

Enabling Blind People to See Farther: Protection & Ease Information Platform on Smartphones for the Blind

Author: Steve Koon
Founder, Innovate 99 Impact Investment Consulting

Technology has changed our life and it should change the life of the blind

In just a few years, WeChat has gained 1 billion users. Smartphones have thoroughly changed our life. However, for Cao Jun, the creator of mobile phones that can be used by the blind and a blind person himself, smartphones can and should change the lives of the blind as well. He taught himself computer technology and learned from his experience that computers can change his life. However, due to economic and technological limitations, few blind people can have computers. With the arrival of the smartphone era, Cao Jun sees an unprecedented opportunity. If blind people could use smartphones, they would be enabled to “see farther”.

I met Mr. Ji Dong, CEO of Protection & Ease, at a Social Enterprise Programme awards ceremony. It was from a conversation I had with him that I became aware for the first time of the profound influence smartphones could have on changing the lives of the blind, considering that they have already changed the lives of able-bodied people. “Let the blind use smartphones.” That is a simple, but great ambition. Ji Dong is not blind, but he was won over by Cao Jun and his extraordinary computer skills, as well as his extraordinary personality. During an interview with the CEO, Cao Jun said to Ji Dong, “Your life is colourful, but what we can see is only black. Can you help the blind to change their lifestyle? Maybe nobody will remember you after you develop ordinary software. However, with this software, every blind person who uses it will be grateful from the bottom of their hearts for your actions.”

For people working in the IT industry, receiving a “thank you” from the users after developing software, however small it is, is a luxury. I understand why Ji Dong gave up the Baidu platform that has hundreds of millions of users and decided to work with Cao Jun on an information platform for smartphones for the blind that could only have tens of thousands users. The value of a “thank you” from the users is greater than the large number of users. This is also why social enterprises are attractive. Ordinary enterprises will never understand the social significance of social enterprises and the sense of mission which they experience.

The chief product of Protection & Ease

Baoyi Yueting (Baoyi Pleasant Sound) is a type of voice activated software designed for the blind. It contains several different parts and can be downloaded and set up on smartphones. When the software is in operation, the smartphone will be set to a special mode in which the blind person can control the phone with the voice guide. Baoyi Yueting will interact with the user through speech for every operation the user makes on the phone, instructing the user on how to progress to the next step. The core concept of the software is that it combines operational gestures with screen narration. In terms of technology, the software uses the commercial version of iFlytek's embedded voice engine, which has a clear and fluent voice. It also uses Baidu's voice recognition input method, the second version of which was developed by Protection & Ease. In addition, it also provides a series of customer-oriented functions and supports the operation of software developed by a third party.

It was not easy to develop Baoyi Yueting. In the constantly changing market of smartphones, the software needs to have good functions and be adapted to the newest and the most popular smartphones of the time in order to provide services to the blind; not an easy task at all.

The first challenge for tech companies: the technology is changing too fast

The former CEO of Nokia was once asked by a journalist: "What is the fatal reason for the fall of Nokia from leading player in the industry to a weak company that is being merged?" His answer illustrated the top challenge faced by tech companies. "In the commercial world, there had never been a company that entered a new field and became the world's leading company in that field within two years. However, Apple succeeded in achieving this in the smartphone field. Therefore not only Nokia, but also the rest of the world, did not think of the possibility of its success today." His words have a lot of truth. All the giants in the field, including Blackberry, Microsoft, Google, HP and Sony, had no way to predict Apple's development.

The failure of Nokia also brought a huge challenge to Protection & Ease because the first version of its information platform software for the blind was based on the Nokia's Symbian system. After Nokia fell, the majority of smartphone users began to use Apple's iOS system or the Android system. However, the Apple system is a closed one, so Protection & Ease only had one choice: the Android system. It had to redevelop the whole platform software. Though they succeeded in the transition with the hard work of the team members, they have a long-term problem related to the development cost. The open Android system is convenient for personalised design, but the openness also leads to different versions of the Android system on smartphones produced by different manufacturers. The compatibility of the various kinds of apps also varies. In order to achieve compatibility between different versions of systems and apps, Protection & Ease had to spend more on development and

customer support. How to control costs, closely follow the upgrading of systems and make innovations in their apps became the major challenges for Protection & Ease.

The wide use of Android led to initial success

Though the redevelopment of the software was very difficult, the wide use of Android brought tens of thousands of users, laying a foundation for the business of Protection & Ease. With the support from giant companies such as Tencent, Baidu and Microsoft, Protection & Ease continues to constantly improve the functions of the system to satisfy the increasing demand of blind users. During the hard work in recent years, Ji Dong came to understand that blind users have even more requirements than sighted users. They need software for chatting, surfing the internet, reading, playing games, and logging on to services such as Weibo and Wechat. If the operation of the software were conducted under the commercial model, some services could be blocked because they lead to loss of revenue. However, Protection & Ease has social values as a social enterprises; it considers meeting users' needs more important than making money. The initial aim of Cao Jun is to provide a good service to the blind, therefore customers come first and making money comes second.

Create an operation model for “the disabled to help the disabled”

In order to provide high-quality services to as many blind people as possible, Protection & Ease employs blind people as workers, accounting for half of all the employees at the company. Most of them work from home to avoid the inconvenience caused by travelling to the office. This model of “the disabled helping the disabled” is a win-win process, and is given high praise and staunch support by The China Disabled Persons' Federation (CDPF). The operational sustainability of the company is no longer a problem, however it is hard to make further progress.

From a strategic perspective, assuming the number of users continues to steadily increase, the future of the company is bright. As long as the number of users exceeds 100,000, the company will be able to earn a stable income to support its future development. Theoretically, it is not hard to attract customers as long as the services continue to get better. However, for Protection & Ease, it is not as easy as it may seem. The market for the blind is different from that for sighted people. We need to get through five obstacles to gain one blind user. Finally, we are only able to access several thousands of users out of the several millions of potential customers.

Change the business model and break the income limit brought by limited customers

Though it is impossible to solve the lack of a purchasing power and willingness to buy in a short period of time, the market for serving the blind is relatively attractive to

investors. If we can't make a breakthrough in the single-income model which relies solely on selling the platform software, we can try to change the business model to expand income. The mission of Protection & Ease is to enable the blind to see further. Smartphones are one of their means to achieve this, but the needs of the blind far exceed a mobile phone. Based on the customer group, we can greatly expand income sources by satisfying their needs, both material and spiritual.

In order to change the business model, we need to overcome a problem unique to blind customers

I have tried to give some suggestions to Ji Dong to help him increase income, but we are unable to solve a problem which is unique to blind customers; they can't use on-line payment. The lack of convenient payment channels for the blind limits the development of many businesses. Those outside of the circle never think of this problem, but every step of the whole value chain, including the design of products and services, payment by the customers and after-sales services, is more complicated than that designed for sighted customers. Actually, every social enterprise has to face this kind of problem; buying special services with better quality means that the payment is going to be higher. The customers of social enterprises have special needs, but more often than not, they have no purchasing power. Government subsidies and welfare funds are also sometimes not adequate. So while it is hard to run an enterprise, it is even harder to run a social enterprise.

The barriers in the value chain are big challenges for Protection & Ease's software business. If it wants to change its business model and expand its business of products and entity services, it will certainly not be easy. At first sight, blind people have many needs, but having needs doesn't automatically mean there is a market. Besides needs, there must be a business model that brings benefits to the company in order to have a real market. The service industry for the blind is similar to the service industry for the aged. At first sight, the demand is huge. However, when you enter the industry, you find that the benefits are low. This is the problem that social enterprises must solve: how to create a beneficial business model based on social demands?

Survive, make breakthroughs and remember the mission

It is a great achievement to make it possible for tens of thousands of blind people to use smartphones. According to Cao Jun, Protection & Ease is a social enterprise that can't be shut down. Once the customers use the system provided by Protection & Ease, they become lifelong customers. The services can improve, but can't degrade. The mission can't be shifted. Though he has solved the problem related to the survival of the company, Ji Dong is still under great pressure. He faces challenges such as how to find the next breakthrough point and open a new chapter for the company? How to find a service that will have a market? How to support the operation

of the company through a beneficial model rather than rely on philanthropic donations? How to help millions of blind people instead of just thousands of them? How to enable blind people to live a smart life rather than just use a smartphone?

Why investors are optimistic about Protection & Ease

Though the company is not yet a large-scale one, its mission, position in the market, core product and services are well coordinated. The reasons for its appeal to investors are as follows:

1. It has great social influence
2. The founder, Cao Jun, has his own personal brand and influence
3. It has a precise, targeted customer group
4. Its products and services can help customers solve real problems
5. Its business model can be extended
6. The market is hard to enter, as the technology and the understanding of the customers are special
7. The customers are loyal and they will stick to the product
8. The managers have rich experience
9. The team is stable and cohesive
10. The goal of the company is to become a hundred-year-old company that will not go bankrupt.

Protection & Ease's contributions to the reflection of social investment

When I started in social investment, I thought the methods and requirements of business investment should be applied to make social enterprises respond well to the market and raise their management level. Then when I had a deeper understanding of the huge challenges these social enterprises faced in serving vulnerable people, I began to realise that the market these enterprises face is not a commercial one. The commercial investment model is based on the features of the commercial market. We cannot use the methods and requirements of commercial investment in social enterprises and we must redesign the model based on the features of the market faced by the social enterprises. The design should not only be limited to the theoretical level, it should cater to the real demands of the customers. The whole group should be taken into consideration rather than certain individuals. Besides consumption behaviours, government policies are also matters to be considered. Basically, we must start from the very beginning in designing the model.

Ten principles for social investment:

1. We can't be distracted from our mission, which is based on social value, regardless of how hard it might be. The enterprises doing normal business can change their customers at any time, but social enterprises cannot.

2. We need a comprehensive analysis of the demand based on individual customers, the whole customer group and government policies. Do not base the analysis on your own ideal imaginations. Being willing to help the vulnerable does not mean that you understand their real needs.
3. Change your concept of time; a goal you plan to finish in one year will usually take you three years.
4. The special customer group of social enterprises has more demands than ordinary consumers.
5. Demand does not equal market; the biggest challenge the social enterprises face is how to use a business model that can bring benefits to satisfy the customers' needs.
6. Stick to your convictions; be immune to the doubts of others. People usually see pure businessmen as "profiteers", and this is quite normal. However, when you run a social enterprise and help others, people will still regard you as a "profiteer". If you can't bear this pressure, you will never succeed.
7. At the initial stage of the enterprise, you must consider the income sources of your company including donations, government purchasing, customers' purchases etc. When the business model is mature, you can gradually rely on the market for profits. When I started as a consultant for social enterprises, I suggested that the founders change their model immediately and earn profits from the market by asking the customers to pay. Now I know this method does not work here in China; the transition should not be too fast and it should be a gradual process.
8. Build a team that has ability in both business and public welfare; the design of a business model balancing social benefits and business profits must involve a team that is capable of this balance.
9. Money cannot solve all the problems and lack of money does not mean that you can do nothing. The key is whether you and your team have determination.
10. You must enjoy the process of social investment and be happy about it, otherwise it's better to go home and play in the stock market.