



HAPPINESS - LH TECHNOLOGIES

BY

ZHENXI WU

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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Author Zhenxi Wu
Program Master of Business Administration (International Program)
Advisor(s) Pavinee Na Srito, Ph.D.


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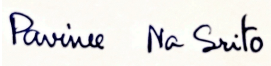

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Abstract

This research is qualitative research. Coke LH Technologies has developed three software packages, each with its focus. Cola-LH-v1.0 software focuses on real-time management of personnel grids and in-hospital and out-of-hospital drug logistics systems in the context of epidemic prevention and control. Coke LH-v2.0 software focuses on the construction of a regional clinical testing center in Songjiang District, Shanghai, enabling the homogenization of laboratory tests in all hospitals in Songjiang District, Shanghai, and creating a three-way win-win situation for our company, the buyer, and the third party through a new profit-making approach. Coke LH-v3.0 software is a smart hospital system developed specifically for patients with depression and other mental illnesses. There are also 54 million people with depression in China, over 10 million people are suicidal and more than 500,000 have ended their lives by suicide, with suicidal behavior caused by depression being the leading cause of death among people aged 15-31. At present, 60% of the country's population is chronically depressed, and some of these groups are reluctant to face up to and take depression seriously for fear that they will be discriminated against by others if they see a doctor, leading to an increasing number of depressed people in society. Such a large group of people, together with those suffering from other mental illnesses, makes the Coke-LH-v3.0 software have unlimited prospects. The financial and feasibility is an initial investment of RMB 4.25 million, with a five-year average annual profit of RMB 2.08 million from 2022-2026 and a return on investment of 49%.

Keywords: Smart hospitals, real-time management, regional clinical testing centers, large sample protocols

Acknowledgement

As I look back on the years I have spent as a postgraduate student, I feel enriched by the time I have finished writing this business plan.

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I would like to thank my classmates and friends who have accompanied me during my postgraduate studies for their helpful suggestions and advice, and whose support, encouragement, and assistance have enabled me to spend my postgraduate studies in a fulfilling way.

This business plan was completed under the careful guidance of my supervisor, Assoc. Prof. Dr. Pavinee Na Saito. My supervisor's profound professional knowledge, rigorous attitude towards studies, style of working for excellence, high moral values, strict discipline and generosity towards others, and simple and approachable personality have had a profound impact on me.

Not only did he help me to set ambitious academic goals and master basic research methods, but he also taught me a lot about how to deal with people and the world. This business plan was completed under the guidance of my supervisor from the selection of the topic to the completion of each step. I would like to express my respect and gratitude to my supervisor.

The successful completion of this business plan would not have been possible without the care and assistance of all teachers, students, and friends. We would like to express our deepest gratitude. Without their help and support, there would be no way to complete my business plan, and the friendship between fellow students will always endure.

Zhenxi Wu

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Section 1

Company description

1.1 Company Profile

Cola-LH Technologies is a technology company engaged in the field of smart healthcare, the company was founded in early 2018, formerly engaged in the development of intelligent office systems (OA), the business is registered in Shanghai, China, with an initial registered capital of 3-million-yuan, early 2020 new coronavirus pneumonia has just broken out in Wuhan, China, the company believes that the epidemic will change the traditional medical industry. The company took this as an opportunity to enter the healthcare industry, focusing on smart healthcare, and is committed to using modern information technology to improve the crowding out of China's healthcare resources by the epidemic, and optimizing traditional treatment methods through digital technology-enabled applications such as artificial intelligence, big data, and 5G. It has developed Coke-LH-v1.0 software (staff grid management and pharmaceutical logistics system), Coke-LH-v2.0 software (medical laboratory homogenization system), and Coke-LH-v3.0 software (smart medical system for depression and mental illness).

After nearly 5 years of continuous improvement and development, Coke-LH Technology has helped Shanghai Songjiang District Central Hospital to realize the grid management of personnel and the construction of a pharmaceutical logistics system, helped Shanghai Songjiang District to establish a regional clinical testing center and realize the homogenization of medical tests in Shanghai Songjiang District and helped Shanghai Mental Health Center to establish a smart medical system.

1.2 Corporate Culture

Corporate mission: To improve the crowding out of China's medical resources by using modern information technology, optimize traditional medical treatment and improve the public's experience through artificial intelligence, big data, 5G, and other digital technology-enabled applications.

Enterprise spirit: sincere cooperation, forging ahead, and pursuing excellence.

Working Policy.

2022: Enhance internal content, focus on humanities, strengthen collaboration and improve services

2021: Only practical work, improve connotation and strengthen cooperation

2020: Strengthen the foundation, improve quality, adjust the structure, grasp the characteristics, and promote cooperation

Core values (management philosophy): quality and innovation, care and respect

1.3 Company History

1.3.1 History of the Company

2018: Coke-LH Technologies was founded and the company is registered in Shanghai, China.

In 2018

Launch of the windows automated office tool

In 2019

Self-developed enterprise back-end cloud services and explored the development of the saas+ cloud office platform

In 2020

A new coronavirus pneumonia outbreak had just occurred in Wuhan, China, and the company believed that the outbreak would change the traditional medical industry. The company took this opportunity to enter the medical industry and promote smart medical care. However, due to limited registered capital, the company initially targeted hospital personnel grid management and pharmaceutical logistics system and developed its software, Coke-LH-v1.0, for mobile phones and computers.

In 2021

In 2021, the company further deepened its cooperation with the Shanghai Songjiang District Health System and further developed the Coke LH-v2.0 software on top of the Coke LH-v1.0 software, established the Shanghai Songjiang District Regional Clinical Laboratory Centre and realized the homogenization of medical laboratory tests.

In 2022

Cooperated with Shanghai Mental Health Centre and developed Coke LH-v3.0

software to establish the Shanghai Mental Health Centre's intelligent medical system.

1.3.2 Company Honours

May 2018 The company was awarded the Cloud Office Industry Preferred Brand

In December 2020 the company was awarded the Outstanding Case Award for Epidemic Prevention and Control by the Shanghai Songjiang District Health and Wellness Committee

The company received the Quality Enterprise Award from the Shanghai Songjiang District People's Government in November 2021

2021 The company received the Outstanding Software Award from Shanghai Songjiang District Health and Wellness Committee in December

September 2022 The Shanghai General Chamber of Commerce expressed its gratitude to the company for facilitating access to medical treatment for patients with mental illnesses

1.3.3 Some of the company's patents



1.4 Products and Services

1.4.1 Coke-LH-v1.0 software

In early 2020, the outbreak of new coronavirus pneumonia, the Chinese government attaches great importance to the prevention and control of the epidemic, hospitals as the key area of prevention and control of the epidemic, the staff base is large and mobile, once the epidemic occurs, the hospital needs to be closed and closed-loop management is adopted, during the closed-loop management period, the staff base needs to be mapped at the first time, during the closed-loop. During the closed-loop management period, we need to identify all the staff in the hospital, including hospital staff, general practice trainees, interns, trainees, rural doctors, security staff, cleaning staff, volunteers, nurses, outsourced engineers, patients, escorts, and other people who stay in the hospital during the emergency closure, so how can we help the hospital to identify the staff in the first place, so as to help the hospital to operate in the normal mode and the hospital. In this context, the company developed the Coke-LH-v1.0 mobile phone and computer software, which divides the hospital into multiple grids for personnel management, including staff health status reporting and nucleic acid report viewing. At the same time, the network base station of the grid system is set up to build the logistics system inside and outside the hospital. The drugs required by outpatients are delivered to distribution points outside the hospital with the help of hospital rail logistics trolleys, before being delivered to patients via special sterile vehicles, and inside the hospital via drug delivery robots to patients' bedsides, contributing to the information construction of Shanghai Songjiang District Central Hospital and the prevention and control of epidemics using information technology.

1.4.2 Coke-LH-v2.0 software

The Coke-LH-v1.0 software developed by the Company was awarded the Outstanding Case of Epidemic Prevention and Control by the Shanghai Songjiang District Health and Wellness Committee. The company further developed the Coke LH-v2.0 software, through which it can roughly count the daily test sample items and quantity in Songjiang District, Shanghai, and through the cooperation with the current domestic third-party authoritative testing institution (Jinwei Medical), The

program has reduced the workload of the seven district hospitals while achieving homogenization of test quality through cooperation with the current third-party authoritative testing organization (Goldfield Medical) and has greatly reduced testing costs due to the large sample testing agreement with the third-party authoritative testing organization (Goldfield Medical).

1.4.3 Coke-LH-v3.0 software

In early 2022, the Company worked with the Shanghai Mental Health Centre to understand the special nature of depression and mental illnesses and their future development prospects, and developed Coke-LH-v3.0 software, which can optimize the medical process for new patients and make them relatively satisfied with the medical process. For new patients, this mobile phone and computer software can optimize the process of access to the hospital and make it relatively satisfactory for patients. For old patients who have already been diagnosed, an in-hospital and out-of-hospital logistics system can be built using identification and the setting up of a network base station for the grid system. The out-of-hospital delivery of medication to the distribution point for outpatients is carried out using a hospital rail logistics trolley and delivered to the patient in a special sterile vehicle, while in-hospital delivery of medication is carried out by a delivery robot to the patient's bedside, contributing to the construction of a smart medical system for the Shanghai Mental Health Centre and the prevention and control of epidemics through information technology.

1.5 Selecting the name for Business

Coke - LH Technologies - Coke: Maybe you're not happy, but I want you to be happy. The hope is that the people who use this mobile phone and computer software can reap happiness and get rid of low moods in the use of this mobile phone and computer software, that is, the grid and logistics management, the application of regional clinical testing center, and the medical experience of depression and other mental illnesses; LH stands for Happy Life, which means that the platform can add color to the lives of people with depression and create a happier life for them.

1.6 Key partnerships

1.6.1 Collaboration with 16 community health service centers in Songjiang District, Shanghai

1.6.2 Collaboration with 7 district hospitals in Songjiang District, Shanghai

1.6.3 Pharmaceutical logistics partners

1.6.4 Medical Laboratory Homogenisation Partners

1.6.5 Partnership with Shanghai Mental Health Centre

Section 2

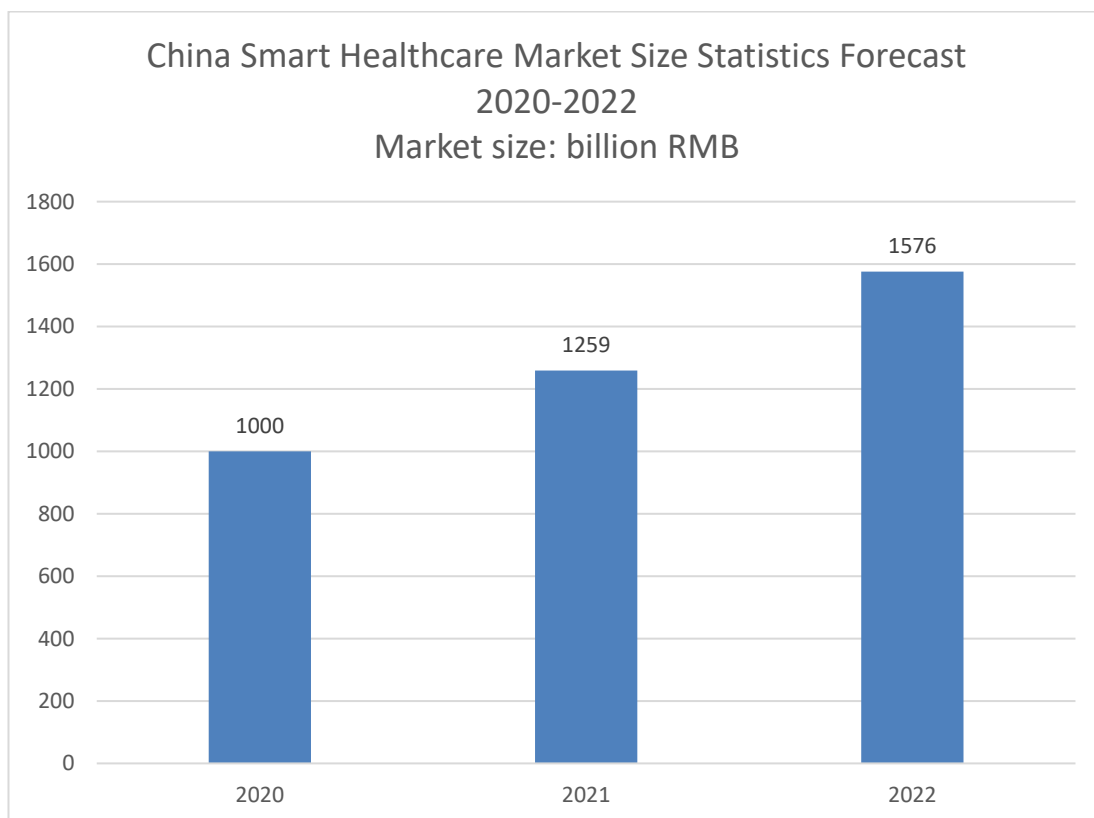
Industry Analysis

Hospitals around the world are now under immense pressure to provide healthcare services to a progressively aging population, while also facing pressure to control costs and improve the quality of care. In December 2017, the then National Health and Family Planning Commission and the National Bureau of Chinese Medicine formulated the Action Plan for Further Improvement of Medical Services (2018-2020) to promote the development of high-quality medical services. The document clearly states that smart hospitals should be built around the "Internet+". With patients' medical needs at the core, information technology will be used to improve service quality, supplement service content, and transform the entire medical process. In the context of the construction of "Healthy China", the longevity of hospitals depends on whether they can maintain their strengths and make up for their shortcomings. In the current era of digitalization and rapid development of information technology, the construction of smart hospitals has become an objective need, and research into it is imperative. The need for smart hospitals is highlighted by the prevention and control of the new pneumonia epidemic.

2.1 Industry Size, Growth Rate, and Sale projections

2.1.1 Smart medical market size

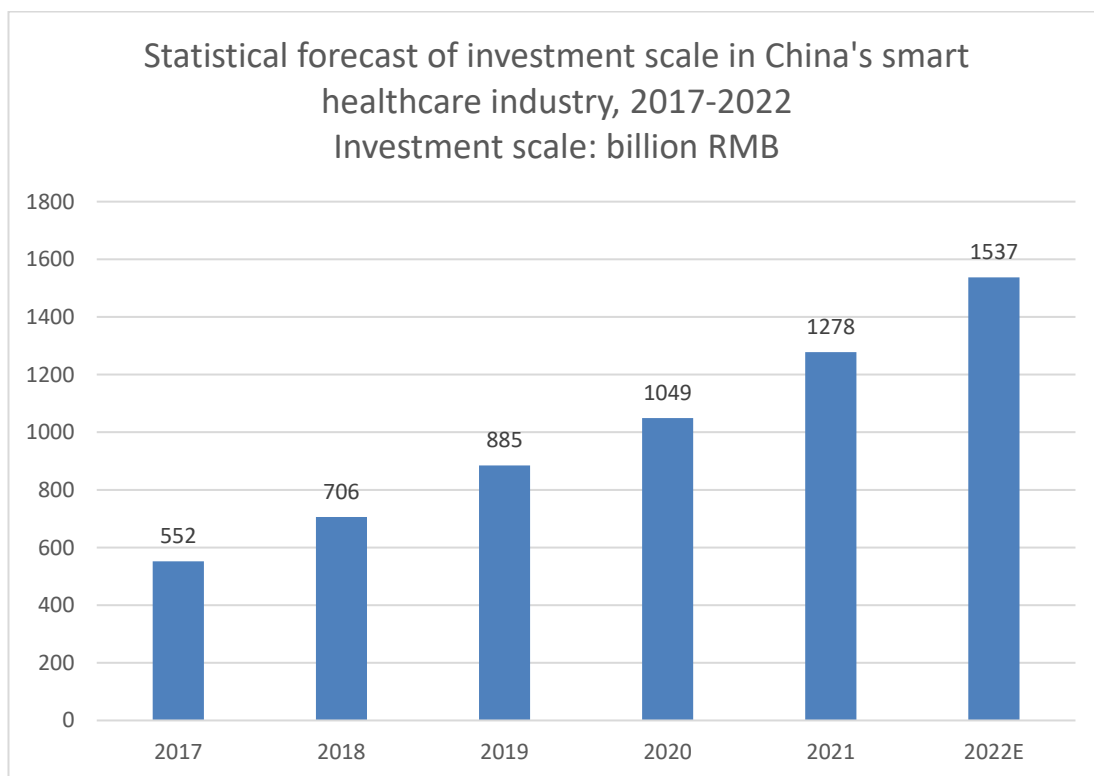
Data show that the scale of China's smart medical industry has exceeded the 100-billion-yuan mark in 2020, and the market scale will grow further in 2021, and the smart medical industry will enter a period of rapid growth in intelligence, efficiency, and scale development. Under the rapid development of the digital economy, the scale of China's smart medical market is growing at a rapid pace, ushering in a good time for development across the board, and its market size is expected to reach 157.6 billion yuan in 2022.



Source: Bureau of Statistics

2.1.2 Scale of investment in the smart medical industry

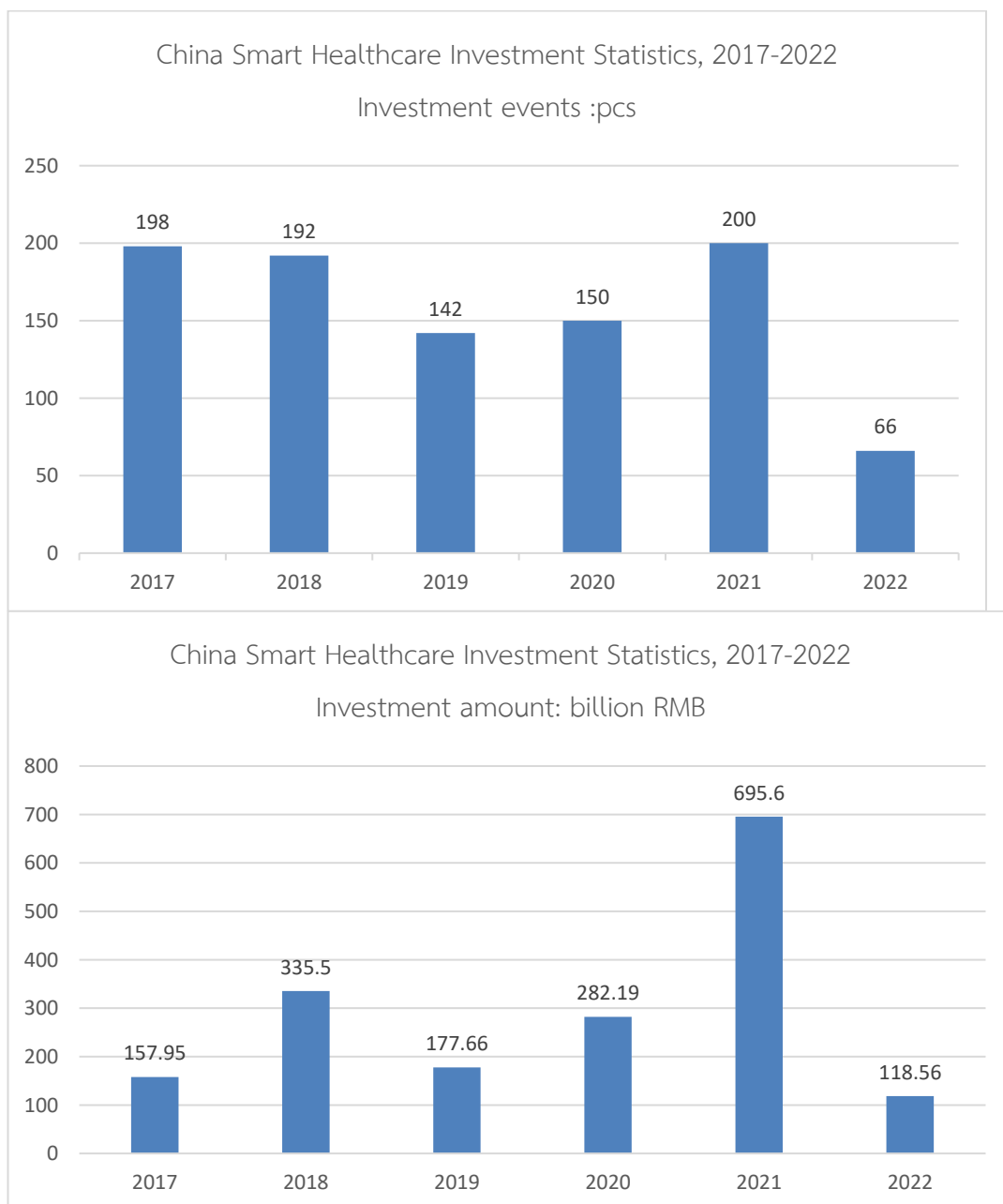
With the development of the wisdom medical industry, more and more capital is flowing into the wisdom medical industry. Data show that the investment scale of China's smart medical industry exceeded 100 billion yuan in 2020, an increase of 15.6% year-on-year, and it is expected that the investment scale of China's smart medical industry will exceed 150 billion yuan by 2022.



Source: Bureau of Statistics

2.1.3 Investment and financing in smart healthcare

In recent years, the scale of the smart medical market has shown accelerated growth, with Internet medical enterprises, technology-based enterprises, and traditional medical information technology enterprises joining the smart medical track to seek the interface with smart medical and carry out transformation and upgrading, and the scale of investment and financing has grown rapidly. Data show that in 2021, the number of smart medical investments in China totaled 200, with an investment amount of 69.56 billion yuan, an increase of 146.5% year-on-year. As of June 24, 2022, the number of smart medical investments in China 2022 totaled 66, with an investment amount of 11.856 billion yuan.



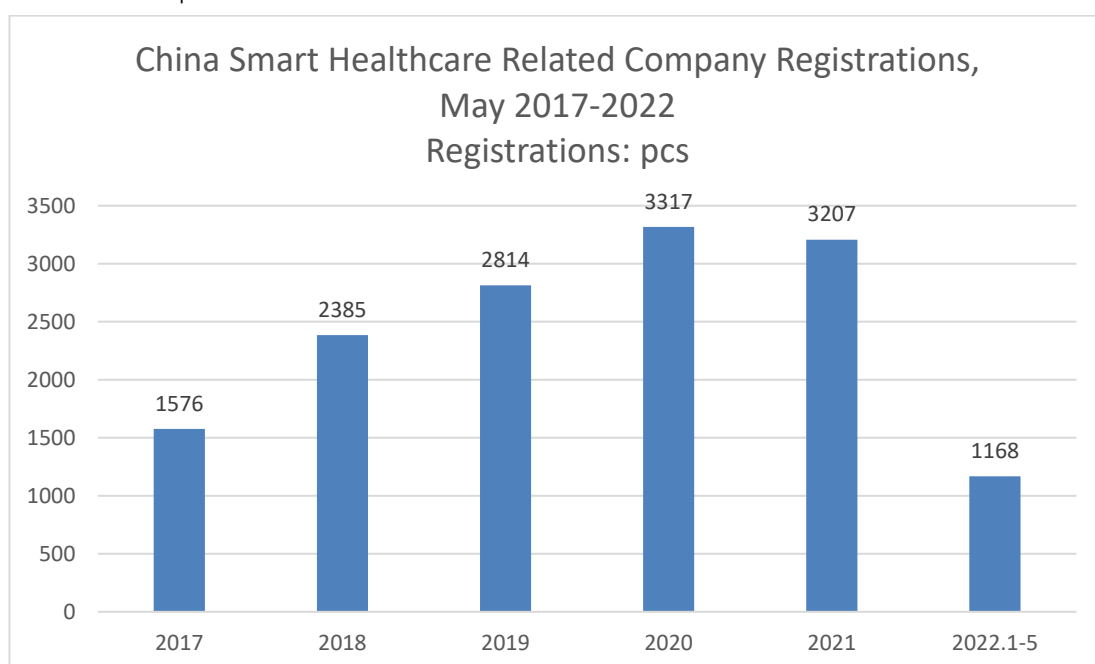
Data source: Statistics Bureau

According to incomplete statistics, there were 66 investment events in the smart medical industry in 2022, with financing amounting to more than 10 billion yuan. In June 2022, Huashan wisdom medicine completed nearly 500 million yuan of Series A financing, with this round of financing led by Wuyuan Capital, followed by Banyan Tree Capital, Neumann Capital, and three angel round investors Xianghe Capital, High Tall Venture Capital, and Qingzhi Capital. Huashan Smart Pharma will continue to focus on AI+new drug development, improve AI high-performance computing

capabilities, expand high-throughput experimental platforms, and simultaneously promote pipeline independent research and development and external cooperation.

2.1.4 Registration of smart medical-related enterprises

In recent years, the number of smart medical-related enterprise registrations in China has continued to increase. Data show that China added 3,317 new smart medicine-related enterprises from 1,576 in 2017 to 3,317 in 2020, an increase of 17.9% year-on-year and a compound annual growth rate of 28.2%. 3,207 new smart medicine-related enterprises were added in China in 2021, a decrease of 3.3% year-on-year. The latest data shows that as of May 2022, 1,168 new smart healthcare-related enterprises were added in China.



2.2 Industry Characteristics

There are three main characteristics of the smart healthcare industry - "smart healthcare" for medical staff, "smart services" for patients, and "smart management" for hospitals. "smart management".

2.2.1 Smart healthcare

Intelligent medical care is the construction of clinical information technology with electronic medical records as the core, mainly the interconnection of information involved in the diagnosis and treatment process such as electronic medical records

and image reports, test results, etc. It also includes the information construction of the whole process of diagnosis and treatment and the effective use of the data generated in the process. In the construction of a smart hospital, the construction of systems such as electronic medical record systems, laboratory data systems, and doctors' treatment terminal systems is the core of the medical process. The construction of electronic medical record systems can effectively improve the efficiency of diagnosis and treatment, enhance the accuracy of diagnosis and treatment information records, and help the hospital and patients to keep long-term and complete records of their visits. The interconnection of electronic medical record systems, laboratory data systems, and doctors' treatment terminals can effectively avoid misdiagnosis caused by wrongly taking paper reports, etc. Artificial intelligence-assisted medical decision-making and widely used remote consultation, which are still in the process of experimentation, all belong to the scope of smart medicine.

2.2.2 Smart services

Smart services are services that patients or users can access more easily and provide the best possible experience for patients. Many hospitals currently have all-in-one machines that provide services such as self-registration, triage, and payment; some hospitals provide services such as appointment registration, appointment consultation, and specialist sitting reminders through social accounts, and some derived services such as car parking information pushing can be included in "smart services". Through websites, various social networking platforms, and related mobile applications, information about the hospital is introduced to patients so that they can better understand the medical resources and service capabilities of the hospital, allowing them to choose departments and doctors according to their needs, reducing ineffective outpatient visits and effectively relieving the pressure of manual triage is currently the basic project of most hospitals in the construction of smart hospitals. Social platforms, hospital-built apps, or medical-related software provide patients with online registration, online top-ups, and follow-up appointments, alleviating problems such as the difficulty of registering at hospitals. The construction of smart services can effectively reduce the labor costs of hospitals to

a certain extent while improving the level of hospital services.

2.2.3 Intelligent management

In the construction of hospital information technology, "wisdom management" belongs to the back end of the value chain, although it does not directly create value, as a support chain, the construction of hospital management information systems is also particularly important, to achieve wisdom management can effectively improve management effectiveness, better for clinical departments to provide support. The construction of wisdom management includes the information construction of different functions such as financial systems, performance management systems, material systems, and OA systems, and is an integral part of the construction of a wisdom hospital. The construction of information technology at the functional level, such as talent assessment, financial management, and material distribution, can make the back-end support of the hospital more orderly and efficient.

2.3 Key Success factors

The current wisdom hospital construction is mainly based on communication technology, network technology, and computer science, and the specific needs of the hospital can be met by building an information platform that can provide wisdom medical care, wisdom services, and wisdom management. Xu Ruoran et al. proposed that the construction of smart hospitals is mainly based on network technology and telecommunication technology to build a platform for instant communication services, information dissemination services, network information inquiry, and services. The communication network, technology, and customer resources of mobile communication operators can allow hospitals to facilitate information pushing through SMS and other forms, real-time consultation appointment status pushing, etc. Information platform construction is the focus of smart hospital construction and contains two parts: out-of-hospital and in-hospital. The out-of-hospital information platform connects to health authorities, medical insurance systems, and regional integrated medical platforms, while the in-hospital information platform covers integrated management systems, laboratory data systems, electronic medical record systems, and doctors' work terminals. Data

integration and utilization is another key focus of smart hospital construction, including the integration and in-depth utilization of information system data to realize data value, which is conducive to the improvement of hospital management effectiveness and the quality of healthcare services. In addition, through models, algorithms, and knowledge combined with existing data, the construction of a wisdom platform, combined with artificial intelligence and other technologies to derive more diverse and targeted wisdom applications is also an important construction direction of the current wisdom hospital. Artificial intelligence combined with actual application scenarios, through the orderly overlay of modules such as big data mining, natural language processing, and medical image analysis, can achieve targeted development of the wisdom modules required for different business scenarios, providing a basis for clinical aid decision-making.

2.3.1 System architecture

The early smart hospitals were mainly based on Radio Frequency Identification (RFID) and built an architecture based on EPC global, sensor networks, and M2M (machine-to-machine) Internet of Things. Zhao Yanjie et al. propose a set of solutions and methods for a cloud-based smart hospital platform by analyzing and studying the architectural design, virtualization deployment, and communication function implementation of the smart hospital platform. Based on information integration and communication collaboration, Lu Jinjun et al. go further to innovate in the architecture of the smart hospital system. By applying key technologies such as information integration, unified communication, and mobile terminal management, several hospital functions are enhanced, such as mobile healthcare, medical knowledge base, medical monitoring, and commercial intelligence analysis. Based on the development of IoT, Yu Lei built a smart hospital architecture in terms of logical structure, application framework, and construction environment. Wang Kai [2] proposed a new intelligent hospital architecture based on BIM technology, in other words, a four-layer architecture consisting of an application layer (building facility big data collection), a network layer (user health big data collection), a sensing layer (remote big data processing and analysis) and a data layer (intelligent medical service application) developed based on the M2M IoT architecture. Shen Di

et al. proposed the idea of process transformation of the treatment process, for example, optimizing the process for digital guidance in outpatient clinics, which can greatly reduce the consultation time and make the whole process more humane, easier, and smoother.

Within the framework of the overall system of smart hospitals, scholars at home and abroad have carried out a great deal of research from different perspectives. RFID is a method of storing and retrieving data remotely using RFID tags. It can be used in the construction of smart hospitals, such as patient identification, blood tracking, intelligent surgical treatment, and avoiding theft of medical equipment. Nadeem Mahmood et al. propose a conceptual framework for a smart hospital management system based on RFID. This framework is more effective in providing up-to-date health information about patients than manual systems with manual data entry. Coronato et al. present a discrete implementation model for smart hospitals, discussing how e-health services and applications can be enhanced by locating information. They propose a semantic model, mechanism, and system to locate the position of different mobile entities in a smart hospital.

2.3.2 Evaluation system

China's healthcare industry has developed so far, and although it has made great progress in medical technology and infrastructure construction, the smart hospital function is not yet perfect, information technology is not well integrated into the medical process, the separation between the medical process and information technology is high, and the degree of wisdom is low. Therefore, in terms of smart hospital construction, China is still in its infancy and still needs to learn from countries with mature technologies. In 2014, the then National Health and Family Planning Commission's Medical Management Service Centre set up a special Smart Healthcare Project Team to develop a general framework for a Smart Healthcare evaluation index system and propose a method for constructing a Smart Hospital evaluation index system.

The evaluation system mainly includes four aspects, namely the selection of evaluation dimensions, the design of the evaluation model, the construction of the evaluation index system, and the application of evaluation methods. The evaluation

system is used to evaluate the construction level of smart hospitals, and is based on three aspects, namely capacity building, application management and effectiveness analysis, and proposes three primary indicators and 16 secondary indicators (including infrastructure, team building and innovation capacity in terms of capacity, and smart patient, smart outpatient, smart inpatient, smart nursing, smart medical technology and pharmacy, smart management, smart logistics). The overall framework of the smart hospital evaluation index system is based on 143 tertiary indicators and 406 rating items based on 3 primary indicators, 16 secondary indicators (infrastructure, team building and innovation capability, application including smart patients, smart outpatient, smart inpatient, smart nursing, smart medicine, smart management, smart logistics, smart security, smart research and smart teaching, and effectiveness including medical service satisfaction, hospital efficiency and health industry development), but the corresponding results still lack sufficient empirical studies for validation and improvement.

2.4 Industry Trends

2.4.1 Environment trend

In October 2013, the State Council issued "Several Opinions of the State Council on Promoting the Development of the Health Service Industry", which mentioned the need to increase the provision of digital medical equipment, promote the integration of the health service industry with the Internet, and strengthen the construction of automated and intelligent health information service platforms. In July 2014, the National Health and Family Planning Commission proposed a top-level plan for the "46312" project, of which the "3" refers to the establishment of three basic databases, namely the electronic health record database, the electronic medical record database and the population-wide case database, to better realize the construction of a systematic, all-round and three-dimensional national health and family planning resource system. In November 2015, the National Health and Family Planning Commission announced the list of 12 pilot smart hospitals, marking the official start of smart hospital practice in China. In December 2017, the National Health and Family Planning Commission and the State Administration of Traditional

Chinese Medicine jointly issued the Action Plan for Further Improving Medical Services (2018-2020), pointing out that the construction of smart hospitals should be combined with the "Internet+". In April 2018, the Opinions of the General Office of the State Council on Promoting the Development of "Internet + Medical Health" pointed out that the construction of Internet + hospitals should be strengthened. The "trinity" of the smart hospital system is to provide patients with higher-quality medical services.

2.4.2 Business Trend

With new technologies such as the mobile internet, the Internet of Things, big data, cloud computing, and smart wearable devices, the smart healthcare industry can be reshaped in many ways.

2.4.2.1 Reorganising the healthcare industry

Smart healthcare will reshape the concept of healthcare - from "treating disease" to "treating the untreated" (changing the goal of healthcare from treatment to prevention); smart healthcare will reshape the healthcare experience --Smart healthcare will restructure the value chain of the healthcare industry - a new model of pharmaceutical e-commerce (optimization of processes), see Figure 1. The so-called treatment of the untreated disease refers to reducing the probability of disease by adjusting dietary habits, work and rest patterns, guiding emotional catharsis, reasonable exercise, and the appropriate use of health care products to regulate the body's constitution and strengthen the body's immunity.

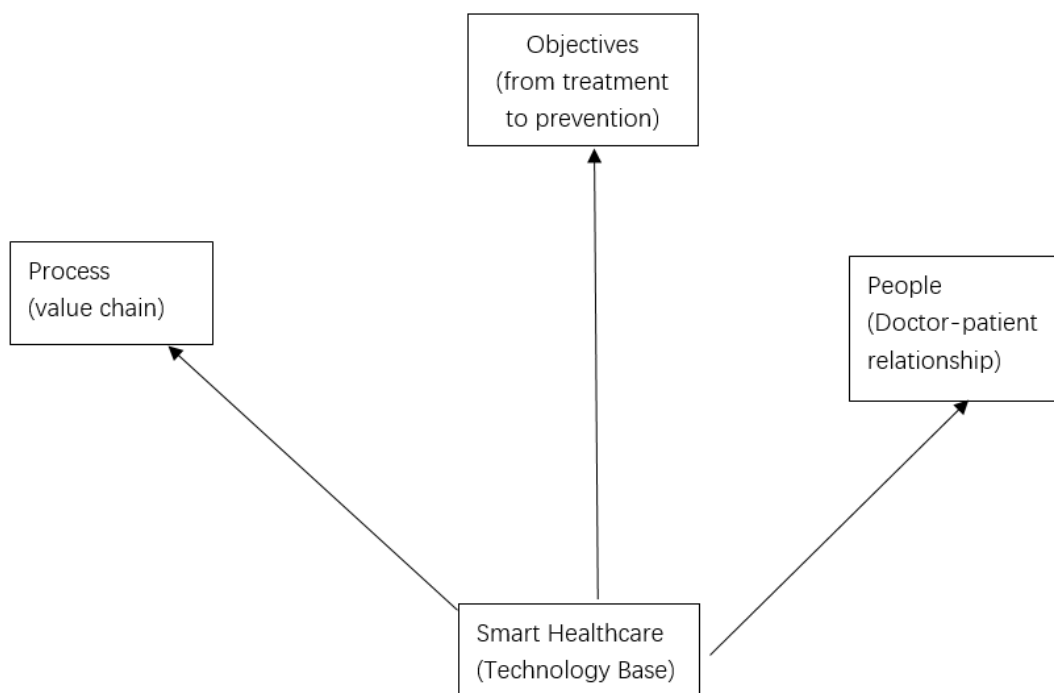


Figure 1. smart medicine restructures the medical industry

2.4.2.2 Reconfiguring the medical industry

In a smart medicine environment, smart wearable devices in the home, together with portable and light medical devices in the community, can monitor the user's body indicators in real time, making it possible to digitize health management. Users can check the changes in indicators at any time on their mobile terminals, detect abnormal data and make timely adjustments to their diet, work, and rest habits according to the advice given by the smart terminals, to prevent diseases before they occur. This not only reduces the pain caused by illnesses when they occur but also saves medical costs. At the same time, the health data accumulated over a long period can be mined through big data to find out the causes of diseases when they occur and to discover the peculiarities of the patient's body indicators, which facilitates doctors to formulate targeted treatment plans. According to the current level of medical care, most diseases can be effectively controlled at the initial stage of occurrence. However, in the traditional medical concept, due to the constraints of various conditions, people only go to hospitals for examination and treatment when they experience obvious discomfort, and by then the condition is often more serious and the best time for treatment is missed, bringing unnecessary pain and

greater financial pressure to patients.

2.4.2.3 Restructuring the medical experience

Smart healthcare will reshape the healthcare experience - with the patient at the center. There are many problems in traditional healthcare that prevent patients from having a good experience. Firstly, in traditional healthcare, there is an asymmetry of information between patients and doctors. Patients have little knowledge of their illnesses, while doctors often have many patients every day, so doctors do not have the time or motivation to fully communicate with patients and explain the causes and pathologies of their illnesses, which directly leads to frequent conflicts between doctors and patients. Secondly, the geographical distribution of medical resources is very unreasonable, and the lack of medical resources and low medical capacity at the grassroots level has led to all patients flocking to large hospitals, resulting in crowded access to core hospitals and long queues.

The typical characteristics of the Internet are user thinking and extreme thinking. Providing users with the ultimate experience is its fundamental attribute. As an application of the mobile internet in the healthcare industry, smart healthcare must also have patient-centered attributes. With new technology, smart healthcare can transfer some of the offline functions of traditional healthcare to be done online. For example, patients can obtain professional advice from doctors through online medical enterprise platforms and search for knowledge about their illnesses through online communities, solving the problem of information asymmetry between doctors and patients to a certain extent and reducing communication conflicts between doctors and patients. These functions greatly save patients' time in the queue and make hospitals more orderly, avoiding overcrowding and improving the efficiency of medical care.

In the future, intelligent healthcare will continue to deepen the integration of online and offline medical services, while breaking the spatial limitations of healthcare with the help of telemedicine technology, which will completely break through the "high wall" restrictions between medical institutions and form a medical consortium between online and offline as well as between hospitals. Patients will be able to

choose their mode of care according to their condition and choose their treating doctor and medical team, truly realizing a "patient-centered" medical model.

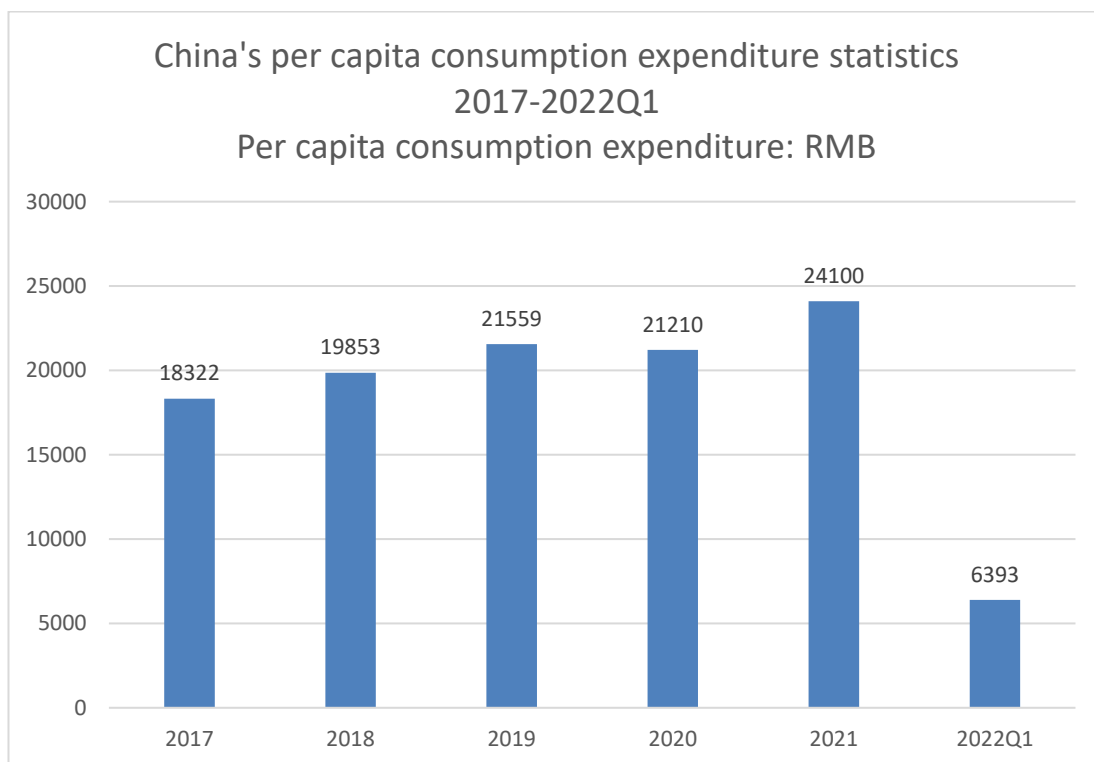
2.5 Long-Term Prospects

1. Policy favors the development of a smart medical industry

With the introduction of several health care informatization policies and the deepening of the new health care reform, relevant government departments in China have responded positively to the construction and investment in smart hospitals and smart medical care, promoting the informatization of medical means and the intelligence of medical technology from new technology applications and policy encouragement to solve the various medical problems currently faced, and have put forward higher requirements for the construction of smart medical care. The General Office of the State Council's Guidance on Promoting the Construction and Development of Medical Consortia requires the realization of grading according to the priority of diseases and the difficulty of treatment, with medical institutions at different levels undertaking the treatment of different diseases, gradually realizing the medical process from general practice to specialization, and truly realizing the interoperability of electronic medical records. The implementation of the policy is largely driving the development of the smart medical industry.

2. Increase in per capita disposable income pushes the development of the smart medical industry

According to data from the National Bureau of Statistics, in the first quarter of 2022, the national per capita disposable income was 10,345 yuan, a nominal increase of 6.3% over the previous year, and a real increase of 5.1% after deducting price factors; per capita consumption expenditure was 6,393 yuan, of which per capita healthcare consumption expenditure was 528 yuan, a nominal increase of 9.1% year-on-year, accounting for 8.3% of per capita consumption expenditure. With the increase in per capita disposable income, people are increasingly concerned about their health, and the demand for high-quality medical services continues to rise, forcing the development of the smart medical industry.



Data source: Bureau of Statistics

3. The current state of society promotes the transformation of medical wisdom

The advancement of urbanization has exacerbated the imbalance between urban and rural healthcare levels, urban hospitals are seeking more convenient and efficient means of wisdom to alleviate the growing pressure of huge volumes of consultations, and issues such as an aging society and chronic disease health management are causing hospitals to change their operations and explore the transformation of healthcare wisdom.

4. Technological advances boost the construction of hospital wisdom

Technological advances are driving the construction of hospital wisdom. The development of technologies such as the Internet of Things, big data, cloud computing, artificial intelligence, and sense has enabled medical-aided decision-making and paramedical means to be realized. At the same time, hospitals have joined forces with health insurance, social services, and other departments to streamline patient access and hospital service processes before, during, and after consultations, as well as medical support, which has also enabled the sharing of medical information across patients, medical equipment, hospital information

systems, and healthcare staff flows, greatly improving medical efficiency. It is expected that the continuous development of new technologies such as 5G, cloud computing, big data, and artificial intelligence will objectively open up a wider space for its further in-depth application.

Section 3

Market Analysis and Marketing Plan

Smart hospitals are a necessary path for the transformation of future hospital development. In 2015, the "Guidance of the State Council on Actively Promoting "Internet +" Action" put forward guiding opinions and clear positioning on the construction and application of "Internet +", followed by the "Action Plan for Further Improving Medical Services (2018-2020)" in 2017. The Action Plan for Further Improving Medical Services (2018-2020) once again proposed to build smart hospitals around the "Internet +". The Notice on Further Improving the Appointment and Treatment System and Strengthening the Construction of Smart Hospitals in May 2020 once again proposed to strengthen the construction of smart hospitals. In May 2020, the Circular on Further Improving the Appointment System and Strengthening the Construction of Intelligent Hospitals once again proposed to strengthen the construction of intelligent hospitals. At present, medical reform policies such as the abolition of drug mark-up, the two-ticket system, open access to medicine, and charging by the disease are all promoting intelligent hospital operations, and the continuous emergence of telemedicine, graded diagnosis and treatment, and medical associations are all part of the national reform of intelligent medical service systems, and the country and various regions are actively carrying out intelligent hospital pilots.

The National Health and Wellness Commission has clarified the definition and connotation of a smart hospital and initiated graded management of hospital smart services. At present, the scope of smart hospital construction covers three main areas: 1. Smart services for patients: using information technology to provide patients with services such as appointment booking, self-service payment, report inquiry, waiting for consultation reminder, intelligent consultation guide, pharmacy automatic dispenser, medical guide robot, etc.; 2. Smart medical care for medical staff: using information technology to promote convenient and efficient medical, scientific research, and teaching work, such as smart 3、 Wise management for

managers: using artificial intelligence, big data, cloud computing, and other "Internet +" technologies to assist hospital and medical management and leadership decision-making, and promoting refined hospital management, unified and homogeneous management of multiple hospitals. management, etc.

3.1 General market overview

Based on the construction experience and future planning of smart hospitals, the three major areas of smart hospital construction are summarised below.

3.1.1 Intelligent services

Smart hospitals should focus on the medical needs of patients, use information technology to improve service quality, supplement service content, and optimize the entire medical process. One of the goals of the hospital's intelligent services is to create an efficient and convenient integrated diagnosis and treatment platform for doctors, nurses, and patients, eventually realizing homogeneous services such as APP, WeChat service number, Alipay and self-service machines, and supporting self-service for the whole process of outpatient, inpatient and medical check-up by multiple means.

3.1.1.1 Intelligent infrastructure, solid foundation for the development of intelligent medical care

The guarantee of infrastructure is the cornerstone of building a smart hospital, including modular machine rooms, virtual resource pools, medical clouds, weak electrical intelligence, intelligent terminal equipment, etc., to provide infrastructure guarantee for the construction of smart hospital areas.

3.1.1.2 Internet + medical care, to achieve the whole process, all-round, multi-district services for the benefit of the public

Take a tertiary hospital as an example, the patient mobile terminal (including APP and self-service machine) can provide patients with face recognition, a real-name authentication function, outpatient appointment registration / same-day registration / additional number between consultations function, and can also help relatives to make appointments; provide patients with outpatient mobile terminal self-service check-in, real-time queuing, reasonable scheduling; provide patients with the whole process of outpatient consultation message reminders, including in-hospital

registration, outpatient check-in, check-in, report The mobile portal provides patients with a full range of outpatient information, including in-patient registration, outpatient check-in, examination check-in, report inquiry, pharmacy collection, etc. Patients can check the introduction of specialists and consultation information on the mobile terminal, make online payments according to the prescription list (supporting mobile medical insurance), as well as check the history of previous outpatient/inpatient visits such as drug prescriptions, examinations, tests, and images, etc., and support the homogenization of services in multiple hospitals. In the future, the Internet-based hospital will establish health records, follow up and manage the health of patients, and strengthen the remote collaboration of the medical association.

3.1.1.3 Intelligent follow-up + post-visit guidance, smart services extend to a closed loop of health management

Smart medical services also need to be extended downwards, and can now achieve an integrated online + offline service model: 1. opening a cloud consultation room, doctors can ask for advice through video and can diagnose and prescribe, and complete online consultation; 2. one-key medicine purchase and billing, no need to register and queue, you can complete the medicine purchase and billing without leaving home, and medicine delivery to the home; 3. intelligent follow-up, online batch intelligent follow-up can achieve high follow-up coverage and easily complete multi-dimensional statistical analysis. 4. Rehabilitation guidance, such as medication reminders, health education, and follow-up plans, provides comprehensive medical services for patients.

3.1.1.4 Smart parking + medical navigation, providing a smooth medical experience to the hospital

In the future, the smart parking system will provide automatic license plate recognition (for patients and staff), vehicle tailgating prevention, parking space planning, parking guidance, and visitor booking for vehicles entering and leaving the hospital.

3.1.2 Intelligent medical care

The goal of intelligent medical care is to build an information system with electronic

medical records as the core, to run through the whole process of intelligent medical care, and to improve medical efficiency across the board. The construction direction of intelligent medical care includes the medical and nursing dimension, the medical and quality control dimension, and the scientific research and teaching dimension.

3.1.2.1 Intelligent medical facilities to comprehensively improve doctors' work efficiency and quality

Through information technology, doctors can be freed from heavy non-medical core tasks and put into clinical and scientific research work without worry.

AI voice medical record entry to enhance work efficiency By using medical artificial intelligence voice technology for medical record entry on the mobile terminal and synchronizing HIS, accurate recognition can be achieved, and with deep customization and repeated training, the accuracy rate of voice recognition can be expected to reach over 95%. The standard, convenient and fast medical record entry will relieve doctors of the heavy workload of writing medical records and allow them to devote more energy to their treatment work.

Mobile doctor workstations and intelligent medical facilities A unified mobile work platform will enable efficient collaboration within the hospital, allowing doctors to check in via handheld PDAs or mobile medical carts, and a hospital-wide information-sharing platform will enable doctors to easily access patients' health records, improving the efficiency and accuracy of treatment. Hospitals also need to continue to absorb cutting-edge technology, introducing cutting-edge technologies such as surgical robots and AI-assisted diagnosis and treatment.

Telemedicine stacked with 5G + cloud + AI for smoother collaboration in multi-district consultations Smart medical sharing is an important element of a smart hospital, based on regional medical information platforms, open teleconsultation platforms, and interoperability platforms to create an integrated collaboration platform, mainly for remote consultations, two-way referrals and graded diagnosis and treatment, stacked with 5G to ensure high-definition and smooth video, stacked with cloud to ensure efficient transmission and storage of medical images, and stacked with AI technology to achieve intelligent film reading. AI technology to achieve intelligent film reading, etc.

3.1.2.2 Create digital wards and realize humanized intelligent care

Smart hospitals can realize comprehensive sensing and IoT for healthcare scenarios, using data to run instead of healthcare to make healthcare workers more efficient and convenient.

Through IoT or big data technology, we can realize mobile room check, wireless nursing (medical advice reminder, health education), infusion monitoring (abnormal alarm, drip rate control, automatic interruption), smart health watch (mobile communication, regional positioning, information reminder, one-touch call, fall alarm, sign monitoring), and other special functions such as asset location of personnel (patients, nurses, etc.), medical waste management, mother and baby identification and Baby theft prevention.

3.1.2.3 Intelligent medical management and quality control for safe, orderly, and convenient processes

Using Big Data + AI, the hospital is promoting the construction of a large system of medical quality control platform to create a full quality control system for basic quality, link quality, and final quality. Using a full range of end-to-end information technology, the hospital will be able to access and display real-time data promptly, with technology + systems running through the entire process to improve management efficiency and quality of care. For example, the construction of information technology centered on electronic medical records ensures the interoperability of electronic medical records as well as tests and images, so that the entire process of electronic medical records can be quality controlled; through the Internet of Things technology, intelligent drug management is realized, so that the entire process of drug management is safe, orderly and convenient, and at the same time, it is connected to the medical prescription system to check drug information and patient information, to improve the efficiency of clinical care.

3.1.2.4 Intelligent empowerment of clinical research and teaching to improve the level of medical research and teaching

Introduce artificial intelligence technology, 5G technology, and other high technology to assist efficient data mining and governance and build a comprehensive clinical research and teaching system.¹ Integrate clinical,

experimental, and scientific research AI platform to rapidly improve scientific research: Through the integrated application of medical natural language parsing, deep learning, structured electronic medical records and intelligent follow-up, and the support of professional animal experimentation system and clinical drug trial system, we can create a real-world based top-notch clinical research and teaching system. 2. 5G + VR/AR, innovative integrated teaching mode for teaching and training: With the introduction of new technologies such as 5G network and VR/AR, the operating theatre panorama and surgical details can be presented in high definition, with clear and stable video without time delay, and the teaching effect can be greatly improved; interactive remote training based on actual clinical cases can improve the quality of medical teaching; Real-time interaction and rich medical teaching resources in the cloud create a ubiquitous teaching and learning environment.

3.1.3 Intelligent management

Hospitals are characterized by a complex organization of departments, high mobility of personnel, busy vehicle traffic, and rapid business growth. Refined management and operation are required throughout the entire process of people, finances, materials, and the medical process, so it is imperative to build a hospital intelligent operation center.

Build a hospital intelligent operation center for all-round visual management

According to the characteristics of the hospital, the hospital's intelligent operation center can be built to support the refinement of operation management by using standardized and master data management, integrating different functions such as operation analysis, comprehensive security, personnel management, energy efficiency management, and asset management to realize the sustainable development and strategic transformation of the hospital.

With the advent of the big data era, hospital management can make medical decisions based on multi-faceted and deep-level information-integrated planning, from "people, finance and materials", "medical education and research", "nursing, medicine, and technology "The hospital management can make medical decisions scientifically and realize hospital operation and management efficiently by

considering different perspectives.

3.1.3.1 Integrated security, efficient disposal of the whole system linkage

Due to the great movement of people and vehicles in hospitals, the security system of a smart hospital should link up access control, smoke detection, cameras, and fire-fighting systems, send this information to the security command center, combine map navigation and personnel systems for analysis and processing, and then use IoT + AI technology to achieve intelligent warning and eliminate potential safety hazards.

3.1.3.2 "Staff 360", more accurate and efficient performance management

To achieve 360-degree integration of staff-related information in the hospital, integrate data from various systems of medicine, teaching, research, and personnel, provide automated management of information and self-service for staff in all aspects of hospital services, and realize closed-loop human resource management in the whole process.

3.1.3.3 Energy efficiency management, refinement, green, and adjustment on demand

In traditional hospitals, energy efficiency is managed in a crude manner

Manual control, lagging response, inability to adjust control parameters according to changes in demand, and wasteful energy efficiency in no man's land. Smart hospitals use energy efficiency big data analysis to refine management: real-time data statistics, abnormal electricity consumption monitoring, electricity consumption prediction and optimization, and energy-saving space analysis, to visualize, predict and suggest optimization of energy consumption data.

3.1.3.4 Asset management to avoid abnormal loss of assets

The scientific operation and maintenance of facilities can improve the reliability of facilities, combined with the Internet of Things and big data technology, comprehensive sense of facility energy consumption, and improve the efficiency of facility operation.

Intelligent hospital asset management should achieve the following functions: 1, asset inventory: valuable assets, consumables second inventory; 2, asset utilization analysis: activating dormant assets, avoiding repeated requisitions and saving

efficiency; 3, asset track tracking: real-time tracking of asset location, automatic out-of-area alarm to ensure asset safety; 4, office/conference room/ward/laboratory resources online management, to ensure that office/meeting/treatment/experimentation is carried out efficiently; 5, machine management: the hospital's asset management system can be used to improve the efficiency of the hospital. 5、 Unattended and remote inspection of the server room, active detection of IT equipment status, and daily preventive maintenance.

The top-level framework model of smart hospital construction includes six aspects:

1、 To enhance the basic security, to ensure efficient operation of the logistics sector, to achieve intelligent control and management of equipment and facilities, supply chain operations, energy consumption, buildings and buildings, and to promote the modern management of hospital2、 Improve medical quality, strengthen the construction of hospital information platform based on electronic medical records, so that information technology can meet the need to improve medical quality and safety; 3、 Optimize the medical process, provide patients with convenient services such as appointment and treatment, mobile payment, result enquiry, information delivery and home delivery of medicine, reduce waiting time and improve service efficiency; 4、 Improve the medical experience, use information technology to 5、 Improve operation management, strengthen hospital human resource management, financial and cost accounting management, material and fixed asset management through information technology, and realize closed-loop and traceability of human management process; 6、 Promote discipline construction, implement the policy of "science and technology for hospital development", use Information technology can be used to support medical research, strengthen the construction of key disciplines, enhance hospital advantages and improve hospital competitiveness. In addition, the process of building a smart hospital also requires attention to the issue of network security risks and more stringent security protection for medical data and patient privacy.

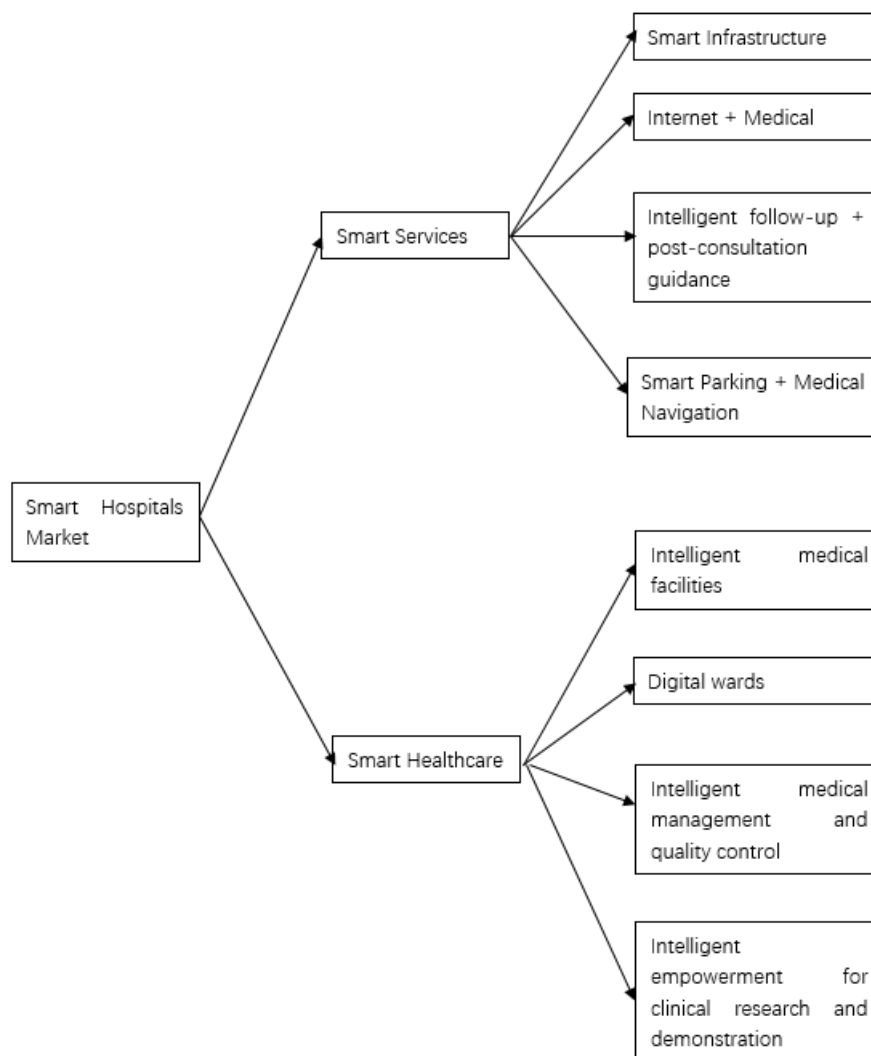
The information technology of a smart hospital needs to be supported by a database and platform architecture to address system silos and data chimneys, and

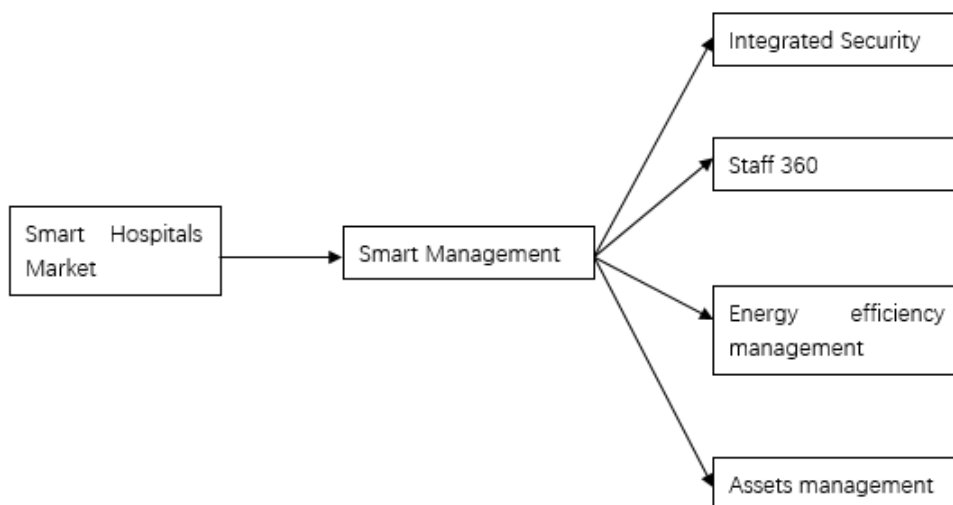
hospital data accumulation to form a high-value data pool. The introduction of information technology can help medical staff make accurate and timely medical interventions and strengthen the relevance of medical diagnosis and treatment. At the same time, the use of big data technology can help increase the hospital's ability to handle emergency medical events regarding disease prevention, infection

The use of big data technology can also increase the hospital's ability to handle emergency medical events such as disease prevention and infection control.

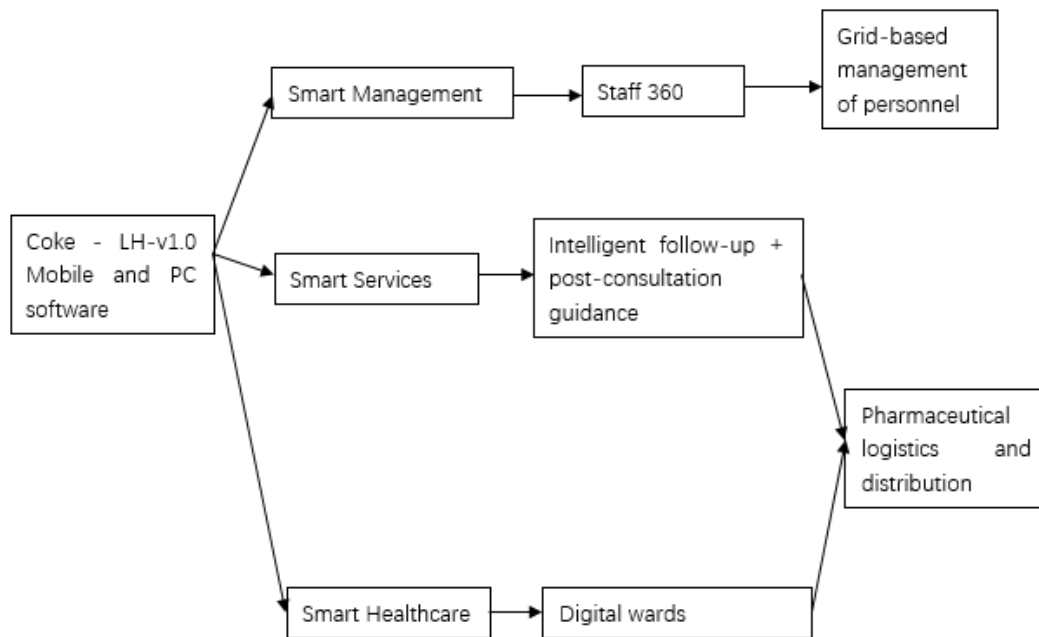
3.2 Market Segmentation and Target Market Selection

3.2.1 Market Segmentation

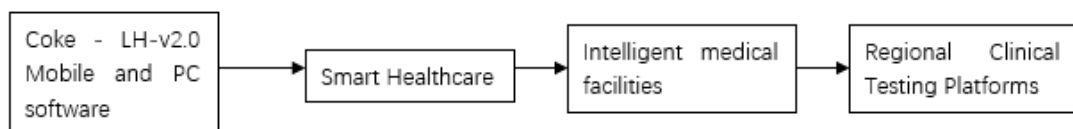




Since the company was established and registered capital was scarce, the Coke-LH-v1.0 software developed by the company chose a small piece of staff 360 in the target market selection, which was specifically responsible for the grid-based management of personnel, but in the course of actual operation, it was found that the real-time management of personnel needed to be achieved and the construction of network base stations within the grid needed to be improved, while the improvement of network base stations within the grid The network base station can not only achieve real-time management of personnel but also achieve the drug logistics and distribution part of the intelligent follow-up + post-visit guidance in Smart Services and the drug logistics and distribution part of the digital ward in Smart Healthcare.

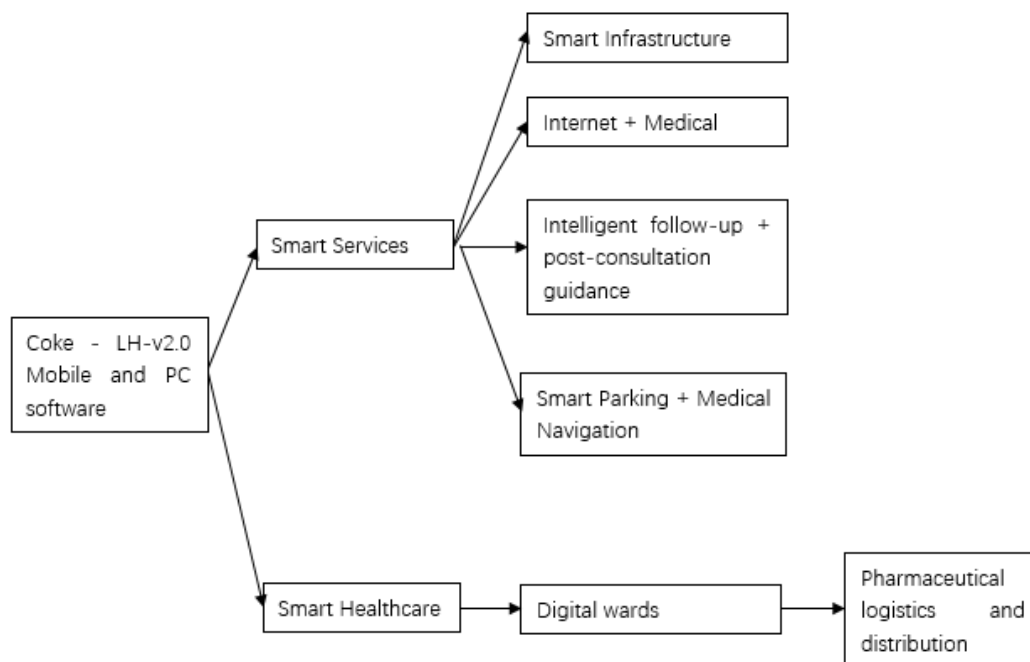


The Coke LH-v2.0 mobile and PC software developed by the company chose the regional clinical testing platform in the intelligence of medical facilities in smart healthcare as its target market, to achieve homogenization of clinical laboratory tests.



3.2.2.3 Coke-LH-v3.0 software

The company has developed the Coke LH-v3.0 mobile and PC software and has selected the entire content of Smart Services and the drug logistics and distribution part of the digital ward in Smart Healthcare as its target market.



3.3 Buyer Behavior

3.3.1 Analysis of Coke-LH-v1.0 Mobile and PC-based Software Buyer Behavior

The development of smart hospitals has become an objective need in the current era of rapid development of digital and information technology, and the prevention and control of the new crown pneumonia epidemic have highlighted the need for smart hospital development. In China, hospitals are building their smart hospital systems, but a smart hospital is a very heterogeneous system that is difficult to implement through a single set of software. Especially in domestic China, the prevention and control of epidemics are particularly important. At present, the personnel management of epidemics used by various hospitals is often human resources software, which has certain defects in the personnel management of epidemics now, and what they need is professional epidemic personnel management software.

3.3.2 Analysis of Coke-LH-v2.0 software Buyer Behavior

The medical and health system of Songjiang District in Shanghai is mainly divided into 7 district hospitals and 16 community health service centers, as 16 community health service centers, because of the conditions, it is impossible to carry out every laboratory project, for them, because of the number of laboratory tests in each

community is not large, the purchase of equipment forms a waste, do not buy equipment community residents have opinions, so the previous practice is 16 community health This inevitably increased the workload of the seven district hospitals and affected the speed of issuing reports on patient tests in their seven hospitals.

3.3.3 Analysis of Coke-LH-v3.0 software Buyer Behavior

According to the World Health Organisation, more than 300 million people worldwide are currently suffering from depression, accounting for approximately 4.3% of the global population. There are also 54 million people suffering from depression in China, more than 10 million people are suicidal, and more than 500,000 people have ended their lives by suicide, with suicidal behavior due to depression being the leading cause of death among people aged 15-31. At present, 60% of the country's population is chronically depressed, and some groups are reluctant to face up to and take depression seriously for fear of being discriminated against by others if they see a doctor, making the depressed segment of society even more vulnerable. This is a huge number of people who are not willing to face up to their depression and take it seriously, which means that depression is a social concern that cannot be ignored. As an authority in the treatment of depression and other mental illnesses in Shanghai, the Shanghai Mental Health Centre needs professional intelligent hospital software for mental illnesses.

3.4 Competitor Analysis

In recent years, the number of smart medical-related companies registered in China has continued to increase. Data show that China has added 3,317 new smart medical-related enterprises from 1,576 in 2017 to 3,317 in 2020, an increase of 17.9% year-on-year and a compound annual growth rate of 28.2%. 3,207 new smart medical-related enterprises will be added in China in 2021, a decrease of 3.3% year-on-year. The latest data shows that as of May 2022, 1,168 new smart healthcare-related enterprises were added in China.

3.4.1 The main competitors of Coke-LH-v1.0 software are hospital human resource management software, so we will first do a SWOT analysis of Coke-LH-v1.0 software and several well-known domestic human resource software.

Strengths.

1. Specially developed for epidemic staff management, with daily staff health status reporting function, monitoring staff health status



(Daily staff health status reporting interface, bound with staff WeChat, daily WeChat will remind from time to time)

2. Staff upload a nucleic acid report, and the system through the OCR intelligent recognition of nucleic acid report encounters an abnormal timely warning
3. Real-time management of staff through the network base station in the grid, in case of an epidemic requiring emergency closure of the hospital, the number of people staying in the hospital can be counted in time
4. Through the network base station setting of the grid system, the construction of in-hospital and out-of-hospital logistics systems. The drugs required by outpatients will be delivered to the distribution points using hospital rail logistics trolleys, and then delivered to the patients by special sterile vehicles, while in-hospital drugs will be delivered to the patients' bedsides using drug delivery robots.



(Medication delivery robot delivers medication to the patient's bedside)



(rail logistics trolley to deliver medication required by emergency outpatients to distribution points)



(A special sterile delivery vehicle can deliver the medication to the patient)

Weaknesses

As employee management software it is a little thin compared to traditional HR software, with no specific employee information (title information, career planning, etc.)

Opportunities.

China's zero tolerance for epidemic prevention and control brings opportunities for the development of software

Threats

The epidemic will eventually pass and the software will need to be transformed once the epidemic is over or the epidemic prevention and control situation is improving

3.4.2 SWOT analysis of the Coke-LH-v3.0 mobile and PC-based software

Since the Coke-LH-v2.0 software was developed based on the deepening cooperation with the Shanghai Songjiang District Health and Hygiene Commission and the original Coke-LH-v1.0 software, a SWOT analysis of the software is not conducted here.

The main competitors of Coke-LH-v3.0 software are the intelligent hospital system software, so we will do a SWOT analysis on Coke-LH-v3.0 software and several well-known intelligent hospital system software in China.

Strengths

Unlike other domestic wisdom hospital systems, because the drugs for psychiatric diseases belong to state-controlled drugs, there are high requirements on patient identification, only consultation services are provided for undiagnosed patients, and treatment is required in the hospital. Strict identification is required during the whole process of internet treatment and internet dispensing, and video and audio recordings are required throughout the process to prevent the inflow of psychotropic substances into the market, which is more in line with national legal requirements than other domestic smart hospital systems.

Weaknesses

For undiagnosed patients and some patients who feel disgusted or inconvenienced to come to the hospital because of the strict identification and video recording

required during the whole process of internet treatment and internet dispensing, the software developed by the company, Coke LH-v3.0, has no advantage over other domestic wisdom hospital systems, and the medical experience is not as good as several well-known domestic wisdom hospital system software.

Opportunities.

The number of patients with mild, moderate, and severe depression in China is nearly 100 million, with an average of one depression patient in every 16 people, plus other mental illnesses.

Threats.

If it does not improve the poor experience of patients coming to the hospital, Coke-LH-v3.0 software will eventually be replaced by other well-known smart hospital system software in China.

3.4.3 Happiness - LH Software 5 Forces Model Analysis

The global outbreak of the new coronavirus pneumonia in 2020 had an impact on the global economy, and hospitals were not immune to it. As a result of this black swan event, hospital outpatient and inpatient volumes were affected to varying degrees, with outpatient care being particularly severe. This backdrop coupled with the need for healthcare reform has led to an extraordinary boom in the smart healthcare industry. A 5 Forces Model analysis of the software developed by Happiness-LH Technologies is now available

According to the concept of Porter's "Five Forces" model (Michael Porter), there are five forces that determine the scale and extent of competition, which together influence the attractiveness of an industry and the competitive strategy decisions of existing companies. The five forces are the competitive ability to existing competitors in the same industry, the ability of potential competitors to enter, the substitution ability of substitutes, the bargaining power of suppliers, and the bargaining power of purchasers.

The competitive power of existing competitors within the same industry

Happiness-LH Technology entered the smart healthcare market late and did not have sufficient start-up capital. It faced two types of existing competitors in the same industry: one was traditional hospital human resource management software

and the other was a traditional smart healthcare information system.

In the face of traditional hospital HRM software, the products developed by Happiness-LH Technology are hardly competitive in the overall picture, so the products developed by the company are located in real-time grid-based personnel management and drug logistics systems. Compared to traditional hospital HRM software, its competitiveness lies in the fact that it is developed specifically for epidemic personnel management, with a daily staff health status reporting function, It can upload nucleic acid reports, alert on abnormal nucleic acid reports, real-time grid-based staff management and in-hospital and out-of-hospital drug logistics systems, which are highly competitive with existing competitors in the industry.

In the face of traditional intelligent medical information systems, the products developed by Happiness-LH Technologies are also not competitive across the board, so the company has worked with the Shanghai Mental Health Centre to develop an intelligent medical system specifically for patients with depression and mental illnesses, focusing mainly on the intelligent service segment. It has taken advantage of the special characteristics of mental illnesses in terms of treatment and medication management to build up product competitiveness and the high competitiveness of existing competitors in the same industry.

The ability of potential competitors to enter

The number of smart medicine-related company registrations in China continues to increase. Data show that China's new smart medical-related enterprises from 1,576 in 2017 to 3,317 new smart medical-related enterprises in 2020, an increase of 17.9% year-on-year and a compound annual growth rate of 28.2%. 3,207 new smart medical-related enterprises in China in 2021, a decrease of 3.3% year-on-year. The latest data shows that as of May 2022, 1,168 new smart healthcare-related companies were added in China. More and more companies are entering China's smart healthcare industry.

However, for the real-time grid-based personnel management drug logistics system developed by Happiness-LH Technologies and the smart medical system developed for patients with depression and mental illnesses, the ability of potential competitors to enter is low for several reasons: for the real-time grid-based

personnel management drug logistics system, because of the uncertainty of the duration of the epidemic and the degree of harm, companies have to do input and output risk assessment, and if the epidemic ends or is less harmful in the short term, there is no need to enter this market. Smart medical systems developed for patients with mental illnesses have weak entry capabilities for potential competitors because of the specificity of treatment and drug management and the need for the smart medical systems developed by the company to interface with the main hospital HIS system and pass security tests.

Substitutability of alternatives

For the real-time grid-based personnel management pharmaceutical logistics system developed by Happiness-LH Technologies, the alternatives are traditional HRM software, which develops grid-based personnel management functions on top of traditional HRM software. The substitution ability of the alternatives is fair, and the advantage is that it is integrated with the HRM system and has more comprehensive information. The disadvantage is that the division of the grid is much more detailed than the original division of sections, and the system is unified in the actual management of sections and grids can easily be confused. The company recognized the substitution ability of the alternatives, so took the opportunity of the hospital to realize real-time grid management of personnel to establish a grid network base station, through which a drug logistics system inside and outside the hospital was established. It also developed the Happiness-LH-v2.0 software, the Regional Clinical Laboratory System, in-depth on the original software as a way to reduce the substitution ability of substitutes.

For the smart medical system developed by Happiness-LH Technologies for patients with psychiatric disorders due to the specificity of treatment and drug management, the smart medical system developed by the company needs to interface with the main hospital HIS system and pass security tests, so the substitution ability of alternatives is weak.

Bargaining power of suppliers

Happiness-LH Technologies' products, the Smart Medical System software, are self-developed and nationally patented, and there are no suppliers, so the bargaining

power of suppliers is weak.

Bargaining power of the purchaser

The purchasers of the products developed by Happiness-LH Technologies are public hospitals, and they are all government procurement projects. The company has been successful in winning the tender through the Shanghai Finance Bureau, and the price is fixed, so the bargaining power of the purchasers is very weak.

3.5 Overall Marketing Strategy

The intelligent hospital system is a complicated system that involves all aspects of the intelligent construction of the hospital, and the company believes that it is difficult for a single software to cover everything. For example, the Coke LH-v1.0 software developed by the company chose a small part of the staff 360 in the intelligent management to be responsible for the grid management of staff, and the Coke LH-v2.0 software chose the regional clinical testing platform in the intelligent medical facilities in the intelligent medical treatment to achieve the homogenization of clinical testing.

3.6 Pricing Strategy

The company's pricing strategy is to divide the opening of a system into several phases, inform the buyer of the results and pricing of each phase, and set the corresponding package price for the buyer to choose from, e.g. Coke-LH-v1.0 mobile and PC software phase 1 plus phase 2 package price, Coke-LH-v3.0 mobile, and PC software phase 1, phase 2 and phase 3 package price, etc.

3.7 Sales process and promotions Mix

3.7.1 Coke-LH-v1.0 mobile and PC software

3.7.1.1 Sales Process

The company has divided the Coke LH-v1.0 mobile and PC software sales process into five phases with different promotional mixes

Phase 1

Objective: To achieve the grading of the staff grid, divide the hospital grid members into four levels and set the corresponding authority according to the different

levels, the fourth level grid members are shown in the obstetrics and gynecology department as an example.

Amount: 20,000 RMB

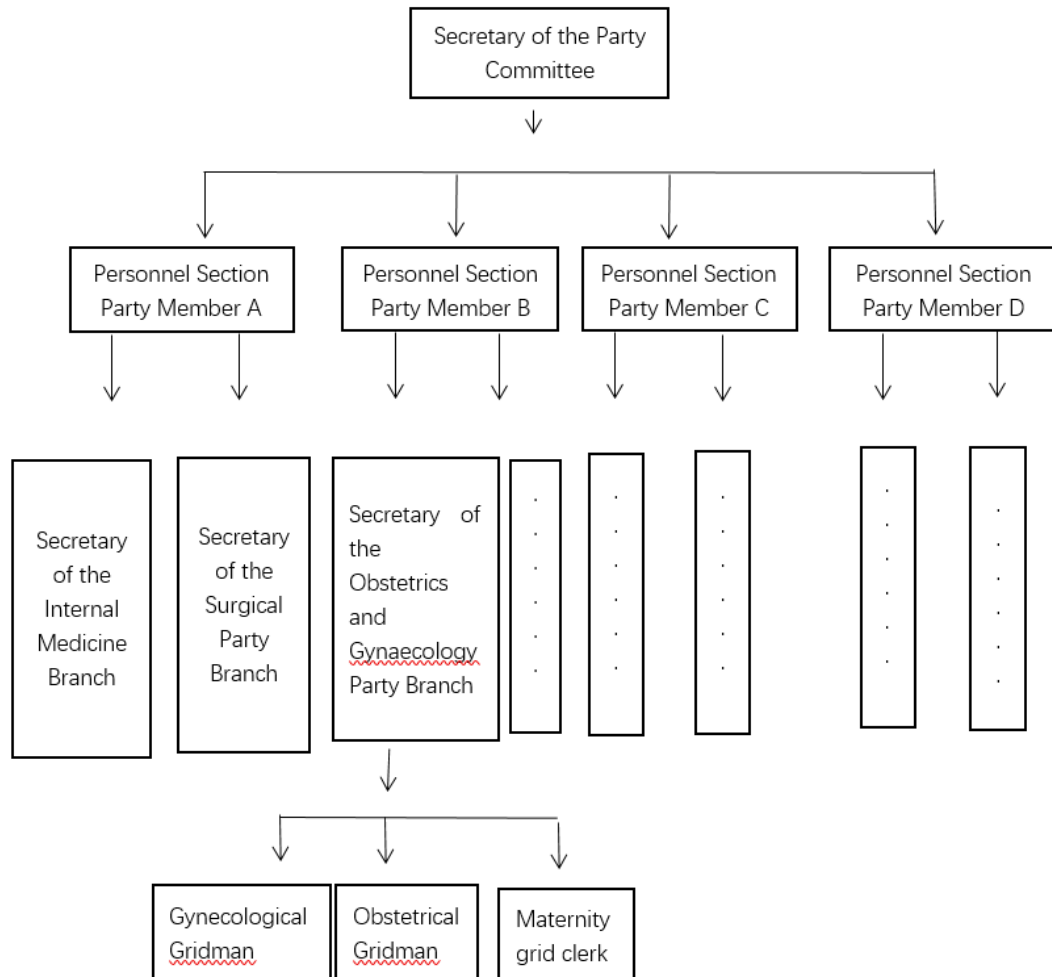


Diagram of the four levels of hospital gridders

Phase 2

Objective achieved: to achieve a gridded hierarchy of locations, Shanghai Songjiang District Central Hospital has 4 interconnected inpatient buildings A, B, C, and D, 3 interconnected outpatient and emergency buildings, medical technology buildings and comprehensive buildings, and 6 separate buildings such as the infection department building, administration building, and logistics building. Each department on each floor of each building is positioned at a grid point, with a total of 162 points subdivided. Each point corresponds to a fixed grid member in charge, to achieve full

coverage and fine management of the grid vertically to the end and horizontally to the edge. Take the inpatient department A building as an example

Amount: 50,000 RMB

Inpatient A Building Grid Grading Scale

Floors	Sections	Gridders
-1	General Services Section Workstations	General Services Section Grid Clerk
1	Neurology	Neurology Gridman
2	Cardiology	Cardiology Gridman
3	Obstetrics and Gynecology	Obstetrical Gridman
3-1	Obstetrics (Paediatrician)	Paediatric Gridworker
4	General Surgery	General Surgery Gridders
5	VIP Ward	VIP Gridders

Phase 3

Achievement of objectives: 1. Daily staff health status reporting function to monitor staff health status 2. Staff upload nucleic acid reports through the system through OCR intelligent recognition of nucleic acid reports and timely warning when abnormalities are encountered 3. Automatic generation of daily reports based on the above two

Amount: RMB 250,000

Daily Report

Work Area	Floors	Sections	Nature of personnel						
			Doctor	Nurse	Chaperones	Subtotal
A	-1	General Services Workstations							
	1	Neurology							
	2	Cardiology							
	...								
	Subtotal								
B	1	Endocrinology							
	2	<u>Haematology</u>							
	3	<u>Paediatrics</u>							
	...								
	Subtotal								
...									
Total									

Phase 4

Objectives achieved: 1. Complete real-time management of personnel and set up network base stations in each grid

Amount 1 million

Phase 5

Share Coke-LH-v1.0 software with all medical institutions in Songjiang District, Shanghai

Amount 200,000

3.7.1.2 Promotions Mix

Number of issues	Issue 1	Issue2	Issue3	Issue 4	Issue5	Total price
Unit price	20000	50000	250000	1000000	200000	1520000
Packages A	68600					68600
Packages B	307200					307200
Packages C	1267200					1267200
Packages D	1444000					1444000

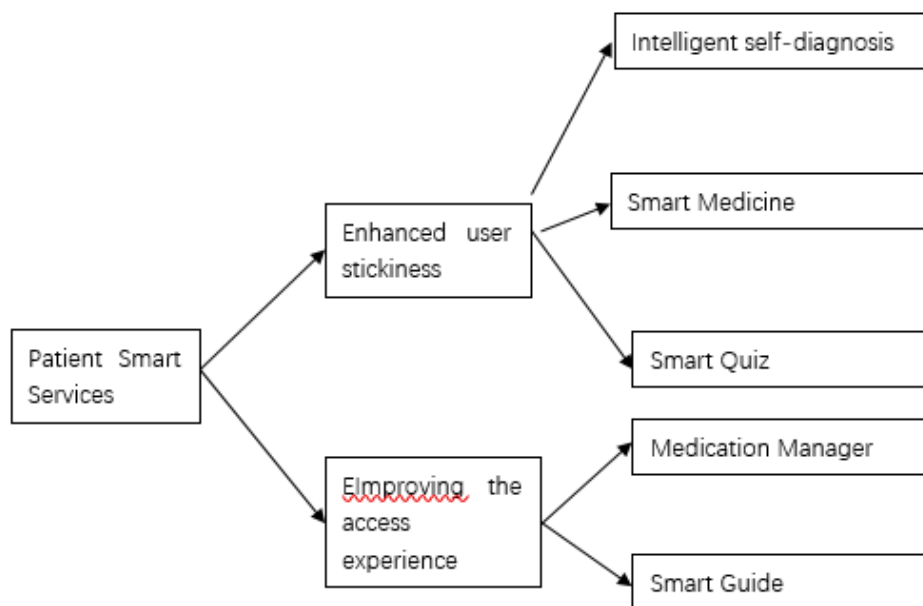
3.7.2 Coke LH-v3.0 mobile and PC software

3.7.2.1 Sales Process

The sales process for the Coke LH-v3.0 mobile and PC software was divided into three phases with different promotional packages

Phase 1

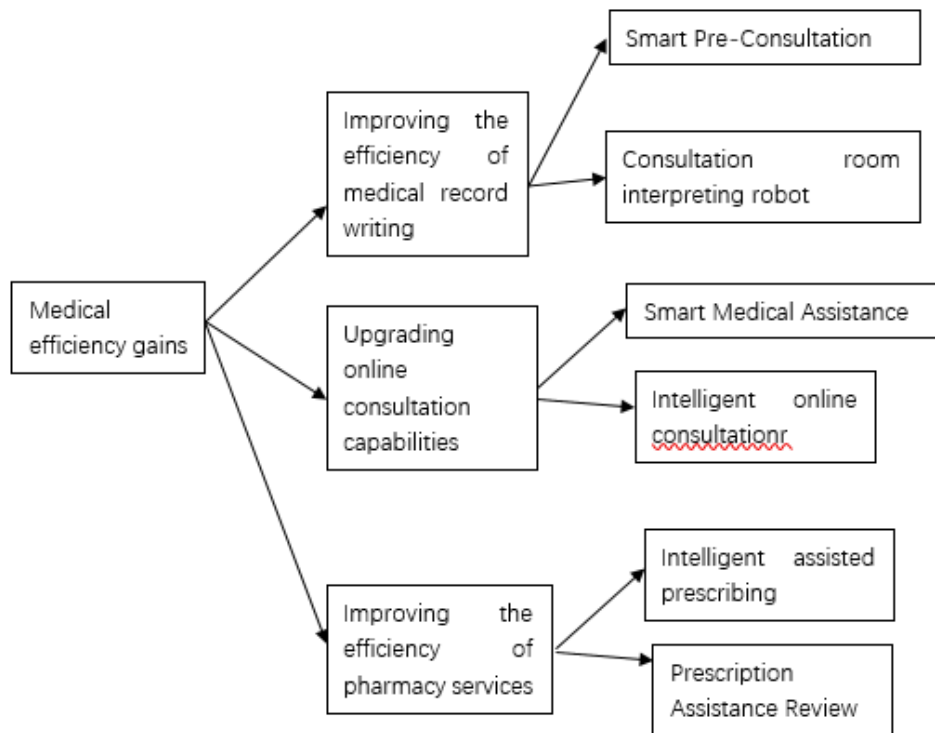
Objectives to be achieved



Amount: RMB 500,000

Phase 2

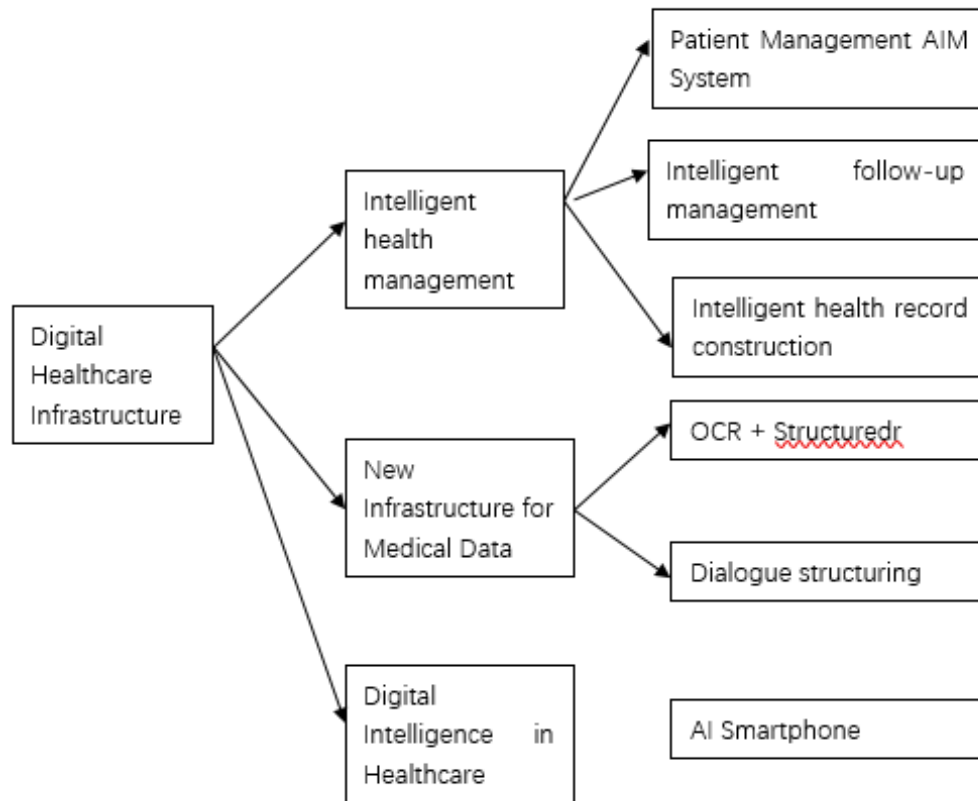
Objectives to be achieved



Amount: RMB 800,000

Phase 3

Target achieved



Amount: RMB 2 million

3.7.2.2 Promotions Mix

Number of issues	Issue 1	Issue2	Issue3	Total price
Unit price	500000	800000	2000000	3300000
Packages A	1248000			1248000
Packages B	3069000			3069000

3.8 Distribution and Sales

Distribution and Sales is the distribution of a part of the company's professional business to specialist suppliers who use the company's resources to a greater or lesser extent when undertaking such business, for which the company makes a profit.

3.8.1 Distribution and sales in line with software development

Coke - LH-v1.0 version of the mobile phone terminal and computer terminal software development to achieve real-time management of personnel, it is

necessary to set up network base stations in the hospital management grid, and the network base stations happen to be able to position the logistics system in the hospital, so the drug logistics system (rail logistics trolley and drug delivery robot) is distributed to Siyuan Hospital Logistics Transmission System Company, as he needs to use the network base stations in the grid positioning, the company uses this to make a profit.

3.8.2 Qualified distribution and sales

To achieve homogenization of laboratory tests, the regional clinical testing center in the software development of Coke LH-v2.0 software distributed the testing tasks to Goldfield Testing to do and signed a large sample agreement with Goldfield Testing to maximize profits, which used the regional sample statistics function in the software of Coke-LH-v2.0 mobile and computer, and the company used this to gain profits. However, this is also inseparable from the qualifications of Goldcorp Laboratory to be ahead of industry standards.

3.8.2.1 Introduction to the distributor

Ltd. [Stock Code: 603882] is a third-party medical testing and pathology diagnosis business at the core of high-tech services companies, through the accumulation of a "big platform, a big network, big services, big samples, and big data" and other core resources advantages, dedicated to the national levels of We are committed to providing leading medical diagnostic information integration services to medical institutions at all levels. The core team of Goldcorp Medical has been actively exploring the mode of operation of medical testing outsourcing services in China since the 1990s, pioneering the third-party medical testing industry in China, and has become a market leader in the third-party medical testing industry in China after years of development.

Goldcorp Medical strictly follows international standards and has an advanced quality management system. As of 2021, it has obtained a total of 47 domestic and international accreditation certificates including CAP and ISO15189, leading the industry for 19 consecutive years. The test results are recognized by 70 countries and regions worldwide. With excellent quality management, Goldcorp Medical was awarded the "4th China Quality Award Nomination Award" and the "19th National

Quality Award Nomination Award".

Through its innovative business model, Goldcorp Medical has established 43 medical laboratories in the Mainland, Hong Kong, and Macau, a nationwide remote pathology collaboration network, and a team of over 630 pathologists from home and abroad, providing accurate, timely, and convenient medical testing and pathology diagnostic services to over 23,000 medical institutions. The network covers more than 90% of the population in China, with Hong Kong as the bridgehead, serving the Guangdong-Hong Kong-Macau-Great Bay Area and countries and regions along the "Belt and Road".

Through international and independent innovation and transformation of results, Goldcorp can provide more than 3,200 tests. With an annual testing volume of over 150 million specimens, the company has accumulated the world's leading large sample and database of oriental races, which is used as the basis to promote the original innovation of in vitro diagnostic industry and artificial intelligence diagnosis.

The company focuses on building an international high-end talent and team, with more than 1,200 researchers and over 200 renowned experts from home and abroad, including more than 30 scholars from overseas, and has established a team of 52 domestic and overseas experts in testing, pathology, clinical and other fields, with academician Zhong Nanshan as chairman, eight academicians including Zeng Yitao, Chen Runsheng, Hou Fanfan, Xie Xiaoliang, Chen Yeguang, Zhang Xue, Tan Weihong and Li Xuekun as advisors. The academic committee is composed of 52 domestic and overseas experts in testing, pathology, clinical and other industries.

It has been recognized as a national high-tech enterprise, a national demonstration center for genetic testing technology applications, a national demonstration enterprise for intellectual property rights, a national demonstration platform for public technology services for small and medium enterprises, etc. It has been approved to establish a national local joint engineering laboratory for medical testing technology and services, a national postdoctoral research station, a national postdoctoral research station, and a national postdoctoral research center. the national-level post-doctoral research station, Guangdong academician workstation, Guangdong enterprise key laboratory, and other national, provincial, and ministerial-

level R&D institutions and R&D platforms.

At present, Goldcorp Medical is using third-party medical testing as the main channel to build a "medical testing+" ecosystem through a large technology platform, a large service network, and a large sample and database: accelerating the application of large samples and big data in medical testing technology innovation and artificial intelligence; while continuously improving the development of clinical drug testing, health testing, health check-ups, judicial appraisal, and other related industries. We will also continue to improve the development of related industries such as clinical drug testing, health testing, health examination, and forensic identification.

By adhering to professionalism and technology, adhering to the essence of medical care and the bottom line of the industry, acting with good intentions and good deeds for the benefit of society and the public, and creating a better life together, Goldcorp Medical is taking practical actions to help healthy China.

Authoritative certification:



International cooperation:



3.8.2.2 Distribution Model

The Coke-LH-v2.0 software was developed in-depth based on the Coke-LH-v1.0 software, to realize the construction of a regional clinical testing center in Songjiang District, Shanghai, and achieve homogenization of laboratory tests.

During the deepening cooperation with the Shanghai Songjiang District Health and Health System, the company learned that one of the pain points of the development of the Shanghai Songjiang District Health System was that some medical tests could not be carried out in the sixteen community health service centers and their subordinate health stations due to the limitation of development funds and that the projects carried out could not achieve homogenization, the approach of the Shanghai Songjiang District at that time was to establish a regionalized test center to unify the test specimens from the sixteen The practice of Songjiang District in Shanghai at that time was to set up a regionalized testing center, where test specimens from the 16 community health service centers were sent to the seven district hospitals in Songjiang District in Shanghai for testing. The advantage of doing so is that it saves the community's investment in laboratory equipment, but the disadvantage is also obvious, one is that the laboratory tests of the seven hospitals cannot achieve homogenization, that is, the testing volume of the whole district is pressed to the seven hospitals to complete, increasing the workload of the seven district hospitals, and the hospitals have to give priority to completing the testing tasks of their hospital patients, resulting in a delay in the test results of the specimens sent by the sixteen community health service centers. This

led to delays in the release of test results from the sixteen community health centers. To solve this problem, the company further developed the Coke-LH-v1.0 software based on the Coke-LH-v2.0 software, through which the program can roughly count the daily test specimen items and quantity in Songjiang District, Shanghai, in cooperation with the current domestic third-party authoritative testing institutions (Goldfield Medical), the benefits of doing so: firstly, to achieve homogenization of test quality, and secondly, to reduce The workload of the seven district hospitals in Songjiang District, Shanghai, and thirdly, the significant savings in testing costs and depreciation of laboratory equipment purchase and maintenance due to the large sample testing agreement with the third party authoritative testing organization (Goldcorp Medical).

The development company of the Coke LH-v2.0 software did not adopt a staged development model and the entire development process was completely free of charge. However, the third-party authoritative testing organization (Goldfield Medical) needed to use the regional sample statistics function in the Coke LH-v2.0 software to prepare laboratory reagents and avoid wastage of reagents.

This is a new model of profitability, the fees for laboratory tests are priced by the state, this model of profitability is analogous: one person needs to consume one test reagent for one project, but a hundred people only need to consume one test reagent for the same project, that is to say, the cost of one person testing one project is similar to the cost of a hundred people testing the same project. Therefore, as long as the number of samples reaches the third-party authoritative testing institution (Goldfield Medical), you can enjoy the price of large samples, which on the one hand greatly saves money, and the money saved can make the company and the medical institution in Shanghai Songjiang District achieve a win-win situation. On the other hand, the medical institution also saves on the purchase cost, maintenance cost, and depreciation cost of the laboratory equipment. The medical institutions in the Songjiang district of Shanghai are particularly benefited.

National pricing:

Medical Insurance Code	Project name	Single charge rate	National Health Insurance Codes
S25020100100010	Bone marrow smear cytology test	120	002502010010000
S250201004b0010	Haematopoietic stem cell count (flow cytometry method)	100	002502010040200
S25020101000010	Granulocyte colony-stimulating factor assay	200	002502010100000
S25020203900010	Neonatal haemolytic disease screening	150	002502020390000
S25020204200010	Glucose phosphate isomerase (GPI) assay	100	002502020420000
S25020306800010	Human leukocyte antigen B27 assay (HLA-B27) (PCR method)	100	002502030680100
S250301005b0010	Immunofixation electrophoresis (M protein typing))	220	002503010050000
S25030301700010	Apolipoprotein E genotyping	120	002503030170000
S25030502600010	Human pre-collagen type III peptide (PIIIP) assay	100	002503050260000
S250306008a0010	Serum troponin T assay (quantitative, dry immunological method or chemiluminescent assay))	120	002503060080000
.....

The average cost of laboratory tests in seven district hospitals in Songjiang District, Shanghai:

Medical Insurance Code	Project name	Average price per cost	National Health Insurance Codes
S25020100100010	Bone marrow smear cytology test	81.6	002502010010000
S250201004b0010	Haematopoietic stem cell count (flow cytometry method)	69	002502010040200
S25020101000010	Granulocyte colony-stimulating factor assay	136	002502010100000
S25020203900010	Neonatal haemolytic disease screening	103.5	002502020390000
S25020204200010	Glucose phosphate isomerase (GPI) assay	68	002502020420000
S25020306800010	Human leukocyte antigen B27 assay (HLA-B27) (PCR method)	69	002502030680100
S250301005b0010	Immunofixation electrophoresis (M protein typing))	149.6	002503010050000
S25030301700010	Apolipoprotein E genotyping	82.8	002503030170000
S25030502600010	Human pre-collagen type III peptide (PIIIP) assay	68	002503050260000
S250306008a0010	Serum troponin T assay (quantitative, dry immunological method or chemiluminescent assay))	82.8	002503060080000
.....

Goldcorp Testing Large Sample Agreement Price:

Medical Insurance Code	Project name	Average price per cost	National Health Insurance Codes
S25020100100010	Bone marrow smear cytology test	39.168	002502010010000
S250201004b0010	<u>Haematopoietic</u> stem cell count (flow cytometry method)	34.5	002502010040200
S25020101000010	Granulocyte colony-stimulating factor assay	65.28	002502010100000
S25020203900010	Neonatal <u>haemolytic</u> disease screening	51.75	002502020390000
S25020204200010	Glucose phosphate isomerase (GPI) assay	32.64	002502020420000
S25020306800010	Human leukocyte antigen B27 assay (HLA-B27) (PCR method)	34.5	002502030680100
S250301005b0010	Immunofixation electrophoresis (M protein typing))	71.808	002503010050000
S25030301700010	Apolipoprotein E genotyping	41.4	002503030170000
S25030502600010	Human pre-collagen type III peptide (PIIIP) assay	32.64	002503050260000
S250306008a0010	Serum troponin I assay (quantitative, dry immunological method or chemiluminescent assay))	41.4	002503060080000
.....

As you can see from the chart, the cost of a large sample of tests from Goldcorp is much lower than the cost of the hospital's tests. This is a win-win-win situation.

Hospital	Our Company	Goldfield Inspection
Savings in laboratory costs	Earned a profit	Avoids the waste of laboratory reagents
Savings in labor costs		
Savings in depreciation costs for the purchase and maintenance of equipment		

Section 4

Management Team and Company Structure

4.1 Management Team

4.1.1 Evaluation Indicators for Effective Management Teams

Characteristics of an effective team include clear communication between team members; regular brainstorming sessions involving all members; consensus among team members; team problem-solving skills; commitment to the project and other team members; effective regular meetings with multiple participants; timely handover from project members to others to ensure the project is moving in the right direction; and positive, supportive working relationships among team members. Ineffective team characteristics include a lack of communication between team members; a lack of clear roles and responsibilities between team members; working alone, rarely sharing information and offering help; team members passing responsibility to others.

4.1.2 Approaches to be taken to manage team building efficiently

Team building is an important task for team leaders to enhance the contribution of team members to the project and the capabilities of the team as a whole. The loyalty, satisfaction, and ability of team members to get the job done are all important to the ultimate success of project management. Team building is considered in terms of the following components.

(1) Team building planning. Team building is an important resource planning element of project management work that needs to be planned and implemented in a structured manner. It is important to develop a reasonable and feasible team-building plan based on organizational goals and combined with the individual goals of team members.

(2) Team culture building. It is important to establish a sense of responsibility and a spirit of cooperation among team members and to carry out a clear definition of duties by establishing corresponding work scope responsibilities so that everyone is responsible for their work. At the same time, the work pressure should be able to

be transferred from one level to another, so that the pressure can be shared. In this way, the team's overall responsibility culture can be well established.

(3) Assessment and incentive policy. The success of a project depends on the sense of responsibility of the project team members, which in turn is directly related to the level of motivation they receive. Incentives for members include job satisfaction, challenging work, a sense of achievement, monetary and material rewards, and other rewards that members consider valuable to them. Team members can only be motivated to work materially if the appropriate incentive policy is established. After all, team members face economic and life pressures in the real world and need to feel that hard work is meaningful and valuable to their lives.

(4) Inspire enthusiasm for work. The characteristics of offshore petroleum engineering indicate that the industry is challenging, not only technically, but also in terms of family commitment to the work, so there is a need to stimulate people's enthusiasm for work so that they can work more actively and with greater peace of mind. Measures to stimulate enthusiasm for work include: allowing each team member to take on more challenging work within his or her capabilities, depending on the characteristics of the project, so that team members can gain a sense of achievement after overcoming challenges while improving their work awareness and experience capabilities through different tasks. The work undertaken by team members and their future direction can be well integrated, which is conducive to future development and inspires their enthusiasm for work.

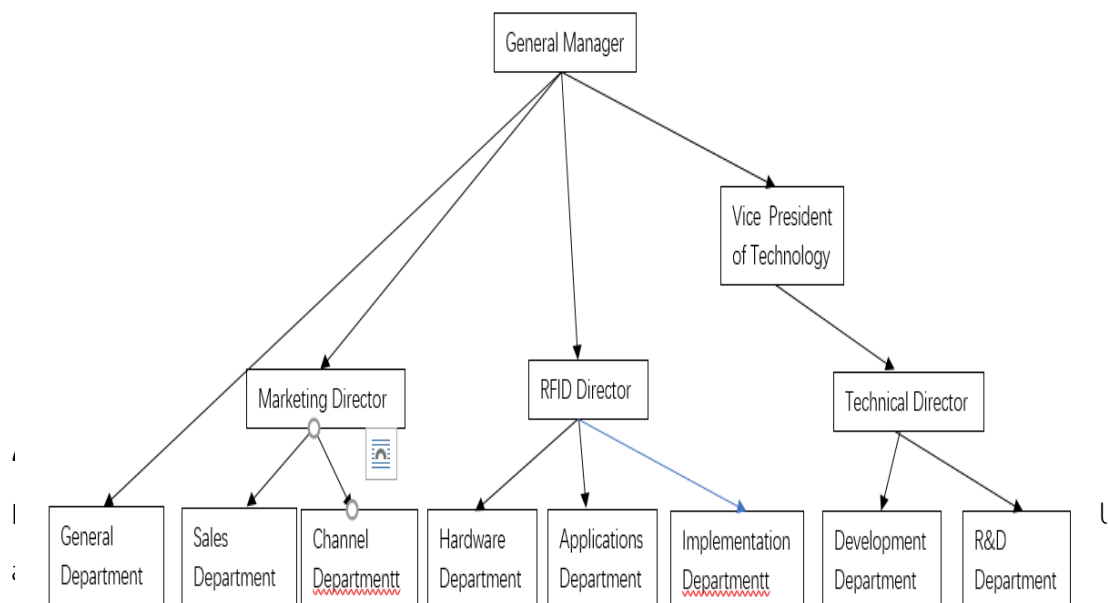
(5) Concentration of offices. The centralization of office locations can improve the communication efficiency of team members, increase their understanding of the overall project situation, and enable them to make more rational decisions in their work, thus improving their efficiency.

(6) Avoid team fragmentation. The goal of team building is to achieve the synergy of 1+1 being greater than 2. If the process causes contradictions and conflicts between members for some reason, it will lead to the negative effect of 1+1 being less than 2. Therefore, the first thing to avoid in team building is the division of team members. Every project manager should be concerned about how to build an

ordinary team into a positive and efficient team, and try their best to do the following: team members work together to clarify work objectives and enhance the team's sense of wholeness and mission; within and between teams to achieve a reasonable division of labor and collaboration, clear responsibility and authority and clear rewards and punishments to form team cohesion.

(7) Regular training. Training includes all activities aimed at improving the skills of the project team. Training can be formal (e.g. classroom training, training using computers) or informal (e.g. feedback from other team members). If the project team lacks the necessary management skills or technical skills, then these must be developed as part of the project or appropriate measures must be taken to reallocate staff to the project.

4.1.3 Company organization



4.3 Other professionals

Finance staff: the company's finance staff, responsible for the day-to-day financial operations of the company and the development of the company's budgetary plans

Auditors: The company's auditors are responsible for the day-to-day audit of the company.

Section 5

Operations Plan, Production Design and Development Plan

5.1 Operations Model and procedure

The Company's business models and procedures fall into the following five categories

5.1.1 Product-based software direct sales model

This model requires attention to

1. When the contract was formed.
2. Identification of the performance obligations in the contract.
3. Period or point-in-time performance obligations.
4. The timing of revenue recognition.

5.1.2 Licensing of productized software

This model requires attention to

1. Additional purchase options.
2. Exceptions based on sale or use.
3. Changes to the contract.

5.1.3 Development of customized software

This model requires attention to

1. Identification of performance obligations in the contract.
2. Period or point-in-time performance obligations.
3. The timing of revenue recognition.

5.1.4 Provision of technical services for customized software

This model requires attention to

1. Whether the performance obligation is to be performed at the point in time.
2. Measurement of the progress of performance.
3. Changes to the contract.

5.1.5 Software operation services

In this model, it is necessary to note

1. Performance obligations at a time or point in time.

2. Changes to the contract and changes to the transaction price.

5.2 Business Location

The Company is located in Songjiang District, Shanghai. For the development of the software and the debugging and maintenance of the software, the Company has fixed personnel and is stationed at the Buyer's business location on a project basis, and also has personnel who travel to the Buyer's business location temporarily.

5.3 Facilities and equipment

The company is equipped with facilities and equipment including a large computer room, a large database, a large computing mainframe for developing programs and laptops, and various mobile hard drives and solid-state drives for software engineers.

5.4 Operation strategy and plans

5.4.1 Operation strategy

The intelligent hospital system is a complicated system that involves all aspects of the intelligent construction of the hospital, and the company believes that it is difficult for a single software to cover everything, plus the company's limited capital to do long-term development, the capital turnover cycle is too long and prone to problems, so the company's operation strategy is to select a small point to make this small point more refined and stronger, for example, the company developed Coke-LH-v1.0 version of the mobile phone terminal and computer terminal, For example, the Coke LH-v1.0 software developed by the company chose a small part of the staff 360 in the smart management to be responsible for the grid management of the staff, and the Coke LH-v2.0 software chose the regional clinical testing platform in the intelligent medical facilities in the smart healthcare to achieve the homogenization of clinical testing.

5.4.2 Operation plans

The company selected a small point in the Operation strategy, and then divided this small point into several phases based on refining and strengthening this small point, and then implemented the operation plan according to the phases, for example, the sales process of the Coke-LH-v1.0 software was divided into five phases.

5.5 Development status and tasks

5.5.1 Development status

The company currently has three types of software, 1. The Coke-LH-v1.0 mobile phone and computer software can divide the entire hospital into multiple grids for personnel management, including staff health status reporting and nucleic acid report viewing. At the same time, the network base stations of the grid system can be set up to achieve real-time management of personnel and build logistics systems both inside and outside the hospital: outside the hospital, the drugs required by outpatients and emergency patients can be delivered to distribution points using hospital rail logistics trolleys, and then delivered to patients by special sterile vehicles, while inside the hospital, the drugs can be delivered to patients' bedsides using drug delivery robots. 2. Coke LH-v2.0 software can The program can roughly count the daily test sample items and quantity in Songjiang District, Shanghai, and reduce the workload of seven district hospitals while achieving homogeneity in test quality through cooperation with the current domestic third-party authoritative testing agency (Goldfield Medical), and save the hospital's testing costs, manpower costs, and The agreement with the third-party testing organization (Goldcorp Medical) for large sample testing saved the hospitals' testing costs, manpower costs, capital for purchasing laboratory equipment and depreciation costs for maintenance of the equipment. For Goldcorp, the company is informed in advance of the daily test items and quantities, reducing the waste of laboratory reagents.3. Coke-LH-v3.0 software is dedicated to the treatment of depression and other psychiatric disorders, and given the special nature of psychiatric disorders, the software can optimize the medical process for new patients and make the patient relatively satisfied with the process. For old patients who have already been diagnosed, an in-hospital and out-of-hospital logistics system can be built through identification and the setting of a network base station for the grid system. Out-of-hospital delivery of medication for emergency patients is carried out using a hospital rail logistics trolley to a distribution point, where the medication is delivered to the patient in a special aseptic vehicle, and in-hospital delivery to the patient's bedside using a medication delivery robot.

5.5.2 Development tasks

At present, the Coke-LH-v1.0 and v2.0 software operations are relatively stable and there are no new development needs, and the software maintenance team is relatively fixed. At this stage, the company's development tasks are focused on the Coke-LH-v3.0 software.

The project is divided into three simultaneous phases, but as the projects involved in these three phases are very complicated, the company has divided the three phases into eight sub-projects (Enhanced user stickiness, improving the access experience, Improving the efficiency of medical record writing, Upgrading online consultation capabilities, Improving the efficiency of pharmacy services, Intelligent health management, New Infrastructure for Medical Data, Digital Intelligence in Healthcare) and 17 sub-categories (

Intelligent self-diagnosis, Smart Medicine, Smart Quiz, Medication Manager, Smart Guide, Smart Pre-Consultation, Consultation room interpreting robot, Smart Medical Assistance, Intelligent online consultation, Intelligent assisted prescribing, Prescription Assistance Review, Patient Management AIM System, Intelligent follow-up management, Intelligent health record construction, OCR + Structured, Dialogue structuring, AI Simultaneous implementation (Smartphone)

5.6 Challenges and risks

8.2.1 The project is designed for a wide range of projects and is a medium to long-term investment with a long turnaround time

8.2.2 The medical experience is not as good as several well-known domestic smart hospital system software and needs to be improved

8.2.3 Psychotropic substances are state-controlled drugs, and the identification of users should be strictly controlled to avoid the inflow of psychotropic substances into the market.

5.7 Costs

The total amount of the three phases of the project is around RMB 3.07 million, and all costs incurred are around RMB 2 million.

5.8 Intellectual property

The software development involved is patent pending and the patents are owned by us.

Section 6

Financial Projections

6.1 Source and Use of Funds Statement

6.1.1 Source

6.1.1.1 Own Funds

6.1.1.2 Absorbed funds

Absorption of funds is a general term for all kinds of funds accepted by supply and marketing cooperatives from other units and borrowed from the system by the provisions of contracts or agreements. Its content includes absorbing the investment of other units and borrowing from the system to form absorbing liquidity, absorbing special funds; accepting investment from other units to purchase and build fixed assets occupied by the funds.

The absorbed funds of our company mainly include the following parts: 1. proceeds from the development of software 2. fees for the use of software from third-party companies 3. advance payments

6.1.2 Use of Funds Statement

The funds are used for investment in fixed assets and working capital. The funds are mainly used for the registration of servers such as trademarks, the development of the Coke-LH software version for mobile phones and computers, the costs of the company's personnel during the production of the product, labor costs, investment in fixed assets, and various expenses such as overheads, operating costs, finance costs and selling costs required for business.

6.2 Basic assumptions of the financial evaluation

The financial evaluation of the project is a very important and objective indicator of whether the project is commercially viable. The financial budget for the operation of the project from 2022 onwards is a five-year planning period with a capital investment of RMB 4.25 million.

6.3 Profits

Project profit returns (economic benefits) and cash flows are important factors in the

project investment decision process. The income statement can fully reflect the company's profit and loss and operating conditions and effectively evaluate the feasibility of the project, combined with Coke-LH Technology's existing and potential business, the 5-year Coke-LH Technology income statement is calculated as follows:

Profit statement (unit: RMB 10,000)

project	2022 year	2023 year	2024 year	2025 year	2026 year
operating receipt	585	591	616	598	578
cost in business	325	336	346	333	328
operating profit	260	255	270	265	250
business income taxes	52	51	54	53	50
net margin	208	204	216	212	200

According to the income statement of the project, the cumulative operating revenue of the project in the past five years was RMB29.68 million, the total operating cost was RMB16.68 million, the operating profit was RMB13 million, the corporate income tax was RMB2.6 million (the government income tax rate for high-tech and science and technology enterprises is 25%) and the net profit was RMB10.4 million.

As the development of the Coke-LH-v1.0 and v2.0 versions of the software has been basically completed and the profit earned is relatively fixed, the Coke-LH-v3.0 version of the software is a complicated system divided into 8 sub-items and 17 sub-items for simultaneous development, which will be continuously developed within five years, so the incoming theory is relatively stable without great ups and downs.

6.4 Investment Evaluation and Analysis

ROI= annual average profit / total investment

The initial investment plan for Cola-LH Technologies is RMB 4.25 million. According to the financial calculation table above, the five-year average annual profit from 2022-2026 is RMB 2.08 million. The calculated ROI = is 49% (table below) indicating

that the company has a good level of return on investment.

Investment profit margin ROI calculation (unit: RMB 10,000)

a particular year	2022 year	2023 year	2024 year	2025 year	2026 year
Net profit attributable to shareholders	208	204	216	212	200
Annual average profit	208				
aggregate investment	425				
earnings power of real assets	49%				

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