

Analysis on How Entrepreneurs Build an Electronics Recycling Startup

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ABSTRACT

With the continuous development of China's social economy, people's living standard and consumption level are constantly improving, and the number of waste electrical appliances and electronic products is also growing rapidly. In addition, the replacement cycle of electronic products is getting shorter, which will undoubtedly make the number of discarded electronic products increase fast. These products, if not properly handled, will seriously pollute the environment and harm human health. However, in China, due to the immaturity of the market mechanism of policy environment, the recycling and disposal of waste electrical and electronic products has always been a big problem troubling the society. Most of the discarded electronic products are put into the second-hand market through simple assembly or renovation by small vendors and other channels [1]. These electronic products beyond their service life bring a lot of safety risks to people. These illegal recycling and dismantling enterprises only pay attention to the high value parts of the waste electronic products, and for those parts with low economic value or toxic or harmful, they just burn them or throw them away. Therefore, China's imperfect electronic product recycling system makes operation and management of formal enterprise become the key point. As a start-up of electronic equipment recycling enterprise, one should equip himself with the characteristics of a successful entrepreneur, plan the direction of operation and management, and understand the prospect of the market. This paper use the questionnaire as the methodology to explore what characteristics are essential for an entrepreneur. Also this paper makes sure that the prospect of electronic devices recycling industry is optimism.

Keywords: Personalities of successful entrepreneur, Prospect of electronics recycling industry, Government policy support, Questionnaire.

1. INTRODUCTION

China's e-waste recycling is still in an extensive and disordered state. Most of the discarded electrical and electronic products are collected by individual retail investors and simply disassembled and processed by small workshops. In this non-professional disassembly and processing process, not only some precious resources are not fully recovered, but also a large number of secondary wastes and pollutants are generated [4]. These secondary wastes and pollutants are often mixed with household garbage and then buried or incinerated, thus causing serious harm to water, soil and air.

According to the market research firm international data corporation (IDC) statistics, China now has 4-500 million phones sold each year, nearly 3-400 million phones fell into disuse, but the old mobile phone recovery rate is less than 1%, nearly 90 percentage of consumer does not know the recycling and second-hand sales market, which means that the resources get to a huge waste. Secondly, under the influence of environmental protection and other factors, the state has been committed to promoting policies and plans such as replacing old electronic products with new ones in recent years. The subsidies and influence from the

policies are very important. Even if all the second-hand mobile phones on the market cannot be refurbished or depreciated for sale and use, it is estimated that among the 100 million used mobile phones, there are 1,600 tons of copper, 35 tons of silver, 3.4 tons of gold and 1.5 tons of palladium. The extraction of these heavy metals can also become an important part of the recycling interests of second-hand electronic products.

Hence, in this article, the author will study the development of electrical and electronic product recycling enterprises from the perspective of an entrepreneur who wants to establish one. Further, the following questions will be explored and discussed what personality traits and social resources are suitable for successful entrepreneurs, and how people can organize a startup company.

2. LITERATURE REVIEW

China has promulgated and implemented the Law on The Prevention and Control of Environmental Pollution by Solid Waste, the Law on the Promotion of Cleaner Production and other laws and regulations, and made corresponding provisions on the recycling and treatment of e-waste.

According to the relevant provisions of these two laws, in February 2009, the State Council issued "Waste Electrical and Electronic Products Recycling Management Regulations", the regulations for electrical and electronic products recycling processing activities to standardize, China's electronic waste recycling and disposal has entered a new era. According to the regulation, the Development and Reform Commission and six other departments jointly released a new version of the Waste Electrical and Electronic Products Disposal Catalogue in 2015, which extended the five types of waste electrical and electronic products to 14 categories, including printers and mobile phones.

In the field of pollution control of electrical and electronic products, in January 2016, the Ministry of Industry and Information Technology, together with the Development and Reform Commission and other 8 departments, issued the Management Measures for the Restricted Use of Harmful Substances in Electrical and Electronic Products. On the basis of the original Measures for the Control and Management of the Pollution of Electronic Information Products, the new Measures expand the scope of the harmful substances to be restricted in use and improve the management mode for the restricted use of harmful substances in products.

In terms of the theory of recycling waste electrical and electronic products, China learns from the treatment mode of "Extended Producer Responsibility System" in developed countries and implements the fund system of waste electrical and electronic products, which provides financial guarantee for formal recycling enterprises. With the improvement of people's living standard and their enhancement of environmental protection awareness, people are increasingly recognizing the importance of recycling of electrical and electronic products. At the same time, many experts and scholars have also issued professional references, such as Recycling status and Analysis of Waste Electrical and Electronic Products, A Preliminary Study on The Management System of Waste Electrical Appliances in China, Research on The Management of Waste Electronic Products in China Based on the Extended Producer Responsibility System and so on. They made a deep analysis of the disposal status quo, recovery countermeasures and resource utilization ratio of waste electrical and electronic products in China, and put forward many feasible Suggestions, either. In this paper, many specific theoretical knowledge have been quoted and referenced.

3. METHODOLOGY

This paper combines normative analysis with field investigation. In the field investigation, the questionnaire method is mainly used to collect data. The questionnaire is designed to collect the public opinions toward what characteristics make a person qualify an entrepreneur. The specific characteristics are given in the options and people can also write down their own answers. The questionnaire will be sent at the central business district of Shenyang.

In this survey, a total of 400 questionnaires were sent out, and 368 were recovered, with a recovery rate of 92%. Invalid questionnaires were eliminated, and the effective questionnaires reached 358, with an effective rate of 89.5%.

4. RESULTS

Among the 358 effective questionnaires, the most popular personalities which an entrepreneur should possess are ranked as below:

1. Willing to taking risks
2. The ability to stand failure
3. The ability to confront with problems and the desire for power
4. Desiring for wining and be thirst to knowledge
5. Possessing entrepreneurial instincts.

The main characteristics of the young people surveyed:

1. Successful people possess unique personality traits, such as a willingness to take risks, an ability to withstand failure, etc.
2. The replacement cycle is short.
3. The vast majority of people have idle electronic products left untreated.
4. Most people are willing to have their cell phones recycled through legitimate means.
5. Most people are willing to accept the refurbished mobile phone if the quality of the refurbished mobile phone is up to standard.

5. DISCUSSION

In the description of the characteristics of successful entrepreneurs, Bob Rice mentions the following: passion, curiosity, work ethic, energy, flexibility, balance, willpower, self-esteem, confidence and integrity. Entrepreneurs often possess some unusual traits and spirits, different behaviors and personalities.

Trait 1: Dare to take risks. If a person is afraid of danger, they are not qualified as entrepreneurs. People can achieve almost anything by taking small, carefully thought out steps, but can't start a business and cannot make a huge difference. To do that, people need the courage to take big leaps. Amounts of examples in the modern society have prove the fact that entrepreneurs should take risks which they can afford the failure, in order to succeed.

Trait 2: Ability to withstand failure. An entrepreneur can forgive him or herself for mistakes, but serious mistakes sometimes lead to success. Germans, for example, are notorious for going bankrupt, but in America it is the other way around. Here, bankruptcy is seen as a proof of experience, an additional way of learning. Without that perspective, it's harder for you to become an independent practitioner. Nine out of ten start-ups fail in the first five years, and even for those that survive five years, the failure rate reaches 90% again in the next five years. Successful entrepreneurs can shorten this period and quickly see

disappointment as an investment in the future. The reason why this trait is so important is that: Gain perseverance. If a person cannot bear disappointment, he will soon give up. However, if one can learn from it and keep moving towards one's goal, then one can achieve success.

Trait 3: Love problems, need power and confidence. Some people are not particularly willing to take responsibility, they prefer to get things done. Entrepreneurs are completely different. They seek power and want to act on their ideas. The difference is easy to understand: one buys tickets to get in and play the game, while the other invents the game, creates the rules and sells tickets. Entrepreneurs do not follow others' opinions, but have their own opinions. They do not want to, and do not have to, make people like their world, and that's their strength. Entrepreneurs also have to be confident. Self-confidence can be learned, but if you want to learn it, you need discipline.

Trait 4: Be a role model and learn how to deal with money. There is nothing like one's example of life to be embedded in business. For a manager, if he succeeds in his work, he will be satisfied. Entrepreneurs, however, are not. Successful entrepreneurs do not just do things differently, they are different from others essentially. The result: only the best people can build the best companies. Great entrepreneurs also have great personalities. People have to change themselves before change their company. One's personal wealth will flow quickly into business. Some of the founders of big companies were incredibly stingy. There are, of course, some fairly generous entrepreneurs. But what they all had in common is that they know they have to increase their personal wealth, so they do not invest all of their wealth in the long-term running of the company.

Trait 5: Want to win, and hunger for knowledge. Bernard Shaw said, "Ordinary people adapt to the world, but the crazy people try to adapt the world to themselves, so that all our progress depends on the crazy people." Entrepreneurs want to win in market share, money and power, and are not afraid of conflict. They want to put a mark on their environment and be sure that it makes everything better. Everything is a big game they want to win.

Trait 6: Entrepreneurial intuition. Some people are smart enough to do great work, but they are not necessarily suited to be entrepreneurs, because they lack some of the entrepreneurial judgment, and an intuition of opportunity and danger. On the surface, everyone says, "You are just unlucky." But it really depends on ability, particular gift: entrepreneurial intuition. This is true of all successful entrepreneurs, who always spot a great opportunity.

How should a startup company be organized? As far as this paper researches, an electrical and electronic product recycling enterprise should be organized as below:

In the era of digital economy, mobile search, e-commerce and social networking have emerged as the new generation. Mobile search can help the buyer to actively obtain information and obtain resources that could not be obtained and compared before at anytime and anywhere. Social networks also allow buyers to rate goods and services [5]. In addition, it has become a habit for most

consumers to skillfully use apps such as Taobao, JINGdong and Xianyu for shopping and selling. This is an opportunity of digital revolution and it can promote the development of the recycling industry of electrical appliances and electronics.

Firstly, a recycling network can be set up. Due to the weak environmental awareness of Chinese consumers, they are not only unwilling to pay for their discarded electronic waste products, but also want to benefit from them. This situation makes the recycling cost of electronic waste products very high. Therefore, how to build a diverse, flexible and convenient recycling network is the primary problem. From the present point of view, the establishment of recycling network can use forward logistics sales network; Work with nonprofit organizations; and establish a nationwide recycling network.

The next level of small collection points in the recycling center are directly managed by the recycling center, which can also be self-built or invited to join or cooperate, or a combination of these methods. There should be the following uniform rules for the recovery point: the recovery point must meet the standards stipulated by laws and regulations; the recycling point only has the right to recycle, and it is not allowed to dismantle it without authorization. The recycling point needs to have a unified store and uniform clothing so as to establish the brand image; the collection point must have a unified standard for waste electronic products to determine a unified price; the recycling center provides uniform training for the recycling points.

Recycling can be multifaceted: it can be collected by the roadside; Collection from purchase points, such as mobile phone business hall and hypermarket; Long-term fixed collection points, such as community-based regular recycling activities; Manufacturer support recovery collection, for instance, brand companies provide door-to-door recycling services. The combination of producers, importers, distributors, specialized processing enterprises and other electronic waste collection activities. Secondly, making rating and pricing of waste electrical and electronic products. As to products' version, brand, damage degree and other factors, enterprises can establish a reasonable recovery price range so that attracting consumers to participate in electrical and electronic product recycling activities.

Thirdly, increase the investment in technology research and development, improve the recycling process. Enterprises should not only carry out a single renovation and repair work for the recycled waste electrical and electronic products, but should proceed from economic factors, resource factors and other aspects, develop the optimal treatment plan. According to statistics, e-waste contains about 40% of the metal, 30% of the plastic and 30% of the oxide [4]. Hidden in waste electrical appliances, electronics, plastic packaging and waste materials, there are recyclable iron and steel, non-ferrous metals, rare metals, plastics, rubber and other resources, which are equivalent to the exploitation of primary mineral resources. It is an inexhaustible "city mine" [2].

In addition, we should make good faith management, and the distinction sells. Strictly control the quality of reproduction of electrical and electronic products, and clearly mark reproduction marks, is not only responsible for consumers, but also related to the corporate's brand image. If the waste electrical and electronic products is refurbished and sold at will, safety problems will be appeared, and then the consequences will be unimaginable and the enterprise brand will be damaged.

It is important to cooperate with the brand manufacturers, sell the reproduction of electric and electronic products with environmental protection label through brand manufacturer sales channels, so as to improve consumers' information awareness and broaden revenue channels. Through the public's understanding and attention to the behavior of home appliance manufacturers, pressure from all walks of life will be formed to encourage manufacturers to adjust their behavior.

Finally, the enterprise takes on the responsibility of recycling electronic waste products and environmental protection. Therefore, the enterprise should prepare enough funds to ensure that it can take the responsibility of recycling, and another enterprise should take over the responsibility in case of some circumstances that make the enterprise unable to take the responsibility of recycling [3]. This requires the intervention of institutions such as insurance, so electrical and electronic recycling enterprises need insurance companies as their partners to share the risk.

6. CONCLUSION

In the face of the increasingly serious threat of electronic waste, people must use formal means of recycling. In this paper, analysis of characteristics of successful entrepreneur is made, so as to enhance people's awareness of environmental protection and promote the development of reproduction of electrical and electronic products. In this paper, readers can find whether they possess the essential personalities of entrepreneur. The characteristics of successful entrepreneurs and the market prospect of electronic waste products recycling are analyzed. As great production and consumption power of electric and electronic products, China should regulate the discarded electronic products recycling, which is beneficial to prevent and reduce the pollution of the environment, promote the comprehensive utilization of resources. The action of "turn "waste" into wealth" is also in favour of the development of circular economy and creating a conservation-minded society, improving the utilization efficiency of scarce resources, promoting sustainable development of the economy, bringing good economic, social and environmental benefits. It is believed that with the joint efforts of all sides, the recycling of waste electronic products in China will gradually get on the right track, and the business of electrical and electronic product recycling enterprise will be thriving.

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