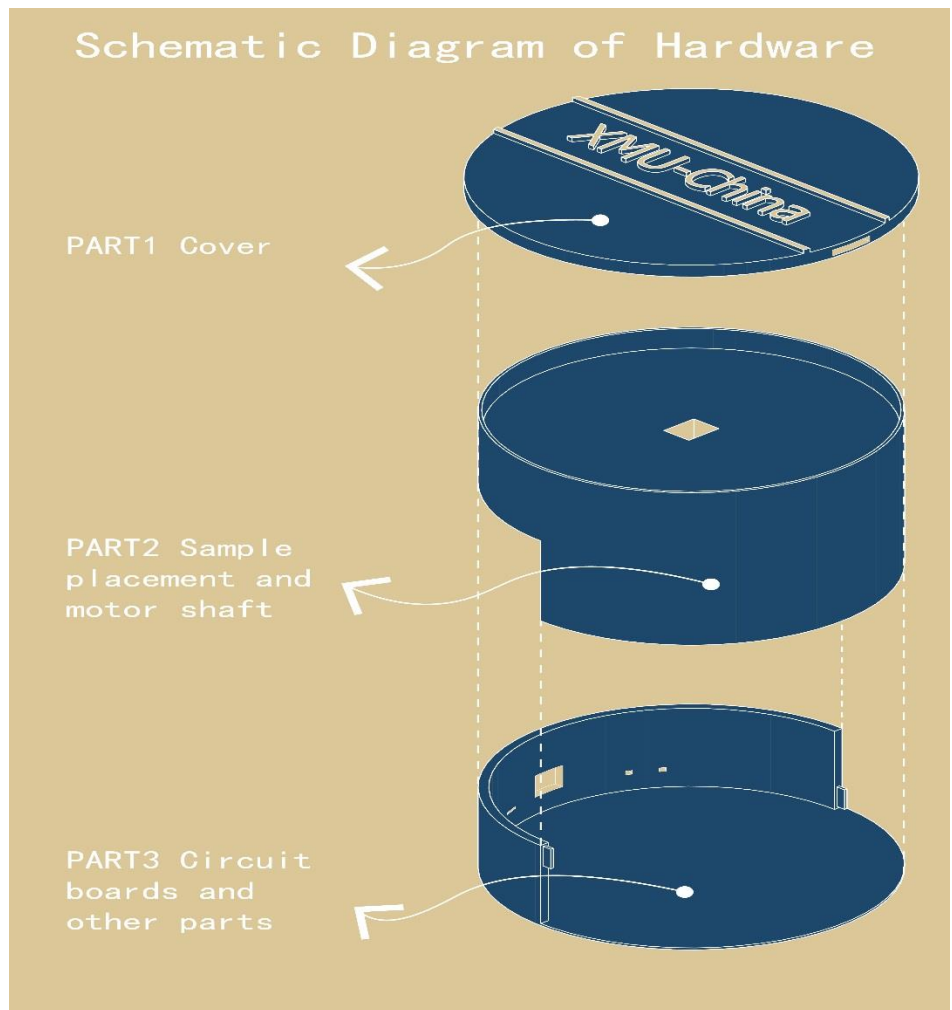


Business Plan



East-Wind

Water Qualitative Detection Device

Low Price, Small Volume, Simple Operation, Repeated Use

Business Plan

WATER QUALITATIVE DETECTION DEVICE

ENVIRONMENT ANALYSIS

Macroscopic environment analysis

In recent years, the occurrence of heavy metal pollution in water is frequent, from Guangxi He river water pollution accident to enterprises in Gansu province antimony spilled into the Jialing River leakage accident, a pile of tragedy makes people realize that we must pay attention to the problem of heavy metal pollution in water. Heavy metal ions not only do harm to people's health, but also can migrate into the food chain because they are unable to degrade. Also, heavy metal ions are easy to accumulate in organisms, when they reach a certain amount, they will make organisms distorted or mutated and eventually lead to death. Water is the source of life, and **people at the top of the food chain will become containers of heavy metal**. China has promulgated relevant laws and regulations on this issue. In February 2015, the Standing Committee of the Political Bureau of the Central Committee of the CPC deliberated and passed the plan of water pollution control action. Even so, heavy metal pollution is still a serious problem.

Microcosmic environment analysis

China faces serious food safety problems in recent years, various food safety accidents exposed to the public. People pay more attention to food safety. They are no longer as casual as before when they buy food and thinking highly of nutritional indicators and quality testing indicators. Compared with a variety of food manufacturers, national unified supply of tap water seems to be reassuring. However, more and more people choose to install filter water purification devices at home in order to obtain better drinking water quality. It can be a pointer that quality requirements for daily water consumption is also rising. Despite the national supply of tap water, some poor areas in China are still using well water and even rainwater as drinking water. At present, the cost of a water sample test in China is about 500-1000 yuan, and it is difficult for individuals to bear such a high cost of detection.

MARKET ANALYSIS

Target market analysis

According to the characteristics of our device, our target market is mainly for outdoor activities group, water quality supervision departments and people who seek high water quality. **To outdoor activities group**, this device can carry out qualitative detection of heavy metals in field water and tell them whether the water can be used or not, just like a compass to the sailors. **To water quality supervision departments**, they can timely know the contents of heavy metals of water samples in the field sampling survey whether the heavy metal contents exceed national standard or not. So that they can pick less water samples to the laboratory and reduce their workload in the premise of not reducing the precision of detection. **To people who seek high water quality**, they can detect their daily water any time and any place to make them feel at ease. When the results are bad, they can seek professional help in time.

Fabricating cost

Factor	Amount	Unit	Cost/CNY
ABS	300	gram	156.0
PMMA	2	piece	20.0
motor	1	piece	10.0
Arduino uno R3	1	piece	85.0
PCB	1	piece	9.0
electric capacity	16	piece	0.3
resistance	11	piece	0.2
ADG1434	1	piece	18.8
LMC6484	1	piece	10.2
TLC2264	1	piece	8.6
9V battery	3	piece	5.9
wire	20	piece	0.5
screen-printed electrode	1	piece	8
Total	13	piece	332.5

The table shows the cost in laboratory, when the device put into industrial production, the cost will decline a lot.

Market position

	Price	Convenience	Accuracy	Test Item	Operation	Repeatedly Use
Professional Detection	HIGH	NO	HIGH	ALL MEDALS	HARD	NO
East-Wind	LOW	YES	HIGH	MOST MEDALS	EASY	YES
Other Products	LOW	YES	LOW	SEVERAL MEDALS OR NONE	EASY	YES

The **price of our device is relatively low**, **the volume is small**. The **operation is very simple**, people do not need any professional knowledge can use it easily. The **device can be repeatedly used**. People can know the content of heavy metals in water at home which means don't need to send water samples to water quality supervision departments and pay high prices.

Channel of distribution

After obtain patent authorization, we hope to find related companies as partners who will get the right to manufacture East-Wind. At the same time, use the company's original distribution channels for online and offline sales.

Price

This device's price is low, but the economic benefits are strong. At the beginning of entering the market, we adopt market penetration pricing which means use a lower initial price to attract a large number of buyers in a short time, so that we can **win a high market share**.

Charity

The ultimate goal of this device is not how to earn more money, but how to protect more people from the damage of heavy metal pollution in water. As mentioned above, some poor areas in China are still using well water and even rainwater as drinking water. Once one of our teammate went to an aid education activity in a back country, she was shocked. How can these children drink such cloudy water! Out of consideration of this situation, we design a plan which called “Clean water for children in poverty mountain”. **When people buy a special charity edition East-Wind, they will donate one East-Wind to the children.** Of course, the special charity edition’s price is higher than common edition.