments in future studies.

#### 2.5 Conceptual Framework

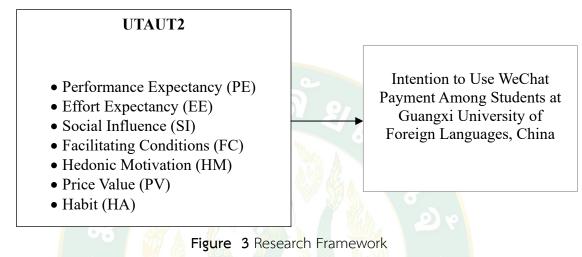
Through the review of related literature and empirical research by numerous scholars, this study finds that the core variables of the UTAUT2 model have significant reference value for understanding users' willingness to use WeChat Payment. In the actual modeling process, different scholars adjust the model according to the specific research objects and content to achieve more targeted results. To ensure the model aligns with the actual research context, this paper also makes corresponding adjustments.

In this study, the research model is constructed based on the UTAUT2 model, with college students at Guangxi University of Foreign Languages who use WeChat Payment as the research subjects. Considering the specific context of college students and the use of WeChat as a social platform, several moderating variables such as age, gender, and experience are excluded.

Based on the literature review in the previous chapters and the analysis of the core variables defined in the UTAUT2 model, the following core variables are considered: Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation, Price Value, and Habit. In summary, a research model suitable for this study is constructed, as shown in Figure 3.

#### Independent variables

#### Dependent variable



# 2.6 Research Hypotheses

To summarize, seven hypotheses are proposed based on the definitions of the variables and their predicted interactions, as shown in Table 11 below:

Hypothesis	Hypothetical content
H1	Performance Expectancy positively and significantly affects college students' Using Intention of WeChat Pay.
H2	Effort Expectancy positively and significantly affects college students' Using Intention of WeChat Payment.
H3	Social Influence positively and significantly affects college students' Using Intention of WeChat Payment.
H4	Facilitating Conditions positively and significantly affects college students' Using Intention of WeChat Pay.
Н5	Hedonic Motivation positively and significantly affects college students' Using Intention of WeChat Payment.
H6	Price Value positively and significantly affects college students' Using Intention of WeChat Payment.
H7	Habit (HA) positively influences the intention to use WeChat Payment.

 Table 11 Elements of the research hypotheses

# CHAPTER III

# RESEARCH METHODOLOGY

The research methodology outlines the overall framework for addressing the research questions, objectives, hypotheses, and the research framework. In this chapter, a comprehensive description of the research methodology used in the study is presented, aiming to describe and explain the research process employed to answer the research questions. It details the specific methods used for data collection and analysis to ensure the study's validity and rigor.

The sample size was calculated using a specific formula, and data were analyzed through questionnaires. This study adopts a quantitative research method, focusing on the factors influencing the intention to use WeChat Payment among students at Guangxi University of Foreign Languages. The location of this study is Guangxi University of Foreign Languages in Nanning, Guangxi, China. The details of this chapter include:

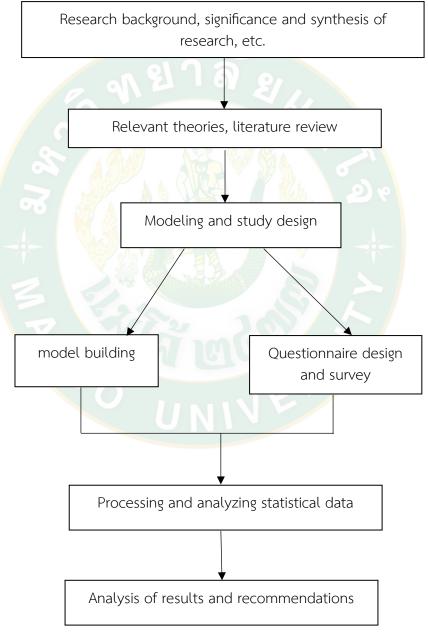
- 3.1 Research Design
- 3.2 Research Process
- 3.3 Population and Sample
- 3.4 Research Instrument
- 3.5 Quality Testing of Research Instruments
- 3.6 Data Collection
- 3.7 Data Gathering
- 3.8 Data Analysis

#### 3.1 Research Design

This study begins by elaborating on the definitions of the WeChat public platform, user satisfaction, and other related theories. It combines the characteristics of the official WeChat public platform of colleges and universities to construct a satisfaction assessment model. By referring to previous scholars' theories on satisfaction with official WeChat public platforms in universities, the study determines the measurement index system, designs the questionnaire, and proposes research hypotheses. In this section, quantitative methods are used to introduce the research design chosen for this study.

The study aimed to examine the factors that influence the satisfaction of current college students at Guangxi University of Foreign Languages with the university's official WeChat public platform. This research design is consistent with the objective of quantitatively assessing these factors and their relationships.

A quantitative method was employed to collect data using questionnaires. The data were then statistically analyzed using SPSS, and the results were summarized in tables along with the corresponding data analysis outcomes.



# 3.2 Research Process

Figure 4 Research Process

The research process for this study is organized into several steps, as illustrated in Figure 4. This figure outlines the sequential stages undertaken to achieve the research objectives. Each step in the process is designed to ensure a comprehensive and methodical approach to data collection, analysis, and interpretation.

1) Research Background, Significance, and Synthesis of Research: The process begins with establishing the background and significance of the research. This involves synthesizing existing research to provide context and justification for the study.

2) Relevant Theories, Literature Review: Conduct an extensive review of relevant theories and literature to establish a theoretical foundation for the study. This step helps in identifying gaps in existing research and formulating research questions.

3) Modeling and Study Design: Based on the literature review, the next step involves modeling and designing the study. This includes two parallel activities:

3.1) Model Building: Develop a theoretical model that outlines the key variables and their relationships based on the findings from the literature review.

3.2) Questionnaire Design and Survey: Design the questionnaire that will be used to collect data from the target population. The survey instrument is crafted to gather information relevant to the research questions and hypotheses.

4) Processing and Analyzing Statistical Data: Once the data is collected through the survey, it is processed and analyzed using statistical methods. This step involves inputting the data into statistical software, such as SPSS, and performing various analyses to test the research hypotheses.

5) Analysis of Results and Recommendations: Finally, the results of the statistical analysis are interpreted and summarized. This includes discussing the findings in relation to the research questions and hypotheses, and providing recommendations based on the results.

#### 3.3 P Population and Sample

#### 3.3.1 Population

This study focuses on the college student population, specifically targeting current students at Guangxi University of Foreign Languages. Guangxi University of Foreign Languages comprises 16 faculties and departments, with a total enrollment of 33,000 full-time students (School Profiles, 2023). It is the university with the largest number of students majoring in foreign languages and the most diverse range of languages offered in Guangxi.

This research adopts a survey study approach, selecting college students from different faculties to ensure broad representation. By involving students from various

majors, the study aims to capture a comprehensive dataset that reflects the diverse experiences and perspectives of the student body.

#### 3.3.2 Sample

Statistician Taro Yamane (1967) developed a method for calculating sample size to determine the appropriate sample size for a given population. Using the total number of students enrolled at Guangxi University of Foreign Languages, which is 33,000, the Yamane formula was applied to determine the sample size, with a margin of error of 5%. The calculation is as follows:

$$n = \frac{N}{1 + N(e)^2}$$

In this context:

- n represents the sample size.
- N represents the population of the study.

e represents the margin of error, which was set at a maximum

threshold of 5%, equivalent to 0.05.

Substitute the values into the formula as follows: 955,037.

$$n = \frac{33,000}{1+33,000(0.05)^2}$$
$$n = \frac{33,000}{83.5} = 395$$

From the calculation, an appropriate sample size of 395 was determined. However, to ensure a representative sample, the researcher collected data through online questionnaires from a total of 400 participants.

#### 3.3.3 Sample Selection Method

The questionnaires were distributed to university students via an online link. There are 16 faculties at Guangxi University of Foreign Languages, and each faculty was randomly sampled. It was planned to collect 25 electronic questionnaires for pre-test analysis. Four hundred valid questionnaires were collected for the final analysis of the study, as shown in Table 12.

serial	Name of faculty	Number of	Number of valid	Questionnaire
number		questionnaires	questionnaires	format
		issued		
Ţ	Institute of Southeast Asian Languages and Cultures			
2	Institute of European and American Languages and Cultures			
33	Faculty of Arts			
4	Faculty of International Economics and Trade			
5	College of Business and Public Administration			
9	School of accounting			
7	Art and drama college			
8	College of education			Curicosticostico
6	School of Information Engineering		004	
10	Higher vocational colleges			
11	College of International Education			
12	Chittagong Institute of Education			
13	Marxist Academy			
14	College of Innovation and Entrepreneurship			
15	International Business School			
16	ASEAN Academy of Law and Business			

 Table 12 Distribution and Recovery of Questionnaires by Faculty

In order to improve the efficiency and effectiveness of questionnaire distribution, several tutors, course instructors, and classmates were contacted to assist in the distribution of questionnaires and the resolution of any questions. The study also implemented the following measures to enhance the quality of data collection:

1) Online distribution of questionnaires by contacting tutors, course instructors, and classmates, sharing links through WeChat groups, and sending them individually to college students, with red packet rewards provided after completing the questionnaires.

2) Distribution of small gifts by purchasing them in advance and providing them to students who completed the questionnaires in class, to improve the quality and efficiency of the responses.

#### 3.4 Research Instrument

3.4.1 Construction of the Research Instrument

The survey for this study was conducted through the online questionnaire platform "Questionnaire Star," which is primarily used to collect data and opinions from a selected sample. The questionnaire was carefully constructed based on the purpose of the survey, the practical and theoretical basis of the study, and the literature review. It was divided into four different sections to comprehensively assess the research variables.

#### Part 1: Screening Questions

This part of the questionnaire is designed to determine the validity of the sample. It consists of two questions. If the respondent answers negatively to either question, it indicates that the subject of the study is an invalid sample, and the questionnaire should be invalidated. The questions designed for this part are as follows:

1 . Are you currently a student at Guangxi University of Foreign Languages? O Yes

 $\bigcirc$  No (end of the questionnaire)

2 . Have you ever used the school's official WeChat public number for WeChat payment?

OYes

 $\bigcirc$  No (end of the questionnaire)

#### Part 2: Demographic Respondents

This section comprises questions about the demographic characteristics of current students at Guangxi University of Foreign Languages, China. It mainly includes gender, age, grade level, and field of study. Respondents are instructed to select a single answer for each item. The questionnaire employs a checklist format and consists of four questions.

- 2.1 Gender:
- O Male
- O Female
- 2.2 Age:
- O under 18 years old
- O 18-20 years old
- O 21-23 years old
- O 24 years old and above
- 2.3 Grade Level:
- O Freshman (1st-year student)
- O Sophomore (2nd-year student)
- O Junior (3rd-year student)
- O Senior (4th-year student)

# 2.4 Field of Study:

- O Arts and Humanities
- O Science and Technology
- O Business and Economics
- O Other (please specify):

# Part 3: General Payment Behaviors Using WeChat

This section focuses on the use of WeChat Payment by university students on the school's WeChat public platform. The questionnaire allows for multiple-choice questions, where respondents may select more than one answer (total of 6 items):

3.1 Primary Reason for Using WeChat Payment:

(Choose only one)

O Convenience: Can be used to pay anywhere, anytime.

O Modernity: Feel modern using digital payment solutions.

O Social Influence: Recommendations from friends, family, or peers.

O University Influence: Recommendations or promotions from the university or its affiliates.

O Access to Information: Receive updates, product information, and promotions through WeChat.

O Other (please specify):

3.2 Most Frequent Use of WeChat Payment:

(Choose only one)

- O Paying for campus-based services or products.
- $\bigcirc$  Checking balances or transaction history.
- O Participating in university or WeChat-specific reward programs.
- O Accessing information about university services or events.
- O Other (please specify):

3.3 Purposes of Using WeChat Payment:

(Please select all that apply)

- O Paying for food and beverages on or off-campus.
- Online shopping.
- O Transportation costs (e.g., taxis, public transport).
- O Bill payments (e.g., tuition, utilities, mobile phone).
- O Transferring money to friends or family.
- O Other (please specify):

3.4 Average Monthly Transaction Value with WeChat Payment:

- O Under 100 RMB
- 101 500 RMB
- 501 1,000 RMB
- 1,001 2,000 RMB
- O More than 2,000 RMB
- 3.5 Frequency of WeChat Payment Use via School's WeChat Account:
- O Multiple times a day
- O Once a day
- O Once every 2-3 days
- O Once every 4-5 days
- O Once a week
- O Once in 2-3 weeks
- O Once in 1-2 months
- O Rarely or not at all

3.6 Primary Uses of WeChat Payment via School's WeChat Account:

(You may select more than one option)

- $\bigcirc$  Online purchases (e.g., books, university merchandise).
- $\bigcirc$  Payment of campus fees (e.g., tuition, accommodation).
- O Campus services (e.g., printing, library fees).
- O Campus events or activities.
- $\bigcirc$  Other (please specify):

# Part 4: Survey on Factors Influencing Users' Intention to Use WeChat Public Number for WeChat Payment

The questionnaire on factors influencing users' intention to use WeChat Payment is in the form of a rating scale, consisting of 8 variable criteria (39 items in total). It measures students' use of WeChat Payment based on the school's official WeChat public platform across multiple dimensions.

The questionnaire uses a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree," with corresponding values of 1, 2, 3, 4, and 5, respectively. Respondents are asked to rate each item according to their actual experiences. 'S:

The scoring criter	ia are as follows
--------------------	-------------------

Strongly agree	5 points
Agree	4 points
Neutral	3 points
Disagree	2 points
Stron <mark>gly di</mark> sagree	1 point

The 5-point Likert scale, a widely used tool for assessing respondents' opinions and attitudes, is utilized to evaluate the factors influencing college students' intention to use WeChat Payment in the live e-commerce model. The evaluation criteria for each class interval are calculated using the following formula:

 $Class Interval = \frac{Highest Value - Lowest Value}{Number of Classes}$ 

Applying this formula:

Class interval = 
$$\frac{5-1}{5} = 0.8$$

Therefore, the class stratification is 0.8, and the mean and criterion scores are classified with the following descriptions:

Range of Score	Level of agreement
4.21 - 5.00	Strongly Agree with the statement
3.41 - 4.20	Agree the statement
2.61 – 3.40	Neutral with the statement
1.81 – 2.60	Disagree with the statement
1.00 - 1.80	Strongly Disagree with the statement

#### 3.4.2 Questionnaire Development Process

The design of the questionnaire instrument is a fundamental step in ensuring that the study collects reliable and valid data. The process of developing the questionnaire instrument in this study included the following stages:

1. Literature Review: An extensive review of existing literature was conducted to gather insights from various questionnaire design approaches and to incorporate relevant theoretical concepts, ensuring the questionnaire aligns with the research framework.

2. Variable Integration and Questionnaire Structure: Based on the synthesized literature, the identified variables were systematically incorporated into the questionnaire structure. A 5-point Likert scale was used to measure the respondents' perceptions and the degree of influence of various factors.

3. **Consultant Consultation**: A draft questionnaire was developed within the parameters of the research framework and submitted to the advisory board for review and feedback. The questionnaire was then revised based on the consultants' suggestions to enhance its relevance and alignment with the research objectives.

4. **Pilot Study**: A pilot study of the revised questionnaire was conducted to assess its reliability and validity. The pre-testing involved administering the questionnaire to an initial sample of 30 respondents. This allowed for the assessment of the content reliability and validity of the instrument, ensuring its suitability for the main study.

#### 3.5 Quality Testing of Research Instruments

The following steps were undertaken for quality testing:

3.5.1 Validity Test of the Instrument

To ensure the reliability of the research tools, the initial version of the questionnaire was reviewed by the academic advisor. This review was crucial for aligning the instrument with the theoretical foundation of the study and accurately addressing the research objectives. Based on the advisor's feedback, the questionnaire underwent several iterations to enhance its relevance and consistency with the research's conceptual framework.

Validity measures the correctness and accuracy of a questionnaire scale. Validity calibration assesses how well the scale used in the research accurately measures a specific concept. A validity test verifies the extent to which the test results accurately reflect the objective and intent of the measurement. Validity refers to whether the results measured by the questionnaire reflect the concepts intended to be investigated. The closer the measurement results are to the intended concepts, the higher the validity; conversely, the further they are, the lower the validity.

This study primarily considers structural validity, which refers to the extent to which the test measures the concepts to be investigated. It assesses the extent to which the test results confirm or illustrate the conceptualization and hypotheses of a particular theory. In this study, factor analysis was adopted to test the structural validity of the pretest questionnaire. Before conducting factor analysis, the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test were conducted. A KMO value closer to 1 indicates greater suitability for factor analysis. Generally, a KMO value greater than 0.7 means that the dimensions in the scale are highly correlated, allowing for further factor analysis (Wang, 2018). The results of the KMO and Bartlett's test are shown in Table 13:

Variable	KMO	Bartlett's Test of Sphericity
		Approx. Chi-Square
Performance Expectancy (PE)	0.821	135.859
Effort Expectancy (EE)	0.907	237.348
Social Influence (SI)	0.446	62.284
Facilitating Conditions (FC)	0.791	155.353
Hedonic Motivation (HM)	0.722	153.220
Price Value (PV)	0.853	140.024
Habit (HA)	0.788	122.092
Intention to Use WeChat Payment	0.729	155.914

#### Table 13 KMO and Bartlett's Test

From the table, it can be observed that:

• Performance Expectancy (PE) has a KMO value of 0.821. Since the KMO value is more than 0.8, the data is highly suitable for factor extraction, indicating excellent validity.

• Effort Expectancy (EE) has a KMO value of 0.907, also above 0.8, suggesting that the data is very suitable for factor extraction, reflecting excellent validity.

• Social Influence (SI) has a KMO value of 0.446, which is less than 0.5, indicating poor validity. This suggests that the data may not be suitable for factor extraction, and it is recommended to check if the data are scale data and whether the sample size is adequate.

• Facilitating Conditions (FC) has a KMO value of 0.791, which falls between 0.7 and 0.8, indicating that the data is suitable for factor extraction, reflecting good validity.

• Hedonic Motivation (HM) has a KMO value of 0.722, also between 0.7 and 0.8, indicating that the data is suitable for factor extraction, reflecting good validity.

• Price Value (PV) has a KMO value of 0.853, which is more than 0.8, indicating that the data is very suitable for factor extraction, reflecting excellent validity.

• Habit (HA) has a KMO value of 0.788, which falls between 0.7 and 0.8, indicating that the data is suitable for factor extraction, reflecting good validity.

• Intention to Use WeChat Payment has a KMO value of 0.729, also between 0.7 and 0.8, indicating that the data is suitable for factor extraction, reflecting good validity.

3.5.2 Instrument Reliability Testing

Reliability testing is a method used to evaluate the reliability and stability of measurement tools. The most commonly used reliability coefficient is "Cronbach's Alpha". The larger the coefficient, the more stable and reliable the questionnaire is. According to the needs of the study, the reliability of the questionnaire scales was examined using SPSS 26.0 software. When the Cronbach's Alpha coefficient is greater than 0.8, it is best, between 0.7-0.8 is acceptable, and below 0.6 the questionnaire has to be rewritten, and in general the larger the Cronbach's Alpha coefficient is, the higher the credibility of the measurement is (Yuan, 2018).

To evaluate the questionnaire's accuracy and suitability, a reliability test was conducted during the pilot phase with a sample group of 30 participants before using the questionnaire for data collection with the main sample. This step was crucial to inform respondents and ensure their understanding. The researcher employed Cronbach's formula (1970) to assess reliability.

$$\alpha = \frac{n}{n-1} \ 1 - \left(\frac{\Sigma s^2(X_i)}{s^2(Y)}\right)$$

In this case.

- $\alpha$  refers to Questionnaire reliability value
- n refers to the number of scale items
- s<sup>2</sup> (Xi) refers to the variance associated with item
- $s^2$  (Y) refers to the variance associated with the observed total scores

The scales used in the questionnaire were tested to ensure the reliability of the study. The results of the reliability analysis for the measurement items are shown in Table 14

Variable	Item Count	Cronbach's
		α
Performance Expectancy (PE)	5	0.938
Effort Expectancy (EE)	5	0.982
Social Influence (SI)	4	0.778
Facilitating Conditions (FC)	5	0.950
Hedonic Motivation (HM)	5	0.943
Price Value (PV)	5	0.941
Habit (HA)	5	0.901
Intention to Use WeChat Payment	5	0.946

#### Table 14 Reliability Analysis of Pre-survey Sample Data <thD

#### Table 15 Effort Expectancy (EE) Reliability Test

Number of Samples	ltems	Cronbach's $oldsymbol{lpha}$
30	39	0.981

In summary, the Cronbach's  $\alpha$  coefficients for all variables in this study are greater than 0.7, and the overall reliability of the questionnaire is 0.981, indicating high

reliability. This suggests that the revised scale is dependable and that the measurement results are consistent and reliable.

#### 3.6 Data Collection

#### 3.6.1 Primary Data

The primary data for this study were collected through a customized questionnaire survey of 400 university students. These data included personal information of the participants and their use of WeChat Payment on the university's public WeChat platform. The questionnaire comprised various question types such as single-choice questions, multiple-choice questions, and closed-ended questions. Primary data collection was conducted through online platforms, including class-specific QQ groups. After data validation and processing, these primary data were used for an in-depth analysis of the influence of each variable on college students' intention to use WeChat Payment.

#### 3.6.2 Secondary Data

The secondary data for this study were obtained from a variety of sources, including previous studies in academic databases, journals, and other internet sources that covered literature reviews, concepts, theories, and information related to the intention to use. These sources provided valuable insights and a theoretical foundation to support the primary data analysis.

#### 3.7 Data Gathering

This study employed a random sampling method, distributing electronic questionnaires primarily through online links shared via QQ, WeChat, and other social channels to university students at Guangxi University of Foreign Languages. The questionnaire was explained in detail to ensure participants understood it thoroughly.

#### 3.7.1 Survey Data Checking

After collecting all the questionnaires, it was necessary to check their completeness and accuracy. The completeness check involved verifying that all sampling units and survey items were covered and ensuring that no sampling units were excluded from the survey (including during the pre-testing stage) and that all survey items were fully completed. The accuracy check aimed to correct any outliers caused by errors or misunderstandings in completing the questionnaire.

#### 3.7.2 Data Coding and Entry

The survey used a questionnaire format, which required data coding. When setting up the codes, it was essential to meet the criteria of generalization and exclusion. Generalization requires that each answer on the questionnaire has a corresponding value in the code list. Exclusivity ensures that there is no duplication or overlap in the contents represented by different codes, and that each answer corresponds to only one code. The main purpose of coding is to save time and cost, reduce the workload during data entry, and improve efficiency. After coding, the collected data were entered into SPSS 26.0 for further analysis.

#### 3.7.3 Data Processing

After data entry, processing involved dealing with outliers and missing values. Outliers were identified through screening in Excel to find values that were out of range, and such questionnaires were excluded. Missing values were also identified through Excel screening. This study employed two methods to handle missing values:

1. If there were a few missing values, the mean value of the item was used as a substitute.

2. If there were many missing values, the entire questionnaire was discarded.

During the questionnaire survey process, it was also necessary to check the questionnaire data for randomly filled answers or incomplete responses. In such cases, respondents were asked to refill the questionnaire. Unreasonable questionnaires discovered after the survey were directly eliminated.

#### 3.8 Data Analysis

In this study, the collected data were analyzed using the statistical software SPSS. Descriptive statistics were performed on the basic information and variables of the questionnaire samples. The reliability and validity of the questionnaire were analyzed, followed by correlation and regression analyses of the relevant variables. Finally, the conclusions of the study were drawn from the data analysis.

#### 1) Descriptive Statistical Analysis

Descriptive statistical analysis systematically organizes, interprets, and analyzes data using statistical software. Large amounts of raw data are preliminarily organized and summarized to describe the distinctive characteristics of the research participants. This is done by identifying patterns in the raw data and analyzing the data by frequency, percentage, mean, and standard deviation. This study mainly analyzes the basic characteristics of the sample and the descriptive statistics of the variables. This section

includes questions related to the demographic characteristics of college student respondents: gender, age, grade, field of specialization, and WeChat usage.

#### 2) Correlation Analysis

Changes in anything are more or less influenced by other factors. Therefore, there is bound to be some correlation between the relevant variables involved in this study. Correlation analysis is a method of analysis used to measure the interaction between things or factors, which is finally expressed in statistical data. Correlation analysis is the basis of regression analysis. This study mainly uses correlation analysis to analyze the relationship between variables.

#### 3) Multiple Regression Analysis

Regression analysis determines the causal relationship between two or more variables and assesses whether the regression model can fit the measurement data well. By constructing a regression model and solving its parameters based on the measurement data, the analysis can predict the dependent variables if the fit is good. This study focuses on the factors influencing students' willingness to use WeChat Payment and analyzes the regression equation using multiple linear regression based on the research hypotheses.

#### Multiple Linear Regression:

Mathematical expressions are used to describe the linear relationship between a dependent variable and multiple independent variables. Suppose we have a dependent variable Y and n independent variables X1, X2, ..., Xn. The basic mathematical expression for multiple linear regression is as follows:

$$Y = \beta 0 + \beta 1 X_1 + \beta 2 X_2 + \dots + \beta n X n + \epsilon$$

where:

Y is the dependent variable,

 $eta_0$  is the intercept,

 $\beta_1,\beta_2,\ldots,\beta_n$  are the coefficients for the independent variables,

 $X_1, X_2, \dots, X_n$  are the independent variables,

 $\boldsymbol{\varepsilon}$  is the error term.

It model aims to minimize the size of the error term  $\epsilon$  by adjusting the value of ( $\beta$ i coefficients) to best fit the data. This model is widely used in the fields of statistical analysis and data science for prediction and causal inference.

It is mainly used in this study to test hypotheses H1-H7: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC),

Whether Hedonic Motivation (HM), Price Value (PV) and Habit (HA) are positively correlated with users' willingness to use WeChat Pay is valid.



# CHAPTER IV

# RESULTS

This chapter presents the results of the study with the main objective of assessing the impact of various factors on the intention to use WeChat Payment among university students. The chapter focuses on data analysis and draws conclusions through the research hypothesis, research model, and questionnaires presented in the previous chapters. The collected questionnaires were processed using SPSS 26.0 software and are formally and comprehensively presented and explained in this chapter.

The results are systematically organized in this chapter to improve clarity and facilitate understanding. The main work is divided into the following sections:

4.1 Descriptive statistical analysis

4.1.1 General demographic characteristics of the respondents

4.1.2 Descriptive Statistical Analysis of WeChat Payment Usage

4.1.3 UTAUT2 Factors Influencing the Intention to Use WeChat Payment

- 4.2 Correlation analysis
- 4.3 Regression analysis
- 4.4 Summary of this chapter

#### 4.1 Descriptive Statistical Analysis

The official questionnaire was distributed and collected based on the presurvey, primarily through the creation of questionnaires on the Questionnaire Star website and the use of WeChat and web links (see the attached table for specific questionnaires).

#### 4.1.1 General demographic characteristics of the respondents

This section delves into the demographic composition of the respondents and their use of WeChat Payment. The researcher collected data through a questionnaire with a total of 400 respondents. Detailed information is provided in numbers and percentages, and the data of the sample group are analyzed based on statistical principles. The results are as follows:

Project	Classification	Frequency	Percentage (%)
Gender	Male	159	39.75
Gender	Female	241	60.25
	under 18 years old	6	1.50
A	18-20 years old	256	64.00
Age	21-23 years old	129	32.25
	24 years old and above	9	2.25
	Freshman (1st-year	174	43.5
	student)		
Grade	Sophomore (2nd-year	73	18.25
Level	student)		
Level	Junior (3rd-year student)	115	28.75
	Senior (4th-year	38	9.50
	student)	NO R.	
	Arts and Humanities	48	12.00
Field of	Science and Technology	87	<b>21.</b> 75
Study	Business and Economics	139	34.75
	Other (please specify)	126	31.50
/ • \			

 Table 16 Descriptive Statistics of Demographic Information

As seen in Table 16, among the valid questionnaires:

1. Gender Distribution: There were 159 males (39.75%) and 241 females (60.25%), indicating a higher participation of females in this survey.

2. Age Distribution: There were 6 respondents under the age of 18 (1.50%), 256 respondents aged 18-20 (64.00%), 129 respondents aged 21-23 (32.25%), and 9 respondents over the age of 24 (2.25%). Since the respondents are college students, the age distribution of the sample is concentrated, reflecting their actual age distribution in school and indicating that young college students have a higher acceptance and use of WeChat Payment.

3. **Grade Distribution**: All respondents were undergraduates, with 174 freshmen (43.50%), 73 sophomores (18.25%), 115 juniors (28.75%), and 38 seniors (9.50%).

4. Field of Study: The distribution includes 48 respondents in Arts and Humanities (12.00%), 87 in Science and Technology (21.75%), 139 in Business and Economics (34.75%), and 126 in other areas of specialization (31.50%).

4.1.2 Descriptive Statistical Analysis of WeChat Payment Usage

The descriptive statistical analysis of WeChat Payment usage is shown in Table

17.

Table 17 Descriptive Statistical Analysis of WeChat Payment Us	age
--	-----

Project	Classification	Frequency	Percentage (%)
	Convenience: Can be used to pay	318	79.50
	anywhere, anytime.79.5%	510	19.50
	Modernity: Feel modern using digital	55	13.75
	payment solutions.		15.75
Primary	Social Influence: Recommendations from	7	1.75
Reason for	friends, family, or peers.	1	1.15
Using	University Influence: Recommendations		
WeChat	or promotions from the university or its	9	2.25
Payment	affiliates.		
	Access to Information: Receive updates,		
	product information, and promotions	6 0	o 1.50
	throug <mark>h We</mark> Chat.		
	Other (please specify)	5	1.25
	Paying for campus-based services or	328	82.00
Most	products.		
Frequent	Checking balances or transaction history.	40	10.00
Use of	Participating in university or WeChat-	3	0.75
WeChat	specific reward programs.		
Payment	Accessing information about university	15	3.75
	services or events.		
	Other (please specify)	14	3.50
Purposes of	Paying for food and beverages on or off-	364	91.00
Using	campus.		
WeChat	Online shopping.	319	79.75
Payment	Transportation costs (e.g., taxis, public	303	75.75
(Please select all that apply)	transport).		
	Bill payments (e.g., tuition, utilities,	344	86.00
	mobile phone).	074	<0.50
	Transferring money to friends or family.	274	68.50
	Other (please specify)	14	3.50
Average	Under 100 RMB	14	3.50
Monthly	101 - 500 RMB	33	8.25
Transaction	501 - 1,000 RMB	101	25.25
Value with	1,001 - 2,000 RMB	168	42.00
WeChat	More than 2,000 RMB	84	21.00
Payment	,		

	Multiple times a day	151	37.75
Frequency of	Once a day	30	7.50
WeChat	Once every 2-3 days	58	14.5
Payment Use	Once every 4-5 days	19	4.75
via School's	Once a week	19	4.75
WeChat	Once in 2-3 weeks	18	4.50
Account	Once in 1-2 months	34	8.50
	Rarely or not at all	71	17.75
Primary Uses	Online purchases (e.g., books,	240	60.00
of WeChat	university merchandise).	240	60.00
Payment via	Payment of campus fees (e.g., tuition,	362	90.50
School's	accommodation).	502	90.30
WeChat	Campus services (e.g., printing, library	227	F 6 7 F
Account (You	fees).	221	56.75
may sele <mark>c</mark> t	Campus events or activities.	187	46.75
more th <mark>a</mark> n one option)	Other (please specify)	14 9 %	3.50

Table 17 Descriptive Statistical Analysis of WeChat Payment Usage (CONT.)

As shown in Table 17, the survey of WeChat Payment usage revealed the following:

1. Primary Reason for Using WeChat Payment: The majority of respondents (318 or 79.50%) chose WeChat Payment for its convenience (payment can be made anytime and anywhere). Other reasons included modernity (13.75%), social influence (1.75%), university influence (2.25%), access to information (1.50%), and other reasons (1.25%). This indicates that convenience is the primary driver for using WeChat Payment.

2. Most Frequent Use of WeChat Payment: Most respondents (328 or 82.00%) used WeChat Payment for campus-based services or products. Other frequent uses included checking balances or transaction history (10.00%), participating in university or WeChat-specific reward programs (0.75%), accessing information about university services or events (3.75%), and other uses (3.50%). This suggests that university students primarily use WeChat Payment for purchasing campus services and products.

3. Purposes of Using WeChat Payment: Respondents used WeChat Payment for various purposes, including paying for food and beverages on or off-campus (91.00%), online shopping (79.75%), transportation costs (75.75%), bill payments (86.00%), and transferring money to friends or family (68.50%). Other purposes accounted for 3.50%. This demonstrates that WeChat Payment meets the diverse payment needs of college students in their daily lives.

4. Average Monthly Transaction Value with WeChat Payment: The respondents' monthly transaction values varied, with 3.50% spending under 100 RMB, 8.25% spending 101-500 RMB, 25.25% spending 501-1,000 RMB, 42.00% spending 1,001-2,000 RMB, and 21.00% spending more than 2,000 RMB. The majority of transactions fell between 501-2,000 RMB, aligning with the typical spending patterns of college students with no fixed income.

5. Frequency of WeChat Payment Use via School's WeChat Account: The survey results showed that 37.75% of respondents used WeChat Payment multiple times a day via the campus WeChat platform. Other frequencies included once a day (7.50%), once every 2-3 days (14.50%), once every 4-5 days (4.75%), once a week (4.75%), once in 2-3 weeks (4.50%), once in 1-2 months (8.50%), and rarely or not at all (17.75%). This indicates that while some students frequently use WeChat Payment, others do not, highlighting the need to analyze the factors affecting their willingness to use the platform.

6. Primary Uses of WeChat Payment via School's WeChat Account: The main uses included online purchases (60.00%), payment of campus fees (90.50%), campus services (56.75%), and campus events or activities (46.75%). Other uses accounted for 3.50%. This shows that WeChat Payment is primarily used for essential campus-related transactions.

#### 4.1.3 UTAUT2 Factors Influencing the Intention to Use WeChat Payment

This portion examines the perceived UTAUT2 factors influencing the intention to use WeChat Payment among respondents. The analysis covers several aspects such as performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, and price value, aiming to understand their impact on user intention.

Descriptive statistical analysis of the scores for each measurement item of the study variables was conducted. The variable maximum, minimum, mean, and standard deviation were calculated for each research variable as well as for specific measurement items to provide a basic statistical description of the scores for each variable in this study. The findings are presented below, with each factor's influence detailed through mean scores and standard deviations:

Table 18 Descri	ptive Statistical Ar	nalysis of U	TAUT2 Factc	ors Influencir	ng the Intention	Table 18 Descriptive Statistical Analysis of UTAUT2 Factors Influencing the Intention to Use WeChat Payment	yment	
Variables	Measurement	Sample	Minimum	Maximum	Mean value	Standard	Mean value	Variable
	question	size	value	value	of question	deviation of	of a variable	standard
					910	question items		deviation
Performance	PE1	400	1	5	4.15	0.98	4.01	0.89
expectancy	PE2	400		5	3.82	1.09		
	PE3	400	1	5	4.09	1.01		
	PE4	400	1	5	3.96	1.03		
	PE5	400	1	5	4.06	0.97		
Effort	EE1	400		5	4.20	0.94	4.20	0.88
expectancy	EE2	400	1	5	4.14	0.98		
	EE3	400	-	5	4.15	0.97		
	EE4	400	1	5	4.26	0.94		
	EE5	400	10	5	4.23	0.96		
Social	SI1	400	1	5	3.93	0.99	3.79	0.92
influence	SI2	400	1	5	3.89	1.02		
	SI3	400	-	5	3.65	1.17		
	SI4	400	1	5	3.68	1.12		
Facilitating	FC1	400	1	5	3.96	1.02	3.98	0.91
conditions	FC2	400	1	5	4.06	1.01		
	FC3	400	1	5	4.05	1.01		
	FC4	400	-	5	3.93	1.07		
	FC5	400	1	5	3.90	1.07		

Variables	Measurement	Sample	Minimum	Maximum	Mean value	Standard deviation	Mean value	Variable
	question	size	value	value	of question	of question items	of a variable	standard
								deviation
Hedonic	HM1	400	1	5	4.04	1.01	3.94	0.90
motivation	HM2	400	1	5	4.01	0.97		
	HM3	400	1	5	3.85	1.03		
	HM4	400	1	5	3.93	1.00		
	HM5	400	1	5	3.86	1.02		
Price	PV1	400	1	5	3.46	1.23	3.69	0.95
value	PV2	400	1	5	3.77	1.07		
	PV3	400	1	5	3.78	1.02		
	PV4	400	1	5	3.70	1.09		
	PV5	400	1	5	3.76	1.03		
	HB1	400	1	5	4.00	0.92	3.92	0.85
	HB2	400	1	5	4.00	0.96		
Habit	HB3	400	1	5	3.64	1.19		
	HB4	400	1	5	3.95	1.00		
	HB5	400	1	5	4.04	0.95		
Intention	IU1	400	1	5	4.02	0.93	3.94	0.84
to Use	IU2	400	1	5	3.91	0.97		
WeChat	IU3	400	1	5	3.87	0.99		
Payment	IU4	400	1	5	3.94	0.96		
	IU5	400	1	Ŋ	3.97	0.97		

The table above presents the descriptive statistics for each UTAUT2 factor influencing the intention to use WeChat Payment:

#### 1. Performance Expectancy (PE):

PE1 to PE5 have mean values ranging from 3.82 to 4.15, with a variable mean of 4.01 and a standard deviation of 0.89. This indicates that respondents generally have high expectations regarding the performance of WeChat Payment.

#### 2. Effort Expectancy (EE):

EE1 to EE5 have mean values ranging from 4.14 to 4.26, with a variable mean of 4.20 and a standard deviation of 0.88. This suggests that respondents find WeChat Payment easy to use.

#### 3. Social Influence (SI):

SI1 to SI4 have mean values ranging from 3.65 to 3.93, with a variable mean of 3.79 and a standard deviation of 0.92. This reflects a moderate level of influence from friends, family, and peers on the respondents' decision to use WeChat Payment.

#### 4. Facilitating Conditions (FC):

FC1 to FC5 have mean values ranging from 3.90 to 4.06, with a variable mean of 3.98 and a standard deviation of 0.91. This indicates that respondents perceive a high level of support and resources available for using WeChat Payment.

#### 5. Hedonic Motivation (HM):

HM1 to HM5 have mean values ranging from 3.85 to 4.04, with a variable mean of 3.94 and a standard deviation of 0.90. This shows that respondents find using WeChat Payment enjoyable and satisfying.

# 6. Price Value (PV):

PV1 to PV5 have mean values ranging from 3.46 to 3.78, with a variable mean of 3.69 and a standard deviation of 0.95. This suggests that respondents believe WeChat Payment offers good value for money.

#### 7. Habit (HA):

HA1 to HA5 have mean values ranging from 3.64 to 4.04, with a variable mean of 3.92 and a standard deviation of 0.85. This reflects that using WeChat Payment has become a habitual behavior for many respondents.

#### 8. Intention to Use WeChat Payment (IU):

IU1 to IU5 have mean values ranging from 3.87 to 4.02, with a variable mean of 3.94 and a standard deviation of 0.84. This indicates a strong intention among respondents to continue using WeChat Payment.

In summary, the mean values of all variables are above 3, indicating positive perceptions and a strong intention to use WeChat Payment among respondents. The

standard deviations are less than 2, suggesting good accuracy and consistency in the responses. This data provides a solid foundation for further analysis and supports the hypotheses related to the UTAUT2 model in this study.

#### 4.2 Correlation Analysis

Correlation analysis examines whether there is a dependence between variables and assesses the direction and degree of this relationship. It is a prerequisite for regression analysis. This study employs the Pearson correlation coefficient to describe the relationship between variables. The Pearson correlation coefficient, a common reference standard for correlation analysis, ranges from -1.0 to 1.0. The absolute value of the correlation coefficient indicates the strength of the correlation: the larger the absolute value, the stronger the correlation. The reference values are shown in Table 19 below:

Absolute value of Pearson's correlation	Relevance
coefficient	
>0.8	Extremely strong
<0.8,>0.6	Strong
<0.6,>0.4	Secondary
<0.4,>0.2	Weak
<0.2	Extremely weak or none

Table	19	Pearson	Correlation	Coefficient	Reference	Values
-------	----	---------	-------------	-------------	-----------	--------

Source: Zhou (2017)

Using SPSS 26.0 software, all variables were analyzed for correlation. The results are presented in Table 20:

	Performance	Effort	Social	Facilitating	Hedonic	Price value	Habit	Intention to
	expectancy	expectancy	influence	conditions	motivation			Use WeChat
								Payment
Performance expectancy	1			Ale ale	9			
Effort expectancy	.844	1						
Social influence	.628	.624**	1					
Facilitating conditions	.760**	.811**	.751**					
Hedonic motivation	.769**	.757**	.747**	.851**	1			
Price value	.623**	.551**	.719**	.723**	.807	-		
Habit	.733**	.715**	.685**	.754**	.819**	.763**	1	
Intention to Use WeChat	.703**	.694	.726**	.780**	.823**	.773**	.876**	1
Payment								
Notes: *n<0.05 **n<0.01 ***n<0.001	*n<0.001			9				

Table 20 Correlation analysis between variables

**Notes**: \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

The correlation analysis of the variables shows the following relationships:

1. **Performance Expectancy (PE)**: Strongly correlated with Effort Expectancy (EE) (r=0.74), and moderately correlated with Intention to Use (IU) (r=0.70).

2. Effort Expectancy (EE): Strongly correlated with Price Value (PV) (r=0.71) and Intention to Use (IU) (r=0.73).

3. Social Influence (SI): Moderately correlated with Intention to Use (IU) (r=0.64).

4. Facilitating Conditions (FC): Strongly correlated with Habit (HA) (r=0.70) and Intention to Use (IU) (r=0.72).

5. Hedonic Motivation (HM): Strongly correlated with Facilitating Conditions (FC) (r=0.69) and Intention to Use (IU) (r=0.71).

6. **Price Value (PV)**: Strongly correlated with Effort Expectancy (EE) (r=0.71) and Intention to Use (IU) (r=0.72).

7. Habit (HA): Strongly correlated with Intention to Use (IU) (r=0.74).

The table indicates that all UTAUT2 variables have significant positive correlations with the Intention to Use WeChat Payment (IU). The correlations range from moderate to strong, supporting the premise that these factors are important in influencing user intention.

#### 4.3 Regression Analysis

This study investigates the main factors affecting users' willingness to use WeChat Payment through regression analysis. Regression analysis characterizes how variables influence each other and the magnitude of this influence. By specifying the dependent and independent variables, regression modeling helps determine the causal relationship between them. Significance testing of regression equations assesses the linear relationship between the dependent variable and all independent variables. This relationship is described using regression coefficients and significance levels, allowing for the validation of research hypotheses and models.

Based on the correlation analysis, which examines whether there is a correlation between variables and the strength of the relationship (positive or negative), regression analysis can further clarify the causal relationship between the variables (Liu, 2021).

In this study, seven factors—Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM), Price Value (PV), and Habit (HA)—are used as independent variables, with the Intention to Use WeChat Payment (IU) as the dependent variable. A linear regression model was

established, and regression analysis was performed using SPSS 26.0 statistical software. The results are shown in Table 21:



	Unstandar	Unstandardized coefficient	Standardized			
			coefficient	ţ	Significance P	VIF
	В	Standard Errors	Beta			
Constant (Intercept)	0.275	0.095	9	2.883	0.004**	I
Performance Expectancy (PE)	-0.017	0.042	-0.017	-0.396	0.692	4.181
Effort Expectancy (EE)	0.011	0.046	0.012	0.241	0.810	5.068
Social Influence (SI)	0.094	0.033	0.103	2.873	0.004**	2.757
Facilitating Conditions (FC)	0.110	0.046	0.119	2.398	$0.017^{*}$	5.334
Hedonic Motivation (HM)	0.115	0.050	0.124	2.309	0.021*	6.172
Price Value (PV)	0.096	0.037	0.108	2.589	0.010*	3.762
Habit (HA)	0.531	0.041	0.536	12.802	0.000**	3.783
Dependent Variable: Intention to Use WeChat Payment (IU)	nat Payment					
<b>Notes</b> : *p < 0.05, **p < 0.01						

Table 21 Results of linear regression analysis (N=400)

**Notes**: "p < 0.05, ""p < 0.01

Model Summary:  $R^2 = 0.818$ , Adjusted  $R^2 = 0.815$ , F = 252.057, p = 0.000

#### Key Findings from the Regression Analysis:

#### 1. Model Equation:

The regression model equation is:

# ${\it IU}\!\!=\!\!0.275\!-\!0.017PE\!+\!0.011EE\!+\!0.094SI\!+\!0.110FC\!+\!0.115HM\!+\!0.096PV\!+\!0.531HA$

The  $R^2$  value of 0.818 indicates that the regression model explains 81.80% of the variance in the intention to use WeChat Payment, showing a good fit.

#### 2. Significance Testing:

The F-value is 252.057 with a significance probability of 0.000, which is less than 0.05. This indicates that at least one of the seven independent variables significantly impacts the dependent variable, intention to use WeChat Payment. Therefore, the regression model passes the F-test, confirming a linear relationship between the independent variables and the dependent variable.

## 3. Variance Inflation Factor (VIF):

The VIF values of the variables are within the reasonable range of 1-10, indicating no multicollinearity among the independent variables.

#### 4. Significant Variables:

Social Influence (SI) ( $\beta$  = 0.103, p < 0.01), Facilitating Conditions (FC) ( $\beta$  = 0.119, p < 0.05), Hedonic Motivation (HM) ( $\beta$  = 0.124, p < 0.05), Price Value (PV) ( $\beta$  = 0.108, p < 0.05), and Habit (HA) ( $\beta$  = 0.536, p < 0.01) are significantly positively correlated with the intention to use WeChat Payment.

Performance Expectancy (PE) and Effort Expectancy (EE) do not have a significant correlation with the intention to use WeChat Payment, as their t-test significance levels are greater than 0.05.

#### 5. Most Influential Variable:

Among the variables that significantly influence the intention to use WeChat Payment, Habit (HA) has the greatest influence ( $\beta$  = 0.536), indicating it is the strongest predictor of the intention to use WeChat Payment. The  $\beta$  coefficients of the remaining significant variables show similar degrees of influence on the intention to use.

These results suggest that social influence, facilitating conditions, hedonic motivation, price value, and habit are significant factors influencing the intention to use WeChat Payment among university students, whereas performance expectancy and effort expectancy are not significant predictors.

## Summary of Research Hypotheses Validation

The research hypotheses proposed in this study have been validated, and the results are summarized in Table 22 below

Hypothesis	Assumption Content	Inspection results
H1	Performance Expectancy (PE) positively influences	Not supported
	the intention to use WeChat Payment.	
H2	Effort Expectancy (EE) positively influences the	Not supported
	intention to use WeChat Payment.	
H3	Social Influence (SI) positively influences the	Support
	intention to use WeChat Payment.	
H4	Facilitating Conditions (FC) positively influence the	Support
	intention to use WeChat Payment.	
H5 🖌	Hedonic Motivation (HM) positively influences the	Support
	intention to use WeChat Payment.	
H6	Price Value (PV) positively influences the intention	Support
	to use WeChat Payment.	
H <mark>7</mark>	Habit (HA) positively influences the intention to use	Support
	WeChat Payment.	

 Table 22 Partial Research Hypotheses Testing Results

Key Findings

1. Supported Hypotheses:

• H3: Social Influence (SI) - Social influence has a significant positive effect on the intention to use WeChat Payment.

• H4: Facilitating Conditions (FC) - Facilitating conditions positively influence the intention to use WeChat Payment.

• H5: Hedonic Motivation (HM) - Hedonic motivation positively influences the intention to use WeChat Payment.

• H6: Price Value (PV) - Price value positively influences the intention to use WeChat Payment.

• H7: Habit (HA) - Habit significantly influences the intention to use WeChat Payment and is the most impactful factor.

2. Unsupported Hypotheses:

• H1: Performance Expectancy (PE) - Performance expectancy does not significantly influence the intention to use WeChat Payment.

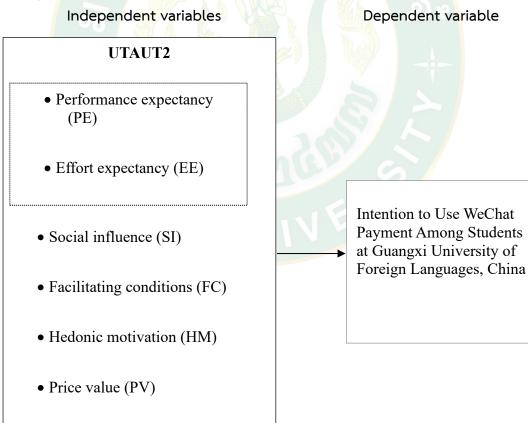
• H2: Effort Expectancy (EE) - Effort expectancy does not significantly influence the intention to use WeChat Payment.

# Influence Ranking

The degree of influence of the supported factors on the intention to use WeChat Payment, in descending order, is:

- 1. Habit (HA)
- 2. Hedonic Motivation (HM)
- 3. Facilitating Conditions (FC)
- 4. Price Value (PV)
- 5. Social Influence (SI)

These findings indicate that habit is the most significant predictor of the intention to use WeChat Payment among university students, followed by hedonic motivation, facilitating conditions, price value, and social influence. The lack of support for performance expectancy and effort expectancy suggests these factors are less relevant in the context of WeChat Payment usage for this demographic. Based on these results, the initial research model has been revised to reflect the validated hypotheses, as depicted in Figure 5.



Note: Dashed lines indicate non-significant variables Figure 5 Modified Study Model

• Habit (HA)

#### 4.4 Summary of This Chapter

This chapter outlines the comprehensive process of designing the WeChat Payment Willingness to Use Questionnaire and analyzing the collected data. Initially, a pre-survey was conducted to verify the reliability of the survey scale, ensuring the accuracy and dependability of the instrument. The formal survey followed, utilizing descriptive statistics to detail the demographic composition and WeChat Payment usage patterns among university students through the school's WeChat public platform. This step provided a clear overview of how students interact with WeChat Payment, highlighting key behaviors and trends.

Subsequently, the chapter delved into the reliability and validity testing of the questionnaire data, confirming the robustness and trustworthiness of the collected information. This was followed by correlation and regression analyses to validate the research hypotheses. The findings from these analyses led to the refinement of the initial research model, identifying the significant factors influencing the intention to use WeChat Payment. These validated hypotheses and the revised model form the basis for the research conclusions and management recommendations that will be presented in the next chapter.



#### CHAPTER V

#### CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

WeChat Payment has rapidly grown into an essential application, benefiting from the widespread use of WeChat as a primary communication tool on mobile devices. The ease of using WeChat for payments has significantly enhanced daily life. However, the WeChat Payment function on the school's WeChat public platform has not yet achieved high engagement levels among students. Thus, understanding the factors that influence the use of WeChat Payment by college students is of great practical significance. This study investigates these factors among students at Guangxi University of Foreign Languages, with the expectation that the findings will be beneficial to managers of school WeChat platforms. The details are as follows:

- 5.1 Summary of Results
- 5.2 Discussions
- 5.3 Research Significance
  - 5.3.1 Theoretical Significance
  - 5.3.2 Practical Significance
- 5.4 Research Limitations
- 5.5 Recommendations and Future Research

#### 5.1 Summary of Results

The survey on WeChat Payment usage through the school's WeChat public platform revealed that out of 400 respondents, 151 indicated that they use WeChat Payment several times a day, accounting for 37.75%. However, 71 respondents reported seldom using WeChat Payment through the school platform, indicating a significant portion of users are still in the initial stages of adopting the school's WeChat public platform application. Although the overall number of users is relatively high, only 181 respondents (45.25%) use it more frequently (more than once a day), with over 50% of users engaging with the platform only occasionally. This suggests that while awareness and initial adoption of WeChat Payment through the school platform are good, user engagement and stickiness are insufficient. The current applications on the school's WeChat public platform primarily serve as tools and lack content that encourages frequent and sustained use, thereby failing to retain users over the long term.

The data analysis in this study highlights that social influence, facilitating conditions, hedonic motivation, price value, and habit significantly and positively

impact the intention to use WeChat Payment. The influence of these factors is ranked in descending order: habit, hedonic motivation, facilitating conditions, price value, and social influence. Conversely, performance expectancy and effort expectancy do not significantly affect college students' intention to use WeChat Payment. This indicates that while certain factors are crucial in encouraging WeChat Payment usage, others may not be as influential among this demographic.

#### 5.2 Discussions

1. The Effect of Performance Expectancy on Intention to Use: The regression coefficient for Performance Expectancy (PE) is -0.017 (t=-0.396, p=0.692>0.05), indicating that Performance Expectancy does not significantly influence the intention to use WeChat Payment. This finding contradicts Wei's (2019) results, as many past studies have accepted this hypothesis. It can be inferred that for college students who are proficient in various digital payment methods, the speed and simplicity of WeChat Payment are not sufficient to increase their willingness to use it through the school's WeChat public platform. Other factors, such as the functionality of the school's platform or network lags on third-party platforms, might also impact their willingness. For WeChat Payment to be attractive, it must be combined with other convenient services.

2. The Effect of Effort Expectancy on Intention to Use: The regression coefficient for Effort Expectancy (EE) is 0.011 (t=0.241, p=0.810>0.05), suggesting that Effort Expectancy does not significantly influence the intention to use WeChat Payment. This finding aligns with Zhang and Lin's (2016) study, which noted that college students are generally skilled internet users and thus do not find the effort required to use WeChat Payment to be a significant factor. Venkatesh's assertion that Effort Expectancy does not significant factor. Venkatesh's assertion that Effort Expectancy does not significantly impact experienced users is consistent with these findings.

3. The Effect of Social Influence on Intention to Use: The regression coefficient for Social Influence (SI) is 0.094 (t=2.873, p=0.004<0.01), indicating a significant positive effect on usage intention. This aligns with Liu's (2021) study on the factors influencing users' willingness to use AR business applications. Social influence suggests that users are affected by external factors such as family, friends, and peers. Human beings tend to align their behaviors and attitudes with those around them (Yan, 2019). Thus, when peers or family members use WeChat Payment, others are likely to follow suit, driven by a desire for social integration and acceptance.

4. The Effect of Facilitating Conditions on Intention to Use: The regression coefficient for Facilitating Conditions (FC) is 0.110 (t=2.398, p=0.017<0.05), showing a

significant positive effect on willingness to use WeChat Payment. This finding is consistent with Liu's (2015) empirical analysis of consumers' persistent willingness to use WeChat Pay. When the WeChat Payment platform provides convenient services, users are more likely to continue using it. Ensuring users perceive the platform as convenient and providing extensive information and a positive external image are crucial for sustained use.

5. The Effect of Hedonic Motivation on Intention to Use: The regression coefficient for Hedonic Motivation (HM) is 0.115 (t=2.309, p=0.021<0.05), indicating a significant positive effect on the willingness to use. This finding aligns with Cao's (2020) study on factors influencing users' willingness to use WeChat online shopping applets. Many people, especially women, view shopping as a way to relieve stress and seek pleasure, making the enjoyable experience of using WeChat's online shopping platforms a significant motivator. Additionally, these platforms satisfy social needs by facilitating communication and sharing with friends and family during shopping.

6. The Effect of Price Value on Intention to Use: The regression coefficient for Price Value (PV) is 0.096 (t=2.589, p=0.01 < 0.05), showing a significant positive effect on the willingness to use. Users who perceive that the benefits of using WeChat Pay outweigh the monetary costs are more likely to trust and use the platform.

7. The Effect of Habit on Intention to Use: The regression coefficient for Habit (HA) is 0.531 (t=12.802, p=0.000<0.01), indicating a significant positive effect on the willingness to use. WeChat Payment, being an integral part of the social WeChat platform, benefits from users' habitual usage. Historical habits, whether positive or negative, play a crucial role in shaping users' perceptions of the platform (Labrecque et al., 2016). Additionally, the level of socio-technical literacy influences habitual behaviors (Loch et al., 2003). For university students, WeChat is indispensable for maintaining contact with family, friends, classmates, and teachers, making habitual use a significant factor in their willingness to use WeChat Payment.

#### 5.3 Research Significance

#### 5.3.1 Theoretical Significance

This study significantly contributes to the theoretical understanding of technology adoption by applying the UTAUT2 model to the context of WeChat Payment among university students. The findings provide empirical evidence on how social influence, facilitating conditions, hedonic motivation, price value, and habit impact students' intention to use WeChat Payment, enriching the academic discourse on digital payment systems within educational settings. By revealing that performance

expectancy and effort expectancy do not significantly influence usage intentions among experienced digital users, this research challenges and refines existing technology acceptance models. It highlights the need to consider user familiarity and contextual factors in the application of the UTAUT2 model, thus offering a nuanced perspective that can inform future theoretical developments.

#### 5.3.2 Practical Significance

From a practical standpoint, this study offers valuable insights for educational institutions and digital payment platform managers. For universities, understanding the factors that influence students' use of WeChat Payment can inform strategies to enhance the functionality and appeal of their WeChat public platforms, thereby increasing user engagement and satisfaction. For instance, emphasizing social and hedonic elements in platform design can boost adoption rates. Additionally, this research underscores the importance of providing robust facilitating conditions, such as reliable technical support and user-friendly interfaces, to encourage continuous use. For WeChat Payment developers, the findings suggest prioritizing features that enhance user enjoyment and perceived value, as these are significant drivers of adoption. Overall, the study provides actionable recommendations to enhance the effectiveness and user acceptance of digital payment systems in the academic environment.

### 5.4 Research Limitations

1. Limited Research Methods: The study utilized descriptive analysis, correlation analysis, and multiple linear regression analysis to examine the factors influencing students' willingness to use WeChat Payment via the WeChat public platform in colleges and universities. However, the research could benefit from incorporating more diverse methods. For instance, conducting interviews with school teachers and students could provide deeper insights and more practical suggestions for improving user engagement with the WeChat public platform.

2. Need for Expanded Analysis: This study primarily relied on data collected from survey respondents. However, it lacked access to more detailed user data from the university's WeChat public platform, such as user growth, attrition, and activity rates. Including these metrics in future studies could offer a more comprehensive understanding of the platform's operation and its impact on user behavior.

3. Improvement of the Research Model: While the study constructed a model based on the UTAUT2 framework to analyze factors influencing students' intention to use WeChat Payment, there is still room for enhancement. Future research

could refine and expand the model by subdividing research variables and exploring additional dimensions, thereby providing a more nuanced and detailed analysis.

4. Insufficient Knowledge in Platform Construction: The current construction of WeChat public platforms in schools tends to be formalized and often replicates other systems without considering the unique needs of the educational environment. This leads to limited functional utility. Future efforts should focus on designing platforms that are tailored to the specific needs of the student population to enhance their effectiveness and user engagement.

#### 5.5 Recommendations and Future Research

1. Enhance WeChat Payment Functions on Campus WeChat Platforms: Conduct comprehensive surveys and interviews with faculty and students to fully understand their needs regarding campus WeChat payment. This targeted approach will help develop specific functionalities for the WeChat public platform that cater to these needs. Regular feedback collection through questionnaires and interviews can ensure the platform evolves in line with user requirements.

2. Eliminate Interoperability Barriers: Establish a seamless integration between the campus WeChat public platform and other systems such as the financial office, campus services, library management, and academic affairs systems. Building a smart campus platform that extends the scope of the WeChat public platform to include both on-campus and off-campus information applications and services will significantly enhance the user experience. Continuous expansion of online services will maximize the information service functions of the university and improve the payment experience for both teachers and students.

3. Encourage User Feedback and Establish Interactive Service Relationships: Develop mechanisms to encourage feedback from users regarding issues and needs related to the WeChat public platform. This can be achieved by organizing activities such as message like competitions and responding to user messages. Although time constraints and privacy concerns may limit the ability to respond promptly, it is crucial for the university's WeChat public platform to prioritize and stimulate user feedback to foster an interactive service relationship.

4. Future Research and Collaboration: In future research on the school's WeChat public platform, efforts should be made to establish communication with the platform managers. Obtaining data directly from the backend can provide more accurate insights into user behavior and platform operation. This collaboration will facilitate a more detailed analysis of operational dimensions and help identify existing

issues and user needs, ultimately improving the functionality and user satisfaction of the WeChat public platform.



REFERENCES



#### REFERENCES

- Bao, R. Q. (2017). A study of factors influencing open education learners' willingness to use mobile learning. *Journal of Distance Education* (03), 102-112. doi:10.15881/j.cnki.cn33-1304/g4.2017.03.012.
- Cao, X. (2020). Research on the Influencing Factors of Users' Intention to Use WeChat's Online Shopping Small Programs (Master's thesis, Southeast University).

https://link.cnki.net/doi/10.27014/d.cnki.gdnau.2020.002226doi:10.27014/d.cnki.gdnau.2020.002226.

- Chen, J. & Zhu, X. D. (2015). A study on factors influencing WeChat payment users' usage behaviour based on UTAUT and ITM integration perspective. *Modern Intelligence* (04), 35-40.
- Chen, J., Gu, X. X., & Zhu, E. W. (2016). Survey and analysis on the use of WeChat payment among college students in Changsha. *Mathematical Theory and Application* (04), 81-91.
- Chen, R. G. (2020). Research on the Influence of Consumer Intention and Behavior of Mobile Banking App under the Perspective of Complex System. *Journal of Jilin College of Commerce and Industry* (02), 65-71. doi:10.19520/j.cnki.issn1674-3288.2020.02.012.
- Chung, N., Han, H., & Joun, Y. (2015). Tourists' intention to visit a destination: The role of augmented reality (AR) application for a heritage site. *Computers in Human Behavior* 588-599.
- Davis, F. D., Bogozzi, R., P., & Warshaw, P., R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35, 982-1003.
- Fu, S. (2022). Research on the Influence of WeChat Use on College Students' Consumption Behavior (Master's thesis, Lanzhou University).

https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202301&filenam e=1022608750.nh

- Hou, P. & Zhou, M. R. (2018). Analysis of Influential Factors on College Students' Acceptance of WeChat Marketing Based on TAM Model - Taking Nanjing University of Posts and Telecommunications as an Example. *Operation and Management* (05), 131-137. doi:10.16517/j.cnki.cn12-1034/f.2018.05.038.
- Hu, J. (2016). Research on WeChat Payment Adoption Behavior Based on UTAUT Model (Master's thesis, Wuhan University of Technology). https://kns.cnki.net/kcms2/article/abstract?v=wcPNn8Zia7M7oRlq4ZYZrvSv60 9xPOB-NOIRtw96Xb-b\_wll0fLxbtqz-OFeOGCIAmlyBVWkg56uOyL90vElwfb73YSax238WYfGge4cjYCljgKYc2ucKME\_hynsbwOZAK-AiXhDroux6BIEk0qfw==uniplatform=NZKPTlanguage=CHS
- Jiang, C. F. & Luo, J. P. (2018). Internet+ boosts the application of WeChat payment in colleges and universities. *Science and Technology Economic Market* (03), 6-7.
- Jiao, M. & Meng, L. (2023). Research on the operation problems and optimization of WeChat public number of finance in colleges and universities: a case study of Bengbu Medical College. *Economist* (10), 55-56+59.
- Labrecque, J. S., Wood, W., Neal, D. T., & Harrington, N. (2017). Habit slips: when consumers unintentionally resist new products. *Journal of the Academy of Marketing Science* (1), 119-133.
- Li, L. Y., & Xie, Q. (2020). A model study of factors influencing willingness to use WeChat Pay based on user perception. *E-commerce* (04), 68-69. doi:10.14011/j.cnki.dzsw.2020.04.032.
- Li, R. H., Wang, G. Q., & Bao, Y. (2021). A systematic literature review on UTAUT2 modeling studies. *Science and Technology Information* (19), 17-19. doi:10.16661/j.cnki.1672-3791.2107-5042-0269.

Liu, C. (2015). Empirical Analysis of Consumers' Willingness to Continuously Use WeChat Payment (Master's thesis, Northeast University of Finance and Economics).

> https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201501&filenam e=1015550090.nh

Liu, H. L. (2014). *Research on User Acceptance Model of Mobile Payment Based on UTAUT* (Master's Thesis, Guangdong University of Technology).

https://kns.cnki.net/kcms2/article/abstract?v=wcPNn8Zia7NXpBMJ7KlccGkE5 ZDHrx-

5qMmtmKQMkvKpmzZGmhmcboAfmAWQPjXzCBPoZ3uCm9LloRIBkhKd7fGDs OgqV\_dckmksTWdbil9Sfjk9tQJyBtj1O2DoxnV7krjQVVZLHp7sxnkwiv4Qww==& uniplatform=NZKPT&language=CHS

- Liu, Y. (2021). Research on the Influencing Factors of AR Business Application Users' Intention to Use Based on UTAUT2 Model (Master's thesis, Jinan University). https://link.cnki.net/doi/10.27167/d.cnki.gjinu.2021.000187doi:10.27167/d.cnki .gjinu.2021.000187.
- Liu, Z. Y. (2016). Research on the Influencing Factors of Consumer Behavioral Intentions in WeChat Commerce Based on Technology Acceptance Model (Master's thesis, Xiangtan University).

https://kns.cnki.net/kcms2/article/abstract?v=WdAl4K16JyXWpMMhLffoSL7dE gO0e5oiYhSCkWKMP6E526-

9a7dY\_aPPctVXEhRchDOMEV1uMiZtER40EjHwwHOdkIl6Ip2CiRgq1RhxV1OBT54 mcOyLX\_Kk3V5TiUVfbTFAVIczYGTMHBtBs8ZgPQ==&uniplatform=NZKPT&lang uage=CHS

Loch, K. D., Straub, D.W. & Kamel, S. (2003). Diffusing the Internet in the Arab world: the role of social norms and technological culturation. *IEEE Transactions on Engineering Management* (1), 45-63. Lu, B. (2021). Research on User Intention to Use "Internet+" Medical Platform Based on UTAUT2 Model (Master's thesis, Northeast University of Finance and Economics).

> https://link.cnki.net/doi/10.27006/d.cnki.gdbcu.2021.001523doi:10.27006/d.cn ki.gdbcu.2021.001523.

ki.gbvdu.2020.001194.

- Ma, X. R. (2021). Research on the current situation and construction of WeChat public platform of university finance. *Journal of Economic Research* (03), 101-103+139.
- Mi, G. B. (2022). Research on the Influencing Factors of W Company AR Beauty Users' Willingness to Use Based on UTAUT2 Model (Master's thesis, Zhejiang University of Technology).

https://link.cnki.net/doi/10.27786/d.cnki.gzjlg.2022.000734doi:10.27786/d.cnki .gzjlg.2022.000734.

- Morosan, C. & DeFranco, A. (2016). It's about time: Revisiting UTAUT2 to examine consumers' intentions to use NFC mobile payments in hotels. *International Journal of Hospitality Management* 17-29.
- Oliveira T., Thomas M., Baptista G., & Filipe C. (2016). Mobile payment: Understanding the determinants of customer adoption and intention to recommend the technology. *Computers in Human Behavior* 404-414.
- Qian, H. Charlie Li, S. (2022). New Opportunities in a New Landscape | Global Digital Payment Trends 2022. Zhihu. https://zhuanlan.zhihu.com/p/468247240
- School Profiles. (2023). Guangxi Institute of Foreign Languages.

https://gxufl.edu.cn/info/341

- Sharma, D., & Vaid, K. Y. (2023). FACTORS AFFECTING M-PAYMENT ADOPTION IN MILLENIALS – TESTING EXTENDED UTAUT2 MODEL. *Thailand and The World Economy*, 41(2), 40–61. http://www.tci-thaijo.org/index.php/TER
- Sun, L. Y., Wang, B. & Wu, Q. J. (2020). Understanding User Acceptance of Short Video App-Based on Modified UTAUT2 Model. *Journal of Shandong Institute of Commerce and Industry* (06), 85-95.
- Tuo, Y. (2020). Research on the Evaluation of Alipay and WeChat Applications Based on the Financial Management Perspective of Universities. *Inner Mongolia Statistics* (02), 23-25. doi:10.19454/j.cnki.cn15-1170/c.2020.02.008.
- Venkatesh, V., Morris, M.G., Davis, F.D., & Davis, G.B. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27, 425-478.
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology[J]. *MIS quarterly*, 36, 157-178.
- Wang, S. J. (2018). Empirical Research on Influencing Factors of Microbusiness Consumer Purchasing Behavior (Master's thesis, Guizhou Normal University). https://kns.cnki.net/kcms2/article/abstract?v=WdAl4K16JyVfAjSEdSkJryz5a4IJ-DiR1vdTxnml07bN9Zr-UW4-WmkYhw9arFSFxMbPh361Pmd6OmjJ5G1SYHQu-Oj\_mqYnfZb8x3htcGxduYWMdl-

IrXMDLynPPcrQ68xmH3PDxQgJ1q6gOLcQkQ==&uniplatform=NZKPT&languag e=CHS

- Wang, S. N. (2019). Research on Influencing Factors of College Students' Willingness to Use Alipay. *Market Weekly* (07), 126-127.
- Wang, Y. H. (2016). *Research on the Influencing Factors of WeChat Payment Users' Willingness to Use* (Master's thesis, Tianjin University of Technology). <u>https://kns.cnki.net/kcms2/article/abstract?v=WdAl4K16JyUp1F9zVs3p6N5hB</u> <u>yXPElo5OULOwpwmd-</u>

gHUc1xKmkxEC7PDzX6CplHVPM\_nw6uKjLHzfEcpkPpZLxWl\_t9cIHAcpRhrTUxh

\_2gxHyLe9dao9k7pkm-

ECbVzcYdYJnzOcnAbvJzBT09w==&uniplatform=NZKPT&language=CHS

Wei, L. (2019). *Research on China's mobile payment users' willingness to use based on UTAUT model* (Master's thesis, University of International Business and Economics).

https://link.cnki.net/doi/10.27015/d.cnki.gdwju.2019.000291doi:10.27015/d.cnki.gdwju.2019.000291.

 Wu, X. F. (2008). Analysis of key factors influencing users' acceptance of mobile Internet (Dissertation, Beijing University of Posts and Telecommunications).
 Master's Degree

https://kns.cnki.net/kcms2/article/abstract?v=wcPNn8Zia7PC-

arjRlajwBCMOqfSpiwsqoE6E5yFDW6iqiSpfnFossXMNl1Ldk555lwWu3s\_1oYc6y7 Y8Q0H-efXOVb7WJcbaCZjRT8n4ol6dBFbxFT8vSdmTM3WcqR6QVHmKHMxjL-

BQJITKtC1xw==&uniplatform=NZKPT&language=CHS

Xiao, Q. (2018). About WeChat Pay.

https://kf.qq.com/faq/181012y6bUNR181012nMFnMr.html

- Xu, Z. (2014). Impacts and Implications of WeChat Payment's Innovative Development on Financial Consumers. *Zhejiang Finance* (06), 35-37+21.
- Yamane, T. (1967). Statistics, an Introductory Analysis. 2nd Edition, Harper and Row, New York.
- Yan, C. H. (2019). Research on unmanned retail consumer acceptance behavior based on UTAUT2 (Master's thesis, Henan University). https://kns.cnki.net/kcms2/article/abstract?v=WdAl4K16JyV7CcDYGwEiQCEkdldbKKGFSfxpH1nZ7t7FmNKcIBSRIBtmMfe2HmIt13ezUbjp5gKfa B4IIw2wQMxKZIggiCZMAMcOpbBrRcEXxOl\_Ytma8KwD87sjQBAWEkNzFnZ8hBs Nom9Il1zsw==&uniplatform=NZKPT&language=CHS

- Yang, F. M. & Zhang, Z. Q. (2020). Model construction and empirical evidence of the influence of e-book users' willingness to use e-books. *Library and Intelligence Work* (09), 85-94. doi:10.13266/j.issn.0252-3116.2020.09.010.
- Yang, H. R., Cao, C. C., & Li, J. Q. (2017). Survey analysis of college students' willingness to use WeChat payment. *Industry and Technology Forum* (05), 113-115.
- Yang, Y. G., & Yang, M. (Eds.). (2022). Many countries speed up promotion of digital payments (International Viewpoint). *People's Daily People's Daily*. http://world.people.com.cn/n1/2022/0412/c1002-32396569.html
- Yuan, S. H. (2018). Empirical study on factors influencing consumers' willingness to use WeChat Pay (Master's thesis, Zhengzhou University). https://kns.cnki.net/kcms2/article/abstract?v=WdAl4K16JyU5f0UCPuMLAOLee bFe4kVbaMlejWkvE2Dv0FwgCv0zkfUwZS1yoc6C4Dj3DCActCrlPPWpG3gVpDBO dJ5Bzjk5L3hhblw\_3fZslU9H\_H6coBJwN6Jx7brGekMA\_1JS0YTxtf6Aclytlg==&un iplatform=NZKPT&language=CHS
- Zeng, Y. (2022). A study on factors influencing consumers' mobile payment usage based on UTAUT model. *Science and Technology Perspectives* (30), 186-188. doi:10.19694/j.cnki.issn2095-2457.2022.30.56.
- Zhang, C. J. (2018). Analysis of the application value of WeChat payment system in campus financial informationization. *China Market* (20), 149-150. doi:10.13939/j.cnki.zgsc.2018.20.149.
- Zhang, M. & Lin, S. (2016). A study on the influencing factors of college students' behaviour towards the use of instant messaging software. *Shanghai Management Science* (04), 66-70.
- Zhang, Q. (2020). Design of cafeteria consumption system based on smart campus. Industrial Control Computer (12), 118-120.

- Zheng, J. & Dang, P. C. (2015). Empirical Analysis of WeChat Payment Adoption Willingness. *Science and Industry* (08), 58-62+67. doi:CNKI:SUN:CYYK.0.2015-08-012.
- Zhou, J. & Chen, S. (2019). Influential Factors of Third-Party Mobile Payment Usage among College Students--Taking Alipay and WeChat as an Example. *Marketing Week* (07), 128-129.
- Zhou, J. (2017). Questionnaire Data Analysis-Cracking the Six Categories of Analytical Ideas in SPSS. *Beijing: Electronic Industry Press*.
- Zhou, T., Lu, Y., & Wang, B. (2010). Integrating TTF and UTAUT to explain mobile banking user adoption. *Computers in Human Behavior* (4), 760-767.
- Zhu, Y. Q. (2020). Survey Research on the Information Service of Official WeChat Public Number in Suzhou Universities (Master's thesis, Heilongjiang University).

https://link.cnki.net/doi/10.27123/d.cnki.ghlju.2020.000378doi:10.27123/d.cnki.ghlju.2020.000378doi:10.27123/d.cnk





APPENDIXES

# <u>งยาล</u>ะ

## APPENDIX A

QUESTIONNAIRES (In English)

**Research Topic**: Factors Influencing the Intention to Use WeChat Payment in Guangxi University of Foreign Languages: A Case Study of UTAUT2 Model

Dear Participant,

Thank you for dedicating your time to this survey. As a Master's student at Maejo University International College, Maejo University, Thailand, I'm conducting research on WeChat Payment usage within the Guangxi University of Foreign Languages community. Your anonymous responses are essential for understanding the factors that influence the intention to use WeChat Payment.

Please answer based on your personal experience, as there are no right or wrong answers. Your contribution is invaluable to my research.

Thank you for your support.

Best regards,

Nan Yang Master's Student

#### **Part I: Screening questions**

Note: Please mark  $\sqrt{}$  in the square in front of the message by selecting the answer that most closely matches the respondents.

## 1.1 Are you currently a student at Guangxi University of Foreign Languages?

 $\circ Yes$ 

•No (end of the questionnaire)

# **1.2 Have you ever used the school's official WeChat public number for WeChat payment?**

oYes

•No (end of the questionnaire)

## Part II: Demographic Information

Please select the most appropriate option for each question. Your responses will remain confidential and be used solely for academic research.

#### 2.1 Gender:

 $\circ$  Male

 $\circ$  Female

## 2.2 Age:

- $\circ$  under 18 years old
- $\circ$  18-20 years old
- o 21-23 years old
- $\circ$  24 years old and above

#### 2.3 Grade Level:

- Freshman(1st-year student)
- Sophomore(2nd-year student)
- Junior(3rd-year student)
- Senior(4th-year student)

#### 2.4 Field of Study:

- Arts and Humanities
- Science and Technology
- Business and Economics
- Other (please specify):

#### Part III: General Payment Behaviors Using WeChat

Please select the option that best describes your experience or opinion. For multiplechoice questions, you may select more than one answer.

#### 3.1 Primary Reason for Using WeChat Payment:

(Choose only one)

- Convenience: Can be used to pay anywhere, anytime.
- Modernity: Feel modern using digital payment solutions.
- Social Influence: Recommendations from friends, family, or peers.
- University Influence: Recommendations or promotions from the university or its affiliates.
- Access to Information: Receive updates, product information, and promotions through WeChat.

• Other (please specify):

#### 3.2 Most Frequent Use of WeChat Payment:

#### (Choose only one)

- Paying for campus-based services or products.
- Checking balances or transaction history.
- Participating in university or WeChat-specific reward programs.
- Accessing information about university services or events.
- Other (please specify): \_

## 3.3 Purposes of Using WeChat Payment:

## (Please select all that apply)

- Paying for food and beverages on or off-campus.
- Online shopping.
- Transportation costs (e.g., taxis, public transport).
- Bill payments (e.g., tuition, utilities, mobile phone).
- Transferring money to friends or family.
- Other (please specify): \_

#### 3.4 Average Monthly Transaction Value with WeChat Payment:

- $\circ$  Under 100 RMB
- $\circ$  101 500 RMB
- 501 1,000 RMB
- 0 1,001 2,000 RMB
- More than 2,000 RMB

#### 3.5 Frequency of WeChat Payment Use via School's WeChat Account:

- Multiple times a day
- $\circ$  Once a day
- Once every 2-3 days
- Once every 4-5 days
- Once a week
- Once in 2-3 weeks
- $\circ$  Once in 1-2 months
- Rarely or not at all

#### 3.6 Primary Uses of WeChat Payment via School's WeChat Account:

(You may select more than one option)

- Online purchases (e.g., books, university merchandise).
- Payment of campus fees (e.g., tuition, accommodation).
- Campus services (e.g., printing, library fees).
- Campus events or activities.
- Other (please specify): \_

## Part IV: Survey on Factors Influencing Users' Intention to Use WeChat Public Number for WeChat Payment

This section of the questionnaire explores various factors that may influence your decision to use the WeChat Public Number for WeChat Payment. Please indicate how much you agree or disagree with each of the following statements, based on your actual feelings and experiences. Use the 5-point Likert scale where

No.	Questions	Strongly	Disagree	Neutral	Agree	Strongly
		Disagree	(2)	(3)	(4)	Agree
1. Pe	erformance expectancy (P	(1) (1)				(5)
1.1	Using WeChat Payment	1	2	3	4	5
	for transactions saves	<u> </u>				
	me time compared to					
	traditional payment					
	methods.					
1.2	I find that using	1	2	3	4	5
	WeChat Payment		e			
	enhances my	816				
	productivity in					
	managing payments.	6	• •			
1.3	WeChat Payment		2	93	4	5
	enables me to complete	LE C	259 6	5		
	payments faster than		NY SI	0		
	other methods.	BUILE			10	
1.4	WeChat Payment is a	1	2	3	4	5
	valuable tool for	A 2				
	managing my daily	RE-IN				
	financial transactions.					_
1.5	WeChat Payment		2		- 4	5
	expands my options for					
	making and receiving	25	302			
	payments.				/	
	ffort expectancy (EE)	1	2		4	5
2.1	I find it easy to become		2		4	5
	proficient at using					
	WeChat Payment for	UN				
2.2	my transactions. WeChat Payment is		2	2	4	5
2.2	user-friendly and	1		5		J
	straightforward for me					
	to use.					
2.3	My interactions with	1	2	3	4	5
2.5	WeChat Payment are	1		5		<i></i>
	clear and easy to					
	understand.					
2.4	Learning to use WeChat	1	2	3	4	5
	Payment is				-	
	straightforward for me.					
2.5	I can use WeChat	1	2	3	4	5
	Payment efficiently					
	after a few tries.					

1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

<b>3. So</b>	ocial influence (SI)					
3.1	People who are	1	2	3	4	5
	important to me					
	recommend using					
	WeChat Payment for					
	transactions.					
3.2	Individuals whose	1	2	3	4	5
	opinions I respect					
	suggest that I should use					
	WeChat Payment.					
3.3	My friends and peers	1	2	3	4	5
	frequently use WeChat					
	Payment, which		2			
	influences my own	4 6				
	usage intentions.					
3.4	I am more inclined to	16	2 0	3	4	5
	use WeChat Payment			9		
	because people I look		250 18 1	5		
	up to are using it.	AQL		6		
	acilitating conditions (FC)					
4.1	WeChat Payment is			3	4	5
	compatible with the			$\mathbb{R}$		
	other digital platforms			7 -		
4.2	and technologies I use.				4	5
4.2	I feel confident in my ability to use WeChat				- 4	5
	Payment effectively.					
4.3	I possess the necessary	25		3	1	5
т.5	knowledge and skills to	57 h M	CC P		-	5
	use WeChat Payment.					
4.4	There are sufficient	1	.2	3	4	5
	resources available				-	
	(e.g., tutorials, customer					
	service) to assist me in					
	using WeChat Payment.					
4.5	When I encounter issues	1	2	3	4	5
	with WeChat Payment,					
	I can easily find help					
	and support.					
5. H	edonic motivation (HM)					
5.1	I find using WeChat	1	2	3	4	5
	Payment to be					
	enjoyable.					
5.2	Using WeChat Payment	1	2	3	4	5
	adds a pleasant aspect to					
	my financial					
	transactions.					

5.3	I find WeChat Payment	1	2	3	4	5
5.5	to be engaging and	1				
	interesting.					
5.4	I prefer using WeChat	1	2	3	4	5
	Payment for					
	transactions over					
	traditional banking					
	methods due to its					
	enjoyable experience.					
5.5	Choosing WeChat	1	2	3	4	5
	Payment for receiving					
	or making payments					
	brings me satisfaction		2			
	beyond just the	21 7 2				
	transactional need.					
6. Pi	rice value (PV)					
6.1	Using WeChat Payment	7 1	2	63.	4	5
	saves me money	, El	AN R.			
	compared to other		SPA			
	payment methods.	A (ALCA	1 A 32			
6.2	I consider the pricing of	Y Y	2 2	A 3	4	5
	WeChat Payment	s. All	A DA	31		
	services to be	3.3.5				
	reasonable for the	A THE				
	benefits it provides.	2.3.3.3				
6.3	The value I get from	× 1	2	3	4	5
	using WeChat Payment					
	justifies the costs,	25				
	making it a worthwhile			6		
	option.					
6.4	The financial	1	.2	3	4	5
	advantages of WeChat					
	Payment, such as cost					
	savings and					
	convenience, outweigh					
	any associated costs.					
6.5	I prefer WeChat	1	2	3	4	5
	Payment because its					
	cost-effectiveness					
	enhances my overall					
	transaction experience.					
7. H	abit (HA)					
7.1	Using WeChat Payment	1	2	3	4	5
	has become a routine					
	part of my daily					
	financial transactions.					

7.2	I automatically think of WeChat Payment as my go-to method for payments.	1	2	3	4	5
7.3	I frequently use WeChat Payment without consciously thinking about it.	1	2	3	4	5
7.4	WeChat Payment is my first choice for digital transactions out of habit.	1	2	3	4	5
7.5	The use of WeChat Payment is integrated into my daily life as a habitual practice.	116	2 2 6	3	4	5
8. In	tention to Use WeChat Pa	ayment				
8.1	I intend to use WeChat Payment for my future transactions.		2		4	5
8.2	I plan to use WeChat Payment for a wide range of transactions, from small to large purchases.		2		4 	5
8.3	I am likely to recommend WeChat Payment to my peers as a preferred payment method.	210		31.5	4	5
8.4	Using WeChat Payment will be my first choice for digital transactions.	U N I	VE	3	4	5
8.5	I foresee increasing my usage of WeChat Payment for my daily financial transactions.	1	2	3	4	5

APPENDIX B

QUESTIONNAIRES (In Chinese)

研究题目: 广西外国语学院微信支付使用意向的影响因素——以 UTAUT2 模型为例

尊敬的参与者:

感谢您将时间用于本次调查。作为泰国梅州大学国际学院的硕士生,我正 在广西外国语学院内进行微信支付使用研究。您的匿名回复对于了解影响使用 微信支付意愿的因素至关重要。

请根据你的个人经验回答,因为没有对错的答案。你的贡献对我的研究是 无价的。

感谢您的支持。

 顺致敬意!
 杨楠

 硕士研究生

 第一部分: 筛选问题

注意:请选择与受访者最匹配的答案,在信息前面的方框中打√。

1. 你目前是广西外国语学院的在读学生吗?

- 〇 是
- 否 (问卷结束)
- 2. 你使用过学校官方微信公众号进行微信支付吗?
- 〇 是
- 否 (问卷结束)

## 第二部分:人口基本信息

请为每个问题选择最合适的选项。您的回复将保密,仅用于学术研究。

- 2.1. 性别:
- 男性
- 〇 女性
- 2.2年龄:
- 〇 18 岁及以下
- 〇 18-20岁
- 〇 21-23 岁
- 24 岁及以上
- 2.3年级:
- 大一学生
- 大二学生
- O 大三学生
- 大四学生
- 2.4 专业学科领域:
- 〇 艺术与人文
- 〇 科学与技术
- O 商业与经济学
- 其他 (请具体说明):

## 第三部分:使用微信的一般支付行为

请选择最能描述您的经历或意见的选项。对于多项选择题,您可以选择多个答 案。

- 3.1 使用微信支付的主要原因:(仅选择一个)
- 方便:可以随时随地付款。
- 现代化: 使用数字支付解决方案, 感受现代化。
- 社会影响:来自朋友、家人或同龄人的推荐。
- 大学影响力:来自大学或其附属机构的推荐或晋升。

○ 获取信息:通过微信接收更新、产品信息和促销活动。

- 其他 (请具体说明):
- 3.2 最常使用微信支付:(仅选择一个)
- 为校园服务或产品付费。
- 检查余额或交易历史记录。
- 参与大学或微信特定奖励计划。
- 访问有关大学服务或活动的信息。
- 其他(请具体说明): \_\_\_\_\_
- 3.3 使用微信支付的目的: (请选择所有适用项)
- 支付校内外的食品和饮料费用。
- 〇 网上购物。
- 交通费用 (如出租车、公共交通)。
- 账单支付 (如学费、水电费、移动电话)。
- 将钱转给朋友或家人。
- 其他 (请具体说明):
- 3.4 微信支付月平均交易额:
- 0 100 元以下
- 〇 101-500 元
- 〇 501-1000 元
- 〇 1001-2000 元
- 〇 2000 多元
- 3.5 学校微信账户微信支付使用频率:
- 一天多次
- 每天一次
- 〇 每 2-3 天一次
- 〇 每 4-5 天一次
- 〇 一周一次

○ 2-3 周一次

○ 1-2 个月一次

○ 很少或根本没有

3.6 通过学校微信账户进行微信支付的主要用途:(您可以选择多个选项)

- 网上购买 (如书籍、大学商品)。
- 支付校园费用 (如学费、住宿费)。
- 校园服务 (如印刷、图书馆费用)。
- 校园活动。
- 其他 (请具体说明):

### 第四部分:影响用户使用微信公众平台进行微信支付意愿的因素调查

本部分调查问卷探讨了可能影响您决定使用微信公众号进行微信支付的各种因素。请根据你的实际感受和经历,说明你对以下每一种说法的同意或不同 意程度。使用李克特5点量表,其中1=强烈不同意,2=不同意,3=中立,4=同 意,5=强烈同意。

编号	题项	强烈不同 意(1)	不同 意 (2)	中立 (3)	同意 (4)	强烈 同意 (5)
1. 绩效	(期望(PE)	GIU		9 /		
1.1	与传统支付方式相比,使 用微信支付进行交易节省 了我的时间。		2	3	4	5
1.2	我发现使用微信支付可以 提高我管理支付的工作效 率。	1	2	3	4	5
1.3	微信支付使我能够比其他 方式更快地完成支付。	1	2	3	4	5
1.4	微信支付是管理我日常财 务交易的一个有价值的工 具。	1	2	3	4	5
1.5	微信支付扩展了我的付款 和收款选择。	1	2	3	4	5

2.努力	」 期望(EE)					
2.1	我发现对于我来说熟练地	1	2	3	4	5
	使用微信支付进行交易很					
	容易。					
2.2	微信支付对我来说非常友	1	2	3	4	5
	好和简单。					
2.3	我与微信支付的互动清晰	1	2	3	4	5
	易懂。					
2.4	学习使用微信支付对我来	1	2	3	4	5
0.5	说很简单。	4			4	_
2.5	经过几次尝试,我就可以	~	2	3	4	5
<u> </u>	有效地使用微信支付了。					
3. 社会 3. 1	<b>影响(SI)</b> 对我很重要的人推荐使用			9	4	5
5.1	約47.1000000000000000000000000000000000000		6.0		4	Ð
3.2	一些我尊重其意见的人建。	AN AN		2	4	5
0.2	议我使用微信支付。			0	T	J
3.3	我的朋友和同伴经常使用		62	<u>)</u>	4	5
0.0	微信支付,这影响了我自		Cult of		1	0
	己的使用意愿。		Cherry)			
3.4	我更倾向于使用微信支	1	2	3	4	5
	付,因为我尊敬的人都在,	BBA	2			
	使用它。		S			
4. 便利	条件(FC)	16	SY/	~		
4.1	微信支付与我使用的其他	mie	$2^{2}$	3	4	5
	数字平台和技术兼容。	GU		2		
4.2	微信支付与我使用的其他	1	2	3	4	5
	数字平台和技术兼容。					
4.3	我拥有使用微信支付所需		2	3	4	5
	的知识和技能。		_			
4.4	有足够的资源(如教程、	1	2	3	4	5
	客服服务)来帮助我使用					
4 =	微信支付。	-4	0		A	_
4.5	当我遇到微信支付的问题	1	2	3	4	5
	时,我可以很容易地找到					
	│帮助和支持。					
<b>5.</b> 孕亦	<b>动机(HM)</b>   我觉得庙田)信支付很愉	1	2	3	А	5
0.1	我觉得使用微信支付很愉快。	L	Δ	ð	4	Ð
	仄。					

<b></b>	传田独信士付头争的人动	1	0	0	4	_
5.2	使用微信支付为我的金融	Ţ	2	3	4	5
	交易增加了一个令人愉快					
5.0	的方面。	-1	0	0	4	_
5.3	我觉得微信支付很吸引	Ţ	2	3	4	5
	人,也很有趣。	-1	2	3	4	5
5.4	与传统银行方法相比,我	L	Δ	3	4	C
	更喜欢使用微信支付进行 交易,因为它能给我带来					
	之勿, 因为已能纪我带来 愉悦的体验。					
5.5	选择微信支付进行收款或	1	2	3	4	5
0.0	付款给我带来的满足感不	1		J	4	J
	仅仅是交易需求。	~				
6 价格	<u>_                                    </u>	1000				
6.1	与其他支付方式相比,使		2	2	4	5
	用微信支付方式可以让我	A YOUR S	6.0		T	0
	省钱。	A NO L				
6.2	我认为微信支付服务的定	SP IN	2	• 3	4	5
	价与其提供的好处相比是		16	2) 0		
	合理的。		Carches			
6.3	我从使用微信支付中获得		121	3	4	5
	的价值证明了成本的合理		194			
	性, 使它成为一个值得选。	BBA				
	择的选择。					
6.4	微信支付的财务优势,如	h	2	13	4	5
	成本节约和便利性,超过	mai				
	了任何相关成本。	GIU	G			
6.5	我更喜欢微信支付,因为	1	2	3	4	5
	它的性价比提高了我的整					
	体交易体验。	N I A				
7. 习惯				1		
7.1	使用微信支付已经成为我	1	2	3	4	5
	日常金融交易的一部分。					
7.2	我自然而然地将微信支付	1	2	3	4	5
	作为我的常用支付方式。					
7.3	我经常使用微信支付,但	1	2	3	4	5
	没有意识到这一点。					
7.4	出于习惯,微信支付是我	1	2	3	4	5
	进行数字交易的首选。				4	
7.5	微信支付的使用已经融入	1	2	3	4	5
	了我的日常生活,成为一					
	种习惯。					

8. 微信	支付使用意愿					
8.1	我打算在未来的交易中继	1	2	3	4	5
	续使用微信支付。					
8.2	我有计划使用微信支付进	1	2	3	4	5
	行广泛的交易,从小额到					
	大额购买。					
8.3	我可能会向同伴推荐微信	1	2	3	4	5
	支付作为首选支付方式。					
8.4	使用微信支付将是我进行	1	2	3	4	5
	数字交易的首选。					
8.5	我预计在日常金融交易中		2	3	4	5
	会越来越多地使用微信支					
	付。	01 8				



## CURRICULUM VITAE

NAME Miss Nan Yang

DATE OF BIRTH 20 July 1997

EDUCATION 20

2016-2020 Guangxi University of Foreign Languages, Bachelor degree

WORK EXPERIENCE

2020- now: Guangxi University of Foreign Languages, counselor

