Aihuishou:

Balancing Social Responsibility & Corporate Success

By Oliver Rui and Yu Feng

he mobile phone has become indispensable for many people in recent years - a combination of the rapid development of the mobile web and the large number of consumers with an aversion to sticking to one phone for a long time. For many of us, our mobile phones are extensions of ourselves, almost 'a part of our body', packed with detailed personal information that must be kept secure. This is why, for many of us, with each purchase of a new phone we simply leave the old ones at home; they are neither put to use again nor discarded. They simply accumulate and the problem now facing everyone is how to deal with this increasing mound of waste, made up of old mobile phones. It is extremely important for effective procedures to be put in place for their disposal. According to data from the China Information Communication Research Institute, less than 2% of old mobile phones were recycled in 2016. This tells us that we have a huge amount of used mobile phones, but very little recycling channels; after all, people can't trust second hand shops

COVER STORY

06

nor the 'entrepreneurs' roaming the railway stations with offers to take these phones off our hands.

The China Ministry of Industry and Information has put the number of abandoned mobile phones in the country at over 500 million in 2017. The Apple Corporation's environmental responsibility report shows that in fiscal year 2015, the company extracted 28,000 tonnes of available material from more than 40,000 tonnes of Apple products. This included 1 tonne of gold, 3 tonnes of silver and 20 tonnes of lead. Truth is, precious metals - gold, silver, palladium etc - account for about a third of a phone's total weight. In this sense old mobile phones are a huge 'gold' mine, both a hidden source of wealth and danger. If improperly disposed of, the heavy metal and other harmful substances could find their way into the soil and water supply, thus posing a huge threat to the environment and the safety of human beings.

Let's look at the data from the sell-

side. According to a report from IDC, a global authoritative research company, about 81.3 million secondhand mobile phones were sold worldwide in 2015, and the number is expected to reach 222.6 million in 2020. Apple has been reported to have begun selling 'refurbished' products, and the big online sellers - such as JD.com, 58.com, etc - have also rolled out second-hand mobile phone trading businesses. CNMO.com and 58.com's 2017 joint Research Report on the Current Situation of Secondhand Mobile Phone Trading shows that nearly half of China's consumers are open to purchasing second-hand mobile phones.

Within the context of the issues raised above, the entire industry is now grappling with one question. How do we replace longstanding grey areas with a sustainable business model through which a socially responsible company – able to resist the temptation of high profits – can 'mine' the resources in second-hand mobile phones without violating the

"Optimisation of the industry chain has given Aihuishou its unique business advantage, making the company a great source of guaranteed cash flow." law. The answer is Aihuishou. The literal translation is "love recycling"

Reshaping the industrial chain

Aihuishou is owned by Shanghai YueYi Network Technology Co, Ltd, which was established in 2011. It focuses on recycling of mobile phones, laptops, digital cameras and other 3C (Computers/Communications/ Consumer) products, with the secondhand mobile phone trade accounting for 80-90% of its business. The phones which Aihuishou receives are processed and sold downstream within the industry. The company has received several rounds of financing from investors including Morningside Venture Capital, IFC (the World Bank's investment agency that works only with the private sector in developing countries), JD Group, Tiantu Capital, Cathay Capital and Fortune Ventures. By the end of September 2017, Aihuishou had opened more than 200 direct sales stores in China's major cities and more than 30,000 cooperative stores in other cities with employees well over 1,500. In 2016, Aihuishou processed 5.2 million mobile phones with a turnover of about RMB1.5 billion.

In explaining why he joined the company, Aihuishou President Zheng Fujiang said, "It makes a lot of sense. Every year over 500 million new phones are sold in China, so there are also hundreds of millions of old phones that are out of use. They are either treated as waste, or given to others to use. If we asked, we may likely find that almost everyone has phones they don't use anymore. This is a huge waste, which perhaps may also cause electronic pollution."

Aihuishou's impressive performance can be traced back to a business model based on social responsibility. In the past, the mobile phone recycling business was mainly conducted by mobile phone stores and small time hustlers, through which second-hand phones would enter different segments of the industry chain. Renovation and re-assemble is the most profitable aspect of the chain. However, there is a high probability that such secondhand phones have quality problems, and this may mean additional costs for consumers who buy them. Aihuishou is hoping to reshape the industry chain, so that this relatively grey industry will become transparent and standardised.

Aihuishou's business model is based on recycling mobile phones through its own channels, then shipping them to operation centres located in Shanghai, Beijing, Shenzhen, Chengdu and Wuhan where they are checked and classified into three categories: endof-life, mid-end and high-end. These categories determine where they are placed in downstream industry chains: end-of-life phones are handed over to third-party companies that specialise in environmental disassembly; mid-end phones and some components obtained through environmental disassembly are sold to downstream buyers through the global auction platform; highend phones, if in good shape, are sold through second-hand goods platforms such as JD.com etc.

Through the reconstruction of the industry chain, Aihuishou has found a unique pricing method. It makes shortterm forecasts to determine the prices of certain brands and models of mobile phones through the auction platform and other downstream sales channels, in order to lock down profits and minimise the risk of price fluctuations. Optimisation of the industry chain has given Aihuishou its unique business advantage, making the company a great source of guaranteed cash flow. Due to downstream buyers' huge demand for used mobile phones, the company can generally clear its inventory within two days.

Aihuishou's business model

There are two main elements to the company's business model: privacy protection and distribution channels.

Strong recycling channels ensure privacy

To develop a competitive advantage, Aihuishou strengthened its recycling channels. For its online recycling channels, it first forged collaborations with JD.com, YHD.com, GOME and other mainstream online platforms so that consumers buying new phones can easily trade in their old ones. Second, Aihuishou built an official website, an app and set up a WeChat service account so that orders could be placed online and transactions completed



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offline. Third, they began to work with Xiaomi MI, Samsung, Meizu and other mobile phone brands so that, when buying new phones, consumers can get cash or coupons if they sell their old ones.

While mobile phone recycling is a low-frequency, non-essential trade for individuals, it is possible to make owners more willing to sell their old phones by combining the sale of old ones with the purchase of new ones.



There are three aspects to the transaction: mailing, door-to-door service and (offline) store service. Of the three, mailing is the most problematic and there are a high number of complaints – but it also generates a lot of orders. There are significantly lower complaints related to door-to-door service and store service. As the name suggests, door-to-door service means that Aihuishou staff go to the address agreed upon with the owner and do the transaction face to face; store service refers to transactions done in the store.

Store service is Aihuishou's key channel. By the end of September 2017, Aihuishou had opened more than 200 direct sales stores in China's major cities, most of which are located in core business districts, with new arrivals and newly opened stores almost every month. Although it has not yet been decided whether to roll out fully functional offline stores – those who are against the idea think it is a move towards heavy assets, and will increase costs – Zheng Fujiang is confident it is the way to go. He believes that, because they use online tools to attract users, direct sales stores are actually very profitable and Aihuishou also expects to use artificial intelligence (AI) to further reduce labour costs.

Offline stores

Aihuishou has not forgotten to reach into small cities; through various levels of collaboration, they now have 35,000 stores across the country. These collaborations are done under the Aijihui brand. From a business model perspective, if we say Aihuishou is a C2B model, then Aijihui is B2B.

Aihuishou has also done a lot of meticulous work on privacy protection and price evaluation to improve owners' experience. Through online channels, owners can check the evaluation standards of specific models, and get a price assessment based on the phone's status, thus putting an end to the previous pricing system which was very random. In terms of pricing, Aihuishou is using a reverse pricing strategy: they first use the auction platform to check the price a downstream buyer would pay for a certain product, then determine the

recovery rate according to the gross profit margin, before giving individual owners the best offer. As for personal privacy and information security issues, for iPhones, as long as the phone is restored to factory settings, there is no need to worry about data leakage. For Android phones, Aihuishou staff will first restore the factory settings while the owner looks on, and further erase all possible information at the backend. Aihuishou uses AC1 data destruction technology (disk rewritable technology), to repeatedly erase the phone's memory - which is in accordance with the United States standards - to make sure the information is completely removed from the mobile phone, ensuring the privacy of personal information and information security.

As regulated by the "Measures for the Management of Circulation of Used Goods" in China, junkyard operators should inspect the acquired, consigned and consigned used goods and strictly register the units and individuals that provide them. However, in the past, the recycling market did not take the regulations seriously, and the market

was simply a source of stolen goods. But Aihuishou is the last place where stolen phones would ever be found. It has a strict registration system for users' IDs, and it regulates the maximum number of mobile phones for sale on a single ID card. At the backend, Aihuishou's information is linked with the police database, and further linked to users' IMEI (International Mobile Equipment Identity) and ID numbers to eliminate - as much as possible the possibility of stolen goods. "Our system helped the police ID a thief as he was selling phones in his real name," said Xie Yin Sheng, co-founder of Aihuishou.

Aihuishou puts great emphasis on standardisation and intelligence in backend management. They have standardised the process of mobile phone testing and are working hard to fill the void of second-hand cell phone testing standards. Aihuishou boasts more than 100 R&D personnel, and steadily invests heavily in R&D, which mainly goes into backend big data analysis, intelligent store and intelligent operation system development, along with making improvements to the pricing and evaluation systems.

In terms of warehousing and logistics, Aihuishou owns more than 10,000 square metres of operation centres across the country. These facilities integrate quality control, sorting, warehousing and logistics to support the company's nationwide business.

Strengthen management of dismantling process

Phones that are categorised as "end-oflife" will go through the dismantling process, where reusable parts are mined. To avoid investing in excessive equipment, Aihuishou does not do the dismantling business itself, but gives it to a third party company. This poses another challenge to Aihuishou: how to effectively manage the third party to avoid speculation about its quality control systems.

Aihuishou therefore had three stipulations in selecting the vendor: first, it had to be certified by the environmental protection authorities; second, it had to have made the list of environmental protection authorities' dismantling and disposal of electronic waste disposal units and have the appropriate business scope; third, it had to have an environmental protection authorities-issued electronic hazardous waste business license. Aihuishou also stated in the contract that the dismantling party must disassemble mobile phones according to environmental protection regulations; they should put aside a sum of money to be held in escrow in case penalties need to be applied, and illegal refining, renovation etc are all strictly prohibited.

Aihuishou places great emphasis on environmentally friendly dismantling because it has seen the great harm e-waste has done to the environment and people's health and it hopes to become a social enterprise that adheres to the concept of environmental protection and best use. Therefore, Aihuishou feels a sense of duty to care for children who have suffered from lead pollution caused by the improper manufacture and handling of electronic products. Aihuishou and the China Children's Fund "Care for blood lead children's special fund" jointly launched a public campaign

"Aihuishou puts great emphasis on standardisation and intelligence in backend management." called "Care for blood lead children, better done than said". The initiative called on people to use their electronic products longer, to buy new electronic products less frequently, and to give the products and waste to recycling companies that are trustworthy.

In March 2017, Aihuishou and TV programme Oriental Billboards jointly held a charity-themed concert, in which well-known singers were invited to perform the public service theme song – "Metal Childhood". After the concert, Aihuishou also launched a charity auction in which a number of pop star's personal items were sold and the funds donated to China Children's Fund's "Care for blood lead children's special fund".

In recent years, Aihuishou has been donating nearly 1,000 recycled 3C products annually to the China Children's Fund and a number of education funds in China's hard to reach mountainous area, to improve education facilities and fulfil the company's social responsibility.

World Bank's nod of approval

Since China's recycling economy is still young and the concept of environmental protection is still in its infancy, how can Aihuishou consistently focus on environmental and social benefits? Xie Yin Sheng believes that "investment from the World Bank is a great help".

"Our Round A investment is from

Morningside Capital and Round B is from the IFC under the World Bank ... The World Bank is very strict about compliance requirements, so we've been doing things in a rigorous manner from the beginning," he explained. He still has memories of the first contact with IFC. "We were still a relatively small start-up before Round B. It was quite funny, you know, we are in different time zones, so when they called from the United States, it was midnight in China. And we had really prepared, we were ready with very detailed data. We co-founders just sat waiting for the call, and when they called, we expected them to ask about the growth rate or other data. But to our surprise, they asked us to name three things we did for China's environmental protection this year. We were completely unprepared, but fortunately we did make some contributions and we were able to speak about them."

Though the World Bank has not made many investments in China, its cooperation with Aihuishou went smoothly. Chen Xuefeng, founder of Aihuishou, said: "The World Bank prefers to invest in companies that combine money-making with social responsibility. So we made a deal after only two months of negotiating."

According to the investment agreement with IFC, a comprehensive monitoring report (CMR) on environmental and social performance must be prepared annually. It should include the following: environmental and social management, occupational health and safety (OHS) performance, major environmental and social events, sustainability of projects and related business, data interpretation and corrective measures. In the document, Aihuishou must report on its environmental and societal contribution from both a qualitative and quantitative point of view. The report should include not only details about Aihuishou, but also the partners and employees in its industry chain. This means Aihuishou must also monitor its partners as well as its staff, and provide appropriate training for them.

In addition to the IFC's help, Aihuishou also feels in some ways that fulfilling social responsibility is not merely giving, it *takes* too. For example, the company faced many difficulties when it started to open its offline store. "We were eventually able to crush some hard nuts because we added the concept of environmental protection to business models when we were talking with our partners," says Chen Xuefeng.

The July 2014 Round B financing from the World Bank made the opening of offline stores much easier than before. In September 2016, after several rounds of follow-up financing and business development, Aihuishou began to make a profit. By the end of September 2017, the company had received more than US\$120 million in investment and its monthly sales were over 200 million. It is now the largest C2B electronic 3C product recycling and treatment platform in China, establishing a clear leadership position in the industry.

In December 2016, when Aihuishou won

CEIBS CSR CASES

13

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the most promising start-ups award in the 2016 Technology Billboard hosted by Sina Tech, this is how the company was described: "Starting from the recycling of electronic products, translating recycled second-hand products into big sales, quietly creating a commercial closed loop, and then becoming a star company in the industry..."

Sustainable CSR

Looking back, the management of Aihuishou believes that the resonance between social responsibility and business is the key to its success. Since the company's business model is grounded in being socially responsible, it brings more reward for them in winning investments and in their business operations. While still facing many challenges such as management capability and profitability, the company's management is convinced that social responsibility has become a part of Aihuishou and is inextricably linked with its commercial prosperity.

Based on their own experience in the industry, the company's founders also have a unique understanding of an enterprise's social responsibility. "Our perception of social responsibility may be different from other companies'. We are in a very non-standard industry, where in such a relatively grey area abiding by the law, being honest and trustworthy, is the largest corporate social responsibility," said Xie Yin Sheng. "We want to be a respected social enterprise and hope to contribute more to the cause of environmental protection by substantially reducing the cost of low-carbon environmental protection through the standardisation of recycling and back-end management." Zheng Fujiang weighed in from a management point of view, "What we want to do is to practice the concept of environmental protection and social responsibility with commercial success. We are not merely an advocator of a public campaign, our goal is continuous fulfilment of social responsibility through commercial success."

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