



RESEARCH ON I-PENSION SMART ELDERLY CARE SERVICE
APPLICATION IN CHINA

BY
MINGDA PANG

AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF
BUSINESS ADMINISTRATION (INTERNATIONAL PROGRAM)
SOUTHEAST ASIA UNIVERSITY
ACADEMIC YEAR 2022
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Abstract

This research aim to study on i-Pension Smart Elderly Care Service Application in China, this study were qualitative methodology via in-depth interview, and content analysis. The study found that: 1) Market segment there are mainly 3 segmentation of smart i-pension home care market were ‘home care’, ‘community care’ and ‘institutional care’, Target online customer who focus our sales first in Shanghai city and the surrounding areas, people mostly are intellectual workers that have comparatively higher stress and pressure than manual workers. Positioning focus on business differentiation and approaches of competition to demonstrate our positioning among other competitors in the same industry, Marketing strategy use the 7C Model. 2) Management Plan company will also consistently focus on market orientation, prompt production adjustments, supply risk reduction, and agreements with customers and upstream and downstream service providers, Production plan focus on online senior care services provided by 5G technology and cloud computing technology have not yet reached full maturity due to the high technical content, and additional on-site inspections are still required for wider deployment, Operation plan focuses on built on cloud computing and 5G technologies for Internet + pension services. 3) Financial projection cash flow for 5 years, were Initial investment 3,000,000 Yuan , ROI average per year 30.96%, NPV 1,644,852.7 Yuan, IRR = 17.6 %, and Payback period on 3 years and 1 moths.

Keywords: Smart elderly care, service application.

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Mingda Pang

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Section 1

Introduction

1.1 Company Description

Our company is mainly focusing on the Chinese elderly care service because these years China has facing more and more stress from the aged tendency of the population. Under this circumstance, as an internet-based company, our company has launched a smart elderly care service in the form of an application for the elderly named **i-pension** with the "Internet+" perspective.

In the early stage of the company's establishment, as a small internet company, we adopted a linear-functional organizational structure to avoid structural complexity. Employees in functional and technology departments have similar values and work goals, employees have a clear career ladder, and have coherence in the development of employee skills. It is convenient for superiors to command and order subordinates, with rapid decision-making, unified orders, clear responsibilities, and rights, orderly, flexible, and stable, and it is also conducive to the role of staff, and it is good to avoid the company's initial management. cost. Therefore, adopting this organizational structure can be well combined with the company's initial strategy to promote the company's service development.

We are supported by information technology and based on the needs of the elderly, and we expect our project to succeed as smart elderly care becomes the mainstream trend of elderly care services in China. Smart elderly care has been promoted by society in recent years, aiming to establish community-based smart elderly care services. In order to achieve a new elderly care service model, the Internet, big data, and other methods have been used to link multiple subjects, including elderly care services departments, enterprises, social organizations, and service recipients.

We offer quality elderly care services to the elderly through the i-pension app we created. It provides convenient and efficient information transfer through the internet about senior care services. An intelligent information platform for the elderly is provided through Internet big data and other technologies, linking government,

community, businesses, social organizations, and other relevant resources. Seniors and their families receive convenient, fast, and on-point elderly services as a result.

1.2 Current Situation Analysis of i-Pension in Chinese Market

1.2.1 PESTEL Analysis:

1.2.1.1 Political Factors:

China now has one of the fastest aging populations in the world as well as the largest old population. Another issue that affects the entire society is how to help the elderly "enjoy the elders." China has recently published several policies regarding elderly care, strongly encouraging social forces to build the elderly care service business. A new form of effective elder care is gradually emerging. And against this backdrop, our company's i-pension application is a reaction to a call from our government. Additionally, the Chinese government provides us with many beneficial policies, including those that are "simple to approve" and "lower taxes."

And our company is a corporation which means we are the most common form of corporation; regulated by statute; treated as a separate legal entity for liability and tax purposes.

1.2.1.2 Economic Factors:

Based on the policies which are good for our company and product's development, the economic environment will be much better than other industries during the period of Covid-19 pandemic. And our i-pension application's members fee is low, so that we could have more customers than our competitors. As an internet-based company, we do not need too many staff and room to do our business. The only product is an online application, and this enabled us to reduce lots of costs too.

1.2.1.3 Social Factors:

The idea for intelligent elder care is part of the first batch of "Internet+" action plans that the National Development and Reform Commission came up with in 2013. These plans cover a wide range of topics, including the growth of "big data" and "Internet+"

industries as well as "Internet+" modern social governance methods. An essential component of the national strategic deployment is smart senior care. Internet + government management, Internet + social services, Internet + community governance, Internet + social services, and other models are suggested by the "Internet +" modern social governance idea, which essentially starts with governmental decision-making and citizen requirements. Using contemporary technical tools like computer, communication, Internet, cloud computing, sensor, etc., "Internet +" senior care creates an information platform for elderly care services to achieve the efficient use and exchange of diverse elderly care service resources. To provide more senior citizens with high-quality, effective, and convenient services, the service platform realizes the rapid response and processing of demands for aged care services. Modern technology is used in community-based elderly care to create a community-based, intelligent, and information-based elderly care service system. It mainly relies on advanced technical means such as the Internet, cloud computing, big data, and intelligent equipment to provide elderly people with home-based and community-based elderly care services. Comprehensive and diversified elderly care services integrating institutional care and institutional care, effectively meeting the diverse and multi-level elderly care service needs of the elderly.

1.2.1.4 Technological Factors:

There are still many problems in the development of Chinese smart and healthy elderly care industry, including unbalanced and insufficient development of elderly care service institutions and facilities, industrial agglomeration has not yet formed, digital infrastructure construction needs to be strengthened, and a unified national health and elderly information platform needs to be established, etc. . In this regard, the combination of supply-side and demand-side management should be adhered to, and multiple measures should be taken to accelerate the development of the smart, healthy and elderly care industry.

First, it is necessary to build, use and manage smart health and elderly care service institutions, improve institutional supporting facilities, focus on cultivating professional, intelligent, chain-based, and branded service institutions, and use pilot

demonstrations as a starting point to promote leading enterprises to lead the development of industrial agglomeration.

Secondly, we should speed up the construction of a unified, authoritative, interconnected national health information platform, form a national health information management system for the elderly and a national pension service information system, and promote the establishment of a regional smart health care service comprehensive information system platform. It is necessary to promote the integration of the Internet, the Internet of Things, and the mobile network, build a smart home health monitoring system, further optimize the operation process, and improve the accuracy and response speed of supply and demand.

Furthermore, industry guidance, technical supervision, patent protection and economic incentives should be strengthened, and enterprises should be encouraged to develop and produce smart products with strong practicability, safety, reliability, and ease of learning, such as emergency positioning equipment, smart home care equipment, etc. Health services; innovative smart elderly care services such as "Internet + elderly care", "time bank" mutual assistance for elderly care, and ability assessment for the elderly.

Finally, it is necessary to build a compound and innovative smart and healthy senior care talent team, explore the pilot reform of the senior care career development system, increase the cultivation of smart information technology talents, and comprehensively use education and training, digital living place experience, family member counseling and other Ways to improve the digital skills of the elderly.

1.2.1.5 Environmental Factors:

Because our company is an internet-based company and our **i-pension** application is also an online cellphone application, so there will not be any environmental influences. While we still need to consider about the environmental influences of those supporting industries like hospitals, transportation, and even the medical care services. When developing smart health and senior care service institutions and upgrading institutional support facilities, we also need to take into account the environmental impact of the construction, use, and management of these facilities.

1.2.1.6 Legal Factors:

As a corporation, we have tax and liability concerns. We are allowed to write off a lot of expenses and deductions that a sole proprietorship or partnership cannot. While the distribution of dividends to corporations is taxed twice. Distributing the income to the entrepreneur in the form of a salary is another way to avoid double taxation.

1.2.2 SWOT Analysis:

1.2.2.1 Strengths:

- 1.** Our APP's UI is designed with bold, clear text and a voice wake-up feature for older users. The elderly can use it easily because it works with a variety of platforms and is integrated into their daily lives.
- 2.** Our APP can track the user's physical indications in real time thanks to a connection with the smart wristband.
- 3.** The user terminal, family terminal, and community terminal are our three platforms. The three terminals are linked so that real-time data transmission is possible. The terminal can keep an eye on the user's health. The associated alert program will be initiated in the event of any irregularity.
- 4.** The service agencies offer care, cleaning, food, medical treatment, and other services in accordance with the actual needs of the elderly, preventing them from having to rely on centralized care that is "one size fits all." In accordance with their financial and physical capabilities, they can make purchases on-demand, and service professionals will then arrive to provide door-to-door service.

1.2.2.2 Weaknesses:

- 1.** The medical-nursing smart linkage pension model's technological development has several flaws, and there aren't enough high-quality medical resources or medical professionals to go around. Since we hire employees online and deliver group training online, we may not fully comprehend the morals and abilities of this medical personnel, which could lower the level of service.

2. There is a "digital divide" among the elderly in society as a result of their limited knowledge of modern information technology, such as the Internet, due to their age and educational level. This will make it difficult for the smart medical and aged care sectors to develop smoothly in rural areas.

1.2.2.3 Opportunities:

1. The upgrading of intelligent construction in the area of health and aged care services has been hastened by the strong development of the big data era.

2. To encourage the growth of the smart elderly care business, the state has recently established pertinent policies on the subject.

3. There is currently a strong demand for aged care services due to the prevalence of one-child households, the need to care for the elderly, and the pressure to provide for them.

4. The relatives of today's elderly people can easily comprehend and embrace our new virtual pension concept.

1.2.2.4 Threats:

1. The smart elderly care model is an industrial innovation from a political standpoint. In terms of macro policies, the state offers assistance and encouragement, but there are no consistent rules governing the methods by which this industry enters and leaves the market, how new industries are positioned, or how services and prices are set. This may result in mixed medical and senior care institutions in different places, which will undermine the industry's promotion effect.

2. From a societal perspective, the clever senior care model must assemble a sizable professional talent team, and those professionals must not only comprehend how elderly care services are run but also have professional nursing training. The above-mentioned human resources' existing talent training system, however, falls short of perfection, which in some ways reduces the effectiveness of this model's application and its potential for advancement.

1.2.3 5 Forces Analysis:

1. Power of Suppliers:

Various software development suppliers make up the majority of the upstream of smart senior care software. Upstream software development is frequently high-tech enterprises, typically a variety of studios and programmers, all of whom are masters of a given sort of software development. This is in contrast to many hospitals, pharmacies, and other supporting facilities in the midstream industry. Since the majority of the software development industry is controlled by a few numbers of titans, upstream bargaining leverage is typically higher.

2. Power of customers:

The sixth national census will be conducted in 2020, and it will reveal that there are 123 million families with an aging population of 60 or older, 43 million of which are "empty-nest households," making up 35.2% of the total. The phenomenon of "empty-nest households" is especially pronounced among metropolitan residents. There are 31 million households with elderly residents who are 60 years of age or older, with 12 million of these households making up 37.2% of all "empty-nest families." The aged care business is in high demand. The downstream individual consumers essentially have no bargaining power or very little bargaining power because the items in this industry are mostly standardized products and there are no highly customized products.

3. Potential of new entrants into the industry

From a threshold perspective, there are specific financial, technological, and talent hurdles to entry into this sector. Additionally, the sales channel marketing of intelligent software is a challenge that requires a lot of labor. Potential competitors must also think about channel barriers. The other the majority of newcomers to the business are manufacturers with prior experience in software development, which is important from the perspective of the creation of intelligent software. Although there aren't many possible competitors in this market from this vantage point, each industry participant nonetheless has a sizable overall strength. can't be undervalued.

In my nation, the number of businesses offering intelligent elderly care software has increased steadily in recent years, and it will reach 24,400 in 2020.

4. Threat of substitute products

Smart senior care software is a competitor in terms of alternatives within the present technological trend, but its existence threatens many other established sectors. the possibility of technological replacement. The traditional elderly care industry can coexist with intelligent elderly care software, so the relationship between the two is less of an absolute substitution and more of a cooperative and symbiotic relationship. Of course, traditional nursing homes are still substitutes for intelligent elderly care software and equipment.

5. Competition in the industry

According to market concentration for smart senior care software in 2019, CR4 is 8.2% and CR8 is 14.7% for the entire sector. The market for intelligent senior care devices is now highly competitive. China's Manufacturing of Smart Elderly Care Equipment in 2019 Concentration Analysis Because there are numerous subdivided categories, including nursing homes, hospitals, pharmacies, and nursing care, there are numerous participants in each area even if the business as a whole is still in its infancy. Only a small number of creators have thoroughly mastered each sub-category. Businesses in the sector are in a phase of intense competitiveness, and there is stiff competition in the market.

1.3 Feasibility Analysis on i-Pension in China (Product & Service, Marketing, Organizational & Financial)

1.3.1 Technical feasibility of the project

From NET to J2EE, the JAVA platform has so far been the technology of choice for all group clients and high-end government agencies when it comes to large-scale software systems. J2EE-compliant application servers are the central core platform for developing object-oriented, multi-layer business applications, and JAVA

technology has become the de facto standard for handling large applications in other nations. It has established itself as the go-to platform for object-oriented development of organizational applications due to its simple portability, broad openness, high security, support for rapid development, and other qualities. Because it is platform-independent, secure, reliable, simple to build, well-maintained, and highly network-usable, Java has established itself as the industry standard. With a multi-tier distributed application model, component reuse, a unified security model, and adaptable transaction control mechanisms, J2EE is the industry standard for enterprise applications. It offers a component-based approach to designing, developing, assembling, and deploying enterprise applications. It offers configurable transaction management techniques, a multi-tier distributed application model, component reuse, and a consistent security approach. It incorporates XML-based data sharing, a uniform security model, flexible transaction control, and reuse capabilities.

1.3.2. Market

China's ageing has entered an accelerated phase and will reach its peak in the next decade, more and more young people are already thinking about their situation after old age, a wisdom of the elderly app also highlights its value, Yingdot technology proposed wisdom of the elderly app from the actual needs of the elderly, the Internet and the elderly industry combined, for the elderly and young people together to provide healthy, convenient and practical It provides a healthy, convenient and practical one-stop solution for the elderly and young people, so that the elderly can enjoy their old age peacefully and the young people at home can rest assured.

1.3.3. Technical innovation

The system and the application has developed a more comprehensive business model and a more advanced, stable, and reliable technical solution to meet the regulatory requirements for the elderly. The main points of innovation are shown below.

More comprehensive business architecture, the project unifies the management of three types of elderly care business: home care, community care and institutional care. Managers can, in the supervisory platform, oversee the relevant operational data and gain a comprehensive understanding of the elderly care services in their jurisdictions, providing an information-based support means for government decision-making. Standardized access to smart hardware, the project adapts and accesses the mainstream smart hardware devices nowadays and provides a unified interface to meet the rapid docking of relevant hardware and realize the interconnection of hardware and system.

Traditional elderly care facilities have high operating costs, weak risk control capabilities, low management levels, and inconvenient supervision, in addition to the elderly's inability to care for themselves, geriatric illnesses, and sudden illnesses; memory loss, vision loss, and inconvenient hands and feet; families' limited time to visit; and institutional nurses' low professionalism, high work pressure, irregular operating procedures, and weak support systems. The humanized care management, intelligent operation management, and simplified care services are used by the intelligent elderly care software system to lower costs for elderly care facilities, enhance operational risk management, guarantee facilities' smooth operation, increase management efficiency, and implement authority management systems at various levels. With the aged as the focal point, the system is fully automated; daily management realizes process, standardization, automation, and humanization. Intelligent monitoring for life care, real-time dynamics, and the management of geriatric health. The system should implement online appointments so that there are more family interactions and family members can feel confident taking care of them. Nursing staff should be more standardized, efficient in their processes, and intelligent so that families can understand the situation of the elderly in real time.

In order to provide real-time, quick, affordable, and effective intelligent elderly care services for the elderly at home, the intelligent elderly care management system platform connects the elderly, elderly care service agencies, guardians, and third-party service providers using cutting-edge Internet and Internet of Things technologies.

Wearing sensors, such as wearable elderly activity status detection devices and portable human physiological parameter testing devices, allows for remote automatic management of an elderly person's daily life, including round-the-clock recording of their eating and living habits at home as well as ongoing monitoring of their health data. Elderly blood pressure monitoring, location determination using an LBS positioning system, building a smart elderly care operation and management service platform through wireless network networking, timely assistance through real-time monitoring, early warning through big data analysis, reasonable dietary and maintenance suggestions, and future prevention are all examples of key information that should be monitored.

1.4 Objectives of Research on *i-Pension*

To study on. i-Pension Smart Elderly Care Service Application. The detail as follow:

The creation of the app is consistent with the modernized and tailored administration of geriatric care. The widespread use of apps makes it easier to handle elderly care services, improves management for managers, and gives users a quick and simple way to comprehend our elderly care services, allowing us to better meet user needs and build a name for elderly care. It is simpler and more practical to utilize. The elderly can start using the software more quickly because to its reading feature and streamlined interface. Elderly smartphone users' demands are better served by the large-character setting and click-to-read feature. Improved care for the elderly. Families, communities, and hospitals can be connected in a line to monitor the health of the old in real time and respond to their needs in real time thanks to the monitoring capabilities of the app and the ability to analyze big data to better understand the physical condition of the elderly. Data, alert processing for aberrant data, so that the old will be more concerned and cared for by the big group of society. This will not only lessen the load on young people with regards to pension difficulties, but also better take care of the health of the elderly.

Section 2

Marketing Plan

2.1 Segmentation, Target, and Positioning of *i-Pension* (STP)

2.1.1 Segmentation:

To cope with the problem of population aging and accelerate the development of the elderly care service industry, the national and local governments have introduced a series of measures to promote the development of the home-based elderly care service industry. The potential market size is expected to further expand. And there are mainly 3 segmentation of our smart i-pension home care market: they are 'home care', 'community care' and 'institutional care'. Institutional old-age care (various rules and regulations promulgated by the national civil affairs department) refers to the joint participation of the government, society, and family in old-age care services, and it is a supplement and update to the traditional family old-age care model. In the community elderly care, it includes day care centers for the elderly, canteens for the elderly, activity centers for the elderly, schools for the elderly, etc.

As China enters an aging society, the demand for institutional pensions is becoming more and more vigorous. Institutional care for the aged is a new type of old-age care model in China. The old-age care institutions gather the elderly in one center to provide for the elderly and can provide for the aged nearby.

Because institutional care is home-based care, the elderly need to rely on the community, as well as pension institutions. From the perspective of market demand, community elderly care service institutions can firstly provide life care, rehabilitation care, spiritual comfort, meal assistance and bathing services for the elderly. The elderly can choose according to their actual situation. The community elderly care service center is conducive to the elderly to use their waste heat and can meet the cultural and entertainment needs of the elderly.

Secondly, the role of community elderly care service centers in elderly care services is mainly to provide entertainment venues for the elderly, improve the quality of spiritual life of the elderly, and make the life of the elderly more colorful

in their later years. In community elderly care services, they can not only enjoy the services provided by professional elderly care institutions, but also carry out a variety of cultural and entertainment activities, which can not only meet the spiritual needs of the elderly, but also promote the physical and mental health of the elderly and realize the self-care of the elderly. value and enhance the social identity of the elderly.

Finally, the community elderly care service center is not only an elderly care institution, but also has very powerful functions and complete functions. It not only provides elderly care services, but also provides services such as physical therapy, spiritual comfort, entertainment and learning for the elderly, effectively meeting the needs of the elderly in life services.

2.1.2 Targeting:

Both the elderly care market and the medical care market are facing the risk of market saturation. At present, manufacturers in the market are focusing more on improving service quality, such as adopting more technologically intensive equipment to improve service levels. Whether our company's market development can be carried out smoothly is directly related to the acceptance of the App. Compared with the exchange rate risk and interest rate risk in the market risk, the company's stock price risk, commodity price risk and other factors linked to its own operations are more worthy of our attention. On the basis that customers are more willing to download the "i Pension" App and put it into use, it will take a process for our company to let customers recognize and adapt to the online elderly care experience under the blessing of 5G technology and cloud computing technology. If the previous market research is not enough and the market analysis is not accurate enough, the functions in the App may not meet the expectations of the elderly's elderly care needs, which will hinder the marketization process of our company or even completely lose this market, making it difficult to recover the investment and affect the company. bad image consequences.

Before entering the two markets, do a good job of research and preliminary publicity. Every company employee must put himself in the shoes of the elderly and

look at the problem from the perspective of the elderly. The psychological resistance of "online elderly care". Fully understand the psychological needs, spiritual needs, etc., select a market target as a breakthrough, and formulate corresponding marketing strategies, from opening a target market to entering the entire market field. At the same time, it is necessary to improve the service quality of our company, enhance the comprehensive competitiveness, enhance the market adaptability, establish a complete market information network system, so that in the face of the ever-changing market, we can anticipate every possible risk in advance and make a good response plan. Only in this way can we truly face risks and deal with them with ease.

To target the market of our smart i-pension application and service, one is based on the actual situation of Chinese current pension work, clarify the government's responsibilities and missions, clarify the responsibilities and obligations of all parties, and provide direction guidance and decision-making reference for the development and development of Chinese smart pension.

The second is to clarify the positioning of market institutions. From a macro point of view, for the development of the elderly care industry, it is necessary to take the country as the main body, be guided by market demand, take demand as the foundation, and be led by the government to promote the development of smart elderly care through a combination of standardization and precision. For the content and quality of services, the government, pension institutions and relevant social organizations need to participate together, adopt the method of substituting rewards for subsidies, explore and build a smart system of home and community elderly care services, and provide all-weather security services for the elderly.

The third is the "smart" requirements of elderly care institutions. Elderly care service is a demand-oriented service, which requires all-round improvement of service level. For the positioning of market institutions, it is necessary to create a smart elderly care system that meets market demand from multiple aspects such as products, technology, and operations according to their own characteristics and conditions. For the demand side, improving the quality of smart elderly care services requires the joint efforts of the government, elderly care institutions, and consumers. From the

perspective of meeting demand and improving efficiency, smart elderly care should provide various services for the elderly at home.

Fourth, the development trend of elderly care services. The current focus of the elderly care industry is to promote the innovation of elderly care service models, and we must pay attention to areas such as community elderly care, home-based elderly care services, and institutional elderly care. The development trend of smart elderly care mainly lies in cultivating and stimulating the vitality of market entities in elderly care service enterprises. It is mainly to realize the digitization, intelligence, and networking of the elderly care service industry, and to strengthen one-to-one services for the elderly.

The development trend of the new format of smart elderly care pointed out that with the continuous expansion of the market scale, increasingly rich service content, and continuous improvement of service quality, social forces have gradually become the main body of the development of smart elderly care. Through the application of intelligent technology and products, elderly care services and products should be effectively supplied, integrated, and efficiently used to improve the quality of life of the elderly.

2.1.3 Positioning:

1. Product positioning:

Our primary operating systems are the APP and smart wristband. There are three platforms in our APP, and each platform is modified to meet user needs. Because of the content's depth, it's easy for family members to comprehend the old person's physical condition and get them supplies. To provide high-quality services for the aged, the community side compiles health information and service requirements for the old. Additionally, to receive medical attention as soon as possible, our smart wristband can track the user's bodily indications in real time, including blood pressure, heart rate, pulse, and other vital signs.

2. Consumer positioning:

There are two key categories of our audience: the primary APP users, who are seniors between the ages of 40 and 85, and their offspring.

2.2 Marketing strategies of *i-Pension* Application in China (7Ps, 4Ps)

Products:

We mostly use an APP and smart bracelet for operation. Three platforms make up our APP, and each platform is modified to meet the needs of users. The community side summarizes the health data and service needs of the aged to provide high-quality services for the elderly, to comprehend the physical condition of the elderly, purchase supplies for the elderly, etc. Additionally, in order to receive medical attention as soon as possible, our smart wristband can continuously check the user's physical indicators, such as blood pressure, heart rate, pulse, and others, to see if they are normal.

Price:

The organization will offer door-to-door services and professional services in accordance with needs, and the community pays according to needs, users + family members + community services. Provide a range of health management services that may be used in a practical fashion, such as daily massages, foot baths, hydrotherapy, and acupuncture, and allow users to purchase health packages that include these services to offer older people more substantial assistance.

Place:

We will build a small shop for our application and our bracelet to make advertainments and we will also post lots of posters in hospitals, local communities, and pharmacy stores too for propaganda.

Promotion:

A membership system that offers distinctive value-added services in exchange for a very low membership fee.

People:

Our customers, who are primarily senior people between the ages of 40 and 85, and their children, fall into two primary categories.

Process:

Our target market is the elderly, and since watching TV and reading newspapers are their primary sources of knowledge, we can hunt for endorsements and platforms and place TV advertising to promote our smart bracelets so that clients would grasp our APP. Children are the primary consumers and decision-makers, even though our APP directly benefits the elderly and indirectly benefits children. As a result, we also need to place advertisements in entertainment software, such as pushing our APP advertisements on Chinese TikTok, to ensure that more children are aware of our products.

Physical evidence:

The exhibition of our i-pension application and the bracelet will mainly be achieved in our i-pension display store.

Section 3

Management & Operation Plan

3.1 Management Plan of *i-Pension* Application in China

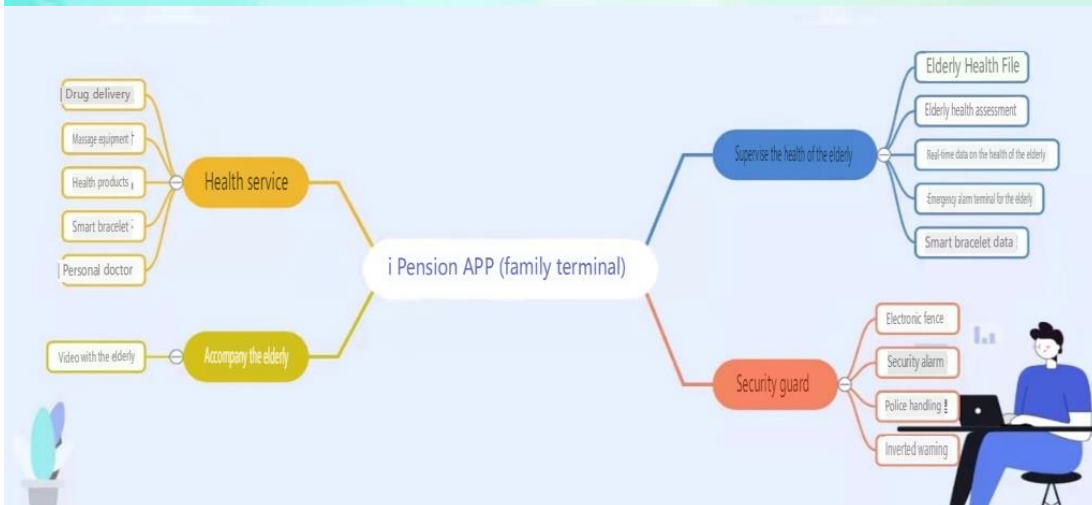
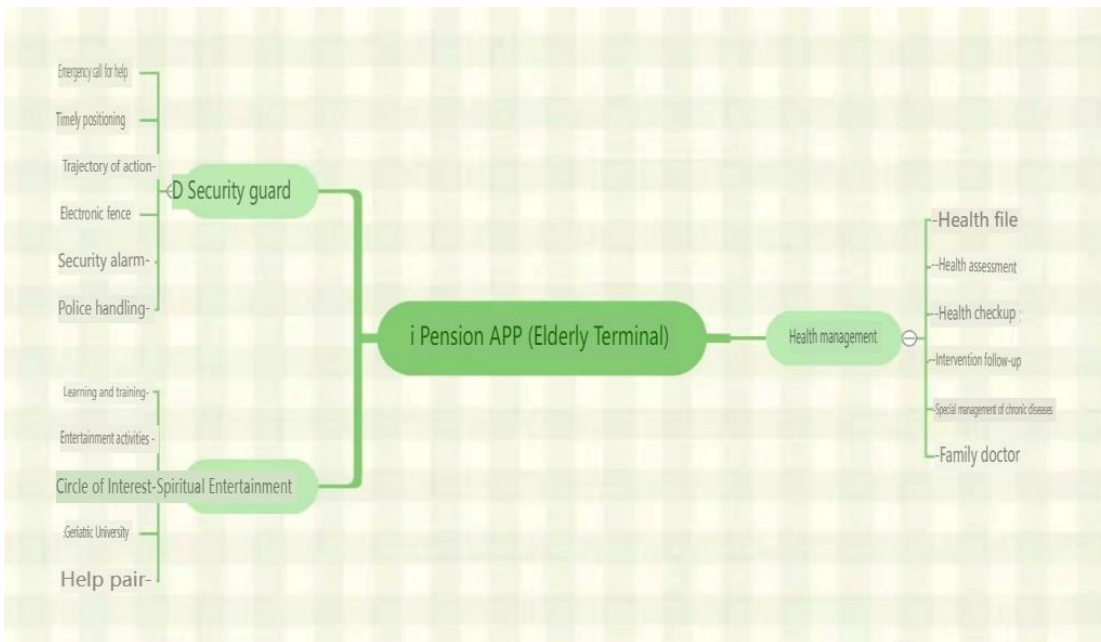
In terms of supply, if we are unable to consistently maintain a unified viewpoint with respect to the needs of the elderly and the anticipated effect of the service by the elderly's families, the resulting service effect does not match the actual demand, and the user experience is extremely poor, which will result in unimaginable losses to the company's reputation. When it came to finances, the company's initial startup money was small, and it lacked competent staff. Later, the management organization system grew significantly, making it difficult to update management concepts on time. Especially inside the App involved in the part of the hospital or not responsible enough, safety, every production of service quality oversight, and protection in the hectic process are often overlooked. Numerous variables are untrustworthy. In order to provide customers with the best possible service, our company will regularly conduct quality inspections and sampling inspections as complementary review methods, as well as on rare occasions, customer service and return visits. We are committed to identifying and resolving issues before they arise and will make these follow-up visits once an issue has been summarized. In order to preserve the legitimate interests of all parties, our company will also consistently focus on market orientation, prompt production adjustments, supply risk reduction, and agreements with customers and upstream and downstream service providers.

3.2 Production Plan of *i-Pension* Application in China

Marketplace risk and protective measures the fundamental source of market risk is competition, encompassing both current and potential rivals who may behave similarly in the future. Our company's technology application development cycle is too long, or it might be launched too late, which could lead to the release of products with similar concepts before ours, allowing them to seize the market first and absorb a large number of users, weakening the competitiveness of our company's products.

Therefore, it is essential to prepare carefully throughout the development phase, to move as quickly as possible through the field application development process, and to reduce the overall development time. Additionally, keep an eye on market movements at all times and get ready for quick action. The online senior care services provided by 5G technology and cloud computing technology have not yet reached full maturity due to the high technical content, and additional on-site inspections are still required for wider deployment. Our business struggles with issues like technology development that is still in its infancy and technical flaws that cannot be implemented in the real world because it is unable to accurately estimate the risk of investing in unproven R&D equipment. Additionally, the places where "I Pension" is applicable are fraught with uncertainty. Whether "I Pension" can be universally applied, whether various devices can function normally, and whether different functions will impact the use effect owing to delay due to diverse regional customs and concepts Whether the technology can accommodate that is a significant unknown.

This technology has long been our company's competitive advantage thanks to the successful research and development efforts of our business. We shall take legal means to defend our company's rightful interests and retain our rightful intellectual property rights if other businesses are likely to copy us using well-known services and technology and hurt consumers. Additionally, after our business is established, a sizable portion of the startup capital will be allocated to technology research and development as well as user feedback analysis. To preserve our professionalism, we will also recruit experts to continuously update and maintain the App. On the other hand, our business will tighten the system of product technology confidentiality to stop the leaking of our business's unique technology and safeguard legitimate rights and interests.





3.3 Operation Plan of *i-Pension* Application in China

The business idea of our company, "i Pension," is built on cloud computing and 5G technologies for Internet + pension services. In my nation, there are already more than 240,000 aged care service providers, and 80% of these providers have internet platforms, such as specialized apps or tiny programs, that help with service delivery. The number of businesses offering elderly care services in my nation has grown steadily over the past ten years, even by double digits in the last two years. Among the pension-related apps currently on the market, "Sunshine Lunch Pension" has received 250,000 downloads, but the main service is "Recipes for Elderly Health Care and Health Encyclopedia," and the App "e Pension" related to smart health and scientific pension "Tang" has received 50,000 downloads as well. As can be observed, there are numerous elder care service app downloads currently available, however the service is only offered once, there are few app downloads, and the operation is difficult. However, it is impossible to ignore the fierce market competition in the senior care sector, and it is important to recognize the potential of associated businesses. Our company is under a lot of strain from the market rivalry.

Many rivals are cautious to enter the market for cloud-based and smart senior care online apps, despite the fact that tens of thousands of Chinese elderly care service providers are working hard to increase the quality of their services. As a result, there is still a huge untapped market for Internet-enabled apps that provide elderly care services. The field application of Internet + elderly care services developed by our company will be

developed earlier than most competitors, so as to better integrate market resources and occupy more large market share. 5G technology and cloud computing technology are the cracking point, whether it is really high-ranking or a hot spot in the future.

Section 4

Financial Projections

4.1 Financial statement of i-Pension

The project plans to raise 1 million RMB, 300,000 RMB for patented technology, 500,000 RMB for venture capital, and 200,000 RMB for self-raised funds, accounting for 30%, 50% and 20% respectively. The financing structure is complete. This project plans to use the funds for the promotion of the i Pension APP and to expand the company's business scale. And cooperate with high-tech to promote the diversification of APP research and development and service content. The main sources of the company's funds include the funds of the company's initial team members and bank loans. The initial funds of this project are mainly used for personnel salaries and period expenses. At the beginning of the project, the focus is the i-Pension APP, and a traffic pool is built to make it popular with most people. In the middle and late stages, it will be combined with offline electronic smart products such as: smart bracelets, trackers, etc., so that family members can understand the physical condition of the elderly in more detail, to give full play to the role of the i-Pension APP. And each i-pension system and bracelet together kit sell at the price of 1000 RMB Yuan. We first want to get the inventory of 150 kits and all the net loss from operation is about 450000 RMB. After adding the depreciation of 50000 RMB, the total fixed cost would be 400000 RMB.

Unit price	¥1,000						
Source of funds (unit: RMB/Yuan)							
	Patented technology funds				¥300,000		
	Venture capital				¥500,000		
	Personal funds of founders				¥200,000		
	Net income (loss) from operations				(¥450,000)		
	Add depreciation				¥50,000		
Total funds provided							¥600,000
Application of funds							
	Purchase of equipments				¥150,000		
	Inventory				¥150,000		
Total funds expended							¥300,000
Net increase in working capital							¥300,000
							¥600,000

Figure 1: Source of Funds

4.2 *i-Pension's* Cash Flow Analysis

4.2.1 Statement of Assets and Liabilities

project ↵	2023, 2024, 2025-2026-				Year 2027 ↵
assets.	↵	↵	↵	↵	↵
Current assets.	↵	↵	↵	↵	↵
Monetary funds ↵	1089661.5↵	981253.2↵	786900↵	905647.8↵	1209845.1↵
Accounts receivable.	45000↵	78000↵	136000↵	179000↵	210050↵
Total current assets.	1134661.5↵	1059253.2↵	922900↵	1084647.8↵	1419895.1↵
Non-current assets.	↵	↵	↵	↵	↵
Fixed assets.	19850↵	26500↵	31000↵	35689↵	40897↵
Intangible assets ↵	9800↵	10060↵	15890↵	19875↵	24569↵
Total non-current assets ↵	29650↵	36560↵	56890↵	55564↵	65466↵
Total assets ↵	1164311.5↵	1095813.2↵	979790↵	1140211.8↵	1485361.1↵
Liabilities and the owner's equity~ (Or shareholders' equity) ↵	↵	↵	↵	↵	↵
Current liabilities~	↵	↵	↵	↵	↵
Accounts payable~	16000↵	21000↵	26000↵	41000↵	48000↵
Employees' salaries payable.	139000↵	167000↵	217800↵	258900↵	304500↵
Total current liabilities ↵	155000↵	188000↵	243800↵	299900↵	352500↵
Total liabilities ↵	155000↵	188000↵	243800↵	299900↵	352500e
Owner's equity< (Or shareholders' equity)~	↵	↵	↵	↵	↵
Paid-in capital ↵ (Or share capital).	1000000↵	1000000↵	1000000↵	1000000↵	1000000↵
Capital reserve~	↵	↵	↵	↵	↵
Surplus reserve ↵	5678↵	5987↵	6437↵	6897↵	7456↵
Undistributed profit~	12389↵	14567.4↵	18976.9↵	25689.1↵	30891.2↵
Owner's equity~ (Or total shareholders' equity) ↵	1018067↵	1020554.4↵	1025413.9↵	1032586.1↵	1038347.2↵
Liabilities and owner's equity ↵ (Or shareholders' equity) total.	1173067↵	1208554.4↵	1269213.9↵	1332486.1↵	1390847.2↵

Figure 2: Balance sheet (Unit: RMB Yuan)

4.2.2 Income Statement

project	Year 2023	Year 2024	Year 2025-	Year 2026-	Year 2027-
1. Operating income-	45327	56789	84879<	113215	134312<
减: Operating cost	12568	18796	23476	29865	35986
Business taxes and surcharges					
减: Sales expenses	3478	7654	9865	13459<	17893
Administrative expenses	7895	9853	11345	14587<	19678
2. Operating profit-	21385	20486	40193	55304	60755
Plus: Non-operating income.					
减: Non-operating expenses					
3. Total profit	21385	20486	40193	55304	60755
减: Income tax expense 25%	5347<	5121<	10048	13826	15189
Fourth, net profit	16038	15365<	30145	41478	45566

Figure 3: Income statement (Unit: RMB Yuan)

4.2.3 Cash Flow Statement

project	2023-2024-2025, 2026, 2027~				
-1. Cash flow from operating activities~					
Cash received for the sale of goods and the provision of services	239834	295897	358760	467543	598650
Subtotal cash inflow from operating activities	239834	295897	358760	467543	598650
Cash for purchasing goods and accepting payment for labor services	45322~	49877	56667	78654	98743
Cash paid to and for employees	139000	167000	217800	258900	304500
Various taxes and fees paid~	5347	5121	10048	13826	15189
Subtotal cash outflow from operating activities	189669	221998	284515	351380	418432
Net cash flow from operating activities-	50165<	73899	74245	116163	180218
2. Cash flow generated by investment activities~					
Purchase of fixed assets, intangible assets and other long-term assets	29650~	36560<	56890	55564	65466
Cash paid by production					
Net cash flow from investment activities~	29650	36560	56890	55564	65466
3. Cash flow generated by fund-raising activities~					
Cash received to attract investment~					
Net cash flow from equity-based activities-					
4. The impact of exchange rate changes on cash and cash equivalents~					
5. Balance of cash and cash equivalents at the end of the period~	20515	37339	17355<	60599	114752

Figure 4: Statement of Cash Flows (Unit: RMB Yuan)

4.3 NPV, IRR, ROI Analysis

4.3.1 Analysis of significant data

project<	2023<	2024<	2025<	2026<	2027<
Operating income.	45327<	56789<	84879<	113215<	134312<
Net profit<	16038<	15365<	30145<	41478<	45566<
Total assets~	1164311.5<	1095813.2<	979790<	1140211.8<	1485361.1<
Net cash increase~	20515<	37339<	17355<	60599<	114752<

Figure 5: Analysis of significant data table (Unit: RMB Yuan)

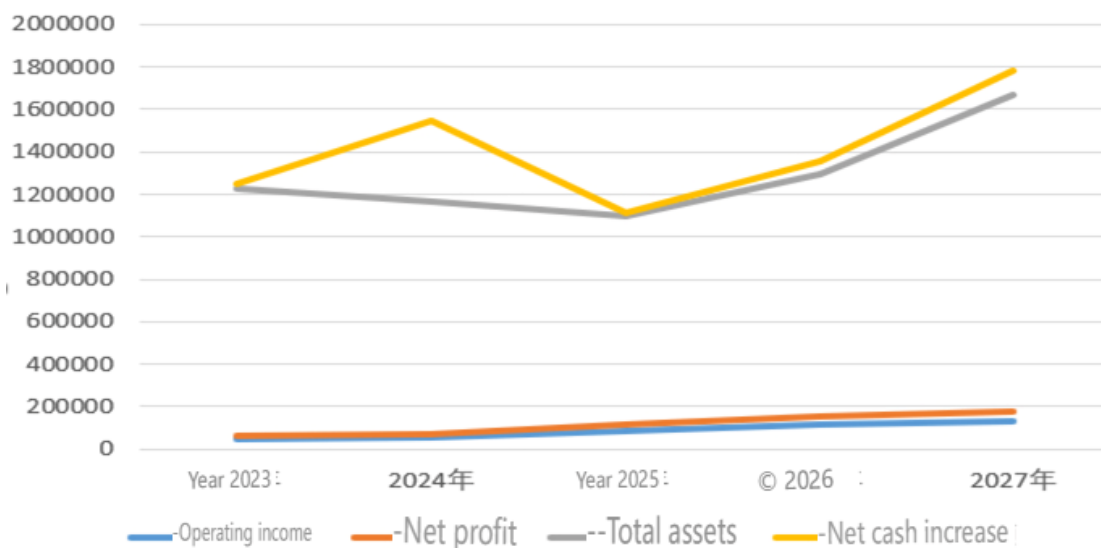


Figure 6: Analysis of key figures

Table 4.3.4 Total Cash flow of i-Pension Smart Elderly Care Service Application projection for 5 year

Total(billion Yuan)	2023	2024	2025	2026	2027
Revenue	1,164,311.5	1,095,813.2	979,790	1,140,211.8	1,485,361.1
Factors (Discount rate 8 %)	0.926	0.857	0.794	0.735	0.681
PV Revenue (Discount rate 8 %)	1,078,152.5	939,111.9	777,953.2	838,104.2	1,011,530.9
Accumurate PV Revenue	1,078,152.5	2,017,264.4	2,795,217.6	3,633,321.8	4,644,852.7

4.3.2 ANALYSE IRR, ROI, NPV, and Breakeven point

From table 4.3.4

Initial investment 3,000,000 Yuan

NPV = 4,644,852.7 – 3,000,000 = 1,644,852.7 Yuan

IRR = 17.6 %

ROI average per year = 4,644,852.7/5 = 928,970.5

ROI average per year = 928,970.5/3,000,000 X100 = 30.96%

Pay Back Period = 3 years and 1 months

It can be seen from the important data analysis table and Figure 6 that our company's operating income, net profit, total assets and total net cash increase are generally on the rise, with a good momentum of development and broad prospects.

In 2024-2025, our company is at the junction of the incubation period and the development period, and the increase in net profit is relatively slow. However, in 2026-2027, our company will develop the model of combining i Pension APP and smart wearable devices, focusing on the development of Beijing-Tianjin-Hebei region, so that the company's net profit increased significantly.

4.3.3 Analysis of solvency

Indicator~	Year 2023 ↵	Year 2024 ↵	Year 2025 ↵	Year 2026 ↵	Year 2027 ↵
Current ratio 7.32 ↵	5.6↵	3.9↵	3.6↵	4.1↵	
Asset-liability ratio~13.3~	17.2↵	24.9↵	26.3↵	23.7↵	

Debt solvency analysis table (unit: %)

From the perspective of solvency, our company has sufficient development funds, strong solvency, and smooth capital turnover. Since our company pays attention to shaping the corporate image during the incubation period, focuses on research and development of the i Pension APP, and builds a traffic pool, the amount of capital

investment is relatively small. From the third year onwards, it will shift to the development of the joint model of the i Pension APP and smart wearable devices. Capital investment Due to the increase in the amount, the current ratio has declined, but the turnover is still smooth, and the short-term solvency is strong. From the perspective of asset-liability ratio, our company's asset-liability ratio has been on the rise, the company's own funds continue to rise, and the long-term solvency has gradually increased.

4.3.4 Analysis of Operating Capability

Indicator	2023	2024	2025	2026	2027
Accounts receivable turnover rate	4.2~	7.1 <	8.9	9.6	9.8

Operating Capability Analysis Table (Unit: %)

From the perspective of operating capabilities, our company's accounts receivable turnover rate has always maintained a high state, indicating that the company recovers accounts receivable at a faster speed, has better liquidity of assets, and has strong liquidity.

4.5 Interview Results: conclusion from 6-10 interviewees of structure interview

4.5.1 The basic life service needs of the elderly.

Among the 10 elderly people surveyed, most of their self-health evaluations are above average, indicating that the elderly has better self-care ability. Although they have better self-care ability, it is known through interviews that the elderly has the most urgent need for basic life services, and the elderly have a relatively high demand for basic life services. In terms of life care services, there are many options for opening canteens for the elderly and delivering meals to their homes. In terms of housekeeping services, the demand for various services is relatively evenly distributed, and the needs of the elderly are relatively high for grocery shopping, cooking and laundry. This shows that when the elderly's self-care ability is better, the requirement for food supply is the strongest.

4.5.1 Medical service needs of the elderly.

As people get older, with the decline of physiological functions, the incidence of diseases increases. In addition, the demand for medical services will become particularly eager. It can be clearly felt that the needs of the elderly for medical services are mainly concentrated in community health service stations to establish health records for the elderly, provide medical services, conduct health knowledge lectures, and medical staff visit the doctor, visit the doctor, and accompany them to the hospital. The elderly is more looking forward to the establishment of health records, the desire for health knowledge, and the demand for in-situ medical treatment. In addition, in the interviews and questionnaires, we found that some elderly people are interested in medical services that provide intelligent physical disease monitoring systems, which shows that some elderly people can accept wearable medical products.

4.5.2 Conclusion.

It can be seen from the survey results of community elderly care service demand that the elderly in the community need basic life services, medical services, health services, and spiritual and social services in order.

(1) In terms of basic life services, since family care is the main way of providing for the elderly, family members play a considerable role in the daily life of the elderly. Children are affected by various pressures such as work and study and cannot take care of the elderly at any time and need the elderly to take care of themselves. Due to factors such as the physical health of the elderly and their limited energy, there is a high demand for day care services when their children are not at home. In terms of housekeeping, they also hope to obtain timely services, such as food delivery, laundry, cleaning, grocery shopping, going to the toilet, going out, etc. Among them, grocery shopping, cooking, laundry, and house cleaning are the most urgent needs. The smart platform built should effectively realize resource interconnection with institutions such as housekeeping, elderly care service agencies, communities, and hospitals.

(2) In medical services, since most of the elderly are infested with chronic diseases and their physical health is average, their demand for medical services continues to increase. The elderly expects the community to establish health records and provide medical services, such as on-site medical treatment, on-site physical examination, and physical therapy massage. With the development of modern technology, some elderly people expect to monitor their own diseases with the help of intelligent products and install intelligent call for help systems at home.

The old-age care lays the foundation for the masses.

(3) In health services, as the elderly grow older, their physiological functions gradually decline. Whether their bodies are healthy and how healthy they are more concerned issues. The elderly pay attention to their own health mainly in three aspects, namely nutrition and health care, exercise health care, and disease prevention and control. With the popularity of TV and smart phones, the elderly mainly obtains health information through the TV network. They have the urgency to understand health knowledge and pay attention to health consultation, but facing Lin's various health information, how to identify the authenticity is very difficult for many elderly people. In building a smart platform, it is necessary to strengthen the screening of information.

(4) In spiritual social services, the emotional support of the elderly mainly comes from the family. Due to the realistic conditions of children's work and life, it is impossible to care for the elderly spiritually and meticulously, causing some elderly people to have a strong sense of loneliness. It stimulates their high demand for spiritual comfort services, and heart-to-heart chatting has become the first choice for the elderly. Due to the inner loneliness of the elderly, they are prompted to look for social activities to pass the time and participate in cultural and sports activities organized by the community to gain a sense of fulfillment in life. Although the elderly has left their jobs, they have a strong desire for self-expression. Although they are old, they are eager to show their talents. Although they are old, they do not want others to spurn their oldness. The elderly are particularly looking forward to the health psychology lectures in the community, and are eager to participate in the community residents' congress and join the elderly association. When building a smart platform, it is necessary to build a good emotional support system and social support system for

the elderly. At the same time, it is also necessary to fully consider the self-expression desires of the elderly, and expand the data platform resources to schools within the jurisdiction, social welfare organizations, etc.

Section 5

Conclusion and Suggestion

5.1 Conclusion

The process of population aging is accelerating, and the problem of providing for the elderly is becoming more and more prominent. The only child generation not only faces social pressure but also bears the problem of providing for the parents. Universal. Not only can it solve some problems for the family, but also provide a better quality of life for the elderly. In response to this situation, under the perspective of "Internet +", our company has launched a smart elderly care service for the elderly in the form of an app. With the help of advanced information technology, this app uses new concepts and new models to improve the accuracy and effectiveness of elderly care services and has become an inevitable choice to deal with the new situation of population aging.

5.2 Suggestion

Social Prospects: With the accelerated pace of China's entry into an aging society, the development of the cause of aging is an important part of building a socialist harmonious society. The problem of aging is not only a practical problem for individuals and families, but also a major social problem related to the national economy and people's livelihood. In addition to facing the increasingly severe challenges of population aging, China is also facing increasingly serious problems of aging, fewer births, only children, and empty nests in terms of population structure. , social transformation, and cultural transformation are intertwined. Therefore, the aging problem has penetrated various fields of economic development and social life. The elderly care issue has become a difficult, focus and hot spot in Chinese society. Opportunities and challenges coexist. The smart elderly care service industry is facing an unprecedented market. opportunity.

Industry prospects: Physical nursing homes are in the early stage of the outbreak, and physical nursing homes have high labor costs, large investment, and

great challenges in providing services. However, my country's smart elderly care industry is in the early stages of development, and the content provided is more focused on daily care and health management services. The smart elderly care service platform lacks long-term planning, and the industry lacks industry systems and related norms. However, affected by favorable policies, China's smart health care service system will gradually mature and improve in the future. Factors such as immature core technology and lack of industrial talents restrict the development of the industry.

Under the double benefits of social and industry prospects, coupled with our marketing and product advantages, I believe that our products will greatly occupy the market and make profits, and become a successful smart elderly care software.

Appendix

(Interview form, List of interviewees)

Smart Pension Questionnaire

Dear Madam and Sir! I am a postgraduate student at the University of Southeast Asia in Thailand. To investigate the topic of "smart elderly care", we have launched this questionnaire survey and hope to get your support and assistance. This survey is in the form of anonymity, and your personal information will be kept confidential. The information obtained is for research purposes only. We hope that you can truthfully reflect your real situation. Thank you for your participation!

1. What is your age [single-choice question] *

- Under the age of 18
- 18 ~ 34 years old
- 35 ~ 59 years old
- 60 years old and above

2. Do you live in Beijing?

[Single-choice question] *

- yes
- no

3. Has your city set up smart elderly care-related institutions? [Single-choice question] *

- yes
- no
- do not understand

4.

Do you know the "smart pension" model?

[Single-choice question] *

- understand
- Have heard of it, but don't know much about it
- do not understand

5. What is the current pension method of your parents/grandparents [single-choice question] *

- Community pension (living at home, community or family members provide medical security, life care, etc.)
- Institutional care for the elderly (nursing home, home for the elderly, etc.)
- Other

6. What do you think is the most important aspect of the current elderly care service [single-choice question] *

- Medical service
- Nursing service
- Entertainment service
- Convenience service

7.

If "Smart Pension" provides the following elderly care services, which of the following services would you choose?
[multiple choice] *

- Personnel positioning and safety monitoring
- Daily care services (such as online booking of housekeeping services, etc.)
- Mental health counseling (such as online psychological counseling)
- Cultural activity services (such as online dating, etc.)
- Emergency telephone service
- Door-to-door medical service

8.

What kind of fees can you accept for the above "smart elderly care" services?
[Single-choice question] *

- Below RMB 500/month
- 500~1000 yuan/month
- 1000~1500 yuan/month
- 1500~2000 yuan/month
- More than 2,000 yuan/month

9.

If you use the "smart pension" model, what will you worry about
[multiple choice] *

- Service Quality
- Personal information security
- Unable to track dynamics and provide information feedback in time
- Unable to deal with emergencies
- Will not use elderly care equipment

10. What measures do you think the government should take if the smart elderly care model is developed [multiple choice] *

- Unified establishment of a database of personal data of the elderly
- Policy subsidies for smart elderly care model
- Increase the supervision of smart elderly care model and related industries
- Standardize the service quality standards of the elderly care industry
- Set up training courses on the use of elderly care products in various communities (to help the elderly and their children learn to use elderly care products)

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THIS IS TO CERTIFY THAT

Mingda Pang

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