

## The Aging Process is "Sneaking" Around Us

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Abstract: "Laoyou App - Internet One-stop Elderly Assistance Platform" is a green channel that plays a role in meeting the diversification and needs of the elderly in their daily lives in the context of China's continuous aging. Make full use of Internet technology to create a more intelligent, convenient and humanized network service platform to provide one-stop and all-round services for the elderly. Create a one-stop service platform for the elderly, coordinate all kinds of scattered pension resources in the society, and realize online and offline dual services, which is unique in today's market. We focus on one-stop service for the elderly, so as to "concentrate on one point and reach the peak", which is more professional and reliable.

Keywords: Aging; Redis In-Memory Database; XML (Extensible Markup Language) Technology Description; UI Layout; SSM Development Framework

With the deepening of China's aging population, topics such as how to "help the elderly adapt to the high-speed Internet era" have become a hot topic. More and more "empty nesters" are emerging, and the quality of life in nursing homes is gradually improving, so it is very important to help the elderly live a quality retirement life.

At present, China's aging has reached a point that cannot be ignored, and it is very meaningful to meet and discuss the social needs and life problems of the elderly, so that the team is more concerned about the construction and achievements in related fields, give full play to the thinking of "Internet + service", coordinate all kinds of pension resources, create a "green channel", and solve all kinds of problems encountered by the elderly in life realistically, and also shoulder relevant social responsibilities, such as the problem of left-behind elderly, medical problems for the elderly, and the cultivation of interests of the elderly, enhance the sense of social participation of the elderly, and so on.

In 2012, the National Office on Aging first put forward the concept of "intelligent elderly care" to encourage and support the practical exploration of smart elderly care<sup>[1]</sup>. Subsequently, in 2015, the State Council issued the "Guiding Opinions on Actively Promoting the "Internet +" Action", which clearly stated that it was necessary to "promote the development of the smart health pension industry"<sup>[2]</sup>. According to the China Business Intelligence Network, the elderly in China are huge, and the aging of the population has continued to deepen since 2000 after entering an aging society. In 2022, China's population aged 60 and above will be 280 million, accounting for 19.8% of the total population, China's aging trend is obvious, and the demand for pension-related continues to increase, while the size of the pension service market is about 8.2 trillion yuan, and it is expected to reach 10.5 trillion yuan in 2024, and the consumer market is extremely huge<sup>[3]</sup>. With the continuous promotion and popularization of the concept of "smart pension", the market for elderly products is becoming more and more competitive. The aging of the population, the proportion of the elderly with higher level of education and cognition is also increasing, people are no longer satisfied with the traditional concept of pension, some of the elderly due to the improvement of cultural level and cognitive level, the spiritual demand has also increased, and the consumption potential of products adapted to the pension market is very considerable.

According to the current aging trend, the company has launched an app, mainly for the elderly (aged 60 and above), hoping to improve the quality of life of this group of people through the use of the app to improve the quality of life of this group, extend independent living time and maintain good condition, to dislocate the competition. This group of people is usually not very sensitive to technology, and the product must be designed to be simple and easy to use. According to the use habits of different elderly age groups to carry out personalized customization, and at the same time, for the children, caregivers, volunteers and other people who care about the health of the elderly, through the use of these products to track the health status of the elderly, provide personalized care services, and give them the necessary help, so the product should not only include the use of the elderly themselves but also provide the function of monitoring. At the same time, the dialect module can also increase the user's intimacy and trust in the platform, and the technology is also connected to the AI voice assistant to understand the classification needs of the elderly. Some of the cultural awareness levels of the higher elderly groups are also constantly improving,

and they have also skillfully added custom modules and shortcuts to make these elderly people have a better experience, so as to "lay out the future". Enterprises will hold relevant interest competitions to cultivate the interests and hobbies of the elderly, solve the problem of loneliness of the left-behind elderly, promote products and increase income generation.

Competitors include not only the same type of products, but also other products that pose a competitive threat, such as housekeeping, health care, community activities, etc. There are also Internet giants such as Google, Microsoft, Amazon, etc. These companies have strong product development teams and technical strength, and can provide a variety of intelligent and connected products for the elderly, such as speech recognition, language translation, etc<sup>[4]</sup>. With strong market competitiveness. These companies focus on the field of medical services, can provide medical health monitoring, care services and other products, have huge medical and nursing service experience and resources, and have rich customer resources. In the research and development of products for the elderly, online traffic can be converted, and traditional medical care and the Internet can be deeply integrated. Their flexibility and agility allow them to iterate quickly and launch new features, with a high upside as the market matures. Therefore, in general, the competition of products for the elderly has entered a comprehensive state, and the means and methods of market competition will also change from a single technology and product competition to a comprehensive competition with multi-dimensional qualities such as platform and resource competition. Enterprises need to firmly grasp market changes, adapt to changes in consumer demand, improve their own technology and product competitiveness, and formulate appropriate market strategies to occupy the market and gain a dominant position.

Compared with Internet giants, the biggest competitive advantage of this app for the elderly is personalized customization. Some unique functions are specially designed for the elderly, such as Beidou satellite positioning at any time, dialect switching, display of nearby hospitals, universities for the elderly, large-value transfer tips and contact emergency contacts, integrated NFC, sick and lost nearby tips, etc. In terms of service, the company will continue to improve the functions of the APP, and actively feedback the opinions of the public for modification. Compared with other all-age service platforms, such as Alipay, WeChat, and administrative apps exclusive to various provinces, the operation is more concise and the interface design is more user-friendly. <sup>[5]</sup>Other all-age service platforms, they are more focused on young people, the elderly mode is just the user UI has been processed, but the underlying operation logic has not changed, so the relevant operations are still very complicated for most of the elderly, and the old friend app, its operation is more in line with the thinking logic of the elderly, if you encounter unsolvable problems, you can solve it through the "help" mechanism of the old friend app, One-click help for those users with relevant operation records and nearby users to achieve one-to-one service in the fastest way at the lowest cost, and at the same time play a role in product promotion. Compared with other traditional service platforms, it combines online and offline services, such as holding relevant activities for the elderly in each city on a regular basis to meet the spiritual needs of the elderly, which not only solves the problem of "empty nesters", but also improves the happiness of residents, and also shoulders corporate social responsibility.

In terms of the technology of the old friend app, the backend adopts the mainstream SSM (Spring, SpringMVC, MyBatis) development framework in the market, and uses MySQL as the data storage method. The SSM framework can quickly respond to data requests and implement simple object-oriented programming, and the SSM framework can modularize the code, which is more conducive to the later maintenance of application development! Describe the UI layout through XML technology, and use web front-end development technology to achieve a variety of functions. This technical solution can enable applications to iterate quickly on different platforms and reduce development costs. In terms of data storage, MySQL relational database is used as the data storage mode, and Redis in-memory database is used for caching! This database technology not only enables efficient data storage, but also allows for fast reading and response to requests. Not only that, the technology department also recommends content and services that users are interested in according to data such as user interests and historical behaviors according to algorithm recommendation technology, so as to improve user experience and platform activity. In general, the core competitiveness of the old friend app lies in line with the operation logic of the elderly and the comprehensive function of providing for the elderly, experience first, service-oriented. At the same time, we should also sort out and identify other potential competitors to grasp the changes in the culture and thinking of the elderly in the future. In the future, the cultural level of the elderly will inevitably be higher and higher, and the concept will be more novel, the change of thinking of the elderly, the change of thinking logic will be the key to service and experience, and grasping this is the key to maintaining our competitiveness.

As an emerging market, the product competition pattern has gradually formed, but from the perspective of the products that appear in the current market, there has not yet been an absolute leader. In terms of laws and policies, the government has strengthened the support and supervision of the elderly industry through relevant laws and policies; In terms of fiscal policy, the government supports the development of the elderly industry through fiscal policies, such as tax reductions and exemptions, financial subsidies, support for innovative projects, preferential credit, etc., to encourage more enterprises and scientific research institutions to invest in the elderly industry, and promote the rapid development of the elderly industry; In terms of population policy, the state vigorously promotes the aging policy, encourages more talents to invest in the elderly industry, and establishes a mechanism for socialization and service for the elderly, such as promoting the opening of nursing homes and promoting community pension and family pension. With the support of this series of policies, the elderly industry will have a broader space for development and provide better and more efficient services for the elderly.

With the increasing number of elderly population in China and the increasingly diversified service needs of the elderly, the elderly service industry is also showing a vigorous development trend. The number of people over 60 is expected to increase from 1 billion to 1.4 billion between 2020 and 2030<sup>[8]</sup>. By 2050, the number of people over 60 will double to 2.1 billion people worldwide. Between 2020 and 2050, the number of people over 80 is expected to triple to 426 million. The elderly service market includes multiple market segments such as life services, health care, social entertainment, etc<sup>[9]</sup>. And the market prospect of the elderly care platform under the Internet model is broad.

Under the general trend of population aging, it is very necessary to help the elderly to better enjoy their old age, but also to reduce their children's worries about the elderly, and to improve the service quality of the domestic pension industry and promote economic growth.

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