

**ANTECEDENTS OF USER SATISFACTION WITH  
HUAWEI MOBILE PHONES**

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## ABSTRACT

Huawei is a world's leading smartphone manufacturer whose products are popular worldwide. As competition in the smartphone market intensifies, user satisfaction becomes a key factor in maintaining and increasing market share. This study aimed to investigate the satisfaction level of Huawei mobile phone users and the influencing factors that determine user satisfaction. Special emphasis is placed on the following factors: product quality, product price, user privacy and protection, service and after-sales service, and user experience.

This study utilized questionnaires as the research instrument and collected data from 385 Huawei mobile phone users using the convenience sampling method to assess user satisfaction. Multiple linear regression analysis was employed to test the hypotheses. The results revealed that user experience was the most influential factor on user satisfaction, followed by product price, service and after-sales service, and data privacy and protection, respectively.

This study provides insights into the marketing strategies and user experience improvements of Huawei phones. By continuously improving user satisfaction, Huawei can consolidate its position in the highly competitive smartphone market and attract more loyal users.

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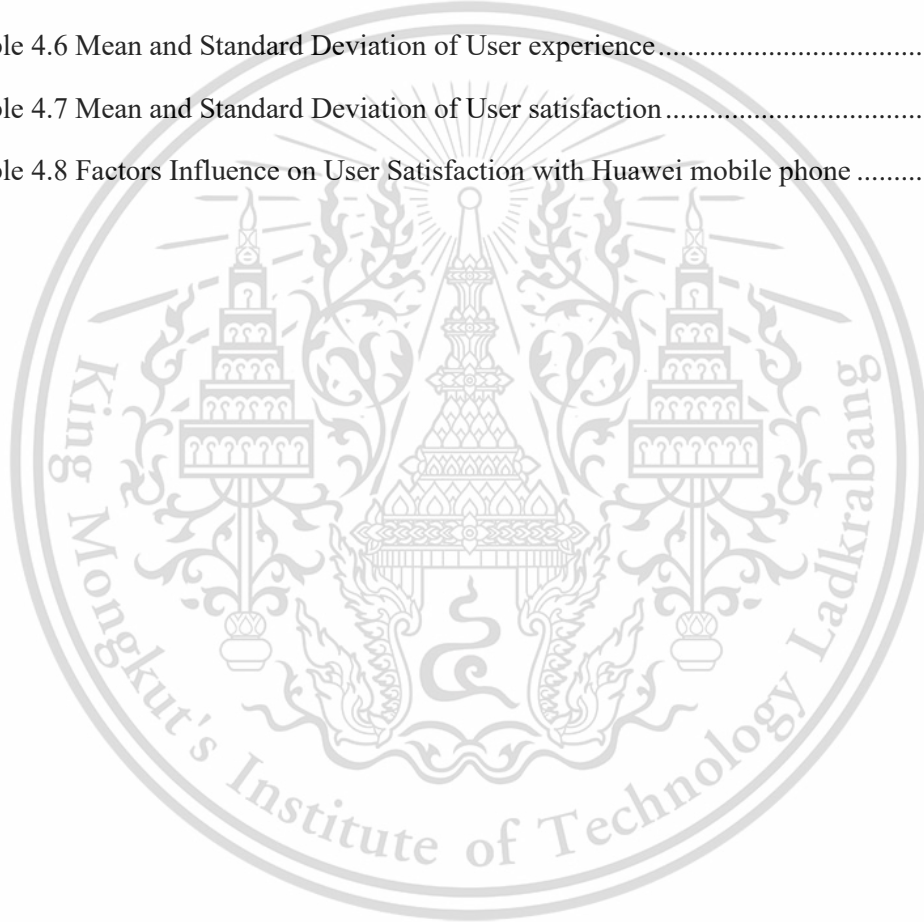
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# CHAPTER 1

## INTRODUCTION

### 1.1 Research Background

With the development of the world economy and the rapid development and innovation of communication technology, the scale of global smartphone users has grown rapidly, and smart phones have become an indispensable communication and entertainment tool in people's life. As the Internet evolves swiftly and markets for goods and services mature, product differentiations are diminishing. A key aspect of modern marketing is its emphasis on customers as the focal point of marketing strategy. The conventional approach, which prioritizes production and sales, is gradually giving way. With the rapid pace of updates and the intensifying competitive environment, customer satisfaction becomes imperative in the battle for customers. Whether customers are satisfied with the goods provided by the enterprise plays a decisive role in the survival and development of the enterprise. In today's increasingly fierce business competition, more and more enterprises pay more attention to the customer satisfaction centered business philosophy and put it into practice. Consumer satisfaction shows the overall evaluation of consumers on a brand, and is one of the core of enterprises to expand the consumer market. The satisfaction of consumers affects their purchase intention and behavior, and also directly determines whether the enterprise can survive in the market development, which is the key issue that all enterprises must pay attention to. Enterprises need to constantly tap customer resources, and carry out effective management, grasp and meet customer needs and exceed customer expectations, in order to win customer satisfaction and trust, so that enterprises can win competitive advantages, in order to survive in the harsh competitive environment, seek development. Therefore, understanding the impact of consumer satisfaction on the brand attitude of enterprises and products and brand attitude on the purchase intention is an important topic in the field of marketing, but also a magic weapon to ensure the survival and long-term development of enterprises.

Smartphones have become an integral part of modern society, offering multiple functions, including communication, information acquisition, entertainment, and productivity tools. The

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smartphone market is highly competitive, and major manufacturers are constantly trying to meet user needs and remain competitive. As one of the world's leading smartphone manufacturers, Huawei is emerging in the market, and its products are widely popular worldwide. However, user satisfaction plays a crucial role in maintaining and enhancing the Huawei mobile phone market share.

The smartphone market is highly competitive, attracting a large number of manufacturers. Apple, Samsung, Huawei, Xiaomi, OPPO, Vivo and other brands have fierce competition, allowing users around the world to choose the best smartphone for their needs. To stand out, manufacturers must constantly improve their products to provide better performance, functionality, and user experience. The smartphone market is a highly competitive area, with multiple manufacturers around the world competing for market share. Huawei is one of China's leading smartphone manufacturers, and user satisfaction is crucial to corporate success. Satisfied users are more likely to repeat purchases and are more likely to recommend the product to others. In addition, satisfied users also share positive experiences and reviews on social media, helping to improve the brand reputation. Therefore, understanding the user satisfaction level with the product and the factors that affect it is very important for the long-term success of the company. Understanding user satisfaction with Huawei phones and the factors that affect satisfaction is critical to the company's strategic decisions and product improvements. Different markets and user groups have different demands and preferences for smartphones. Research into market segmentation and user needs can help to better meet user expectations. Better promote enterprise development.

## **1.2 Research Objectives**

1. To evaluate the user satisfaction level of Huawei mobile phones.
2. To study the factors that affect the satisfaction of Huawei mobile phone users.

## **1.3 Research Question**

1. What is the current user satisfaction of Huawei mobile phones?
2. How does Huawei improve mobile phone user satisfaction based on the identified influencing factors?

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## 1.4 Research Hypothesis

H1: The price of a product has a significant influence on user satisfaction with Huawei phones.

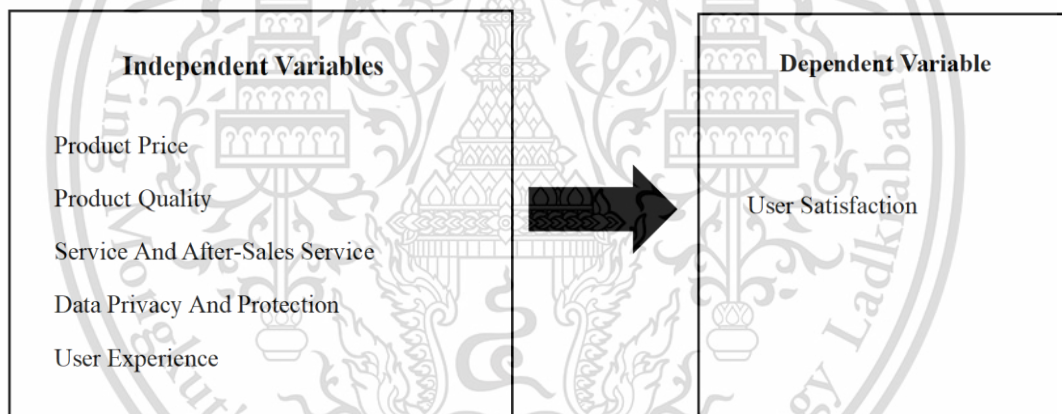
H2: Product quality has a significant influence on user satisfaction with Huawei mobile phones.

H3: Service and after-sales service have a significant influence on user satisfaction of Huawei mobile phones.

H4: Data privacy and protection have a significant influence on user satisfaction on Huawei phones.

H5: User experience has a significant influence on user satisfaction on Huawei phones.

## 1.5 Conceptual Framework



**Figure 1.1** Conceptual Framework

## 1.6 Scope of the Study

### 1.6.1 Population and Sample

The population of this study was among the Huawei mobile phone users in China. The exact number of users is unknown.

The sample selection process includes targeting users using Huawei phones. A total of 385 valid questionnaires were collected from the users for data analysis and evaluation.

### **1.6.2 The Scope of The Study**

The scope of this study includes investigating the relationship between independent and dependent variables, namely Huawei phone quality, Huawei phone service and after-sales service, price, user experience, and data privacy and protection. The study aims to determine whether these variables have a significant influence on Huawei mobile phone user satisfaction.

### **1.6.3 Period of Study: January 2024**

## **1.7 Significance of the Study**

Rapid development of science and technology, smartphone update speed is also accelerating, makes the mobile phone market competition becomes more intense, mobile phone from the original durable consumer goods, gradually developed into fashion consumer goods, its style constantly updated, appearance shape, function constantly change and innovation, make mobile phone update speed much faster than most durable consumer goods. If mobile phone manufacturers want to serve and satisfy customers, retain old customers and attract new customers as much as possible, they must take customer satisfaction as the focus of their constant attention. Paying attention to customer satisfaction and customer demand has become the quality policy of more and more mobile phone manufacturers. This paper focuses on the customer satisfaction of Huawei mobile phone, which can make Huawei company improve the shortage and better meet the customer needs, so as to improve the customer satisfaction of the enterprise and promote the healthy and orderly development of Huawei. The company's main profit comes from customers, and the company can maintain continuous competitiveness by attracting customers. If the products / services provided by the enterprise can exceed customer expectations, the enterprise can gain a large number of loyal customers and its market competitiveness also increases. Customer satisfaction management has emerged since 1990, and is often used in the field of marketing management strategy. The research results of customer satisfaction are conducive to the further development of enterprises. Only based on the satisfaction of Huawei mobile phone users can we penetrate into user needs and meet their expectations, so as to promote the continuous improvement and development of Huawei mobile phones. User satisfaction survey helps to optimize the allocation of enterprise resources, in

In addition, the improvement of user satisfaction helps to enhance user experience and spread word of mouth. If customers are satisfied with the products or services of the enterprise, they can share their experience with other customers, so as to expand the brand awareness and improve the corporate image, which is conducive to the future development and growth of the enterprise. Therefore, in order to dominate the market in the fierce market competition, user satisfaction is the necessary factor to be considered.

The study aims to identify the factors affecting Huawei user satisfaction and to improve their market competitiveness and share. This study conducted a comprehensive analysis of different factors and used questionnaire survey and data analysis methods to investigate Huawei mobile phone user satisfaction and provide advice.

By establishing relevant hypotheses, supplemented by questionnaires, and analyzing the data to better study the factors affecting the satisfaction of Huawei mobile phone users. In terms of practical significance, on the one hand, it can better understand the development status of Huawei and consumer needs, laying the foundation for the future development of related enterprises; Secondly, based on the relevant analysis of Chinese mobile phone companies, it can have some reference significance for related electronic product companies.

### **1.8 Definition of Term**

1. Price is defined by measurable criteria that encompass the device cost and users' value-for-money perceptions. It involves diverse pricing across Huawei's phone range, accommodating various user budgets. Users' feelings about value for money consider both the phone cost and benefits from features and performance. The repair cost also influences overall price perception. Lastly, it considers users' beliefs about the pricing reasonableness in relation to features and performance.

2. Product quality is defined by users' perceptions and experiences across key dimensions. Reliability and ease of use are measured by users' daily interactions and perceived dependability. Build and durability are assessed based on alignment with user expectations. Features, specifications, and materials contribute to judgments of quality. Overall performance, including speed and responsiveness, forms a crucial aspect of the operational definition.

3. Service and after-sales service are defined by users' assessments of various service-

related aspects. This encompasses the perceived excellence of after-sales support provided by Huawei for their mobile phones, the quality of customer service experienced during the purchase of Huawei phones, and the overall comfort and enjoyment of the purchasing experience. The operational definition further includes the efficiency of Huawei's after-sales service and the convenience of the service center network.

4. Data privacy and protection are defined by users' perceptions of security and confidence in safeguarding personal information. This encompasses a sense of security experienced while using a Huawei phone, the belief in Huawei phones having a comparative advantage in user privacy protection, and the confidence that Huawei prioritizes and ensures the privacy of user data. Trust in the overall safety of using Huawei phones with respect to data privacy is a key component, as well as the belief that Huawei phones outperform other smartphone brands in terms of securing user information.

5. User experience is defined by users' subjective evaluations of various aspects. This includes the perceived intuitiveness and user-friendliness of features and functions, meeting or exceeding expectations in camera quality, finding the design and aesthetics appealing, and positive assessments of performance in terms of speed and responsiveness. The overall positive experience with using the Huawei phone encapsulates users' holistic judgments, combining functionality, design aesthetics, and performance.

6. User satisfaction is defined by users' affirmative responses to a set of statements gauging their overall contentment and future intent. This includes the subjective feeling of being "very satisfied" with the Huawei phone, the device meeting or exceeding expectations, the willingness to recommend Huawei phones to others, expressing a consistent preference for Huawei phones in future purchases, and the intention to continue using Huawei phones. The operational definition captures users' holistic evaluations, encompassing their present satisfaction, positive expectations, likelihood to recommend, brand loyalty, and future usage intentions with respect to Huawei phones.

## **1.9 Research Benefits**

There are many potential benefits to write a paper on antecedents of user satisfaction with Huawei mobile phones, which are contribute to academic research and theoretical construction,

as well as decision making and improvement in practical business.

1. Academic research contribution: By conducting a user satisfaction survey, it can provide academia with practical data about the Huawei mobile user experience. This helps to fill gaps in the research field on user satisfaction in Huawei phones and provide the basis for future research.

2. Market insight: Learn more about users' views and experiences of Huawei phones. These insights are important for Huawei companies and other related companies to make more informed decisions about product improvement, marketing, and customer service.

3. Market analysis and competitive advantage: Through in-depth investigation of user satisfaction and influencing factors, it can help Huawei understand the position of its products in the market. This helps to find the advantages and disadvantages of the products, and provide the company with the direction to improve the products and services, so as to remain competitive in the fierce market competition.

4. Brand building: Help Huawei better understand the performance of their products on the market by revealing user satisfaction factors. This helps to improve the product, increase user loyalty to the brand, and enhance the brand image. User satisfaction is an important part of brand building. By identifying the aspects that users like and dislike, the company can carefully build its brand image, improve user loyalty and increase its reputation.

5. Corporate Improvement: By deeply understanding the results of customer satisfaction surveys, Huawei can get specific feedback on its products and services to better meet customer needs and improve the company's business practices.

6. Social impact: Have a positive impact on society, prompting companies to be more responsible in technology and services, and raise standards in the entire mobile phone industry. To help consumers to better understand the advantages and disadvantages of Huawei mobile phones. This helps consumers to make more informed decisions when they buy. The company helps to build a more responsible and sustainable business model by actively responding to user needs and improving product quality.

7. Product improvement: By understanding user satisfaction factors with the product, Huawei can provide practical suggestions on product improvement. This helps the company to better meet the user needs, improve the product quality, and enhance the user experience.

8. Marketing: the survey results can become a strong support for marketing. Positive user satisfaction and feedback can be used as marketing materials to provide a practical basis for the company's advertising and promotional activities.

9. User relationship management: It can provide companies with deeper user insight and help build a stronger user relationship management strategy. Understanding user needs and expectations can help companies better respond to user feedback and provide more personalized services.

10. Strategic decision-making: Survey results can provide data support for the company's strategic decisions. Understanding the reasons for user satisfaction and dissatisfaction can help companies adjust their strategic direction to better meet market demand.



## CHAPTER 2

# LITERATURE REVIEW

### 2.1 The Current Development and Current Situation of Huawei Mobile Phones

Huawei Technologies Co., Ltd. was established in 1987 and is headquartered in Longgang District, Shenzhen City, Guangdong Province. Huawei is a global leader in information and communications technology (ICT) solutions, focusing on the ICT field and committed to innovation and open cooperation. Provide services to customers and operating companies. By providing customers and consumers with competitive ICT solutions, products and services, Huawei strive to realize the future of the information society and build a better world where everything is connected.

As one of Huawei's three core businesses, Huawei's consumer business began at the end of 2003 and has set up 16 R&D centers in China, Germany, Russia, Sweden, India, and the United States.

In 2015, Huawei was named one of the Top 100 Most Valuable Brands in the Brand Z Global Rankings, ranking 16th among brands in the technology sector. Huawei has a variety of models and different price for customers to choose from.

2015 was the year of the outbreak of Huawei mobile phones. This year, Huawei shipped 108 million mobile phones, and Huawei's consumer business revenue exceeded 20 billion US dollars, a year-on-year increase of 70%. Huawei's global smartphone market share was 9.7%, ranking among the top three in the world, according to a data report from a market research institute in September GFK2015.

In April 2016, Huawei released the new P-series flagship, the Huawei P9. Starting from the P9 series, Huawei began to explore the road of imaging, and for the first time tried to cooperate with Leica to focus on mobile phone photography. The Mate9 series brings Porsche design for the first time, opening Huawei's signature high-end business flagship.

In September 2016, the company launched the Huawei P10, a new generation flagship of the P series in cooperation with Leica. This is the first flagship phone from Huawei and Leica.

The final sales exceeded 6 million units.

In 2018, Huawei's sales revenue in the consumer business reached 348.9 billion yuan, a year-on-year increase of 45.1%, which is already Huawei's largest business. Huawei's consumer business revenue has surged, and smartphones have played a big boost.

In 2023, Huawei finally launched the much-anticipated Huawei Mate60 after R&D, which was rushed out of stock as soon as it went on sale. The sales record is outstanding.

## 2.2 Concepts and Theories of User Satisfaction

User satisfaction is the degree to which the user expectations match with the user experience. Generally speaking, user satisfaction truly reflects the user's inner psychological state and the user's experience of a certain service. It is the feeling of users by comparing their initial expectations and personally experience a certain product or service of the enterprise. Satisfaction is the feedback and summary of customer satisfaction, the performance of a product or service, and the evaluation of the product or service itself. Eshghi et al (2007) emphasized the importance of customer satisfaction in gaining consumer loyalty and concluded that operators should better improve customer satisfaction more comprehensively rather than locking consumers in. Gerpott et al (2001) concluded that customer satisfaction is crucial to customer retention and good user satisfaction can attract customers, while Khayyat & Heshmati (2012) found that the main drivers of customer satisfaction are the following factors: perceived usefulness, perceived ease of use, perceived enjoyment, price, demographic characteristics and mobile phone brands. In addition, they also found that increasing service quality has a positive impact on increasing customer satisfaction, so the impact of service quality on user satisfaction can also be seen.

Kim et al (2004) found through research that mobile operators must first prioritize maximizing customer satisfaction. Kuo et al (2009) pointed out that customer satisfaction is a function of service quality, customer service and system reliability, while Leelakulthanit & Hongcharu (2011) concluded that promotional value, store customer service quality and corporate image are all influences a major factor in customer satisfaction. Martensen et al (2000) found through research that they believed that the main driving factors of customer satisfaction are the following three factors: image, product and service quality. Turel & Serenko (2006)

found that the main drivers of customer satisfaction and customer loyalty are product value and product quality, while Vranakis et al (2012) concluded that customer satisfaction is the main driver and influencing factor of customer loyalty, and image is the most important factor affecting the customer satisfaction and customer loyalty.

### **2.3 Concept and Theories of Product Price**

The cited empirical studies delve into the intricate relationship between access to market information and its impact on selling prices within the agricultural sector. These studies provide valuable insights into how information dissemination channels, particularly through technologies such as radio and mobile phones, can influence farmers' decisions and ultimately affect the economic outcomes of their agricultural activities.

Svensson & Yanagizawa (2009) focused on the transmission of market information via local FM radio stations in Uganda, specifically examining its impact on corn farm prices. The findings suggested that farmers who were better informed through these radio broadcasts achieved higher selling prices for their corn. This underscores the significance of accessible information in empowering farmers to make informed decisions that positively influence their economic outcomes.

Similarly, Ochiai & Yamazaki (2013) explored the influence of mobile phone popularity in rural India on the prices of wheat for small farmers. The study revealed that the widespread use of mobile phones contributed to an increase in wheat prices, showcasing the transformative effect of technology on market dynamics and pricing mechanisms in agricultural settings.

Contrastingly, Lee & Bellemare (2013) found that ownership of mobile phones by farmers in the Philippines, specifically by the family's father or spouse, correlated with higher crop selling prices. However, household ownership of mobile phones as a whole did not impact selling prices. This nuanced distinction emphasizes the importance of considering individual roles and access within households when assessing the impact of technology on market outcomes.

In contrast, Fafchamps & Minten (2012) focused on short message service (SMS)-based business services providing market and weather information, as well as crop consulting information. Surprisingly, they found that these factors did not directly affect the sale price of

agricultural products. However, the farmers receiving these services did exhibit a change in the markets where they sold their products, highlighting the indirect influence of information on marketing strategies.

Aker & Ksoll (2015) extended the exploration by conducting interventions that provided individuals in Niger with shared mobile phones and training on diversifying their crops. Interestingly, the study found no significant increase in the likelihood of selling diversified crops or in farm gate prices. This challenges the assumption that information alone may not always translate into immediate economic benefits and underscores the complexity of the relationship between information access and market outcomes.

Overall, these empirical studies collectively contribute to the growing body of knowledge surrounding the impact of market information on selling prices in agriculture. They employ diverse methodologies, ranging from natural experiments to randomized controlled trials, providing a comprehensive understanding of the multifaceted nature of this relationship in different geographical and socio-economic contexts.

## **2.4 Concepts and Theories of Product Quality**

Product quality encompasses the aggregate features and attributes of a product designed to fulfill both specified and potential user needs. The primary purpose of any product is to cater to the requirements of the user. Whether the product is simple or complex, its quality can be elucidated through specific characteristics. The quality attributes of a product vary based on its inherent nature, leading to diverse performance parameters and indicators.

The essential quality characteristics that mirror users' usage requirements are typically condensed into six facets: performance, life (durability), reliability, maintainability, safety, adaptability, and economy. Regardless of the complexity or simplicity of a product, these facets serve as a comprehensive framework for evaluating and ensuring that the product not only meets but exceeds the expectations and needs of users.

Customers often exhibit varying attitudes towards the quality characteristics of a product (Archak et al., 2011; Zhang et al., 2018).

Customer satisfaction holds significant importance in the realm of quality management, particularly as online reviews serve as a direct platform for customer feedback. Previous

research has frequently employed customer satisfaction as a metric for evaluating product quality. For instance, Hsiao & Hsiao (2020) utilized Taguchi's quality engineering approach to identify service attributes in hotel quality that are favored by customers. The assessment of overall customer ratings and the utility of online reviews constitutes two primary avenues in the measurement of customer satisfaction. Studies in this domain have delved into both individual reviews (Duan et al., 2008; Rui et al., 2013) and evaluations of other reviews (Huang et al., 2015; Kaushik et al., 2018).

In these investigations, customer satisfaction is considered a representation of product quality, emphasizing various measures of satisfaction. Given that product quality is intrinsically tied to a company's quality management practices, previous literature has explored marketing and operational enhancements derived from Total Quality Management (TQM) and Six Sigma methodologies (Boulter et al., 2013; Swink & Jacobs, 2012; Sila, 2020). Sila (2020) discovered that process management and information analysis within quality management can actively elevate a company's competitiveness in the global market. Additionally, (Boulter et al., 2013) demonstrated that recipients of quality awards may outperform competitors in sales, asset turnover, and other performance indicators. These studies affirm the significance of quality management practices and demonstrate that sales performance can be influenced either directly (Sila, 2020) or indirectly (Swink & Jacobs, 2012) by the level of product quality.

In these investigations, the influence of product quality characteristics on sales performance was scrutinized through pathway analysis. Huntley (2006) concentrated on four IT service quality attributes (technical, social, economic, partnership) and illustrated that these quality characteristics exert distinct effects on customer purchase decisions. Additionally, the researchers explored the subtle impacts of several sales factors. Akram et al (2018) provided evidence that promotions can actively enhance the perceived quality of products and trigger impulsive purchases among customers.

The so-called customer perception quality refers to the subjective evaluation of the goods and services that they buy according to their own needs and integrating the relevant information in the market. Dodds (1991) and other scholars found in their research that customer perception of a brand's product quality greatly influences purchase desire. Purchase desire, in turn, affects the brand loyalty. The lower the customer's desire to buy a brand, the lower their loyalty to the

brand. Therefore, brand quality perception directly influences brand loyalty through purchase desire. Sasser (1978) conducted a questionnaire survey on 1600 consumers in the shopping mall to study the relationship between consumers' perceived quality and brand loyalty, and divided the perceived quality of consumers into three dimensions: repeated purchase desire, purchase quantity and willingness to recommend the product to others. Finally, it is concluded that the consumers' desire to repeatedly buy a certain brand product, the purchase quantity and the willingness to recommend the product to others all have an important impact on the brand loyalty. That is, perceived quality indeed has an impact on customer loyalty.

On the basis of the questionnaire survey, Yuan (2014) used the method of factor analysis to verify the impact of perceived quality of the mobile phone industry on brand assets and related analysis. The study found that the core power of the perceived quality of mobile phones

There is a significant positive correlation between the five dimensions of ability, additional function, security, reliability and service quality and the three dimensions of brand assets: brand association, brand emotion and brand loyalty.

## **2.5 Concept and Theories of Service and After-sales Service**

Service is divided into pre-sale service, in-sale service and after-sales service. Pre-sale service refers to the work before the customer determines what kind of products to buy. It refers to a series of services carried out by enterprises to stimulate the customers who are not exposed to the products, with the purpose of stimulating the customers' desire to buy. Engaging with customers in the initial stages is crucial to gaining a profound understanding of their needs. This involves delving into what customers intend to purchase, the intended use of the product, and their preferences regarding product types. By proactively seeking this information, businesses can tailor their sales strategies to align with the specific needs and preferences of customers. This customer-centric approach not only enhances the overall customer experience but also allows businesses to formulate targeted and effective sales strategies that resonate with the unique requirements of their clientele. This two-way communication fosters a more personalized and mutually beneficial relationship between the business and its customers. Pre-sale service can enhance the understanding of both parties, create conditions for consumers to purchase products, trust the enterprise and products; win the support of consumers, win the

market and improve the competitiveness of enterprises.

Pre-sale services have a variety of contents, mainly providing information, market research and forecast, product customization, processing, providing consultation, accepting telephone orders and mail order, providing a variety of convenience and financial services. The main purpose of pre-sale service is to assist customers in engineering planning and system demand analysis, so that the product can meet the needs of users to the maximum extent, and also enable the customers' investment to maximize the comprehensive economic benefits.

In-sale service: in-sale service refers to the service provided to customers in the process of product sales. Patiently help customers to choose goods, introduce and display products for customers, explain the use of products in detail, and answer questions from customers. Pre-sales service is mainly to collect information and formulate strategies. In-sale service is designed to master the pre-sales service to stimulate customers' desire to purchase and make the transaction. Sales staff in the sales site, fully communication with customers, in-depth understanding of customer needs, to assist customers to buy the most appropriate products activities. The goal of service in sale is to provide customers with the best performance and price ratio solution, which is not only a service behavior to satisfy customers' desire to buy goods, but also a service behavior to constantly meet the psychological needs of customers. A stellar in-sale service not only facilitates a sense of enjoyment for customers but also serves to augment their purchase decisions significantly. When sales service is delivered in a harmonious and natural manner, it effectively mitigates any sense of estrangement between customers and the enterprise's sales, marketing, and customer care personnel. This, in turn, fosters an environment of mutual trust between buyers and sellers. The quality of service provided by sales, marketing, and customer care personnel emerges as a pivotal factor influencing a customer's decision to make a purchase. It underscores the importance of cultivating positive interactions and relationships throughout the sales process, as these interactions play a key role in shaping the overall customer experience and ultimately influencing buying behavior.

When buying, the warranty, after-sales service and other relevant regulations can make customers get rid of doubts, swing form, determined to buy goods. After-sales service is to satisfy customers through a series of services and achieve the purpose of building brand reputation, and then obtain more customers through brand influence. After-sales service

encompasses a range of service activities provided subsequent to the sale of goods. It stands out as a pivotal phase in customer service and has evolved into a crucial component for enterprises aiming to sustain or expand their market share. The quality of after-sales service directly impacts the satisfaction level of consumers. Exceptional after-sales service is now considered a product of brand economy. In a market where consumers are increasingly conscious and their consumption concepts are evolving, the focus is shifting beyond the product itself. When faced with similar products in terms of quality and performance, consumers are more inclined to choose companies that offer high-quality after-sales service. As such, investing in and delivering top-notch after-sales service has become a strategic imperative for businesses seeking to meet the evolving expectations of today's consumers. In the modern business environment, after-sales service has become an important part of the customer experience. A good after-sales service can bring many benefits to the enterprise, such as improving customer satisfaction, increasing loyalty and improving corporate reputation.

High-quality after-sales service is indeed a byproduct of the brand economy, and renowned brand products often excel in this aspect compared to lesser-known brands. The pricing of products from well-known brands tends to be higher, and this is attributed not only to the product's cost and quality but also to the fact that the cost of after-sales service is factored into the sales strategy of these brands. Establishing an information-driven after-sales service system is essential for effective management. Such a system enables enterprises to have a clear overview of their after-sales service management. Customer support requests can be systematically recorded and transformed into work orders, facilitating seamless communication with support service personnel. This ensures that internal service teams can promptly acknowledge and address support requests, distributing them based on the actual circumstances. Such a systematic approach guarantees that no customer service request is overlooked, showcasing the enterprise's commitment to specialized and well-managed after-sales service.

Lyu, Lim, & Choi (2016) revealed that every facet of the customer service experience plays a pivotal role in determining customer satisfaction. This finding aligns with the assertion made by Wilson, Zeithaml, Bitner & Gremler (1996) that emphasizing service quality is a fundamental factor for achieving success in customer satisfaction. Satisfaction is recognized as a vital phenomenon, indicating that performance and additional services meet or exceed

customer expectations. In line with the perspective of Gronroos, customer satisfaction not only fosters loyalty among existing customers but also serves as a catalyst for positive word-of-mouth, attracting new customers through the endorsements of satisfied individuals. This emphasizes the interconnected relationship between customer satisfaction, loyalty, and the potential for organic customer growth through positive referrals.

Service quality brings a positive customer experience through various prior factors such as expectation and service perception. Getz (2002) has long shown an interest in finding and connecting the same things in the tourism industry to improve the industry for a better customer service experience. In their research, the scholars discovered that service providers encounter numerous opportunities across various service interactions, and these opportunities should not be overlooked or missed.

Asugman, Jean & McCullough (1997) three scholars tracked the after-sales service of 96 large American enterprises and pointed out that the after-sales service of enterprises should be defined as the activities that minimize the product problems and maximize the customer consumption experience after the product is purchased. In the late 1980s, American scholars. Parasuraman, Zeithaml & Berry (1988) on the basis of Total Quality Management (comprehensive quality management theory) developed a new system to evaluating brand service quality- -SERVQUAL theory, the core of which is "service quality gap model", and divides service quality into five aspects: tangible, reliability, response, trust and empathy. SERVQUAL Theory is an effective tool to evaluate the quality of brand service, and it has been widely applied in practice.

Since then, different scholars have further deepened the development of the SERVQUAL theory. For example, the American scholar Carman proposed in 1990 that the measurement of service quality should be added or revised to the SERVQUAL theory according to different products in different industries to meet the needs of more measurement. The quality of service directly affects consumers' desire to buy, and subsequently influences consumers' brand loyalty. Kan (2008), in the study on mobile phone brand customer loyalty, points out that the service quality of the mobile phone brand is the key factor affecting customer brand loyalty. The service quality inspection dimension is divided into four aspects: sales staff attitude, service convenience, environmental facilities, and technical support. It is highlighted that each of these

aspects could affect the final formation of customer loyalty. Zhu (2014) research on the quality of the research on the influence of after-sales service to customer loyalty, with electronic products after-sales service warranty duration, warranty is free, after-sales service charge, the efficiency of after-sales service and after-sales service channel is perfect as the breakthrough point, and it is concluded that the quality of after-sales service has a positive impact on customer loyalty.

## 2.6 Concepts and Theories of Data Privacy and Protection

In today's digital age, data has become a valuable resource, and data privacy protection is an increasingly important task. For mobile phone enterprises, how to protect data privacy has become an indispensable work. Data privacy is the right of an individual or organization to maintain privacy and confidentiality of the data under its possession or control. These data can include personally identifiable information, financial information, medical information, social media activities, e-mail, communication records, location data, etc. Data privacy protection is the process of ensuring that these data is not unauthorized access, used, or disclosed.

Data privacy usually involves the following aspects:

**Data collection:** Individuals and organizations need to comply with relevant laws and regulations when collecting data. The data collected must be legal, transparent and have a clear purpose, and sensitive personal information must be agreed to by users.

**Data storage:** Individuals and organizations need to take steps to protect the collected data, such as encryption, storage in a secure location, limiting access, etc.

**Data use:** Individuals and organizations must abide by relevant laws and regulations when using the data to ensure that the use of the data is legal, transparent, and clear in purpose, and does not violate personal privacy.

**Data sharing:** When sharing data, ensure the security and privacy of data, and ensure that data is only accessed by authorized people.

**Data destruction:** When data are no longer needed, measures need to be taken to conduct safe destruction to prevent data leakage.

Without data privacy protection, hackers can access personal information and use the information for identity theft and fraudulent activities. These activities may cause significant

losses to both individuals and organizations. If an organization fails to protect customer information, it may lose customer trust and thus affect business development.

When dealing with the challenge of data privacy protection, enterprises need to start from many aspects to establish a perfect data protection mechanism and process. Through the development of strict policies for data protection, encryption and secure storage, user privacy authorization, employee training, regular audit, contract constraints, technical update, and the establishment of rapid response mechanism, mobile phone enterprises to better protect the security and privacy of user data, so as to win the trust of users and market recognition.

Gabriella (2020) has proposed that mobile phone data can serve as a direct means to collect and indirectly infer information about people's behavior, situations, and psychological characteristics. Recognizing the significance of privacy in this context, individuals who own mobile devices should have the ability to exercise their privacy preferences and establish boundaries for how their personal data is collected and utilized. Gabriella (2020) suggests the necessity for human-centered sensing systems that prioritize self-tracking, fostering transparency in mobile data practices while respecting individual privacy preferences. Specifically, the tracking process should be transparent, enabling individuals using mobile phones to comprehensively understand what data is being collected from their devices, how it is utilized, and under what circumstances their personal data might be shared with third parties. This approach to mobile phone privacy aims to empower individuals, allowing them to maintain a sense of agency over their privacy. It provides users with the means to control their personal data and the information they choose to disclose, thereby contributing to a more user-centric and privacy-conscious mobile data environment.

First, it is important to determine what constitutes the basis of user privacy issues. Malhotra et al (2004) show that the privacy of Internet users is determined by three factors: their concerns about data collection, the control users believe over this collection, and how they perceive the importance of understanding data collection. The more concerned users are about these three factors, the higher their privacy issues are.

A study of in-app ads (Sutanto et al., 2013) suggests that the more data apps collect to tailor ads to their specific needs, the more concerns these consumers have about privacy.

## 2.7 Concept and Theories of User Experience

User experience is a design methodology that centers around the needs of the user, making their requirements the primary goal of the design process. This approach ensures that user-centricity is integrated into the entire development process, starting from the earliest stages and persisting throughout. The concept of user experience permeates every phase of development. In fact, user experience is the process; the user experience is designed to make the product feel better, so as to enhance user satisfaction and loyalty and ensure the normal operation and evolution of the product. It can also be said that user experience design is the process that determines whether the "feeling" is good or bad, and this process needs to be designed for users to experience and feel. Focus is based on users, to study users, understand the background of target users, and consider the interaction between users and products in different situations. As far as possible to meet the needs of users in different situations, to create a perfect enjoyment process for users. User experience design is a multi-dimensional concept. In order to do a good job in user experience design, it is the result of cooperation in various aspects, including interaction design, information architecture, visual design, human-computer interaction, etc. Every link affects the user's "feeling" of the product. Jesse James Garrett The five-layer model in the book *User Experience Elements*: strategy layer, scope layer, structure layer, frame layer and performance layer. From the perspective of product operators and developers, we can understand why to do it, what to do it, and how to do it. And stand in the user's point of view: can use, what use, how to use.

At the strategic level, operators and developers need to build a team, market analysis, user analysis, development process and other complex work, what can ultimately benefit.

From the user's perspective, we need to let them understand the positioning of the product: what the product is for and what the user can get. Usually, the product name, logo and slogan undertake this task, and whether the information can be correctly conveyed to the user, and efficiently disseminated in the target population is also an aspect of the user experience.

Through the sorting and analysis of user needs, the scope layer developers finally determine the service boundary and specific functional details of the product. As operators, what benefits they need to obtain in the product, and how many problems can be solved as users

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have been clear in the scope layer. The scope layer is to transform the user needs and product objectives in the strategic layer into the product functions and content provided to the users.

In the structural layer, after defining the functional requirements and prioritizing them, there is a clear picture of the service scope of the product. Integrating these scattered functional requirements into a whole, this is the task of the structural layer, which is the main battlefield of interaction design. The main function is to design how the product to respond to users' requests.

Frame layer, the structure layer is the conceptual model of the product, the frame layer is the physical expression of the structure layer. In the framework layer, the content summarized through the strategic layer, range layer and structure layer is transformed into specific pages, and the conceptual model is implemented into a physical model.

The performance layer is the top of the five levels, and users know the first contact level after the product starts to use through the product name, logo and slogan. At this level, content and functional elements are brought together through aesthetics to achieve all the goals of other levels and meet the users' sensory feelings.

Marc (2023) proposed that user experience research aims to continuously improve product usability and ergonomics. These parameters were evaluated in a qualitative or quantitative manner. These are key indicators of product availability, satisfaction, and adoption rates. To ensure higher product adoption and patient-centered design, developers of digital health solutions should pay more attention to end-user-device or software interactions.

# CHAPTER 3

## RESEARCH METHODOLOGY

### 3.1 Population and Sample

This research focuses on customers who are currently utilizing Huawei phones as their primary mobile devices. The target population encompasses individuals within this customer segment, acknowledging the broader and potentially unknown extent of Huawei phone users.

Sample Size Determination:

To ensure statistical precision and confidence in the research outcomes, the calculation of the required sample size is rooted in a 95% confidence level ( $Z = 1.96$ ) and a margin of error of  $\pm 5\%$ . The formula employed for sample size determination is expressed as:

$$\text{Sample Size} = \frac{(Z)^2 \times 0.5(1-0.5)}{(0.05)^2}$$

This calculation yields a minimum required sample size of approximately 385 customers. Given the potential variability in the size of the overall Huawei phone user population, the research aims to collect data from a minimum of 385 customers to establish a robust foundation for statistical reliability within the broader, potentially unknown population of Huawei phone users.

### 3.2. Sampling Method

In this study, chose to use the convenience sampling method. Convenience sampling is a non-probability sampling method that selects participants based on the practicality of participation. It is suitable for this study for the following reasons:

**Reachability:** Huawei A wide range of smartphone users and can reach users through multiple channels.

**Efficiency:** Convenience sampling is a time-saving method that is particularly beneficial for time-limited studies.

**Cost-effective:** This approach is cost-effective because it does not require significant resources to recruit participants.

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### 3.3 Variables

This study includes five independent variables: product price, product quality, service and after-sales service, data privacy and protection, and user experience. The dependent variable analyzed in this study was user satisfaction. Based on the relevant theories, concepts, literature and previous studies, a comprehensive variable scale is carefully extracted and established.

### 3.4 Research Instrument

The questionnaire is an efficient data collection tool that quickly captures a large amount of information. Extensive data can be easily distributed to multiple respondents, and questionnaires can often be completed anonymously, helping respondents to answer questions more honestly, especially when addressing sensitive topics. Anonymity helps to reduce the impact of social expectations and stress. Quantitative questionnaires can produce quantitative data, which means that researchers can analyze and quantify opinions, attitudes, and behaviors. These data can be statistically analyzed to draw conclusions. The questionnaire allows easy access to extensive samples representing different populations and groups. This helps to conduct cross-sectional studies or to compare the differences between different groups.

Many factors need to pay attention to when establishing the questionnaire to ensure the validity and reliability of the questionnaire. Before creating the questionnaire, ensure that study objectives and questions were identified. It is very important to understand the questions want to answer and the types of information needed. Pay attention to the following principles:

1. The problem is clear: the problem should be clear, concise, and avoid complexity. Use a language that is easy to understand.
2. Logical order: The order of the questions should be logical to ensure that respondents can easily understand the coherence of the questions.
3. Closed questions: It is easier to analyze and compare answers using closed questions. Ensure that adequate answer options are provided.
4. Avoid subjectivity: Questions should not guide or bias the respondents of respondents.
5. Sensitivity questions: If the questionnaire contains sensitivity questions, consideration should be given to handle and protect the privacy of respondents.

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6. Questionnaire layout and design: The questionnaire appearance should be clear and neat so that respondents are easy to read and fill in. Use the appropriate font, font size, and typesetting. Avoid excessive questionnaires to avoid respondent fatigue. Keep the questionnaire concise and focus on the research objectives.

7. Data Management: Plan how data is stored, managed, and protected to ensure its security and integrity.

8. Clear objectives: The objectives of the questionnaire should be clear, and the audience should clearly understand how their answers are used to increase the audience's willingness to cooperate.

9. Questionnaire test: Test questionnaires in small audience groups to identify potential problems and improve them.

10. Feedback and correction: collect respondent feedback and revise the questionnaire according to the feedback to improve the quality of the questionnaire.

The questionnaire is divided into two parts. The first part of the questionnaire is a survey of the basic information of the survey users. The basic information of the respondents includes: gender, age, nationality, monthly income and education level.

The second part of the questionnaire is the study of independent variables, including product price, product quality, service and after-sales, data privacy and protection, and user experience. The survey included 30 items. Rated on a 5-point Likert scale with options ranging from "strongly agree" to "strongly disagree." "Strongly agree" represents the highest level of consent, followed by "agree", "neutral", "disagree" and "strongly disagree". Based on the respondents' actual experience and usage perception, the higher the score, the more the respondents agreed with the problem statement.

### **3.5 Reliability and Validity Analysis**

#### **3.5.1 Reliability Analysis**

Reliability analysis focuses on determining the accuracy and dependability of research data. It assesses whether the collected data is true and reliable, whether the chosen research sample genuinely answers the research questions, and whether the respondents provide consistent and accurate answers. In essence, reliability analysis examines the consistency of

results when the survey object is repeatedly measured using the questionnaire. This ensures that the research findings are robust and can be trusted, enhancing the overall validity of the study. Reliability, is a key indicator for assessing the quality of the questionnaire items and ensuring its expected impact. The reliability of the questionnaire is a measure of the stability and reliability of the questionnaire measurement instrument. It reflects the extent to which the questionnaire yields similar results at different times or in different contexts. Reliability was first introduced into psychometric measures by Spearman in 1904, which refers to the degree of consistency or reliability of the test results.

The questionnaire survey method is a widely employed research technique. The questionnaire, designed in accordance with the research objectives, serves as the tool for gathering information through this method, and its quality significantly influences the authenticity and effectiveness of the survey results. To ensure the questionnaire's high reliability and validity, an initial step in the analysis involves conducting reliability and validity analyses. If the questionnaire demonstrates good reliability and validity, it indicates that the data collected through the questionnaire is reliable and internally consistent, making it suitable for subsequent analysis. A common analytical method used for this purpose is Cronbach's coefficient alpha.

It is generally believed that the reliability coefficient should be between 0-1,

If the reliability coefficient of the scale surpasses 0.9, it is considered very good, indicating high reliability.

If reliability coefficient falling within the range of 0.8 to 0.9 is deemed acceptable, suggesting that the scale demonstrates satisfactory reliability.

If the reliability coefficient falls between 0.7 and 0.8, it indicates that the scale may require some refinement for improved reliability.

If reliability coefficient below 0.7 implies that the scale might need substantial revisions or should be considered for abandonment due to inadequate reliability.

For this study, the test results revealed Cronbach's alpha values exceeding 0.7 for all variables under examination, thus meeting the established criteria and deemed acceptable for subsequent data collection procedures.

### 3.5.2 Validity Analysis

Validity refers to the correspondence degree between the structure of the measured result and the measured value. The optimal approach for validity analysis is to use factor analysis to analyze the construct validity of the measurement scale or the whole questionnaire.

The questionnaire was assessed using a content validity analysis. Validity analysis usually refers to the validity and correctness of the questionnaire scale, that is, to analyze whether the design of the questionnaire questions is reasonable.

Validity analysis revolves around assessing the effectiveness of research items in expressing the conceptual information of the research variable or dimension. In essence, it involves evaluating whether the design of the research items is appropriate, examining whether the investigator has designed them scientifically, and determining whether the research items adequately represent a particular variable.

For content validity test, the Item Objective Congruence (IOC) over 0.5 for all items associate with each variable. Therefore, those items are passing the criteria for validity testing.

### 3.6 Data Collection

The data collection process in this study employed the "Questionnaire Star" platform, renowned for its efficiency and convenience in distributing and collecting questionnaires. This platform offers a reliable method for gathering information from Huawei mobile phone users while ensuring the privacy and integrity of respondents. Through clear research objectives and meticulously designed questions, respondent privacy was safeguarded to uphold the credibility of the findings. Additionally, respondent participation was strictly voluntary to maintain ethical standards.

Utilizing the prominent survey platform, known for its expertise in online questionnaire surveys, expedited the data collection process. The platform's user-friendly interface and comprehensive services, including online questionnaire design and custom reporting, facilitated efficient data collection. Compared to traditional methods, the Questionnaire Star platform stands out for its speed, ease of use, and cost-effectiveness, making it a preferred choice for enterprises and individuals seeking efficient survey solutions.

Data collection involved distributing questionnaires on the Questionnaire Star platform,

with the QR code shared via social media to enhance accessibility for respondents. This approach facilitated timely and effective data collection, aided by the widespread adoption of the platform. Distribution efforts extended across various channels, including the Huawei mobile user community, social media platforms, and email invitations, ensuring comprehensive coverage and diverse respondent participation.

### 3.7 Analytical Methods

Data analysis involves the use of linear regression analysis to check the relationship between customer satisfaction (dependent variable) and product price, product quality, service and after-sales service, data privacy and protection, and user experience (independent variable). Several research hypotheses derived based on research goals are tested.

Data analysis involves the examination of a substantial volume of collected data using appropriate statistical methods. It includes the processes of summarizing, comprehending, and digesting data to maximize its developmental potential and utility. The primary objective of data analysis is to study and summarize data to extract valuable information and draw conclusions. Through this process, the aim is to concentrate on and extract pertinent information from a large dataset, uncovering the underlying patterns or laws related to the research object. The ultimate goal is to facilitate informed decision-making and actions based on the insights gained. Essentially, data analysis is the transformative process of converting raw data into meaningful information through collection, examination, and interpretation. In big data analysis, regression analysis is a predictive modeling technique that studies the relationship between dependent and independent variables. This technique is commonly used in predictive analyses that find causal relationships between variables. The present study used the Likert scale questionnaire. It is a measurement tool commonly used in social science research and market research. It is designed to measure people's attitudes, opinions or opinions about a subject, question, or statement. Likert The scale usually consists of a series of ordered statements or questions, and respondents need to choose a degree of answer based on their perspective, often including very agree, agree, neutral, disagree and strongly disagree. It transforms subjective attitudes or perceptions into quantifiable data, enable researcher to perform the statistical analysis. As the data is ordered, statistical analysis can be performed, then data can be compared.

# CHAPTER 4

## ANALYTICAL RESULTS

This chapter introduces the study of Antecedents of User Satisfaction with Huawei Mobile Phones. The main data collection tool used was the questionnaire, where 385 questionnaires were completed. The completeness and validity of the questionnaire was critically reviewed by the investigator. According to the research purpose, analyze the data using the statistical software, the data analysis results are presented in the form of descriptive table, the systematic explanation is as follows:

- 4.1 Demographic Profile
- 4.2 Level of Factors Influencing User Satisfaction
- 4.3 Level of User Satisfaction
- 4.4 Hypothesis Testing

### 4.1 Demographic Profile

In the formal questionnaire, the first part is the basic information of population information, which is divided into gender, age, level of education, monthly income and nationality. After collecting these data through the questionnaire, the researchers used the statistical software to analyze the basic personal information, and Table 4.1 is a descriptive analysis of the demographic information.

**Table 4.1** Characteristic of the Respondents (n=385)

Demographic Variable	Category	Frequency	Percentage
Gender	Male	172	44.7
	Female	213	55.3
Age	Under 18 years old	20	5.2
	18-25 years old	148	38.4
	26-35 years old	98	25.5

**Table 4.1** (Continue)

Demographic Variable	Category	Frequency	Percentage
	36-45 years old	41	10.6
	46-60 years old	74	19.2
	Over 60 years old	4	1.0
Education	High School or below	59	15.3
	Vocational School	48	12.5
	Bachelor's Degree	223	57.9
	Master's Degree	48	12.5
	Doctoral Degree	7	1.8
Monthly Income	2,000 yuan or below	66	17.1
	2,001-4,000 yuan	111	28.8
	4,001-6,000 yuan	109	28.3
	6,001-8,000 yuan	64	16.6
	8,001-10,000 yuan	17	4.4
	10,001-15,000 yuan	10	2.6
	Above 15,000 yuan	8	2.1
Nationality	Chinese	375	97.4
	Other	10	2.6

Table 4.1 outlines the demographic data related to the study data, including five factors: gender, age, education, monthly income, and nationality. The comprehensive analysis is made as follows:

Regarding gender, males represented 44.7% of the total population, at 172 individuals. Women represented 55.3% of the total population, at 213 individuals.

As for age, 20 individuals are under 18 years old, accounting for 5.2% of the total number, 148 individuals aged 18 to 25, accounting for 38.4% of the total number, 98 individuals between 26 to 35 years old accounting for 25.5% of the total number, 41 individuals aged 36 to 45 years old, accounting for 10.6% of the total number, 74 individuals aged 46 to 60, 19.2% of the total

number, and 4 individuals over 60 years old, accounting for 1.0% of the total number.

As for the education level, there are 59 individuals with high school degree or below, accounting for 15.3% of the total number, 48 individuals with vocational school, accounting for 12.5% of the total number, 223 individuals with bachelor's degree, accounting for 57.9% of the total number, 48 individuals with master's degree, accounting for 12.5% of the total number, and 7 individuals with doctoral degree, accounting for 1.8% of the total number.

About the monthly income, 66 individuals with a monthly income of less than 2,000 yuan, Accounting for 17.1% of the total population, 111 individuals earning between 2,001 - 4,000 a month, Accounting for 28.8% of the total population, 109 individuals earning 4001 yuan to 6000 yuan a month, Accounting for 28.3% of the total population, 64 individuals with a monthly income of 6001 to 8000 yuan, Accounting for 16.6% of the total population, 17 individuals with a monthly income of 8001 to 10000 yuan, For 4.4% of the total population, 10 individuals with a monthly income of 10001 to 15000 yuan, Accounting for 2.6% of the total population, 8 individuals with monthly incomes of more than 15,000 yuan, Accounting for 2.1% of the total population.

As for nationality, 375 of the respondents are Chinese, accounting for 97.4% of the total number, while the remaining 10 are from other countries, accounting for 2.6% of the total number.

## 4.2 Level of Factors Influencing User Satisfaction

**Table 4.2** Mean and Standard deviation of Product quality

	Product quality	Mean	S.D.	Interpretation
1.	Huawei phones are reliable and easy to use.	3.787	1.139	High
2.	The build and durability of my Huawei phone meet my expectations.	3.725	1.230	High
3.	I believe the features and specifications of my Huawei phone reflect a high level of quality.	3.842	1.096	High

**Table 4.2 (Continue)**

	Product quality	Mean	S.D.	Interpretation
4.	The materials used in the construction of my Huawei phone seem of high quality.	3.818	1.154	High
5.	I find the performance of my Huawei phone to be of excellent quality.	3.771	1.136	High
	Overall	3.789	.987	High

The results of the product quality aspects regarding Huawei mobile phone user satisfaction are shown according to Table 4.2. The Huawei phones assessed by the respondents were consistently rated high in all aspects of product quality, and a comprehensive analysis of these data is as follows:

The statement "Huawei phones are reliable and easy to use" has a high mean score of 3.787 with a standard deviation of 1.139. This suggests that the majority of respondents see Huawei phones as reliable and easy to use.

The statement "The build and durability of my Huawei phone meet my expectations" has a high mean score of 3.725 with a standard deviation of 1.230. This reflects the respondents' belief that the durability of Huawei phones has met their expectations.

The statement "I believe the features and specifications of my Huawei phone reflect a high level of quality" has a high mean score of 3.842 with a standard deviation of 1.096. This shows that the respondents believe in the high quality level of Huawei mobile phones.

The statement "The materials used in the construction of my Huawei phone seem of high quality " has a high mean score of 3.818 with a standard deviation of 1.154. This reflects the respondents that the materials for Huawei phones are of good quality.

The statement "I find the performance of my Huawei phone to be of excellent quality" has a high mean score of 3.771 with a standard deviation of 1.136. This shows that the respondents value the performance and quality of Huawei phones.

The overall mean score of all statements on product quality is 3.789 and the overall standard deviation is 0.987, a high degree of consistency, which overall showed that

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respondents are very satisfied with the product quality of the Huawei phone.

**Table 4.3** Mean and Standard Deviation of Product Price

Product Price	Mean	S.D.	Interpretation
1. Huawei has a wide range of mobile phones, with different prices available for users to choose from.	3.769	1.166	High
2. The price of Huawei's phones, along with the product itself, makes me feel that they offer great value for money.	3.662	1.153	High
3. The repair cost of Huawei phones is very low.	3.491	1.132	High
4. The pricing of Huawei phones is reasonable considering the features and performance.	3.629	1.129	High
5. I believe Huawei phones provide good value for money.	3.626	1.201	High
Overall	3.635	.957	High

The results of the survey on product price aspects with Huawei mobile phone user satisfaction are shown in Table 4.3. The Huawei phones assessed by the respondents were consistently rated high in all aspects of the product price, and a comprehensive analysis of these data is as follows:

The statement "Huawei has a wide range of mobile phones, with different prices available for users to choose from " has a high mean score of 3.769 with a standard deviation of 1.166. This suggests that respondents generally believe that Huawei phones have different prices for consumers to choose from.

The statement "The price of Huawei's phones, along with the product itself, makes me feel that they offer great value for money." has a high mean score of 3.662 with a standard deviation of 1.153. This shows that respondents value the value of Huawei mobile phones.

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The statement "The repair cost of Huawei phones is very low." has a high mean score of 3.491 with a standard deviation of 1.132. This indicates that the respondents generally agreed that the cost of maintaining Huawei mobile phones is acceptable.

The statement "The pricing of Huawei phones is reasonable considering the features and performance" has a high mean score of 3.629 with a standard deviation of 1.129. This shows that the majority of respondents believe that Huawei phones are reasonably priced.

The statement "I believe Huawei phones provide good value for money" has a high mean score of 3.626 with a standard deviation of 1.201. This shows that the respondents value the cost performance of Huawei phones.

The overall mean score for all statements is 3.635 and the overall standard deviation is 0.957, which showed a high degree of consistency, indicating that the majority of respondents were satisfied with the price of Huawei phones.

**Table 4.4** Mean and Standard Deviation of Data privacy and Protection

Data privacy and protection	Mean	S.D.	Interpretation
1. Using a Huawei phone gives me a sense of security about the protection of my personal information.	3.714	1.155	High
2. I believe Huawei phones have an advantage in safeguarding user privacy compared to other brands.	3.730	1.152	High
3. I feel confident that Huawei phones prioritize and ensure the privacy of user data.	3.748	1.178	High
4. I trust that using Huawei phones is generally safe in terms of data privacy.	3.836	1.164	High
5. Compared to other smartphone brands, I believe Huawei phones are more secure in protecting user information.	3.733	1.192	High
Overall	3.752	.993	High

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The results of the Data privacy and protection aspect in Huawei mobile phone user satisfaction are shown according to Table 4.4. The Huawei phones evaluated by the respondents have always been rated high in all aspects of Data privacy and protection. The Data privacy and protection of Huawei phones meets the expectations of users. A comprehensive analysis of these data is as follows:

The statement "Using a Huawei phone gives me a sense of security about the protection of my personal information." has a high mean score of 3.714 with a standard deviation of 1.155. This indicates that respondents generally believe that the use of Huawei phones gives respondents a sense of security about protecting their information.

The statement "I believe Huawei phones have an advantage in safeguarding user privacy compared to other brands." has a high mean score of 3.730 with a standard deviation of 1.152. This shows that respondents value user privacy when using mobile phones.

The statement "I feel confident that Huawei phones prioritize and ensure the privacy of user data." has a high mean score of 3.748 with a standard deviation of 1.178. This demonstrated that the majority of respondents believe that Huawei phones would prioritize and ensure the privacy of user data.

The statement "I trust that using Huawei phones is generally safe in terms of data privacy" has a high mean score of 3.836 with a standard deviation of 1.164. This shows that respondents believe that the use of Huawei phones is often trustworthy with respect to data privacy.

The statement "Compared to other smartphone brands, I believe Huawei phones are more secure in protecting user information." has a high mean score of 3.733 with a standard deviation of 1.192. This suggests that respondents generally believe that Huawei phones are more secure in protecting user information.

The overall mean score of all statements was 3.752 and the overall standard deviation was 0.993, which showed a high degree of consistency, which overall indicates that the majority of respondents were satisfied with the Data privacy and protection of Huawei phones.

**Table 4.5** Mean and Standard Deviation of Service and After-sales Service

Service and after-sales service	Mean	S.D.	Interpretation
1. The after-sales support provided by Huawei for their mobile phones is excellent.	3.686	1.176	High
2. The customer service during the purchase of Huawei mobile phones is very good.	3.743	1.147	High
3. The purchasing experience for Huawei phones is comfortable and enjoyable.	3.743	1.143	High
4. The efficiency of Huawei's after-sales service for mobile phones is notably high.	3.696	1.165	High
5. Huawei phones have a convenient network of service centers for after-sales support.	3.782	1.127	High
Overall	3.730	.984	High

The findings regarding the Service and after-sales service aspect of Huawei mobile phone user satisfaction are shown according to Table 4.5. The Huawei phones evaluated by the respondents are always rated as high evaluation in all aspects of Service and after-sales service. The Service and after-sales service of Huawei phones solves the needs of users, and a comprehensive analysis of these data is as follows:

The statement "The after-sales support provided by Huawei for their mobile phones is excellent." has a high mean score of 3.686 with a standard deviation of 1.176. This shows that most respondents attach great importance to the after-sales experience.

The statement "The customer service during the purchase of Huawei mobile phones is very good" has a high mean score of 3.743 with a standard deviation of 1.147. This suggests that respondents generally agreed that customer service was good when they bought their Huawei phones.

The statement "The purchasing experience for Huawei phones is comfortable and enjoyable." has a high mean score of 3.743 with a standard deviation of 1.143. This shows that

the respondents thought the experience of buying a Huawei phone was comfortable and pleasant.

The statement "The efficiency of Huawei's after-sales service for mobile phones is notably high" has a high mean score of 3.696 with a standard deviation of 1.165. This reflects the respondents' attention to the efficiency of after-sales service.

The statement "Huawei phones have a convenient network of service centers for after-sales support" has a high mean score of 3.782 with a standard deviation of 1.127. This indicates that the respondents generally believe that Huawei mobile phones have a convenient network of after-sales support service centers.

The total mean score for all statements was 3.730, which was interpreted as "high". The overall standard deviation was 0.984, overall, indicating that the majority of respondents were very satisfied with the Service and after-sales service for Huawei phones.

**Table 4.6** Mean and Standard Deviation of User experience

User experience	Mean	S.D.	Interpretation
1. Using features and functions on my Huawei phone is intuitive and user-friendly.	3.774	1.101	High
2. The camera quality on my Huawei phone meets or exceeds my expectations.	3.714	1.090	High
3. I find the design and aesthetics of my Huawei phone appealing.	3.707	1.166	High
4. My Huawei phone performs well in terms of speed and responsiveness.	3.675	1.123	High
5. My experience with using my Huawei phone has been positive.	3.712	1.163	High
Overall	3.716	.954	High

The results of the User experience aspect in Huawei mobile phone user satisfaction are shown according to Table 4.6. The Huawei phones evaluated by the respondents have always

been rated high in all aspects of User experience. The User experience of Huawei phones has improved users' loyalty to Huawei phones. A comprehensive analysis of these data is as follows:

The statement "Using features and functions on my Huawei phone is intuitive and user-friendly." has a high mean score of 3.774 with a standard deviation of 1.101. This illustrates that the respondents thought the functionality of the Huawei phone as intuitive and user-friendly.

The statement "The camera quality on my Huawei phone meets or exceeds my expectations" has a high mean score of 3.714 with a standard deviation of 1.090. This shows that the respondents attach great importance to the camera quality and experience of Huawei mobile phones.

The statement "I find the design and aesthetics of my Huawei phone appealing" has a high mean score of 3.707 with a standard deviation of 1.166. This indicates that the majority of respondents liked the appearance of Huawei phones.

The statement "My Huawei phone performs well in terms of speed and responsiveness" has a high mean score of 3.675 with a standard deviation of 1.123. This demonstrated that respondents rated Huawei phones as superior in terms of speed and responsiveness.

The statement "My experience with using my Huawei phone has been positive." has a high mean score of 3.712 with a standard deviation of 1.163. This reflects the importance respondents have in using Huawei phones.

The total mean score for all statements was 3.716, which was interpreted as "high". The overall standard deviation was 0.954, which generally indicates that the majority of respondents were satisfied with the User experience of Huawei phones, indicating that Huawei phones have brought a good user experience to the respondents.

### 4.3 Level of User Satisfaction

**Table 4.7** Mean and Standard Deviation of User satisfaction

User satisfaction	Mean	S.D.	Interpretation
1. I am very satisfied with my Huawei phone.	3.720	1.166	High

**Table 4.7** (Continue)

User satisfaction	Mean	S.D.	Interpretation
2. The Huawei phone lived up to my expectations.	3.727	1.142	High
3. I would recommend Huawei phones to others.	3.725	1.165	High
4. I will always buy Huawei phones.	3.629	1.172	High
5. I intend to continue using Huawei phones in the future.	3.735	1.128	High
Overall	3.707	.977	High

The results of the survey on Huawei mobile phone user satisfaction are shown according to Table 4.7. According to the results in Table 4.7, the respondents have high satisfaction with Huawei phone users, and a comprehensive analysis of these data is as follows:

The statement "I am very satisfied with my Huawei phone." has a high mean score of 3.720 with a standard deviation of 1.166. This shows that the majority of respondents felt satisfied with their Huawei phones.

The statement "The Huawei phone lived up to my expectations" has a high mean score of 3.727 with a standard deviation of 1.142. This demonstrated that the majority of respondents believed that Huawei phones met respondents' expectations.

The statement "I would recommend Huawei phones to others" has a high mean score of 3.725 with a standard deviation of 1.165. This suggests that most of the respondents plan to recommend Huawei mobile phones in the future and among others.

The statement "I will always buy Huawei phones" has a high mean score of 3.689 with a standard deviation of 1.172. This suggests that most respondents will continue to buy Huawei phones in the future.

The statement "I intend to continue using Huawei phones in the future." has a high mean

score of 3.735 with a standard deviation of 1.128. This indicates that most of the respondents plan to continue using Huawei phones in the future.

The overall mean score for all statements was 3.797, which was interpreted as "high". The overall standard deviation was 0.977, overall, indicating that the majority of respondents had high satisfaction with Huawei phones, indicating that Huawei phones have high user satisfaction.

#### 4.4 Hypothesis Testing

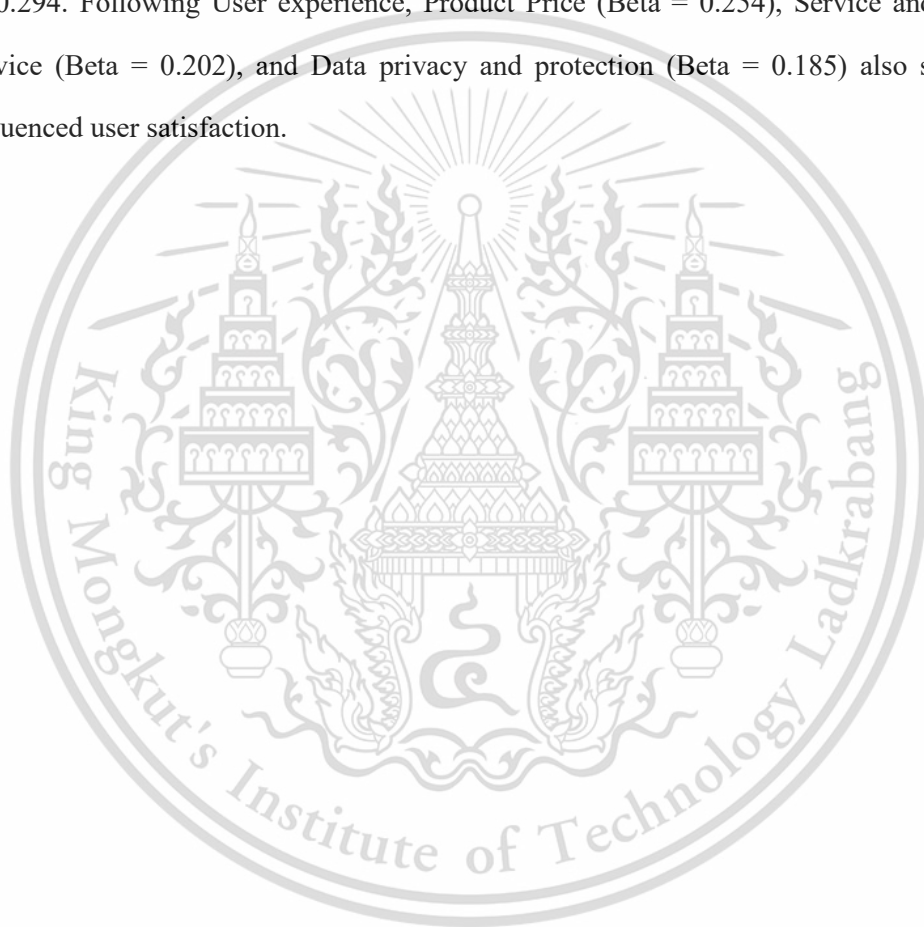
**Table 4.8** Factors Influence on User Satisfaction with Huawei mobile phone

Variable	B	Beta	t	p-value	VIF
Constant	.047	-	.591	.555	-
Product Quality	.044	.044	.913	.362	6.164
Product Price	.260	.254	5.758	.000**	5.173
Data privacy and protection	.182	.185	3.928	.000**	5.872
Service and after-sales service	.200	.202	3.934	.000**	6.963
User experience	.301	.294	6.291	.000**	5.801

R Square=0.857, \*\* p < .01

Table 4.8 presents the results of a regression analysis examining the factors influencing user satisfaction with Huawei mobile phones. The analysis included five independent variables: Product Price, Product Quality, Service and after-sales service, Data privacy and protection, and User experience. These variables were examined in relation to the dependent variable, user

satisfaction. Variance inflation factors (VIF) were utilized to assess collinearity among the independent variables. The VIF values for Product Price, Product Quality, Service and after-sales service, Data privacy and protection, and User experience were all below 10, indicating no significant multicollinearity issue among the predictor variables. The R-squared value of 0.857 indicates that approximately 85.7% of the variance in user satisfaction with Huawei mobile phones is explained by the predictor variables. Among the independent variables, User experience had the greatest impact on user satisfaction, as evidenced by its highest Beta value of 0.294. Following User experience, Product Price (Beta = 0.254), Service and after-sales service (Beta = 0.202), and Data privacy and protection (Beta = 0.185) also significantly influenced user satisfaction.



## CHAPTER 5

### CONCLUSION AND DISCUSSION

This study provides an in-depth analysis of the factors affecting Huawei mobile phone user satisfaction, and examines the relationship between five independent variables: product price, product quality, service and after-sales service, data privacy and protection, user experience and a dependent variable, user satisfaction. A total of 385 data were collected by questionnaires, ensuring the validity and integrity of the study. To test the proposed hypothesis, using a multiple linear regression analysis, 385 data were collected and analyzed. This chapter continues to explain and discuss the results of the research analysis. Although this study has yielded some positive results, it is important to objectively recognize certain limitations. Based on the current research findings and limitations, this chapter puts forward some suggestions for future research. Through these suggestions, it is expected to further promote the development of related fields, fill knowledge gaps, and improve the theoretical level.

#### 5.1 Conclusion

##### 5.1.1 Demographic Information

This study provides a comprehensive analysis of the demographics in the user satisfaction questionnaire for Huawei mobile phones. Among the 385 respondents, the total male proportion was 44.7%. Women represented 55.3% of the total population, and women were slightly higher than men. In terms of age, respondents aged 18 to 25 were the most frequent, accounting for 38.4% of the total respondents, followed by those aged 26 to 35, or 25.5% of the total respondents. In addition, the respondents mainly had a bachelor's degree in education level, accounting for 57.9% of the total number of respondents.

As for monthly income, the people with monthly income ranged from 2001 to 4000 yuan were the most, accounting for 28.8% of the total number, followed by those with monthly income of 4001-6000 yuan, accounting for 28.3% of the total number. In addition, the vast majority of respondents are Chinese, accounting for 97.4% of the total number of respondents. This demographic profile provides an important basis for further analysis of user satisfaction

in Huawei phones.

### **5.1.2 Level of Influential Factors**

In terms of product quality, product quality is one of the key factors for users to choose and trust a mobile phone. According to the analysis results, Huawei mobile phone obviously won high satisfaction from users in terms of product quality and gave a high evaluation, with a mean score of 3.789. The standard deviation was 0.987. Users believe that the Huawei phone features and specifications reflect a high level of quality, with a mean score of 3.842 and a standard deviation of 1.096. This shows that most users have similar high satisfaction with the quality of Huawei phones. This consistency may result from the strict standards of Huawei phones in product manufacturing and quality control, allowing users to steadily feel excellent quality during use.

In terms of product price, according to the analysis results, users showed a relatively moderate satisfaction with the product price of Huawei mobile phones, with a mean score of 3.635 and a standard deviation of 0.957. It shows that users have some differences in their views on the price, but the overall users maintain a relatively consistent attitude. The highest scores in this were in Huawei has a wide range of mobile phones, with different prices available for users to choose from. The mean score was 3.769 with a standard deviation of 1.166. This suggests that users are satisfied with the Huawei phone's strategy of offering a variety of options at different price ranges. This flexibility allows users to find the most suitable mobile phone model according to their personal needs and budget, thus better meeting the needs of different user groups. The relatively high standard deviation may reflect some differences in user evaluation of product prices. This also reflects the general trend of price sensitivity in the smartphone market, and users' focus on cost performance is an important factor in the purchase decision.

In terms of Data privacy and protection, users show high satisfaction with the Data privacy and protection of Huawei phones, which reflects their effective response to data privacy and protection concerns. The mean score was 3.752, with a standard deviation of 0.993. This shows that most users have similar and high satisfaction with the data privacy and protection measures of Huawei phones. Users believe that using Huawei phones is often secure with respect to data

privacy. The mean score was 3.836 with a standard deviation of 1.164. This shows that users for Huawei mobile phone in data privacy and protection strategy and practice, relatively high standard deviation may reflect in the user groups for data privacy concern degree has certain differences, but on the whole users for Huawei mobile phone in data privacy and protection strategy showed relatively consistent recognition.

In terms of Service and after-sales service, users give relatively high satisfaction, reflecting the excellent performance of Huawei phones in service quality and after-sales support, with a mean score of 3.730 and a standard deviation of 0.984, which shows that users have relatively consistent overall views on service and after-sales service and have high satisfaction. Among them, the highest score is Huawei phones have a convenient network of service centers for after-sales support. with a mean score of 3.782 and a standard deviation of 1.127, which indicates that users are very satisfied with the convenience and quality of Huawei's after-sales support. A convenient after-sales service center network can provide users with fast and efficient ways to solve problems, increasing users' confidence and convenience when using Huawei mobile phones. The relatively high standard deviation may reflect some differences in users' expectations and experiences of after-sales service, but overall, users have positive reviews of the service and after-sales support provided by Huawei phones.

In terms of User experience, users have given a relatively high level of satisfaction, which reflects their very positive feelings about the overall function and performance of the mobile phone. According to the results, the mean score was 3.716, and the standard deviation was 0.954, indicating that there is a certain consistency in the overall view of user experience, and the satisfaction level is relatively high. In particular, the highest score in this case was the Using features and functions on my Huawei phone is intuitive and user-friendly. mean score of 3.774 with a standard deviation of 1.101. This shows that users are very satisfied with the user interface design, functional operation intuition and user friendliness of Huawei phones. This design concept makes it easier for users to master the functions of the phone, improving the overall experience. The relatively high standard deviation may reflect some individual differences in the specific elements of user experience, but overall, users' evaluation of Huawei phones are generally positive.

This ~~ma~~ **In conclusion, the results show that user satisfaction with different aspects of Huawei**

phones is high, but also pay attention to new needs and needs to be improved to further improve user satisfaction and sense of use.

### 5.1.3 Level of User Satisfaction

The results of this study provide useful cognitive insight into the level of Huawei mobile phone user satisfaction as well as the influencing factors. The research results show that users give good reviews of all aspects of Huawei phones, including mobile phone price, mobile phone quality, Service and after-sales service, Data privacy and protection and mobile phone user experience. The satisfaction score of each aspect ranges from 3.629 to 3.735. Positive reviews of user privacy protection, prices and services, and user experience show that Huawei phones perform well in meeting user needs and expectations. In addition, users said they were willing to recommend Huawei phones to friends and relatives, and according to the “I would recommend Huawei phones to other” statement, respondents gave a score of 3.725, which indicates that most respondents plan to recommend Huawei phones with others in the future. Underlines the potential of Huawei phones to build positive reputation and loyalty in the future. This study provides strong support for the success and future development of the Huawei mobile phone brand. User satisfaction with Huawei phones reflects positive factors in multiple aspects of Huawei phones, which can provide a favorable guarantee for brand success and user loyalty.

In this study, the overall satisfaction of Huawei phones was 3.707 and the standard deviation was 0.977, reflecting the positive feeling and experience of using Huawei phones, which helps to consolidate brand reputation, promote word of mouth, and increase user loyalty. The high degree of user satisfaction with Huawei phone is not just a single evaluation, but a comprehensive reflection of a series of positive feelings and profound use experience. This positive user experience not only helps consolidate the good reputation of Huawei phones in the market but also generates positive word-of-mouth effects among user groups and target customer groups. This series of positive feedback not only creates a cycle of satisfaction for current users, but also provides a strong guide for attracting new users. And then a positive word of mouth. The sharing and recommendation role of users is like a bridge, transforming satisfaction into brand reputation and infiltrating into a wider user group. Huawei By

continuously providing high-quality products and services, mobile phones have successfully established a reliable and satisfactory brand image in the hearts of users, and thus gained a considerable market share in the highly competitive smartphone market.

#### **5.1.4 Hypothesis Testing**

The regression analysis of the factors affecting the user satisfaction of Huawei mobile phones provides useful insights for Huawei's future management decisions, which is helpful for future research in this field, and provides help for future research in this field, and the standardization coefficient shows that Huawei mobile phone user satisfaction is related to Product Price, Product Quality, Service and after-sales service, Data privacy and protection, User experience, and these present a positive correlation.

According to the results, user experience emerged as the most influential factor, followed by product price, service and after-sales service, and data privacy and protection. These four factors are significant predictors of user satisfaction. With an R-squared value of 0.857, these predictor variables accounted for a substantial proportion of the variance in user satisfaction, approximately 85.7%.

## **5.2 Discussion**

### **5.2.1 Level of User Satisfaction**

Overall, according to the results of this study, users showed relatively satisfactory satisfaction with Huawei phones, and high satisfaction helped to build a positive brand reputation. A well-known brand can attract more potential consumers, thereby increasing its market share. In the highly competitive mobile phone market, user satisfaction is an important competitive advantage. Huawei differentiates its products by increasing satisfaction and wins consumer preferences. In the field of marketing, existing literature consistently underscores the importance of improving service quality, augmenting perceived benefits, and fortifying customer satisfaction. Additionally, fostering a deep sense of belonging and identity is identified as crucial for attaining business success and gaining a competitive edge (Alam & Noor, 2020). Building on insights from the prevailing literature on service management, it has been established that customer satisfaction serves as an effective metric for assessing the overall

experience of a product post-purchase (Juwaini et al., 2022).

According to the results of this study, users are generally satisfied with the user satisfaction of Huawei mobile phones. Therefore, in the future Huawei planning and management, these factors affecting high satisfaction levels should be maintained and optimized to achieve higher user satisfaction.

## **5.2.2 Level of Influential Factors**

### **5.2.2.1 Product Price**

The results of this study show that product price is one of the key factors affecting user satisfaction, mobile phone price is one of the most intuitive factors in shopping decision, and price is an important factor determining the competitiveness of products in the market. Moderate prices help products to stand out in the fierce market competition and attract more consumers. Mobile phone price plays a key role in purchase decisions. For each consumer, finding a phone that matches the price is an important part of ensuring that individual needs are met and economically justified. These findings are in agreement with previous findings, Pricing assumes a multifaceted role in the evaluation of products by customers (Erickson & Johansson, 1985). Economically, a higher price signifies a larger monetary commitment on the part of customers, potentially impacting their budgets negatively. From a behavioral standpoint, research indicates that price serves as a cue for consumers to infer product quality (Brucks et al., 2000; Raghurir, 2006), leading to positive influences on product evaluations and purchase intentions (Jang & Chung, 2021). In conclusion, this study highlights the key impact of product price on user satisfaction, and further research can build on these findings to continue studying other aspects that may affect the price of Huawei mobile phone products.

### **5.2.2.2 Product Quality**

The results of this study show that users highly recognize the product quality of Huawei phones and value the product quality, scoring above the average level in evaluation. Users' impression of the quality of the brand is often spread to other potential consumers, thus affecting the brand image and market reputation, and enhancing users' trust in the brand. Phone quality has a profound impact on both the user experience and the device life span. Choosing high-quality mobile phones can not only provide better performance and function, but also

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reduce the need for repair and replacement to better meet the needs of users. An increasing number of organizations adopt quality management as a strategic cornerstone to gain a competitive advantage (Reed, Lemak, & Mero, 2000) and enhance overall firm performance (Hendricks & Singhal, 1997; Lemak & Reed, 1997; Samson & Terziovski, 1999). Companies that have received quality awards typically outperform their counterparts in terms of both financial metrics (Hendricks & Singhal, 1997) and stock market value (Lemak & Reed, 1997). In conclusion, making user satisfactory product quality can significantly improve user satisfaction, and further research in the future can explore other factors affecting the product quality of Huawei mobile phone users.

### **5.2.2.3 Service and After-sales Service**

The results indicate that the service and after-sales service of Huawei phones directly affect user satisfaction, with quality service being one of the key factors in establishing brand loyalty. Most users believe that Huawei for mobile phone service and after-sales service are efficient, timely and convenient. This finding is consistent with previous studies, Numerous researchers have investigated the influence of after-sales services on both customer satisfaction and customer retention across various industry sectors (Kurata & Nam, 2010; Rigopoulou et al., 2008; Van Birgelen et al., 2002; Blut et al., 2018; Arabi et al., 2018). For instance, Parasuraman et al (1994) found that SERVQUAL dimensions in the service industry play a crucial role in determining customer satisfaction. Additionally, Rigopoulou et al (2008), in a study focusing on after-sales services for electronic appliances, examined the impact of after-sales service quality on customer satisfaction and behavioral intentions. Kursunluoglu (2014) demonstrated that retailers need to enhance the quality of services, as it significantly contributes to customer satisfaction and consumer loyalty. High-quality after-sales service helps to maintain product quality and brand reputation. Timely solution of product quality problems and active response to user feedback can help to eliminate users' negative impression on the brand and maintain the brand reputation. Through high-quality service, enterprises can improve the overall experience of users and form a positive brand image. Consumers are often more likely to choose brands that can provide full-service support. In conclusion, this study highlights Service and after-sales service, especially the efficiency aspect of services, and future studies

may further investigate other aspects affecting Service and after-sales service in Huawei mobile phones.

#### **5.2.2.4 Data Privacy and Protection**

The study found that Huawei phone users have high expectations for Data privacy and protection, and by strengthening data privacy and protection measures, they can reduce the risk of data leakage and protect users from potential harm. This is consistent with previous research and embodies the importance of personal information and the need to protect personal privacy in today's society. Scholars have examined the value of privacy protection from the enterprise's perspective, exploring its implications in various domains such as management, economics, and the market (Esteves & Resende, 2019; Esteves & Cerqueira, 2017; Johnson et al., 2017; Kramer et al., 2019). Regarding customer attitudes toward the protection of privacy information, within the retailing domain, Mousavizadeh et al (2016) demonstrated through experiments that information privacy protection can effectively alleviate privacy concerns, consequently enhancing customers' perceived benefits. The importance of data privacy and protection has become particularly pronounced in today's digital age, with impacts on individuals, businesses and society as a whole. In the information society, sensitive information of individuals is widely collected and used, so it is crucial that Huawei acts as a mobile phone company to ensure the security and privacy of these information. Overall, this study highlights the impact of Data privacy and protection on user satisfaction, and future studies can further investigate other aspects of the Huawei mobile Data privacy and protection.

#### **5.2.2.5 User Experience**

The results of this study show that Huawei mobile phone users believe that good user experience could bring high user satisfaction, good user experience helps to build brand loyalty, and user experience is directly related to word-of-mouth communication. Satisfied users are more likely to share their positive experiences through word of mouth to bring more potential users to the brand. Huawei Mobile phones performed well at User experience, and these results are consistent with previous studies, efforts in these endeavors necessitate meticulous attention to design decisions, as user acceptance is a product of a positive user experience influenced by numerous factors (Konstantakis et al., 2017; Zarour & Alharbi, 2017).

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User experience Its growing importance in the mobile sector has a profound impact on user satisfaction and brand loyalty. In the fierce market competition, the user experience is a key competitive advantage. Users are more willing to choose those mobile phone brands that provide a better experience, thus improving the competitiveness of the brand in the market. User experience is the core of the user satisfaction survey. Understanding users' feelings and expectations in the use of products can help to adjust product design and service and improve the overall satisfaction level. Excellent user experience is directly related to user satisfaction. When users experience a smooth, intuitive and enjoyable experience when using their phone, they are more likely to have positive reviews of the product and brand. In conclusion, this study highlights the importance of user experience for improving satisfaction, especially the user-friendly clear interface, and future studies may further investigate other factors affecting the user experience of Huawei mobile phones.

### **5.2.3 Hypothesis Testing**

#### **5.2.3.1 Influence of Product Price on User Satisfaction**

User satisfaction refers to the assessment of whether a product and its services fulfill the needs and objectives of the users (Anderson & Sullivan, 1993). The results indicate a positive relationship between product prices and user satisfaction. Product price is directly related to Huawei's brand image and the perceived value of the product. Higher prices may be considered to represent high quality or unique value, while lower prices may be seen as affordable or more cost-effective. Huawei Need to find a balance in price to deliver the right brand image and sense of value. By setting different prices, Huawei can achieve different positions in the market. High-end prices may position the product as a high-end market, while low prices may make the product more suitable for the mass market. This helps to meet the needs of different consumer groups. Through flexible pricing strategies, enterprises can better adapt to the changes in the market. For example, prices are adjusted according to market demand and competitive conditions to better meet consumer expectations. The price of mobile phone products directly affects user satisfaction, and is one of the important factors that users pay attention to when buying and using mobile phones. Users usually expect the maximum cost performance within the price range paid. User satisfaction increases with the performance,

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function and quality of the phone consistent with its price. Reasonable prices can help to meet a wider range of user needs and improve user satisfaction. The mobile phone market is highly competitive, and the price is a key factor in determining the competitiveness. Reasonable prices can attract more potential consumers and improve the brand's position in the market. Overall, the price of mobile phone products is one of the key factors of user satisfaction. Huawei need to provide high-quality products and ensure the rationality of the price, so as to meet the expectations of users, increase the market competitiveness, and improve the overall satisfaction of users.

### **5.2.3.2 Influence of Product Quality on User Satisfaction**

The study analysis showed that product quality did not have a very significant impact on the user satisfaction of Huawei mobile phones. Nevertheless, it also highlighted the importance of product quality based on the assessment of Huawei mobile phone users. In high-tech sectors, the smartphone industry is particularly intriguing due to its reliance on modular and complex product architectures, coupled with substantial variability in market demand (Tseng & Chiang, 2013). Companies within this market continually strive for product innovations to maintain a competitive edge over their rivals (Dedrick & Kraemer, 2016; Varriale et al., 2022). The quality of mobile phone products has a direct and far-reaching impact on user satisfaction. Good product quality is one of the key factors to make customers become loyal consumers. Stable performance and low failure rate can build user confidence in the brand, making it more inclined to continuously choose products of the same brand. In the fierce market competition, product quality is a key competitive advantage. Superior quality mobile phone products are easier to stand out in the market and attract more consumers to choose. Excellent mobile phone product quality often means a longer service life and higher reliability. Users are not prone to faults and problems during the use process, which helps to improve user satisfaction. In addition to the hardware quality, the stability and fluency of the software is also critical to user satisfaction. High-quality mobile products often have optimized operating systems and applications, reducing crashes and errors and providing a better user experience. The quality of mobile phone products directly determines the user's satisfaction. Huawei By providing high-quality products, it can not only meet the expectations of users, but

also build brand loyalty and improve market competitiveness. Therefore, ensuring the stability and superiority of the quality of mobile phone products is crucial for Huawei. The quality of mobile phone products is a key factor of the success of enterprises and the sustainable development of the brand. High-quality products can not only help to meet the needs of consumers, build a good brand reputation, but also help to improve the competitiveness and market share of enterprises. Therefore, Huawei should put product quality at the core of its business strategy, and achieve a win-win situation for both enterprises and consumers by continuously improving the quality level.

### **5.2.3.3 Influence of Service and After-sales Service on User Satisfaction**

According to the results of this study, Service and after-sales service is one of the essential factors for improve user satisfaction, and Service and after-sales service has a statistically significant effect on user satisfaction in Huawei mobile phones. This finding highlights the importance of improving the quality of Service and after-sales service for improve user satisfaction, and the findings suggest a positive correlation between Service and after-sales service and user satisfaction, echoing recent literature, Researchers have underscored the significance of service quality in customer acquisition and retention, as well as in fostering positive word-of-mouth regarding specific services (Dwivedi, Papazafeiropoulou, Brinkman, & Lal, 2010; Ifie, Simintiras, Dwivedi, & Mavridou, 2018; Shareef, Kumar, Dwivedi, & Kumar, 2014). In many highly competitive industries where products have become increasingly homogeneous, companies are opting to differentiate themselves from competitors and enhance their competitive advantage by bundling products with services (Bijvank et al., 2010; Davies, 2004; Penttinen & Palmer, 2007). To improve user satisfaction, Huawei should reduce the customer churn rate by providing satisfactory service. Timely solve users' problems, make them feel valued, help to retain existing customers, and reduce the loss caused by poor service. High-quality after-sales service helps to maintain product quality and brand reputation. Timely solution of product quality problems and active response to user feedback can help to eliminate users' negative impression on the brand and maintain the brand reputation. Providing quick, professional services can help to solve the problems that users encounter during their use. Users' timely resolution of problems usually significantly increases their satisfaction.

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Quality customer support is the key to improving customer satisfaction. Users need to be able to easily get help and support, whether through online chat, phone, email or other channels. Providing efficient and convenient maintenance and warranty services is the key to users when faced with hardware or software problems. Timely repair and maintenance can help to improve user trust and satisfaction. Service quality is directly related to the user experience. Friendly, professional and efficient service leaves a positive impression on users and improve the overall satisfaction. Quality service and after-sales service can help to enhance the brand reputation. Users are more willing to trust brands that offer full-service support, which is critical to long-term satisfaction. To sum up, service and after-sales service are crucial to the long-term success of enterprises. Service and after-sales service are an indispensable part of mobile phone user satisfaction. By providing excellent service experience, Huawei can win the trust and loyalty of users, enhance the brand image, and improve the market competitiveness. In the highly competitive market, by providing high-quality services, enterprises can establish a good brand image, establish user loyalty, and achieve sustainable business development. Therefore, Huawei should consider the service and after-sales service as an integral part of the enterprise strategy, and provide users with a full range of support and care.

#### **5.2.3.4 Influence of Data Privacy and Protection on User Satisfaction**

The results showed that Data privacy and protection had a significant positive influence on user satisfaction of Huawei mobile phones. In support of findings suggesting a positive association between Data privacy and protection and user satisfaction, similar findings in recent literature, Providing explicit and accurate high-quality information is effective in reducing information gaps between service providers and recipients (Chiou & Droge, 2006). Moreover, various studies on mobile shopping have demonstrated the correlation between information quality and satisfaction. Specifically, research has explored the combined impact of information quality, service quality, and design quality. For instance, Chung et al (2015) found that information quality, service quality, and design quality influence confirmation, satisfaction, and the intention to continue using tourism websites. Gao et al (2017) confirmed that system quality and information quality positively impact satisfaction and "word of mouth" in virtual travel communities. Wen (2012) highlighted the effects of information, system, and

service quality on satisfaction, attitude, and the intent to purchase for travel websites. More recently, Chang et al (2018) validated that the system, information, and service quality of O2O commerce services elevate customer satisfaction levels, explained this relationship within an information system success model. Protecting personal data is a fundamental principle of respecting individual rights and privacy. In the information society, sensitive information of individuals is widely collected and used, so it is crucial to ensure the security and privacy of these information. The importance of data privacy and protection is not only related to individual rights, but also to the compliance and sustainable development of enterprises. Through the establishment of a sound data privacy and protection system, the protection of personal rights and interests and the maintenance of corporate reputation can be realized. Providing effective privacy protection measures to ensure that users' personal data is properly handled and protected is a key factor to improve user trust and satisfaction. Users prefer to choose products that focus on privacy. Users are very concerned about the security of their personal data. By adopting advanced data encryption technologies and security protocols, Huawei needs to improve the security of user data and reduce user concerns to increase satisfaction. Provide timely security updates and repair measures to remedy potential security vulnerabilities, protect users' data from malicious attacks, and help to improve users' confidence in product security and improve satisfaction. Respect users' authorization and choice, allow users to choose whether to share specific types of data, establish users' sense of data ownership, increase users' trust in the brand, and improve satisfaction. To sum up, Data privacy and protection is the key factor affecting the satisfaction of Huawei mobile phone users. In order to improve user satisfaction, effective data privacy and protection measures are the key factors to establish user trust and improve user satisfaction. The more users pay attention to the protection of their personal data, the more Huawei needs to take practical measures to ensure the privacy and security of the data, so as to win the trust and support of users.

### **5.2.3.5 Influence of User Experience on User Satisfaction**

The research results show that User experience has a significant influence on the user satisfaction of Huawei mobile phones. The findings suggest a positive relationship between User experience and user satisfaction, a finding that is consistent with some recent

literature. For example, Deng et al (2010) on User experience, satisfaction research report also said: User experience significantly influences the utilization, perceived value, and satisfaction with products and services. For example, Deng et al (2010) conducted empirical research to explore how user experience affects perceived value, satisfaction, and the intention for continued usage. Therefore, the measurement of user experience should involve a comprehensive analysis of what a user feels and thinks about the product or service. User experience is becoming increasingly important in the mobile sector, and has a profound impact on user satisfaction and brand loyalty. User experience is directly related to the word-of-mouth communication. Satisfied users are more likely to share their positive experiences through word of mouth, bringing more potential users to Huawei. Focusing on the user experience helps Huawei better understand the user needs and expectations. By constantly collecting user feedback, Huawei can make product innovations and improvements to ensure that the product is aligned with market demand. User experience is directly related to the brand image. Providing a first-class user experience helps build a positive image of the brand and make Huawei more popular and trusted. The easy-to-use and intuitive user interface makes it easier for users to use mobile phone functions and improve their satisfaction with Huawei phones. Clear ICONS, simple navigation, and intuitive design all help improve the user experience. High-speed, smooth operation and application response time can significantly improve the user experience. Users expect immediate feedback when using the Huawei phone, and rapid response speed helps to increase user satisfaction. Through carefully designed interactive elements and animation effects, improve the Huawei phone experience. Excellent interaction design helps to improve users' impression of Huawei phones and increase satisfaction. Providing excellent user experience is key to Huawei mobile user satisfaction. Only by continuously optimizing the design, improving the functions and paying attention to user needs, Huawei can win the trust and love of users and improve the overall user satisfaction. Overall, the user experience is critical to the success of Huawei phones. By focusing on the user experience, it helps to promote the Huawei to build a loyal user group and improve the brand value, so as to achieve better performance in the market. Therefore, improving the user experience has become an indispensable part of the development of the Huawei mobile phone

### 5.3 Implications

The results of this study provide valuable insights and practical implications for areas related to Huawei mobile phone user satisfaction. User satisfaction is directly related to the long-term success and sustainable development of Huawei. By focusing on and improving user satisfaction, enterprises can build a strong customer base, enhance their brand influence, and gain a competitive advantage in the market.

Firstly, a reasonable product price is very important, and the price is an important factor in determining the competitiveness of the product in the market. Moderate prices help products to stand out in the fierce market competition and attract more consumers. Product price is one of the main factors that consumers consider when making a purchase decision and improving user satisfaction. Consumers often weigh price against product quality, so reasonable prices help to increase the market penetration of products.

Secondly, good service and after-sales service are also key factors to ensure user satisfaction, and high-quality service and after-sales service directly affect user satisfaction. Fast, friendly, and professional services can improve the user experience and enhance users' trust in the brand, thus prompting users to be more inclined to buy products again.

Third, data privacy and protection also have a significant impact on user satisfaction. Data privacy and protection are the keys to building a trusting relationship between users and enterprises and service providers. When users believe that their data is properly protected, they are more willing to buy the product, and guaranteed data privacy and protection are also key to user satisfaction.

Moreover, the results show that user experience has a profound impact on user satisfaction, and excellent user experience is directly related to user satisfaction. When users experience a smooth, intuitive, and enjoyable experience with their phone, they are more likely to have positive reviews of the product and brand, which ultimately increases user satisfaction.

In summary, Huawei should focus on product price, service and after-sales service, data privacy and protection, and user experience, these key areas to help Huawei phones improve satisfaction.

## 5.4 Recommendations

Based on the study results and conclusions drawn, the following are some suggestions for Huawei phones to improve user satisfaction:

1. In response to the highly competitive market environment, Huawei should consider adjusting its product pricing strategy based on market demand and competitive conditions. This adjustment should aim to maintain competitiveness while enhancing the value proposition of its products. The company can achieve this by diversifying its product range across different price points to cater to varying user preferences. Implementing regular promotional activities or package discounts can further enhance users' perception of cost-effectiveness.

2. Huawei should prioritize regular software updates to address feature enhancements, bug fixes, and security improvements. These updates should be informed by user feedback and market research to promptly address software vulnerabilities and deliver stable and efficient system updates. Additionally, the company should expand its technical support channels to provide timely and efficient customer service. This can include offering multi-channel customer service options such as online chat and hotlines, ensuring users receive prompt assistance. Strengthening after-sales services, including efficient maintenance and replacement services, will also foster user trust and satisfaction. Establishing after-sales service centers in various countries and extending product warranty periods can further enhance customer confidence.

3. Huawei should prioritize optimizing user experience by designing intuitive and user-friendly interfaces. Providing personalized setting options allows users to customize their phone functions according to their preferences, enhancing overall satisfaction. Simplified user manuals and video tutorials can facilitate better usage, particularly for older users. Continuous user research and feedback mechanisms should be established to understand evolving user needs and preferences, enabling timely adjustments to product and service strategies. Encouraging user feedback and sharing experiences can foster a collaborative environment for continuous product improvement.

4. Strengthening privacy policies and ensuring transparency in data collection, usage, and protection is essential to building user trust. Huawei should review and enhance its privacy policies to clearly communicate how users' personal information is collected, used, and

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safeguarded. Providing users with greater control over their privacy settings empowers them to manage their personal information effectively, further enhancing trust and satisfaction.

### **5.5 Limitation and Future Research**

The study primarily focuses on mobile phone users in China, limiting its ability to fully represent the global user base of Huawei mobile phones. Therefore, there are limitations in generalizing the findings to the broader global user population. Additionally, the study's data collection period may have been constrained, potentially impacting the timeliness of the research results amid the rapidly evolving technological and market landscape. For future research directions, it is imperative to broaden the scope of study beyond the Chinese population to encompass users from diverse geographical regions and cultural backgrounds. This would facilitate a more comprehensive understanding of user satisfaction with Huawei mobile phones on a global scale. Additionally, exploring the impact of emerging technologies such as augmented reality, artificial intelligence, and 5G on user satisfaction could provide valuable insights into evolving user preferences and behaviors. Furthermore, conducting cross-cultural comparative studies would elucidate variations in user satisfaction across different cultural contexts, enabling the development of targeted localization strategies. Moreover, investigating user expectations and feedback in specific aspects, such as design aesthetics, software features, and after-sales services, could offer nuanced insights for product improvement.

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## APPENDIX A

### Questionnaire

#### Questionnaire

**Subject:** Antecedents of User Satisfaction with Huawei Mobile Phones

The main purpose of this questionnaire is to study the impact of product price, product quality, service and after-sales service, data privacy and protection, user experience, and user satisfaction on Huawei mobile phones.

The questionnaire was part of an academic study for a master thesis on satisfaction of mobile phone users. The questionnaire is designed using a convenient sampling method, and the collected data will be statistically analyzed using the appropriate techniques and software. Ensure the confidentiality of the information provided by the respondents and do not negatively affect the respondents by their participation in the study. I sincerely appreciate your valuable cooperation in this study, and your contribution is of great significance to our investigation. Thank you for providing me with the necessary data and insights. Thank you very much.

Miss. Miao Du

Program: Master of Business Administration in Industrial Business Administration  
(International Program) KMITL Business School

### Part 1: Demographic Profile

Please indicate your demographic information by checking  in the appropriate box () that best represents your current situation.

#### 1. Gender:

- Male  Female

#### 2. Age:

- Under 18 years old  18-25 years old  
 26-35 years old  36-45 years old  
 46-60 years old  60 years old or older

#### 3. Education

- High School or lower  Vocational School  
 Bachelor's degree  Master's degree  
 Doctoral degree

#### 4. Monthly income

- 2,000 yuan or below  2,001-4,000yuan  
 4,001-6,000 yuan  6,001-8,000yuan  
 8,001-10,000 yuan  10,001-15,000 yuan  
 Above 15,000 yuan

#### 5. Nationality

- Chinese  Others (please identify.....)

### Part 2: Factors influencing Huawei mobile phones user satisfaction and user satisfaction level.

Please complete the questionnaire honestly based on your genuine thoughts and opinions. Indicate your level of agreement by marking a check (✓) in the corresponding column. Please provide responses for all the questions to ensure completion of the questionnaire. The options provided represent the degree to which you agree with your actual experiences and attitudes, using a scale of 1 to 5, with 1 indicating "strongly disagree," 2 indicating "disagree," 3 indicating "neutral," 4 indicating "agree," and 5 indicating "strongly agree."

Variable	Opinion Level				
	1	2	3	4	5
<b>Product quality</b>					
Huawei phones are reliable and easy to use.					
The build and durability of my Huawei phone meet my expectations.					
I believe the features and specifications of my Huawei phone reflect a high level of quality.					
The materials used in the construction of my Huawei phone seem of high quality.					
I find the performance of my Huawei phone to be of excellent quality.					
<b>Price</b>					
Huawei has a wide range of mobile phones, with different prices available for users to choose from.					
The price of Huawei's phones, along with the product itself, makes me feel that they offer great value for money.					

Variable	Opinion Level				
	1	2	3	4	5
The repair cost of Huawei phones is very low.					
The pricing of Huawei phones is reasonable considering the features and performance.					
I believe Huawei phones provide good value for money.					
<b>Data privacy and protection</b>					
Using a Huawei phone gives me a sense of security about the protection of my personal information.					
I believe Huawei phones have an advantage in safeguarding user privacy compared to other brands.					
I feel confident that Huawei phones prioritize and ensure the privacy of user data.					
I trust that using Huawei phones is generally safe in terms of data privacy.					
Compared to other smartphone brands, I believe Huawei phones are more secure in protecting user information.					

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Variable	Opinion Level				
	1	2	3	4	5
<b>Service and after-sales service</b>					
The after-sales support provided by Huawei for their mobile phones is excellent.					
The customer service during the purchase of Huawei mobile phones is very good.					
The purchasing experience for Huawei phones is comfortable and enjoyable.					
The efficiency of Huawei's after-sales service for mobile phones is notably high.					
Huawei phones have a convenient network of service centers for after-sales support.					
<b>User experience</b>					
Using features and functions on my Huawei phone is intuitive and user-friendly.					
The camera quality on my Huawei phone meets or exceeds my expectations.					
I find the design and aesthetics of my Huawei phone appealing.					

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Variable	Opinion Level				
	1	2	3	4	5
My Huawei phone performs well in terms of speed and responsiveness.					
My experience with using my Huawei phone has been positive.					
<b>User satisfaction</b>					
I am very satisfied with my Huawei phone.					
The Huawei phone lived up to my expectations					
I would recommend Huawei phones to others					
I will always buy Huawei phones.					
I intend to continue using Huawei phones in the future.					

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