

# CLEAN WATER PURIFIER

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## ABSTRACT

The pollution and destruction of water resources, bring harm to people, tap water treatment process and the backwardness of the network pipe construction; tap water treatment process has been basically through the conventional coagulation, sedimentation, filtration, disinfection, and this treatment process is not able to deep-seated treatment of heavy metal ions in the water, scale, etc., while after adding biocides sterilization will make the tap water contains chlorine, these are harmful to human health These are substances that are harmful to human health, the family water purifier has become a "just need" products, but the current price of thousands of good water purifier is not the people, and too large installation process trouble, maintenance trouble. So we want to develop a lightweight and can be installed directly on the faucet convenient water purifier. Our company designed the smart faucet, the product with detection device, water purification device, sensor and supporting APP four as one, the sensor is used to detect the user's real-time water use and then import the detected data into our design APP and then the user's water use for comparison, ranking to achieve the purpose of advocating citizens to conserve water and APP will also be pushed to everyone daily with water-related knowledge, detection device continues to detect the water use, and the water use knowledge. The app will also provide daily information about water use, and the testing device will continuously detect the content of harmful substances and beneficial substances in the water.

**Keywords:** water purification, health, service

## Section 1 Company Description

Founded in 2022, Shandong Heze Jieli Technology Co., Ltd. sells water purifiers and taps as its main business. At present, the water quality of domestic urban tap water has not been able to fully meet People's Daily needs, after investigation found that people generally think that the water quality is not high, there is the taste of bleaching powder. Family water purifier has become a "just need" product, but at present the price of thousands of good water purifiers is not close to the people, and too large installation process trouble, maintenance trouble. So the company developed a water purifier that is lightweight and easy to install directly on the faucet.

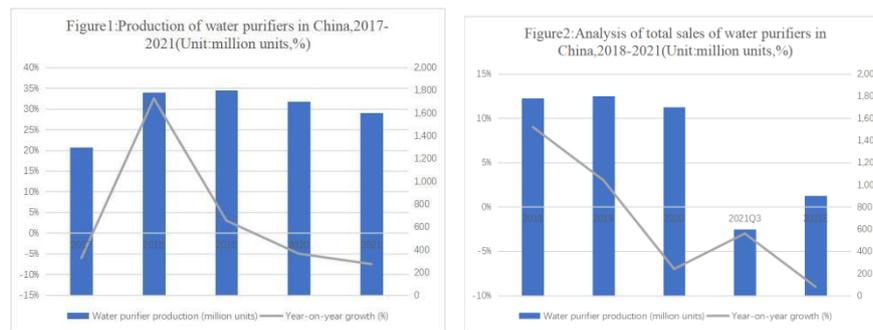
Our corporate vision is that we hope people all over the world can use good water, protect the safety of people's tongues, so that everyone can drink good and healthy water. The company hopes to create a new water purification method to achieve rapid and efficient water purification, integrate the latest technology, give users the best experience, and protect users' water health and safety.

We call our brand name Zhiyuan. The moral is: healthy water, intelligent life.

## Section 2 Industry Analysis

From the perspective of the overall market situation, in recent years, the demand for water purifiers is being driven worldwide due to the declining level of drinking water and the rapid urbanization and industrialization.

According to the first table, the current status data of domestic water purifiers show that the overall output of domestic water purifiers shows an increasing trend of fluctuation. However, as can be seen from the second table, the domestic downstream demand is weak and the sales pressure has increased.



Through macro environment PEST analysis

### P-Political factors

The government work report calls for the implementation of "Made in China 2025", with intelligence and integration with Internet enterprises becoming the focus of the transformation. In 2018, The State Council issued the Guidelines on Improving the System and Mechanism for Promoting Consumption and further stimulating people's consumption Potential, which once again highlighted the development of smart home and smart home information product industries that adapt to consumption upgrading.

### E-Economic factors

According to data from the National Bureau of Statistics, except in 2020, which was severely affected by the epidemic, China's per capita health care expenditure has been in a stage of rapid growth in the past decade, with the average growth rate maintained at more than 10% for a long time, indicating that Chinese people have a strong desire to pursue a healthy life. The quality of water resources is a necessity for a healthy life, as a powerful tool to improve water quality, the development of water purifiers is naturally worth looking forward to.

### S-Social Factors

With the improvement of people's income level and the increase of residents' disposable income, the support of residents' smart home has achieved rapid growth. Smart home, smart community and smart city are in a progressive relationship to a certain extent. Family is the smallest cell of every city and the smallest node of smart city. The city can be called intelligent only after every common people's family realizes intelligence.

### T-Technical factor

With the continuous development of the Internet of Things technology, the commercial landing of 5G technology is accelerated, and smart home will continue to enter thousands of households, becoming the trend of the development of smart homes in the future. More and more new technologies emerge, and the integration of smart home will produce a strong combination force, such as artificial intelligence technology, speech recognition technology, deep learning technology, etc., they are constantly making efforts to smart home industry, strive for

deep integration with smart home technology. Smart home products will be more and more popular, the classification is more and more refined, the product types involved will be more. Remote control will have a certain development, but will eventually be replaced by a complete smart home system. The future of the smart home market is vast, but the smart home platform market war is also indispensable.

Here is the SWOT analysis

**Strength:** 1. for the tap water quality problems, physical products plus online data analysis to solve, one intelligent. 2. Online big data reflects the situation with high degree of personalization. 3. Scientific polarization and diverse and precise product services. 4. As a developing industry, the market industry's huge.

**Weaknesses:** 1. Lack of consumer awareness of the product. 2. Financial barriers. 3. Technical barriers. 4. Initial difficulties, small influence, not enough appeal, low market share. 5. Low brand awareness of the product.

**Opportunity:** 1. Government support for college students' entrepreneurship. 2. economic development, people's living standards improve, the pursuit of higher quality of life.

3. healthy life, the concept of safe water, consumer awareness to enhance. 4. It is easy to be accepted in line with the social background of pursuing health. 5. The development of Internet technology popularity. 6. The industry lacks leaders and the existing competitors are homogenized.

**Threat:** 1. Strong enterprises follow suit and imitate. 2. The existing water purifier in the market fierce competition, brand diversity, consumer awareness of this product is not high, easy to categorize it as similar products.

The following is the analysis of Porter's five forces model

Existing competitors

The existing competitors in the market are Xiaomi, Haier, hot love, Fei Yu, Di Lang, Philips, Midea, Seagull bathroom and so on.

We have a unique and creative, integrated service function that combines clean water and intelligence, and can use intelligent ways to save water for users. With the traditional smart faucet will not have too much conflict, to avoid at the beginning of the face of strong competitors.

Bargaining power of upstream suppliers

Upstream suppliers mainly include technology suppliers, product developers, industry veterans, product manufacturers, service technicians and maintenance personnel and so on. The upstream suppliers are all related to the core of our products, so our bargaining power is not high and our competitive advantage is not obvious. However, once the features of this product are developed, our bargaining power will be improved. Consumer acceptance is higher, and we have a competitive advantage.

The bargaining power of downstream users

To ALREADY some INTELLIGENCE faucet, CONSUMER choice LEEWAY IS LARGER. At this time, our bargaining power is weak, but with the unique service and user experience of our products and considering user dependence, our bargaining power will be enhanced among downstream users.

Threat from potential entrants

Although the smart home appliance industry has high entry barriers, relatively large scale and large capital investment, there will still be potential entrants into the industry. In addition, there will be a large number of potential entrants after the success of the product's cultural model of intelligence, water purification and water

saving. In the face of threats from potential entrants, our advantages are not obvious. If we fail to become bigger and stronger, establish our own brand and quickly occupy the market, we will face threats from potential entrants in the process of operation, which will reduce our competitiveness.

The threat of potential replacements

At present, the potential substitutes mainly refer to intelligent sensor faucets, water purifiers, water purification faucets and other smart faucet product stakeholders. While there are many alternatives to smart faucets and similar products on the market, there is no smart faucet that offers an all-in-one service and can feel the culture of water conservation. The products of the replacement are positioned in water saving, intelligent sensing, water purification, intelligent temperature control, etc. This product is committed to the full range of water services, so it has a certain competitiveness.

To sum up, according to the competition analysis, this product has strong or weak bargaining power with upstream and downstream customers. Most of them have advantages, indicating that the service of this product has a higher value rate of return in the product market and consumer market. From the perspective of substitution, potential competition and existing competition in the industry, there is no clear positive competitor in this industry, and the existing competition is only in some non-main business. So this product can quickly occupy the market, establish the brand image, the advantage is very obvious. There is competition in general, but it is not intense. Therefore, the formulation of the competitive strategy of this product should conform to the basic situation of the market, and at the same time, we should find our own shortcomings, so as to make full use of strengths and avoid weaknesses, and skillfully use these five competitive forces to enhance our competitiveness.

### **Section 3 Market Analysis and Marketing Plan**

Market segmentation

Jieli is a smart home product that integrates all water use functions. In recent years, the smart home industry has developed rapidly. The newly developed smart faucet products have mushroomed, and the market competition in the water purifier industry has become increasingly fierce. Without a scientific market segmentation and effective marketing means, it will not be able to meet the expanding consumer demand and rapidly changing market competition. Combining with the actual situation of wisdom source, this paper discusses three types of market segmentation factors.

Psychological factors, purchasing behavior factors, demographic factors

The target market

According to the market segmentation, we position the market in the middle and high-end market with smart home consumption ability. And divided into three target markets according to the age stage;

(1) The post-70s and post-80s middle and high-end groups(2) post-90s technology enthusiasts(3) The elderly and people with mobility difficulties

Overall marketing strategy

Create co-branded products: Co-branded products are a popular product sales method recently, that is, two related or unrelated brands together to make a product with each other's brand Logo. In this way, we will co-sign with environmental protection organizations or green public welfare organizations to create our own unique products.

Promote the brand "image", develop the high-end market: we have a product image Logo, which is the brand of our products, but also a part of our assets. Product brand Logo can be said to be very important, it is different from other enterprise products image representative, is also a consumer to identify our products, recognize our products an external image of the way.

The product is linked to the mobile device APP to observe the water consumption in real time: It is an innovation of our products, we have a series of testing device of intelligent series of bibcock, each related water consumption and water use will be generated by sensor data transmission to the APP, can real-time understand the situation, with water faucet of damage, such as allowing users to timely, and can be processed in a timely manner.

High quality service products: In addition to excellent product quality assurance, high quality service is also essential. Nowadays, the free on-site installation and maintenance services provided by suppliers have become the most basic services. These items bring convenience and after-sales guarantee to consumers, and are favored by consumers.

Sales and promotion methods

The combination of traditional sales and Internet sales is adopted to combine traditional channels with multiple channels of Internet sales in parallel.

Combining direct channel strategy and short channel strategy, direct channel can save middleman cost. And the short channel is only through a layer of middleman channel.

Sales promotion strategy

1. Feature promotion

Planning event marketing in large shopping malls halls, squares and other population gathering places to improve product identification and influence.

2. Practical promotion

This product can be practical innovation, will attract a large number of consumers.

3. Concept promotion

Human demand for water resources is increasing, coupled with the existence of unreasonable exploitation and utilization of water resources, many countries and regions appear different degrees of water shortage problem, call on people to save water.

#### **Section4 Management Team and Company Structure**

The company's core management team consists of 5 people, who hold core positions such as CEO and CFO respectively.

The company has five main departments: Technology Department, Finance Department, Marketing Department, Human Affairs Department and Administration Department.

#### **Section5 Operations Plan, Production Design and Development Plan**

From the date of the company was founded, in the next six years or longer, the company will be market-oriented, with technology, quality, service for the premise, based on innovative unique hardware and software products, vigorously implement the brand operation, capital operation, technology innovation and personnel

training strategy, strengthening characteristics, build a adapt to market economic development, based on people's health consciousness, The social environment with significantly improved environmental awareness meets the needs of users, and large enterprises with strong economic strength and competitive ability penetrate ideas, impact the traditional concept of water use, establish water knowledge system, and provide intelligent and efficient life.

The company's development strategy will be divided into four steps: early stage, middle stage, long term and long term. On the basis of realizing the strategic goals of each stage, the company will realize the strategic conception of making the company more refined, stronger and bigger, and becoming the industry leader.

At present, the product has been designed. The equipment takes the traditional faucet as the carrier, and introduces the water flow sensor, water quality detection device and filter element device. The water flow sensor is used to detect the real-time water consumption of users and then import the detected data into the app designed by us to achieve the goal of integration. The detection device continuously detects the content of harmful substances and beneficial substances in the water. Then we use the newly added filter element to strictly filter the harmful substances to strictly ensure the user's water safety.

## Section6 Financial Projections

According to the five-year financial statement data, the initial planned investment of the clean water leading project is 1.8 million yuan, the average annual profit is expected to be 551,024 million yuan in the next five years, the total revenue is 2,755,512 yuan, and the calculated RoI is 31%, indicating that the project has a good level of investment income.

Year	2022	2023	2024	2025	2026
EBIT	-5.17	1.372	51.932	90.57	136.808
Average EBIT	55.1024				
Total Investment	180				
Investment Margin	31%				

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