The Impact of IoT Product Sales on Customer Satisfaction in Xiaomi Corporation

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This Independent Study has been Approved as a Partial Fulfillment of the Requirements for the Degree of Master of Business Administration

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Title: The Impact of IoT Product Sales on Customer Satisfaction in Xiaomi Corporation

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ABSTRACT

This study examined the impact of IoT product sales on customer satisfaction, focusing on Xiaomi Corporation's IoT offerings. This study adopted a quantitative research method.The primary objective of this study was to examine the impact of Xiaomi's IoT product sales price, after-sales，service，technological advancement on customer satisfaction. A total of 320 questionnaires were distributed, with 300 valid responses collected, yielding an effective recovery rate of 93.75%. Results indicate that sales price, after-sales service quality,and technological development of Xiaomi's IoT products all exert a significant positive influence on customer satisfaction. This demonstrates that reasonable pricing strategies, efficient after-sales service, and technological innovation are crucial factors in enhancing customer satisfaction. The findings provide theoretical foundations and practical references for enterprises in the smart home industry regarding the formulation of IoT product marketing strategies, service optimisation, and technological upgrades.

Keywords: product pricing, after-sales service, technological advancement, IoT product.

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LI KAILUN

Declaration

I, LiKailun, hereby certify that the work embodied in this independent study entitled "The Impact of IoT Product Sales on Customer Satisfaction in Xiaomi Corporation" is result of original research and has not been submitted for a higher degree to any other university or institution.

(Li Kailun)
November 6,2025

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Chapter 1 Introduction

1.1 Background of the Study

The global economy is undergoing a digital transformation, with 'digitalisation' becoming pivotal to the survival and development of intelligent manufacturing enterprises. Chinese smart manufacturing companies, exemplified by Xiaomi Corporation, are actively participating in the new wave of global division of labour, creating and capitalising on international entrepreneurial opportunities to emerge as industry leaders (Zhang,2021). With the implementation of information technologies such as 5G, the Internet of Things, and artificial intelligence, the smart home industry is advancing into a phase empowered by 5G+IoT. Interconnectivity between devices has garnered significant attention, with whole-home intelligence increasingly prioritised by enterprises. Home products are becoming more intelligent and diverse in category, prompting companies to establish smart home ecosystems to support comprehensive device integration into platform ecosystems. China has strongly supported the smart home sector, with initiatives to promote AI adoption in this field dating back to 2015. In December 2021, the State Council's "14th Five-Year Plan for Digital Economy Development" explicitly called for guiding the interoperability of smart home products and fostering intelligent interaction between home appliances and the living environment. According to iResearch's "2023 China Smart Home (AIoH) Development White Paper",The development of China's smart home industry has entered its third phase, focusing on personalised user requirements to achieve deep interaction between products and users (Fan,2025). Today, Xiaomi Corporation is not only the world's largest consumer IoT platform but is also venturing into emerging fields such as smart vehicles, leading the entire industry into an era of artificial intelligence and universal connectivity. This signifies Xiaomi's continuous expansion into new business domains while maintaining innovation and keeping pace with technological advancement. Furthermore, it has introduced the Xiaomi Ecosystem Chain (a core strategic initiative of Xiaomi Corporation), which integrates diverse resources and capabilities to establish an extensive and complex collaborative network, enabling the co-creation of innovation and value (Meng, 2024). From 2017 to 2022, China's smart home market size grew from RMB 325.47 billion to RMB 651.56 billion, exhibiting a consistent annual increase. However, in relative

terms, the growth rate of China's smart home market plummeted in 2020 due to the dual pressures of the major public health event and upstream supply shortages. Subsequently, with the gradual economic recovery, the growth rate of China's smart home market began to rebound. Moreover, the traditional home appliance sector continues to expand into the smart home industry, while internet giants have also entered this domain. For instance, Xiaomi launched its "Mi Home" smart home brand in 2016, covering users' daily living, residential, and mobility needs; Haier Smart Home introduced its first scenario-based brand "Three Wing Bird" in 2020.Providing users with comprehensive smart home solutions. The prevalence of smart home products is steadily increasing, encompassing multiple segments including smart appliances, smart security systems, smart speakers, and smart cameras.（Fan，2025).

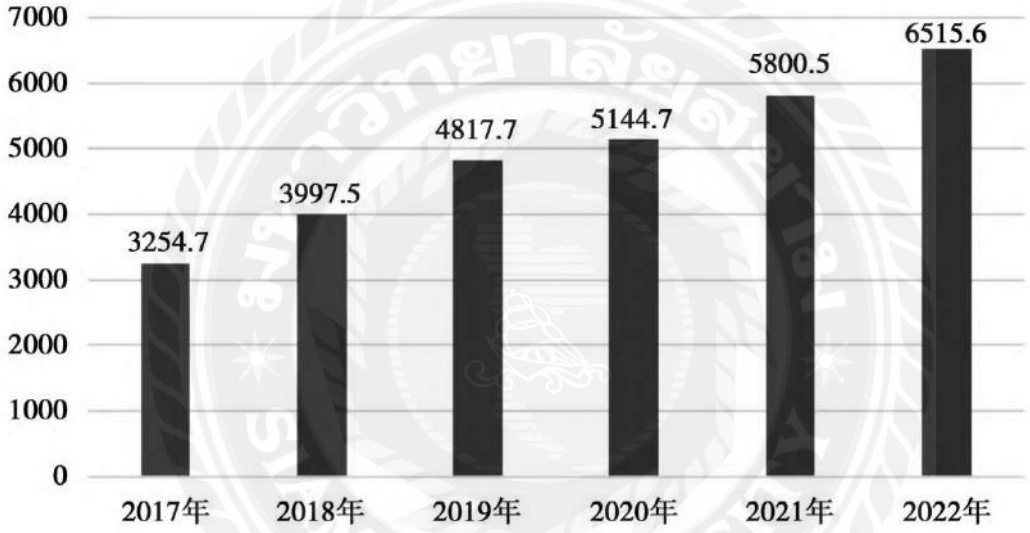


Figure 1.1: Market Size of China's Smart Home Industry, 2017–2022 (Unit: RMB billion)

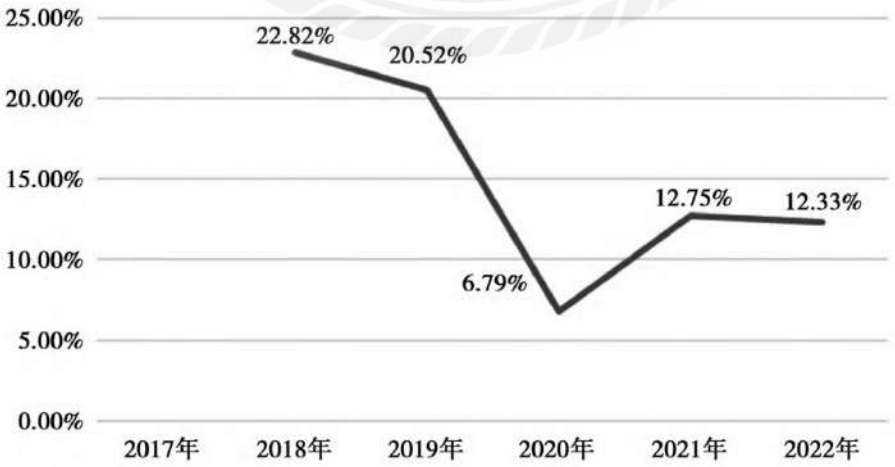


Figure 1.2: Growth Rate of China's Smart Home Market Size, 2017–2022

Fan and Liu (2025) analyzed the current situation of independent innovation at Xiaomi.At the MIDC 2017 Xiaomi IoT Developer Conference, Lei Jun announced that Xiaomi IoT had become the world's largest smart hardware IoT platform. To compete in the growing IoT market, the concept of AI+IoT=AIoT was introduced in 2018, representing the fusion of artificial intelligence and the Internet of Things – the intelligent interconnection of all things. To embrace the AIoT era, Xiaomi launched its "Smartphone + AIoT" dual-engine strategy in 2019. Collaborating with Baidu to explore AIoT, Xiaomi leveraged AI for data utilisation and mining, while Baidu utilised IoT for scenario-based implementation.

Xu (2025) analyzed the synergy effects in Xiaomi's IoT business ecosystem evolution.In 2018, Xiaomi proposed the concept of AI + IoT = AIoT, signifying the intelligent interconnection of all things. In 2019, Xiaomi implemented its "Smartphone + AIoT" dual-engine strategy, integrating AIoT with smartphones at its core. By fully opening its IoT platform to third-party partners, Xiaomi achieved IoT scenario implementation and interconnected product control, thereby driving comprehensive development across smart home, wearables, and mobility sectors.In 2020, the strategy was upgraded to "Smartphone × AIoT", placing greater emphasis on seamless connectivity across all scenarios. Building upon this foundation, Xiaomi implemented tiered product management. Through the reclassification and planning of ecosystem products, Xiaomi achieved enhanced resource integration, structural optimisation, and efficiency gains, thereby sustaining the continuous development of its entire ecosystem. In 2023, Xiaomi unveiled its "Human-Vehicle-Home Full Ecosystem" strategy, incorporating smart vehicles into its portfolio to achieve seamless connectivity and intelligent interaction across three major scenarios. The objective is to create a comprehensive smart living experience, close the loop of the Xiaomi ecosystem, and establish a complete Xiaomi ecosystem.

1.2 Question of the Study

1) Does the sales price of Xiaomi's IoT products have a positive influence on customer satisfaction?

2) Does the after-sales service for Xiaomi's IoT products have a positive influence on customer satisfaction?

3) Does the technological development of Xiaomi Corporation's IoT impacts have a positive influence on customer satisfaction?

1.3 Objectives of the Study

1) To investigate the influence of sales price on customer satisfaction

2) To investigate the influence of after-sales service on customer satisfaction

3) To investigate the influence of IoT technological development on customer satisfaction

1.4 Scope of the Study

This study focused on customer satisfaction with Xiaomi Corporation, examining products manufactured using the company's Internet of Things technology. It comprehensively assessed customer satisfaction . Drawing upon customer satisfaction theory, this study provides recommendations for enhancing customer satisfaction. Employing the quantitative research method, a total of 320 questionnaires were distributed, with 300 valid responses collected, achieving a response rate of 93.75%.

1.5 Significance of the Study

1) Practical significance:

Xiaomi Corporation has long positioned "high cost-performance ratio" as its core competitive advantage. Investigating the impact of IoT product pricing on customer satisfaction assists enterprises in striking a balance between profit margins and customer value perception. This enables the formulation of more scientifically grounded and targeted sales strategy, thereby enhancing competitiveness and customer loyalty across diverse market segments. As IoT products grow increasingly sophisticated and their ecosystem expands, the quality of after-sales service has become a critical factor influencing user experience and satisfaction. By examining the relationship between after-sales service and customer satisfaction, companies can identify shortcomings within their service systems. This enables them to improve response times, optimise service processes, and enhance technical support capabilities, thereby elevating brand image and consumer trust.A thorough analysis of the

combined impact of factors such as pricing, service, and technological innovation on customer satisfaction enables enterprises to gain a more systematic understanding of the mechanisms underpinning customer satisfaction. Building upon this foundation, Xiaomi can continuously enhance customer loyalty and repurchase rates by optimising product pricing strategies, refining its after-sales service system, and accelerating technological innovation. This approach fosters positive word-of-mouth dissemination, propelling the company towards long-term, stable, and sustainable development. As a leading enterprise within China's IoT sector, Xiaomi's research findings hold significant implications not only for its own operations but also offer valuable insights for other IoT and smart home companies. This contributes to the industry's collective advancement in technological innovation and customer satisfaction management.Well-being has emerged as a core concept in modern development. Investigating the impact of smart home products on consumers' subjective well-being aligns closely with the national goal of enhancing people's wellbeing outlined in the 14th Five-Year Plan, while also providing scientific grounds for formulating relevant policies.

2) Theoretical significance:

Existing customer satisfaction research has primarily focused on traditional manufacturing and internet service sectors, whilst systematic studies concerning Internet of Things (IoT) products remain relatively scarce. This study examines Xiaomi Corporation, exploring the impact of three dimensions — sales price, after-sales service, and technological development — on customer satisfaction. This contributes to expanding the application scope of customer satisfaction theory within the smart IoT industry, providing new analytical perspectives and theoretical model support for related academic research. Traditional customer satisfaction models (such as the SERVQUAL model and the Expectation-Confirmation model) predominantly emphasise service quality and perceived customer value. However, within IoT products, technological innovation levels and intelligent connectivity experiences are increasingly becoming critical factors influencing customer satisfaction. Incorporating "IoT technological development" into the research framework further refines the constituent dimensions and influencing mechanisms of customer satisfaction, providing new theoretical foundations for studying consumer behaviour characteristics within emerging technology industries. Xiaomi Corporation, renowned for its "high cost-performance ratio" and "technology ecosystem," offers a compelling case study for examining the interactive relationship between price perception, service quality, and technological innovation. This research explores the synergistic and balancing effects of these three elements on customer satisfaction from a theoretical

perspective. Such an investigation not only deepens our understanding of marketing and consumer behaviour theory but also contributes to the localisation and contextualisation of these theoretical frameworks.Moreover, the findings of this study may form an analytical framework centred on customer satisfaction, providing a theoretical foundation for further academic research into "customer relationship management within intelligent product ecosystems". This contributes to advancing the theoretical framework of marketing management within the Internet of Things domain.

1.6 Definition of Key Terms

Customer satisfaction refers to the comprehensive evaluation formed when customers compare their actual experience with their anticipated standards after receiving a product or service. It encompasses not only customers' rational judgements regarding the functionality, quality, pricing, and after-sales support of the product or service, but also the emotional experiences generated during the consumption process, such as feelings of pleasure, trust, and security. Consequently, this study defines customer satisfaction as the holistic expression of a customer's overall evaluation and subjective perception following their experience with an enterprise's products or services.

After-sales service refers to the various forms of support and assistance provided by enterprises to customers following product sales, ensuring smooth usage and enhancing the customer experience. These primarily encompass the timeliness of issue resolution, the professionalism and attitude of service personnel, the effectiveness of repairs and technical support, the responsiveness to enquiries and feedback, the comprehensiveness of warranty policies, and the transparency of the service process.

Technological development refers to the continuous technical improvements and innovation activities undertaken by enterprises in their products or services. These encompass not only the updating and performance enhancement of hardware equipment, but also the upgrading of software systems, functional optimisation, and refinement of technical processes.

Sales price refers to the price levels and associated strategies established by enterprises during the transaction of products or services. This encompasses not only the listed price itself but also price incentives such as discounts, promotions, instalment plans, and preferential packages.

Chapter 2 Literature Review

2.1 Introduction

This chapter comprises five sections: Xiaomi Corporation, Sales Price, Technological Development, After-Sales Service, and Customer Satisfaction.

2.2 Literature review

2.2.1 Xiaomi Corporation

Wang (2022) contended that as an increasing number of companies—including Apple, Vanke, Dell, and Xiaomi—have adopted asset-light operational models and achieved notable success, this business approach has garnered greater attention from enterprises. Xiaomi Corporation, established merely two years prior, achieved operating revenues of one billion US dollars. Within a further two years, its revenues surpassed ten billion US dollars, securing the top position in mainland China's smartphone sales rankings. In 2017, Xiaomi claimed the top global market share in the consumer IoT sector, achieving total operating revenue of 100 billion yuan. Subsequently, in 2018, the company listed on the Hong Kong Stock Exchange – a remarkable achievement within just eight years of its founding. This rapid success stems from the implementation of an asset-light operational model coupled with complementary financial strategies. Consequently, Xiaomi's success offers invaluable lessons for peers within the industry. Outsourcing enabled stringent product cost control, ensuring high value for money while attracting vast user bases. This rapidly expanded Xiaomi's market share, bolstering its core competitiveness. In today's increasingly homogenised smartphone market, the asset-light operational model acts as a catalyst, propelling Xiaomi's forward momentum.

Xu (2022) contended that Xiaomi Corporation emerged from the e-commerce sector, navigating a challenging entrepreneurial journey to its present position. The economic value it has generated has established it as another commercial exemplar following internet giants such as Google and Amazon. This success is attributed to its keen sensitivity to the opportunities of the era. During the internet entrepreneurship boom, it maintained a sharp instinct to seize favourable opportunities. While continually adapting to external environmental shifts, Xiaomi has also steadily enhanced its resource integration capabilities. Simultaneously, it has proactively developed strategies aligned with its developmental trajectory. Benefiting from its diversified investment strategy, Xiaomi has now solidified the core competitiveness of

its mobile phone business while actively expanding into multiple investment ventures, achieving considerable revenue success. This approach represents a mainstream survival strategy for enterprises in today's market economy, actively exploring a path that maximises its own interests. Therefore, given the successful case of Xiaomi Corporation's diversified investment strategy, this study examines Xiaomi's diversified investment strategy, which holds significant demonstrative value for research into the financial performance of other listed companies.

Bi (2023) contended that relevant authorities conduct inspections and oversight of the smart home industry in accordance with regulatory frameworks. However, the absence of unified industry standards for smart home products presents numerous challenges. For instance, smart home systems require platforms to enable interoperability, yet major manufacturers seek to establish proprietary platforms to bolster their brands. This necessitates multi-platform compatibility among smart home products, a capability achieved by only a minority of enterprises. The prevailing lack of compatibility consequently diminishes consumer experience and satisfaction. This diminishes consumer experience and satisfaction.

Wang (2024) contended that in recent years, Xiaomi's profit model, built upon its ecosystem chain system, has played a pioneering role within the industry. However, numerous enterprises have pursued the development of their own ecosystem product systems blindly, such as LeEco and Hainan Airlines, thereby assuming excessive risks and inflicting damage upon their companies. Many businesses lack a comprehensive understanding of themselves and a reasonable positioning, relying solely on blind imitation, which cannot sustain their presence in the market long-term. By contrast, Xiaomi's profit model has gained market recognition.

Wang (2022) contended that Xiaomi Corporation has managed to break through the competitive smartphone market within a mere few years. Leveraging its distinctive operational model and immense developmental potential, the company has now achieved significant accomplishments across multiple domains including smartphones, the Internet of Things, and internet services. Its trajectory itself possesses considerable case study representativeness.

Song (2025) contended that alongside the remarkable success of Xiaomi's ecosystem chain, competitors have seized development opportunities to rapidly expand their footprint in this domain, causing Xiaomi's ecosystem chain to lose its former dominant position. Amidst evolving external conditions, Xiaomi faces a series of challenges: critical issues such as inadequate offline channel development and lack of core technologies; the emergence of homogeneous competitors within the industry;

quality control problems at Xiaomi ecosystem enterprises increasing the company's outsourcing liabilities and associated risks; and mounting financial pressures stemming from rapid market expansion.

Zhang (2025) contended that it is precisely the vigorous development of technologies such as the Internet of Things, communications, and artificial intelligence within their respective domains, coupled with the synergistic effects arising from their mutual permeation and integration, that collectively propel the rapid advancement of the smart ecosystem—a segmented market capable of achieving comprehensive coverage through targeted implementation. In an ideal state, the smart ecosystem constitutes a highly complex and exceptionally synergistic system architecture. Within this framework, the Internet of Things serves as the foundational physical connectivity layer, responsible for integrating diverse physical devices into networks. It constructs an extensive, interconnected network of devices, enabling data collection and transmission, thereby providing the system's vital data "source". Communication technology, leveraging its efficient and stable network transmission capabilities, ensures the accurate and rapid flow of vast data volumes between different devices and nodes. This safeguards the unimpeded flow of information throughout the ecosystem's "nerve pathways". Artificial intelligence, drawing upon its formidable data processing and analytical capabilities, performs deep mining, knowledge extraction, and intelligent decision-making on the vast data aggregated from IoT endpoints. This enables the entire intelligent ecosystem to serve human activities across diverse scenarios with greater "intuitive responsiveness," achieving flexible adaptation to complex human-machine interaction environments and varied demands.

Zhang (2025) posited that whilst intelligent ecosystems harbour vast developmental prospects and substantial commercial value, for enterprises to distinguish themselves and secure a dominant position within this emerging market driven by new technologies, the key lies in precisely timing participation across all dimensions and scientifically selecting engagement approaches aligned with their resources and capabilities. Throughout this process, enterprises must conduct in-depth market analysis, organically integrating their core competencies with the historic opportunities presented by technological transformation. This enables the formulation of viable and effective development strategies, positioning them as industry leaders.

Wang (2024) contended that Xiaomi's profit model, built upon its ecosystem chain system, has played a pioneering role within the industry. However, numerous enterprises have pursued the development of their own ecosystem product systems

without due consideration, such as LeEco and Hainan Airlines, thereby assuming excessive risks and inflicting damage upon their companies. Many businesses lack a comprehensive understanding of their own capabilities and a rational positioning, relying solely on blind imitation, which cannot sustain their presence in the market over the long term.

2.2.2 Sales Price

Research has shown that price discounts can improve customer satisfaction in the short term, as customers feel they receive higher value(Lichtenstein et al., 1993). However, this increase in satisfaction may be temporary. Kumar and Shah (2004) stated, its long-term effects may be influenced by other factors, such as service quality and subsequent support.

High-frequency discounts may weaken a brand's high-end image, leading to increased sensitivity of customers to price discounts and affecting overall service satisfaction (Campbell & Diamond ,1990). Customers may perceive discounts as a sales strategy, affecting their evaluation of the company's service quality.

Bitner (1990) mentioned in the article that price discounts and the quality of service determine customer satisfaction. Research has found that even with price discounts if service quality is poor, overall customer satisfaction may still be low. Zeithaml et al. (1996) mentioned this in their article. The impact of service reliability, responsiveness, and customer care on customer satisfaction may exceed price factors.

Oliver (1999) believed that combining discounts and service quality can significantly improve customer satisfaction. Customer satisfaction and loyalty often increase when a company provides high-quality services while implementing appropriate discount strategies.

Customer expectations have a significant impact on their satisfaction. Research suggests that discounts may alter customers' expectations of company value (Grewal et al.,1998). If the discount fails to meet customer expectations, it may harm satisfaction.

Bolton & Drew (1991) believed that sustained price discounts may make customers accustomed to low prices in the long run, making it difficult for them to accept normal prices in the future. This may affect their long-term satisfaction with the company's brand.

Different types of discounts (such as percentage discounts, cash discounts, and buy one, get one free) may impact customer perception and satisfaction differently, as Narasimhan et al. (2006) mentioned in the article. Research suggests selecting appropriate discount types based on customers' purchasing habits and psychological expectations to maximize their satisfaction.

Homburg et al. (2005) believed that in the decoration industry, price discounts are often combined with factors such as service quality, design capabilities, and on-time project delivery, which affect overall customer satisfaction. Successful cases in the industry demonstrate that discount strategies should complement high-quality service and effective customer communication to achieve optimal customer satisfaction.

2.2.3 Technological Development

Raj and Prakash (2018) contended that artificial intelligence (AI) may be integrated into smart devices, enabling individuals and objects to interact appropriately within multi-user and social environments, thereby enhancing information-sharing capabilities.

Nozari et al. (2021) contended that the Internet of Things, by gathering real-time information from devices and facilitating interactions with the environment, introduces novel transformations. This brings fresh solutions to corporate marketing, such as social networks and various mobile applications acting as "social sensors" by expressing human emotions. Furthermore, businesses design marketing campaigns based on data generated from people's opinions and desires, thereby reducing corporate marketing costs.

Zhao (2025) indicated that according to the 2024 Global Smart Home Market Insights Report, the global smart home market size reached US$101.07 billion in 2023. It is projected to grow from US$121.59 billion in 2024 to US$633.20 billion by 2032, with a compound annual growth rate (CAGR) of 22.9% during the forecast period. In recent years, the Chinese smart home market has experienced remarkably rapid development.

Marikyan et al. (2019) contended that smart homes can deliver benefits to users in areas such as health, the environment, economics and psychological wellbeing. The primary barriers to consumer adoption of smart home technology include technical,

ethical and legal issues, alongside cognitive gaps and psychological resistance among consumers.

Moore (1993) was the first to propose that contemporary corporate competition no longer resembles the isolated battles for market share of the past. Instead, enterprises now collaborate across industries to jointly deliver novel products that fulfil customer requirements. The relationships between firms resemble ecological chains in biology, where participants simultaneously influence the chain itself, thereby engaging in market competition through such interconnected systems.

Zhang (2025) noted that tracing the developmental trajectory of IoT technology, from Professor Ashton's mention of the Internet of Things within his 1999 research on RFID (Radio Frequency Identification) at MIT's Auto-ID Centre to the present day, its concepts, principles and applications have undergone sustained and in-depth academic exploration for many years, achieving remarkable accomplishments across multiple domains. The Internet of Things aims to establish a vast network system underpinned by the internet, enabling the interconnection of all independently addressable physical objects. This system dismantles the information silos between traditional physical devices, facilitating efficient information flow and collaborative sharing.

With the growing demand for enhanced domestic living in the new era and driven by rapidly advancing Internet of Things (IoT) technology, smart home products and their associated industry have emerged. In this new age, technologically sophisticated smart home products are progressively replacing traditional furniture and appliances, becoming the primary trend in home development. The smart home sector represents a core application area for IoT technology and a significant developmental direction, with the state continuously introducing policies to support its growth. Following its inclusion in the 2016 Government Work Report, the Ministry of Industry and Information Technology issued a document in 2017 stating that the government would continue to strengthen policy support for smart home products and encourage relevant enterprises to innovate continuously, thereby fostering the vigorous development of China's smart home industry. In the 2021 Government Work Report, Premier Li Keqiang emphasised that efforts would continue this year to steadily increase bulk consumption in the home appliance sector.

Xu. (2022) reported a naturally wood-based triboelectric self-powered sensor (WTSS) for constructing smart home systems. Integrated with domestic fixtures, it finds application across three real-time human-machine interfaces: smart home control systems, intelligent access control systems, and smart floor monitoring

systems. This solution offers advantages including low cost, user-friendly operation, and environmental sustainability.

Sun (2020) contended that smart home technology is progressively transforming and influencing people's daily lives, providing users with efficient, convenient and economical modern domestic environments. Simultaneously, smart homes represent an IoT sector vigorously promoted by national policy. As this technology permeates the lives of the general populace, the industry's healthy development directly impacts countless households, presenting substantial market opportunities and commercial prospects awaiting further exploration by high-tech enterprises.

Mäkinen (2012) proposed a definition of the commercial ecosystem, positing it as a collective of enterprises that provide customers with products offering high value for money. As research into commercial ecosystems deepened, the concept of the commercial ecosystem chain emerged.

Clarysse et al. (2014) found in their research that ecological chains present new opportunities for enterprise development, whereby competitive relationships between enterprises can be transformed into cooperative and mutually beneficial relationships within such chains.

Yang(2021) found that artificial intelligence products can empower consumers through interconnectedness, enabling them to extend their own capabilities and acquire abilities previously beyond their reach. For instance, consumers utilising their mobile phones to control smart home appliances or schedule timers for such devices achieve an extension of action that transcends temporal and spatial constraints, thereby enhancing their positive perceptions of AI products. Interconnected collaboration between products effectively enhances service capabilities, delivering superior user experiences while simultaneously expanding the boundaries of users' self-perception. Operating products located thousands of miles away via mobile phones has become routine practice.

2.2.4 After-Sales Service

Marikyan et al. (2019) contended that smart homes can deliver benefits to users in areas such as health, the environment, economics and psychological wellbeing. The primary barriers to consumer adoption of smart home technology include technical, ethical and legal issues, alongside cognitive gaps and psychological resistance among consumers.

Bi (2023) contended that research into smart home marketing strategies should not only focus on the products themselves and their energy consumption levels, but also prioritise how customer needs can drive market sales. Building upon this, consideration should be given to potential issues arising during the development of smart home products, such as security, reliability, and stability. Moreover, to ensure consumers maintain long-term usage and trust in smart home products, manufacturers should continually enhance product intelligence and consistently provide integrated smart home solutions. This approach will bolster consumers' enduring confidence in smart home technology.

Rijsdijk and Hultink (2009) proposed that product intelligence encompasses dimensions such as autonomy, adaptability, collaboration, and interactivity. Artificial intelligence products can interact with other intelligent devices and humans, flexibly adapt to different contexts, and make autonomous decisions.

Porter and Heppelmann (2015) categorised the core elements of IoT-enabled products three types: physical components, interconnected components, and intelligent components. They noted that, compared to traditional products, smart products are those that introduce interconnected and intelligent functionalities onto the existing physical composition of conventional products.

2.2.5 Customer Satisfaction

Park (2007) found that online customer reviews reflect consumers' perceptions, evaluations and opinions, serving dual roles as both information providers and recommenders. However, when a large volume of reviews is available, conflict arises between these two roles. He examined how the trade-off between these roles influences consumer engagement levels and subsequent purchase intentions.

Chou (2013) examined the impact of review configurations on consumers' transactional decisions. Furthermore, the researchers analysed whether purchasing decisions were influenced by price levels and personality traits. Findings indicate that only when customers' evaluation levels are high does this exert a positive effect on their purchase intentions.

Yang (2022) found that in smart home interlinked scenarios, consumers' offline experiences exert a positive influence on online purchasing behaviour, with perceived risk and perceived quality acting as mediating factors.

Yang (2019) indicated that customer perceptions are linked to customer experience. When consumers perceive threats to autonomy, this correlates with their counter-reaction tendencies and experiential perceptions, and is associated with

brands linked to choice and avoidance. Specifically, individuals with high self-esteem, when perceiving high autonomy threats, are more inclined to select brands associated with avoidance. Conversely, individuals with low self-esteem exhibit no discernible difference in their selection of brands linked to either choice or avoidance.

Wang (2014) conducted research on customer satisfaction, in which scholars analysed the influence relationship between customer perceptions and customer satisfaction. They concluded that customers' consumption perceptions directly impact satisfaction levels. These perceptions encompass quality perceptions, value perceptions, and perceptions of related factors such as the consumption environment and service attitude. These perceptual elements directly influence customer satisfaction.

Wang (2020) indicated that customer satisfaction and customer experience positively influence customers' willingness to pay a premium. In intelligent products, customer experience exerts a greater influence on customers' willingness to pay a premium than customer satisfaction. Within customer experience, customers' behavioural experience exerts a greater influence on their willingness to pay a premium than sensory experience and emotional experience.

Li (2021) noted that within the context of the Internet of Everything, products or services exert a direct influence on consumer behaviour, with external environmental factors such as technology and human-computer interaction directly impacting shifts in consumer conduct.

Guo (2018) indicated that service personnel's professionalism influences customer satisfaction. Given its intangible nature, customers find it difficult to accurately identify this risk perception factor stemming from a lack of specialised knowledge, leading to low satisfaction levels. Managers should enhance the quality of service personnel's work by providing customers with tangible evidence of service delivery. This reduces the difficulty of customer assessment, thereby improving satisfaction.

Chu (2018) contended that to gain customer recognition and enhance loyalty, businesses must ensure customers perceive value and satisfaction, thereby re-evaluating and improving service quality from the customer's perspective.

2.3 Xiaomi Corporation Overview

Xiaomi Group was established in April 2010 by seven co-founders including Lei Jun, with its headquarters located in Haidian District, Beijing, China. Since its inception, the company has remained steadfast in its mission to "enable everyone

around the world to enjoy the benefits of technology in their daily lives", dedicated to advancing the development of smart devices and intelligent living through technological innovation. After over a decade of growth, Xiaomi has evolved from its origins as a smartphone manufacturer into a global technology company centred on smartphones, smart hardware, and the Internet of Things (IoT) platform.In terms of business layout, Xiaomi's principal operations encompass smartphones, IoT and lifestyle products, internet services, and smart electric vehicles.

Among these, the smartphone business serves as the company's foundation and core entry point, while IoT and lifestyle products form the backbone of Xiaomi's extensive smart home ecosystem. Internet services constitute a vital pillar for building the company's long-term profitability. In recent years, Xiaomi has expanded into the smart electric vehicle sector, launching its (Human × Car × Home) strategy. This aims to create a complete smart living ecosystem through the interconnectedness of its three core intelligent terminals: smartphones, home appliances, and automobiles. By the end of 2024, Xiaomi's IoT platform had connected over 904.6 million devices (excluding smartphones, tablets, and laptops), with active users spanning more than 100 countries and regions worldwide.

The company has established regional headquarters in India, Southeast Asia, Europe, and elsewhere, developing mature localised production and service systems. This positions Xiaomi as one of China's most internationally influential technology brands.Xiaomi's strategic focus on smart home and IoT ecosystems represents the most emblematic aspect of its corporate strategy. Through the deep integration of smart hardware products with its IoT platform, the company has established a comprehensive intelligent ecosystem spanning multiple domains including home appliances, security systems, lighting, environmental control, entertainment, and wearable devices. Xiaomi's smart home products primarily centre around the "Mijia" brand, encompassing hundreds of intelligent devices including smart bulbs, sockets, cameras, door locks, air purifiers, robot vacuum cleaners, refrigerators, washing machines, and air conditioners. Users can achieve multi-device interconnected control via the "Mijia App" or utilise voice interaction through the "Xiao Ai" voice assistant, thereby creating an integrated smart scenario experience encompassing "person-device-home". Unlike traditional appliance manufacturers, Xiaomi's core strength lies in its platform-centric ecosystem approach. Rather than merely selling smart devices, the company positions its smartphones as control hubs, leveraging its IoT platform to interconnect diverse appliances and generate powerful network effects within its ecosystem.In developing its ecosystem, Xiaomi employs a dual-track

strategy of investing in ecosystem enterprises alongside developing proprietary products, building an open ecosystem through investment, incubation and collaboration. Since 2014, the number of Xiaomi ecosystem enterprises has exceeded 300, spanning smart hardware, home appliances, sensor modules, AI algorithms, health wearables and other domains.

These ecosystem enterprises have grown rapidly under Xiaomi's brand and platform support, enriching Xiaomi's product portfolio while enhancing its overall competitiveness in supply chain management, technological innovation, and market expansion. The smart home ecosystem, exemplified by Mi Home, has expanded continuously through this collaborative mechanism, thereby realising the strategic framework of "Xiaomi manufacturing + ecosystem co-creation".In terms of product and market strategy, Xiaomi has consistently adhered to its positioning of "high cost-performance". Through direct internet sales, lean supply chain management, and controlled R&D expenditure, Xiaomi is able to launch feature-rich, high-performance smart home products at lower costs. For instance, products such as the Mi Smart Door Lock, air purifiers, and robotic vacuum cleaners have garnered widespread acclaim in both domestic and international markets for their excellent user experience and affordable pricing. This "high quality + affordable pricing" strategy has not only enabled Xiaomi to rapidly build a substantial user base in the smart home sector but has also driven the swift expansion of its entire IoT ecosystem. The continuous growth in smart home users has led to exponential increases in the number of devices connected to the Xiaomi platform, which in turn enhances the platform's ecosystem value and user retention.Xiaomi's smart home ecosystem emphasises the concepts of "scenario-based experiences" and "whole-home intelligence". By integrating AI algorithms with IoT technology, Xiaomi achieves automated coordination across domestic scenarios. For instance, upon a user's return home, the smart door lock unlocks, hallway lights illuminate automatically, the air conditioning begins cooling or heating, curtains draw gently, and background music plays – all actions orchestrated autonomously by the system through sensors, smart gateways, and cloud-based algorithms. This scenario-based experience not only enhances user convenience but also demonstrates Xiaomi's innovative capabilities in smart scenario system integration and AI application.In its global market expansion, Xiaomi has accelerated the overseas deployment of its smart home business through a dual-pronged strategy of "globalisation and localisation".

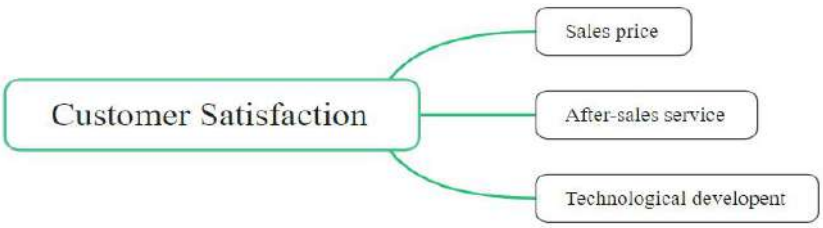
The company has established localised operational centres in countries including India, Indonesia, Thailand, Spain and Germany, implementing tailored

adaptations for each region's languages, service preferences and ecosystem partners. For instance, in the European market, Xiaomi introduced a smart home data security system compliant with local privacy regulations. In India, the company strengthened collaborations with domestic appliance manufacturers to jointly develop products meeting local consumer demands. This flexible localisation strategy enables Xiaomi to rapidly replicate its successful domestic model overseas, forming a global ecosystem footprint.Looking ahead, Xiaomi will continue to deepen its strategic focus across three key areas: "whole-home intelligence", "AI-driven smart living", and "open ecosystem collaboration". The company plans to further enhance the intelligence of its smart home systems through core technologies such as AI algorithms, voice recognition, visual recognition, and cloud-based control. Concurrently, Xiaomi will persistently refine its "human-vehicle-home" smart connectivity strategy, enabling seamless data sharing and scenario-based coordination between smartphones, home devices, and smart vehicles. For instance, when a user drives home, the vehicle system can pre-emptively activate the home's air conditioning and lighting; when the user departs, the home security system automatically enters alert mode. This cross-device intelligent ecosystem not only elevates user experience but also expands Xiaomi's potential footprint in future smart mobility and smart city domains.

2.4 Theoretical Framework

Based on the analysis and collation of extensive customer satisfaction research, Xiaomi Corporation's smart home interconnect customer satisfaction is influenced by sales price, after-sales service, and technological development, as shown in Figure 2.1.

Figure 2.1 Theoretical Framework



Chapter 3 Research Methodology

3.1 Research Design

This study examined customer satisfaction with Xiaomi Corporation's smart home connectivity products, aiming to explore the influence mechanisms of sales price, after-sales service, and technological development on overall customer satisfaction. Primary data were collected through questionnaire surveys and aralyged with quantitative analysis methods to empirically test the relationships between these influencing factors. This provides data support and theoretical basis for enterprises to refine service strategies and optimise user experience.

3.2 Questionnaire Design

This study aimed to investigate the mechanisms through which Xiaomi Corporation's Internet of Things (IoT) products influence customer satisfaction in terms of sales price, after-sales service, and technological development. To systematically gather authentic consumer perceptions and experiences, a structured questionnaire survey method was employed. Quantitative questions were designed to measure user attitudes, enabling an empirical analysis of the relationships between various factors and satisfaction levels. The questionnaire design adhered to principles of scientific rigour, specificity, and conciseness, ensuring logical coherence, clear language, and ease of comprehension while guaranteeing data quantifiability and statistical validity. The first section collects respondent demographics to understand sample characteristics, facilitating subsequent stratified statistical analysis and differential comparisons across groups. The second section examines sales price. investigating the impact of price competitiveness, perceived value for money, and promotional strategies on customer satisfaction. The third section addresse after-sales service , focusing on the role of service response speed, staff professionalism, and service convenience in shaping user experience. The fourth section examines technological development, including product functionality upgrades, system updates, device connectivity performance, and technological innovation capabilities, to investigate the role of technological factors in enhancing customer satisfaction. The final fifth section measures overall customer satisfaction, assessing users' satisfaction with the overall product experience and future purchase intent, serving as the dependent variable.

Table 3.1 Questionnaire Items

Variate	Measurement item	NO.
Sales Price	Do you consider the pricing of smart home products to be competitive?	Q1
	Do you feel the product's price is commensurate with its features?	Q2
	Is value for money a key factor in your decision to choose this product?	Q3
	Did the promotional activities or discount schemes for the product influence your purchasing decision?	Q4
	Would you be willing to pay a price slightly above average for this smart home product, as it offers value for money?	Q5
After-sales Service	Are you satisfied with the responsiveness of our after-sales service?	Q6
	Do you feel that the attitude and professionalism of our after-sales service staff meet your expectations?	Q7
	Is the process for product repair, replacement or return convenient?	Q8
	Are the after-sales service channels provided (online customer service, physical	Q9

	stores, mobile apps, etc.) convenient and user-friendly?	
	Are you satisfied with your overall experience of our after-sales service?	Q10
Technological Development	Do the technological updates and functional upgrades of smart home products meet your requirements?	Q11
	Has the firmware or app update significantly improved your user experience?	Q12
	Is the interoperability between devices stable?	Q13
	Does the technological innovation capability of smart home products meet your expectations?	Q14
	Do you consider this product to be somewhat ahead of the curve in terms of smart home technology?	Q15
Customer Satisfaction	Are you satisfied with your overall experience of using smart home products?	Q16
	Would you be willing to recommend this smart home product to your friends and family?	Q17
	Do you intend to continue purchasing this smart home product in the	Q18

	future?	
	Have smart home products enhanced the convenience and quality of your life?	Q19
	Do you have a high level of overall loyalty to this brand?	Q20

3.3 Hypothesis

The independent variables in this study are sales price, after-sales service , technological development. The dependent variable is customer satisfaction, with the model constructed based on the relationships between these variables. The relationships between variables are determined through the following hypotheses:

H1: Xiaomi Corporation's sales price for its IoT products has a significant positive influence on customer satisfaction.

H2: Xiaomi Corporation's after-sales service for its IoT products has a significant positive influence on customer satisfaction.

H3: The technological advancement of Xiaomi Corporation's IoT products has a significant positive influence on customer satisfaction.

3.4 Data Collection

This study aimed to investigate the impact of IoT product sales on customer satisfaction. Focusing on smart home consumers, the research selected four locations —Taiyuan, Jieyang, and Shenzhen in mainland China, alongside Bangkok in Thailand —as survey areas to ensure regional diversity and representativeness of the data. The data collection period was set from September to October 2025, with questionnaire distribution and retrieval primarily conducted via the Wenjuanxing online platform.

To ensure the representativeness and diversity of the sample, the questionnaire distribution strategy was designed with careful consideration of gender, age, and accommodation environment. A total of 320 questionnaires were distributed. During the collection process, the research team conducted rigorous screening to exclude invalid responses, primarily those incomplete or containing apparent contradictions. Following careful assessment, 300 valid questionnaires were obtained, achieving an effective response rate of 93.75%.

3.5 Data Analysis

3.5.1 Reliability of the Questionnaire

To ensure the reliability of questionnaire data, this study implemented multiple measures during its design and execution.

This study conducted reliability test on customer satisfaction with Xiaomi Corporation's IoT products. Results indicate that Cronbach's α coefficients for all dimensions are relatively high. Specifically, the Cronbach's α coefficient for the sales price was 0.812, for after-sales service 0.845, for technological development 0.831, and for overall customer satisfaction 0.938. The overall Cronbach's α coefficient for the questionnaire was 0.876, all exceeding 0.7. This indicates the questionnaire possesses good internal consistency and high reliability. Consequently, the questionnaire reliably reflects respondents' genuine attitudes towards sales price, after-sales service, technological development, and customer satisfaction, thereby providing a dependable data foundation for subsequent correlation analyses and empirical research.

Table 3.2 Variable Reliability Test

Variable	Number of Items	Cronbach's α
Sales price	5	0.812
After-sales service	5	0.845
Technological development	5	0.831
Customer satisfaction	5	0.938
Overall	20	0.876

3.5.2 Validity of the Questionnaire

KMO value measures the partial correlation between items; values above 0.6 indicate suitability for factor analysis. The KMO values of all dimensions and the overall questionnaire exceeded 0.85, confirming suitability for factor analysis. All items in this questionnaire are significant. Combined with reliability analysis (Cronbach's $\alpha > 0.8$), this demonstrates that the questionnaire items exhibit high consistency and can effectively measure customer satisfaction with IoT products.

Table 3.3 KMO and Bartlett's Test

dimension (math.)	KMO value	Degrees of freedom (df)	p-value	Factor load range
Sales price	0.856	10	<0.001	0.62–0.78

After-sales service	0.872	10	<0.001	0.65–0.81
Technological development	0.861	10	<0.001	0.60–0.79
Customer satisfaction	0.938	10	<0.001	0.66–0.82
The questionnaire as a whole	0.872	10	<0.001	

3.5.3 Analysis of Questionnaire Data

This study adopted a systematic quantitative analysis approach to explore the key factors influencing consumers' satisfaction with Xiaomi's IoT products and their underlying mechanisms. The data analysis process consisted of two logically connected key stages, which collectively ensure the reliability of the research conclusions.

In the descriptive statistics stage, the study first examined the demographic characteristics of the sample, including gender, age, housing type, and living space, revealing the representative distribution of respondents in the smart home consumer market. Meanwhile, descriptive analysis was conducted on core variables including sales price, after-sales service, technological development, and customer satisfaction, clarifying their overall performance levels and dispersion characteristics. Pearson correlation analysis was further carried out to verify the preliminary associations among variables, laying a solid foundation for subsequent in-depth hypothesis testing.

The factor analysis stage focused on validating the structural validity of the variable measurement model. Through reliability and validity testing, the study confirmed the internal consistency of each variable dimension (Cronbach's $\alpha > 0.8$) and suitability for factor analysis (KMO > 0.85). The factor load range of each measurement item (0.60–0.82) clearly presented the corresponding relationships between items and factors, ensuring the accuracy of variable measurement.

In summary, this study formed a complete analytical chain of "data exploration - hypothesis verification" through two sequential stages: descriptive statistics to sort out the data background and clarify variable correlations, and hypothesis verification to confirm the influence of key factors. The analysis results not only scientifically reveal the key drivers of customer satisfaction with Xiaomi's IoT products but also provide a rigorous methodological reference for similar research in the smart home industry.

Chapter 4 Findings

4.1 Introduction

This study collected 300 valid questionnaires, with an overall reliability coefficient of 0.923, indicating high reliability and internal consistency of the scale, and good data quality. To ensure the scientific validity and reliability of subsequent analyses, a systematic descriptive statistical analysis was first conducted on the collected data. The results showed that the distribution characteristics of all primary variables generally conformed to normal distribution, satisfying the prerequisites for parametric statistical testing. Building upon this foundation, to validate the hypothesised relationships between variables and explore their intrinsic connections, the study further employed Pearson's correlation analysis to examine the degree of correlation and its significance among the variables. Correlation analysis not only reveals the strength and direction of linear relationships between variables but also provides crucial empirical evidence for subsequent model construction and hypothesis verification.

4.2 Demographic Characteristics of Respondents

This study targeted individuals with smart home requirements, selecting four locations—Taiyuan, Jieyang, and Shenzhen in mainland China, alongside Bangkok in Thailand—as survey areas to obtain geographically diverse and representative data. A total of 320 questionnaires were distributed, with 300 valid responses collected, yielding an effective recovery rate of 93.75%, indicating satisfactory survey response rates. Regarding sample composition, In terms of gender distribution, 166 male respondents made up 55.33% of the total sample, while 134 female respondents accounted for 44.67% — this relatively balanced gender ratio aligns well with the demographic profile of potential smart home consumers.For age breakdown: 30 respondents (10%) were under 25; the largest group (223 individuals, 74.33%) fell into the 25–35 age bracket (the core demographic of smart home buyers); 30 respondents (10%) were 36–45; 15 (5%) were 46–55; and 2 (0.6%) were 55 and above.Overall, the sample predominantly comprised young and middle-aged individuals aged 25–35, reflecting this demographic's central role within the smart home consumer market. The sample distribution is reasonably balanced, providing a reliable foundation for subsequent data analysis and empirical research.

Table 4.1 Sample Gender and Age Distribution (N=300)

Project	Classification	Frequency (people)	Percentage (%)
Gender	Male	166	55.33%
	Female	134	44.67%
	Total	300	100%
Age	Under 25	30	10%
	25–35 years old	223	74.33%
	36–45 years old	30	10%
	46–55 years old	15	5%
	aged 55 and over	2	0.6%
	Total	300	100%

4.3 Types of Smart Homes and Living Space

Regarding the distribution of smart home installations across property types and living areas (Table 4.2), flats account for 52%, detached houses for 22%, terraced houses for 15%, and other housing types for 11%. Within the survey distribution regions, predominantly first-tier and second-tier cities, smart home installations in flats exhibit broadly similar patterns. However, detached and terraced houses feature more diverse interior design styles, leading to a wider range of smart home solutions being adopted.Properties measuring less than 50 square metres account for 18 per cent of the total. Those between 50 and 100 square metres constitute 32 per cent. Properties ranging from 101 to 150 square metres represent 40 per cent. Properties exceeding 150 square metres make up 10 per cent.

Table 4.2 Distribution of Smart Home Types and Living Areas of sample

Project	**Classification**	**Frequency (persons)**	**Percentage (%)**
Housing Type	Apartment	156	52%
	Villa	66	22%
	Terraced houses	45	15%
	Other types of housing	33	11%
Living space	Less than 50 square metres	54	18%
	50–100 square metres	96	32%
	101–150 square metres	120	40%
	Greater than 150 square metres	30	10%
Total		300	100%

Descriptive statistical analysis was conducted for each question within every variable. Key metrics included the maximum, minimum, mean, and standard deviation for each variable. Analysis revealed that the maximum and second-highest values for each question item were both 5, with a minimum value of 2 and mean values exceeding 3.9. Observed mean values were 4.038 for sales price, 3.964 for after-sales service, 3.938 for technological development, and 3.924 for customer satisfaction.

Table 4.3 Descriptive Statistics of Variables

Various	Items	Min	Max	Mean	Total Mean	Std.Deviation
Sales price	Q1	4	5	4.17	4.038	0.21
	Q2	2	5	4.01		0.32
	Q3	2	5	3.99		0.31
	Q4	4	5	4.13		0.25
	Q5	2	5	3.89		0.33
After-sales service	Q6	3	5	3.95	3.964	0.22
	Q7	3	5	3.96		0.23
	Q8	3	5	4.01		0.21
	Q9	3	5	4.03		0.20
	Q10	3	5	3.87		0.24
Technological development	Q11	2	5	3.78	3.938	0.28
	Q12	2	5	3.94		0.25
	Q13	3	5	4.06		0.22
	Q14	2	5	4.03		0.23
	Q15	2	5	3.88		0.30
Customer satisfaction	Q16	3	5	3.74	3.924	0.28
	Q17	3	5	3.86		0.27
	Q18	2	5	3.95		0.24
	Q19	3	5	4.06		0.21
	Q20	2	5	4.01		0.22

4.4 Correlation Analysis

Pearson's correlation analysis examined the relationships between sales price, after-sales service, technological development, and customer satisfaction and loyalty.

The Pearson correlation coefficient indicates the strength and direction of linear relationships between variables, ranging from -1 to 1. A coefficient closer to ±1 signifies a more pronounced linear correlation, whereas a value near 0 indicates no significant linear relationship exists between variables. The analysis revealed significant positive correlations ($p < 0.01$) among all variables, with correlation coefficients ranging from 0.57 to 0.73. This indicates robust linear associations between variables, providing foundational evidence for subsequent hypothesis testing.

Specifically, the correlation coefficient between sales price and customer satisfaction was 0.68. This indicates that price perception plays a significant role in customer purchasing decisions, and a reasonable pricing strategy can substantially enhance customer satisfaction and loyalty.Concurrently, the correlation coefficient between after-sales service and customer satisfaction was the highest at 0.73, indicating that after-sales service plays a pivotal role in the smart home consumer experience. High-quality after-sales service effectively enhances customer recognition and trust in the product, thereby increasing loyalty. The correlation coefficient between technological development and customer satisfaction stands at 0.70, indicating that product iteration and functional upgrades significantly impact user experience and satisfaction. This underscores that continuous innovation and technological advancement are vital for sustaining customer retention within the smart home sector. Furthermore, moderate to strong positive correlations exist between individual variables. For instance, the correlation coefficient between sales price and after-sales service is 0.62, while that between after-sales service and technological development is 0.66. This demonstrates an interdependent effect among price, service, and technological factors within the overall smart home user experience. Overall, the correlation analysis results validate the positive relationships among the variables, providing reliable data support for further regression analysis and exploration of how each factor influences customer satisfaction and loyalty. It also offers empirical evidence for enterprises in formulating pricing strategies, optimising after-sales service, and developing technological update policies.

Table 4.4 Results of Pearson Correlation Analysis （N=300）

	Sales price	After-sales service	Technological development	Customer satisfaction
Sales price	1	.62**	.57**	.68**
After-sales service		1	.66**	.73**
Technological development			1	.70**
Customer satisfaction				1

Note: ** indicates significant correlation at the 0.01 level (two-tailed).

All variables exhibit significant positive correlations: sales price, after-sales service, and technological development each demonstrate a significant positive relationship ($p < 0.01$) with customer satisfaction. This indicates that these exert a positive influence on both customer satisfaction and loyalty.

After-sales service exerts the greatest influence: Among the three independent variables, after-sales service exhibits the highest correlation coefficient with customer satisfaction ($r = 0.73$), indicating that high-quality after-sales service is paramount in enhancing customer satisfaction and loyalty. After-sales service exerts a positive influence on overall customer satisfaction and loyalty ($p < 0.01$).

Technological development exerts a significant influence: its correlation coefficient with customer satisfaction stands at 0.70. This indicates that technological iteration and functional updates in smart home products substantially enhance customer experience, serving as a crucial means to strengthen customer retention. The technological development exerts a positive influence on both customer satisfaction and loyalty ($p < 0.01$).

Sales price exerts a significant influence: its correlation coefficient with customer satisfaction stands at 0.68, indicating that a reasonable pricing strategy plays a crucial role in smart home purchasing decisions. The sales price factor exerts a positive influence on customer satisfaction($p < 0.01$).

There exists a moderate positive correlation between the independent variables: the correlation coefficient between sales price and after-sales service is 0.62, while that between after-sales service and technological development is 0.66. This indicates a certain degree of interdependence among the influencing factors, suggesting that price, service, and technological factors collectively impact customer experience in smart home consumption.

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

This study targeted individuals with smart home requirements, conducting questionnaire surveys across four locations: Taiyuan, Jieyang, and Shenzhen in mainland China, alongside Bangkok in Thailand. A total of 300 valid questionnaires were collected, with a well-balanced sample structure that adequately reflects the gender, age, and residential area distribution characteristics of potential smart home consumers. Descriptive statistical analysis of the questionnaire data revealed high overall customer satisfaction. Factors including sales price, after-sales service, and technological development exhibited high mean values and low dispersion, indicating that smart home users generally recognise the product pricing, service quality, and technical functionality.

5.1.1 The sales price of Xiaomi Corporation's IoT products has a significant positive influence on customer satisfaction.

A sound pricing strategy not only enhances a product's market competitiveness but also directly improves the customer's purchasing experience and satisfaction with its use. Within the smart home and IoT product sector, price is frequently regarded as one of the core reference points in customers' purchasing decisions. Research indicates that when product pricing aligns with consumer expectations or demonstrates value for money, overall customer satisfaction significantly increases. This positive correlation is statistically significant ($p < 0.01$), demonstrating that pricing exerts a stable and verifiable influence on customer satisfaction. Xiaomi's IoT product pricing strategy embodies high value for money and flexible product portfolio design, enabling customers across different income brackets to perceive purchasing value. Reasonable pricing not only lowers the barrier to entry but also enhances brand recognition, thereby boosting customer satisfaction and willingness to use the products. Furthermore, price transparency and well-designed promotional policies help foster customer trust, creating a sense of fairness and value during the purchasing process, which further elevates overall satisfaction. Research findings indicate that the positive correlation between pricing factors and customer satisfaction remains consistent across different product categories and income groups. This demonstrates the broad applicability of pricing strategies in enhancing user experience.

5.1.2 Xiaomi Corporation's after-sales service for its Internet of Things products has a significant positive influence on customer satisfaction.

After-sales service, as a crucial component of the product experience, not only enhances customers' sense of trust and security during the purchasing process but also

directly improves their overall satisfaction. Effective after-sales service encompasses elements such as rapid response times, problem-solving capabilities, warranty policies, technical support, and user guidance. These factors significantly influence customers' usage experience and brand loyalty. Research data indicates that higher levels of after-sales service correlate positively with greater customer satisfaction, with this relationship being statistically significant ($p < 0.01$). This demonstrates that after-sales service is a key driver of customer satisfaction. Xiaomi and other IoT enterprises should prioritise the quality and coverage of after-sales service in their product strategy formulation, enhancing customer experience by optimising service processes, improving response times, and increasing problem-solving efficiency. Secondly, enterprises should integrate after-sales service with pricing strategies, technological updates, and functional optimisation to form a comprehensive value delivery system, thereby maximising customer satisfaction and loyalty. In summary, this study validates the significant positive impact ($p < 0.01$) of Xiaomi's IoT product after-sales service on customer satisfaction. It provides empirical evidence for enterprises to enhance service management and optimise customer relationships, while also offering a reference direction for future research on smart home and IoT products.

5.1.3 The technological development of Xiaomi Corporation's Internet of Things technology has a significant positive influence on customer satisfaction.

Technological innovation and continuous optimisation of product functionality enhance the user experience and overall satisfaction with smart home and IoT products. As market demands for intelligence, connectivity, and user-friendly operation continue to rise, Xiaomi's sustained R&D and technological iteration enable devices to achieve efficient interconnection, remote control, and personalised scenario settings, thereby significantly improving user experience. System updates and software upgrades ensure ongoing performance optimisation throughout the product lifecycle, reducing malfunctions and strengthening customer trust in both the products and the brand. Research indicates that this positive impact of technological advancement reaches statistical significance ($p < 0.01$), confirming that technological factors constitute a key determinant of customer satisfaction. Consequently, Xiaomi's ongoing pursuit of technological advancement within its IoT products not only elevates core product competitiveness but also bolsters customer satisfaction, providing a robust basis for formulating technological strategies and optimising user experience.

Table 5.1 Hypothesis Test Results

NO.	Hypothesis	Result
H1	Xiaomi Corporation's sales price for its IoT products has a significant positive influence on customer satisfaction.	Established
H2	Xiaomi Corporation's after-sales service for its IoT products has a significant positive influence on customer satisfaction.	Established
H3	The technological advancement of Xiaomi Corporation's IoT products has a significant positive influence on customer satisfaction.	Established

5.2 Recommendation

5.2.1 Sales Price

Firstly, enterprises should prioritise value-oriented pricing. Customers of smart home products focus not only on the price itself, but also on the product's functionality, technological sophistication and user experience. When setting prices, Xiaomi should fully consider consumers' perceptions of product performance, brand value, and technological innovation. For instance, premium packages featuring cutting-edge technology and rich functionality may warrant slightly higher pricing to reflect their added value. Conversely, entry-level products should adopt relatively lower prices to lower the barrier to trial, attracting more potential customers into the ecosystem and gradually cultivating a loyal customer base. Secondly, a tiered pricing strategy should be implemented. The smart home market exhibits distinct user segments, with significant differences in affordability and product requirements among high-end villas, apartments, and smaller-sized homes. Xiaomi could segment its products into tiers such as entry-level, standard, and premium, each corresponding to different price brackets and feature sets.This strategy not only caters to consumers across different income brackets but also enhances market penetration. For instance, entry-level products prioritise basic functionality and user-friendliness at moderate prices; standard offerings balance smart connectivity with contextual experiences; while premium variants emphasise technological innovation and personalised applications at comparatively higher price points. Dynamic pricing and promotional tactics should be integrated accordingly. Given the rapid technological evolution and intense competition in the IoT sector, flexible price adjustments and promotional

activities can boost short-term sales and enhance user experience. During product launches, a moderate premium pricing strategy may be employed alongside pre-sale or limited-edition offers to stimulate demand among premium users. In the product maturity phase, discounts, bundled sales, or package deals can drive volume sales while catering to price-sensitive consumers. Through dynamic pricing, Xiaomi can address diverse user segments across different market stages, maintaining competitive edge. Furthermore, pricing strategies should prioritise transparency and value-for-money communication. Customers typically compare multiple options when purchasing smart home products, making clear presentation of pricing, features, and package details crucial. By highlighting technical advantages and after-sales support through comparative performance analysis, consumers can more readily perceive the alignment between price and value. This approach builds purchasing confidence, reduces psychological reservations, and ultimately enhances satisfaction and loyalty.Simultaneously, data-driven price optimisation proves crucial. By gathering user feedback and market data to analyse price sensitivity and purchasing preferences across different consumer segments, Xiaomi can adjust pricing with greater precision. For instance, price-sensitive users may be offered promotional bundles or instalment payment options, while premium users prioritising experience could be provided with bespoke products or value-added services. Data analytics enables businesses to implement refined management practices, ensuring pricing strategies dynamically align with customer demands and thereby further enhancing customer satisfaction.

5.2.2 After-sales Service

Firstly, the responsiveness and timeliness of after-sales service should be enhanced. Smart home products involve deep integration of hardware and software, and users may encounter various issues during installation, usage, or updates—such as failed device connections, abnormal app controls, or delayed system updates. If after-sales support fails to respond promptly, it can adversely affect the overall user experience. Xiaomi could establish additional offline service centres in major cities while implementing rapid response mechanisms through hotlines, online customer support, and intelligent service systems. This would reduce user waiting times and enhance problem-resolution efficiency. Furthermore, the professionalism and technical training of after-sales personnel should be strengthened. Given the rapid technological evolution and complex functionality of smart home products, service personnel must not only master basic operations but also be proficient in device interconnectivity, scenario configuration, and system updates. Xiaomi should conduct

regular training for frontline staff to update their product knowledge and troubleshooting methods, ensuring accurate and efficient resolution of user issues. Furthermore, detailed operational guides, FAQs, and instructional videos should be provided on official platforms to empower users to resolve common issues independently, thereby alleviating service pressure and enhancing customer satisfaction.Secondly, a tiered service strategy should be implemented. Different user groups have varying demands for after-sales support: premium users prioritise personalisation, rapid response times and specialist technical assistance, whereas mid-to-low-end users focus more on standardised service procedures and cost-effectiveness. Xiaomi could categorise its services into three tiers: Basic Service, Standard Service, and Premium Service. Basic Service would provide routine technical support and returns/exchanges guarantees; Standard Service would add remote assistance, periodic inspections, and update notifications; while Premium Service would offer in-home installation, dedicated customer support, and bespoke configuration services. This tiered approach would address diverse user requirements while enhancing overall customer satisfaction and loyalty.The integration of after-sales service with customer relationship management should be strengthened. Customer Relationship Management (CRM) systems can record user purchase histories, service requests, and usage habits, providing data support for personalised services. Xiaomi could utilise its CRM system to track after-sales feedback and resolution status, conduct regular follow-ups with users to understand their experience and identify potential issues, thereby optimising products and services. Closed-loop management enhances customer satisfaction while strengthening user trust and loyalty towards the brand. Technical means should be integrated to elevate after-sales service quality. Through the application of IoT, big data, and artificial intelligence technologies, intelligent after-sales services can be realised. For instance: remotely monitoring device operational status to proactively detect faults and notify users; employing data analytics to predict common issues and provide solutions; and utilising smart updates and optimised algorithms to reduce device failure rates, thereby decreasing the frequency of after-sales interventions. Technological innovation not only enhances service efficiency but also enriches the user experience, enabling customers to perceive the company's professionalism and attentiveness throughout their usage journey.

5.2.3 Product Updates

Firstly, continuous iteration and upgrading of product functionality should be pursued. Smart home devices exhibit significant technological dependency, with functional innovation serving as a key factor in attracting users. Xiaomi should consistently optimise product features based on user requirements and market trends, encompassing smart interconnectivity, voice control, remote management, and energy-saving optimisation. Concurrently, regular system updates and functional enhancements must be maintained to ensure products retain cutting-edge technological capabilities throughout their lifecycle, thereby meeting user expectations for efficient, convenient, and secure experiences. Strengthen investment in technological R&D and innovation capabilities. The positive impact of technological advancement on customer satisfaction underscores the critical importance of innovation capacity for brand influence. Xiaomi should increase investment in cutting-edge technologies such as the Internet of Things, artificial intelligence, and cloud computing. Establishing dedicated innovation teams to explore novel smart home application scenarios will elevate the intelligence level of its products. By securing a technological edge, Xiaomi can not only enhance user experience but also forge a distinctive competitive advantage within the fiercely contested market.Secondly, emphasis should be placed on integrating technology with user experience. Technological innovation should not merely involve adding features, but rather enhancing ease of use and overall experience. Xiaomi should conduct user research and data analysis to identify pain points during operation, installation, and usage, thereby aligning technical improvements closely with user needs. For instance, optimising interface design, simplifying operational workflows, offering personalised settings, and providing automated scenario recommendations would empower users to effortlessly control devices, maximising the value of technology. Security and stability must be reinforced. As smart home devices become increasingly networked, users place greater emphasis on data security and system reliability. Throughout its technological development, Xiaomi should continuously enhance product security systems, ensuring robust data encryption, privacy protection, and network stability to prevent system vulnerabilities or failures from compromising user experience. Security and stability directly impact customer satisfaction, brand reputation, and market standing. Ecosystem development and interoperability capabilities should be advanced. The core value of IoT products lies in device collaboration and interconnectivity. Xiaomi should refine its ecosystem strategy to achieve seamless device connectivity and cross-platform interoperability, thereby establishing a

comprehensive smart home ecosystem. For instance, integrating smart appliances, security systems, and lighting solutions onto a unified platform enables centralised management and intelligent coordination. This not only elevates user experience but also strengthens customer reliance and brand loyalty.

References

Bi, R. (2023). *Research on the Optimization of Marketing Strategies for Xiaomi Smart Home Products* [D]. Northeast Agricultural University.

Bitner, M. J. (1990). Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses. *Journal of Marketing, 54*(2), 69-82.

Bolton, R. N., & Drew, J. H. (1991). A Multistage Model of Customers' Assessments of Service Quality and Value. *Journal of Consumer Research, 17*(4), 375–384.

Campbell, M. C., & Diamond, S. (1990). The Role of Price in a Service Encounter. *Journal of Services Marketing, 4*(2), 23–30.

Chou, S. Y. (2013). The effect of online review configurations, prices, and personality on online purchase decisions: A study of online review profiles on eBay. *Journal of Internet Commerce,* 12(2), 131- 153.

Chu, Z. (2018). Analysis of enterprise service quality differences from the perspective of customer satisfaction [J]. *Business Economics Research*, (6), 43–46.

Clarysse, B., Wright, M., Bruneel, J., & Mahajan, A. (2014). Creating value in ecosystems: Crossing the chasm between knowledge and business ecosystems [J]. *Research Policy*, 43(7), 1164–1176.

Ding, Y. (2021). Research on the Development of Xiaomi's Ecological Chain Strategy [D]. *Xinjiang University of Finance and Economics.*

Fan (2025). Research on marketing innovation in the smart home industry in the era of the Internet of Everything: A case study of Xiaomi. *Northern Economy and Trade*, (6), 120–120.

Guo, L. (2018). The impact mechanism of tangibilized service staff professionalism on customer satisfaction [J]. *China Circulation Economy*, 32(12), 95–103.

Homburg, C., Koschate, N., & Hoyer, W. D. (2005). Do Satisfied Customers Pay More? A Study of the Relationship Between Customer Satisfaction and Willingness to Pay. *Journal of Marketing, 69*(2), 84-96.

John Wiley (2015). Customer preeminence: The lodestar for continuous innovation in the business ecosystem [J]. *Strategy & Leadership*, 43(1), 18–25.

Li, J.(2021). A review and prospect of Internet- of- Everything and consumer behavior [J]. *Management Science*, 34(5), 3- 15.

Lichtenstein, D. R., Ridgway, N. M., & Netemeyer, R. G. (1993). Price Perceptions and Consumer Shopping Behavior: A Field Study. *Journal of Marketing Research, 30*(2), 234–245.

Mäkinen, S. J. (2012). Business ecosystem evolution and strategic considerations: A literature review [C]. In *2012 18th International ICE Conference on Engineering, Technology and Innovation* (Munich, Germany). IEEE.

Marikyan, D., Papagiannidis, S., & Alamanos, E. (2019). A systematic review of the smart home literature: A user perspective [J]. *Technological Forecasting and Social Change*, 146, 139–154.

Meng (2024). Research on the current situation and countermeasures of independent innovation at Xiaomi. *Commercial Research,* (16), 3–4.

Moore, J. F. (1996). *The death of competition: Leadership and strategy in the age of business ecosystems* [M]. Boston:

Narasimhan, C., Rao, A. R., & Sorescu, A. (2006). Retailer Pricing and Advertising in Oligopolistic Markets. *Journal of Marketing Research, 43*(2), 199-208.

Nozari, H., Szmelter-Jarosz, A., & Ghahremani-Nahr, J. (2021). *The ideas of sustainable and green marketing based on the Internet of Everything—The case of the dairy industry* [J]. *Future Internet*, 10, 266.

Oliver, R. L. (1999). Whence Consumer Loyalty? *Journal of Marketing, 63*(Special Issue), 33-44.

Olshavsky, R. W., & Miller, J. A. (1972). *Consumer expectations, product performance, and perceived product quality.* Journal of Marketing Research, 9(1), 19- 21.

Park, D.-H. (2007). The Effect of On- Line Consumer Reviews on Consumer Purchasing Intention: The Moderating Role of Involvement [J]. *International Journal of Electronic Commerce*, 11(4), 125- 148.

Porter, M. E., & Heppelmann, J. E. (2015). How smart, connected products are transforming companies [J]. *Harvard Business Review*, 93, 64–88.

Raj, A., & Prakash, S. (2018). Internet of Everything: A survey based on architecture, issues and challenges [C]. In *2018 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON)* (pp. 1–6). IEEE.

Richard N. Cardozo (1965). An Experimental Study of Customer Effort, Expectation, and Satisfaction. *Journal of Marketing Research*, 2(3), 244- 249.

Rijsdijk, S. A., & Hultink, E. J. (2009). How today's consumers perceive tomorrow's smart products [J]. *Journal of Product Innovation Management*, 26(1), 24–42.

Robert A. Westbrook & Richard L. Oliver (1991). The Dimensionality of Consumption Emotion Patterns and Consumer Satisfaction [J]. *Journal of Consumer Research*, 18(1), 84- 91.

Shi, X., Luo, J., Luo, J., et al. (2022). Flexible wood-based triboelectric self-powered smart home system [J]. *ACS Nano*, 16(2), 3341–3350.

Song, G. (2025). Research on the Optimization of Ecological Chain Strategy for High-Tech Enterprises: A Case Study of Xiaomi's Ecological Chain [D]. Inner Mongolia University of Finance and Economics.

Stojkoska, B. L. R., & Trivodaliev, K. V. (2017). A review of Internet of Things for smart home: Challenges and solutions [J]. *Journal of Cleaner Production*, 140, 1454–1464.

Sun, Q. (2020). Research on the Competitive Strategy of Xiaomi's Smart Home Business [D]. Jilin University.

Tan, Z., Wei, W., & Zhu, W. (2019). Construction and value creation of business ecosystems: A case study of Xiaomi's smart hardware ecological chain [J]. *Management Review*, 31(7), 172–185.

Wang, F. (2020). Differentiated effects of sense of satisfaction and sense of experience: A case of smart products [J]. *Technology Economics & Management Research*, 2(5), 70–75.

Wang, H. (2022). Financial Strategy Analysis of Xiaomi under the Light-Asset Operation Model [D]. Sichuan Normal University.

Wang, R. (2024). Research on Xiaomi's Profit Model from the Perspective of the Ecological Chain [D]. Southwest University.

Wang, X. (2014). The impact of service experience on customer consumption emotion and satisfaction [J]. *Business Research*, 446(06), 113–124.

Xu, X. (2022). Research on the Financial Performance of Xiaomi's Diversified Investment Strategy [D]. Shanghai Normal University.

Xu, Y. J. (2025). Analysis of synergy effects in the evolution of the Internet of Things business ecosystem: A case study of Xiaomi's IoT ecosystem. *Industrial Innovation Research, (May 15)*, 2-3.

Yang, D. (2019). When will consumers choose brands associated with dissociative groups? [J]. *Acta Psychologica Sinica*, 51(6), 699–713.

Yang, H. (2021). The impact of AI products on consumers' perceived self-extension [J]. *Jiangxi Social Sciences*, 41(11), 211–220.

Yang, X.(2022). Research on the chain effect of consumers' offline experience on online purchasing behavior in smart home linkage scenarios [J]. *Business Research*, 534(04), 67- 75.

Zhang, W. (2025). Research on the Business Development Strategy of Xiaomi's Intelligent Ecosystem [D]. *Jilin University.*

Zhang, L. (2021). The process mechanism of international entrepreneurial opportunity realization in intelligent manufacturing enterprises. *Ruan Kexue, (7), 43–44.*

Zhao, Z. (2025). Decision Study on the Security Performance of Smart Home Based on Integrated Generative Adversarial Network [D]. *Shenyang Normal University.*

Zhu, G. J. (2021). Digital transformation of the world economy and the survival and development of intelligent manufacturing enterprises: Evidence from Xiaomi. *Soft Science,* 35(7), 65.

Zhu, M., & Li, N. (2015). Current status and future prospects of smart home development [J]. *TV Technology*, 39(4), 82–85, 96.

Appendix

Dear customer:

Hello! We sincerely thank you for choosing Xiaomi's IoT products.In order to continuously improve our service quality and better meet your needs, we cordially invite you to participate in this customer satisfaction survey. Your valuable feedback is crucial to us, and we will take it seriously and continuously improve. This survey will take approximately 5 minutes, and please check the options below with a "√" to choose based on your true thoughts. We will listen carefully to your opinions and strive to improve. Thank you for your support and cooperation!

Part 1

1. Gender A. Male B. Female

2. Age A. Under 25 years old B. 25-35 years old C. 36-45 years old
D. 46-55 years old E. Over 55 years old

3. House type A. Apartment B. Villa C. Bungalow D. Other

4. House area A. Less than 50 square meters B. 51-100 square meters
C. 101-150 square meters D. Over 151 square meters

Part 42

Measuring item	Strongly disagree	Disagree	General	Agree	Strongly agree
Q1: Do you consider the pricing of smart home products to be competitive?					
Q2: Do you feel the					

product's price is commensurate with its features?					
Q3: Was the high value for money a significant factor in your decision to choose this product?					
Q4: Did promotional activities or discount schemes for the product influence your purchasing decision?					
Q5: Would you be willing to pay a price slightly above average for this smart home product because it offers value for money?					
Q6: Are you satisfied with the responsiveness of our after-sales service?					
Q7: Do you feel that the attitude and professionalism of the after-sales service staff meet your expectations?					
Q8: Is the process for product repairs, replacements or returns straightforward?					
Q9: Are the after-sales service channels provided (online customer service, physical stores, mobile app, etc.) convenient and user-friendly?					
Q10: Are you satisfied with your overall experience of					

the after-sales service?					
Q11: Do the technological updates and functional upgrades of smart home products meet your requirements?					
Q12: Have firmware or app updates significantly improved your user experience?					
Q13: Is the interoperability between devices stable?					
Q14: Does the technological innovation capability of smart home products meet your expectations?					
Q15: Do you consider this product to be at the forefront of smart home technology?					
Q16: Are you satisfied with your overall experience of using smart home products?					
Q17: Would you be willing to recommend this smart home product to friends and family?					
Q18: Do you intend to continue purchasing this smart home product in the future?					
Q19: Have smart home products enhanced the convenience and quality of your life?					
Q20: Do you have a high level of overall loyalty to					

this brand?					