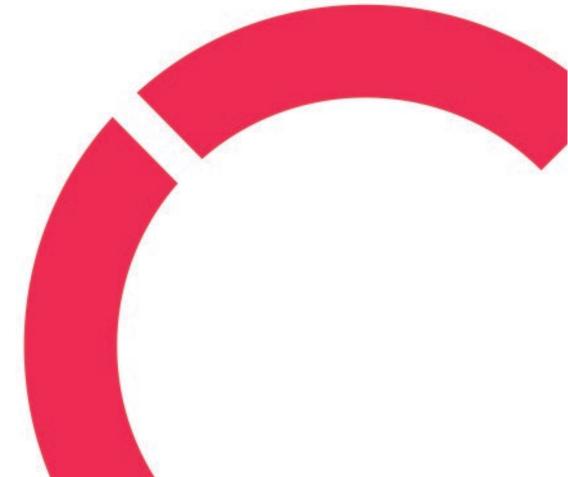
Yijun Yin

# MARKETING STRATEGY OF SMALL ENVIRONMENTAL PROTECTION ENTERPRISES IN CHINA

Case study: Shaoxing Heyuan Environmental Technology Co., Ltd.

Thesis CENTRIA UNIVERSITY OF APPLIED SCIENCES Business Management October 2023



# ABSTRACT

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The research object of this thesis Shaoxing Heyuan Environmental Technology Co., LTD. (hereinafter referred to as Heyuan) is a small environmental protection company. In the course of its rapid expansion, it has faced numerous challenges, including the lack of distinctive product advantages, sluggish sales, cutthroat competition in the market, diluted profits, hindered development in diverse markets, and formidable interregional rivalry. These difficulties further exacerbate the substantial capital risk and arduous collection endeavors. Based on the actual operation of Heyuan, this thesis summarized and analysed the existing problems in the marketing management of Heyuan combined with relevant marketing theories.

In this thesis, the macro environment and industry environment of Heyuan were analysed, and the PEST analysis method was used to analyse the printing and dyeing wastewater treatment industry from the political environment, economic environment, social environment, and technical environment, to clarify the current situation of Heyuan. Porter's Five Forces Model was used to analyse the competitive ability to exist, competitors, the entry ability of potential competitors, the substitution ability of substitutes, the bargaining power of suppliers, and the bargaining power of buyers in the printing and dyeing wastewater treatment industry. Then the SWOT model was built and analysed from the strengths, weaknesses, threats, and opportunities of Heyuan to further elaborate the strengths, weaknesses, opportunities, and threats of Heyuan. Based on STP theory, this thesis analysed the marketing strategy of Heyuan from the perspectives of market segmentation, target market selection, and differentiated market positioning. Finally, using the 4Ps marketing mix design theory, this thesis made set of marketing strategies for Heyuan from the aspects of the product, price, channel, and promotion.

Finally, based on the actual situation in Heyuan and taking into account the backdrop of industrial development, a more comprehensive analysis and summary of Heyuan will be conducted using scientific analysis and research methods. Simultaneously, the marketing strategy will be optimized by leveraging relevant theories of market economics and considering the specific circumstances of the company.

# Key words

Heyuan, marketing, printing and dyeing, sales, textile industry, wastewater treatment

# **CONCEPT DEFINITIONS**

EPC

Engineer, Procure, Construct

EPC+O

Engineer, Procure, Construct + Operation

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## **1 INTRODUCTION**

As an emerging industry, the environmental protection industry is currently in a period of rapid development. A good market environment and favourable policies provide good prospects for the development of the environmental protection industry but also make the competition inside and outside the industry increasingly fierce. At the same time, due to the promulgation of a series of environmental policies, laws, and regulations, strict supervision, and the rapid improvement of public awareness of environmental protection, the user demand for pollution-emitting enterprises tends to integrate environmental protection services from simple pollution control. Benefiting from the dividends of the over-all market, a large number of small environmental protection enterprises are facing the opportunity of surging demand and the challenge of fierce competition. How to formulate and implement the marketing mix strategy in line with the market demand and their own ability, so as to enhance the market competitiveness and improve the future development space, is a topic worth studying.

The research object of this thesis, Shaoxing Heyuan Environmental Technology Co., LTD., is a small environmental protection enterprise. In the process of its rapid development, it has encountered many problems, such as poor sales due to the lack of major products, profit dilution due to vicious market bidding, obstacles in the development of different markets, difficulties in cross-regional competition, large capital risk and difficulty in receiving payment. In order to help the company clarify the problems and find the right development direction and improvement methods, this paper starts from the actual operation situation of the company and combines marketing theories to carry out a theoretical analysis of the social macro environment, industrial environment, and internal environment of the company, so as to help the company more fully understand the market demand, so as to grasp the market opportunity and form the ability of sustainable development.

The research content of this thesis includes a detailed analysis of the macro environment and industry competition environment of Heyuan, so as to fully grasp the market environment of the company. Secondly, the SWOT analysis of Heyuan is carried out to clear the company's competitive situation in the market. Upon this foundation, the target market and positioning of the company were identified using the STP analysis framework. A thorough examination was conducted based on the 4Ps theory, analysing the existing issues in the company's marketing strategy from the aspects of product, price, distribution, and promotion. A comprehensive set of measures to optimize the marketing strategy were pro-

posed, including product optimization, price optimization, distribution optimization, and promotion optimization.

The first is product optimization, closely following the policy orientation and user needs through internal innovation and external cooperation to innovate and develop products. The first objective is product optimization, with the company closely following policy guidance and user demands. Through internal innovation and external collaborations, the company strives to creatively develop products that align with market trends. Leveraging scientific and technological advancements, efforts are made to enhance the capacity and quality of after-sales services. Strategic partnerships are also established to offer users comprehensive environmental solutions, thus facilitating the promotion of the company's products in the market. Secondly, price optimization involves analysing the perceived value of users and implementing target cost pricing as well as risk-based pricing strategies that align with industry characteristics. Depending on the factors such as the advantages of merchants and other channels, the company can avoid malicious bidding, obtain the ideal profit and solve the problems of capital risk. The third is channel optimization, which puts forward the channel selection standard of "target user distance", so as to cross the region, the industry obstacles to improve the breadth and depth of the channel with a variety of mutually beneficial cooperation modes, greatly improve the channel capacity, and solve the company's cross-regional competition difficulties. The application of scientific and technological means in channel construction is also an important means to achieve high efficiency in channel construction. Finally, promotion optimization, mainly through active planning and participation in public activities to shape the company's market image, and to provide users with flexible trading methods to promote sales. It also puts forward the idea of how to systematically collect all kinds of highquality marketing data in daily marketing activities under the background of the big data era, build their own promotional assets through preservation, collation, optimization, and dissemination, and realize sales promotion through the accumulation of promotional assets.

# **2 THEORY OF MARKETING**

The thesis presents an exploration of Heyuan, utilizing the PEST analysis model to analyze its current state, and deploying the Porter's Five Forces model to examine the prevailing competitive landscape. Combined with the SWOT model, the advantages and disadvantages of Heyuan are analyzed. According to the STP marketing strategy analysis, the marketing strategy of Heyuan is optimized.

#### 2.1 STP Theory

STP theory encompasses the concepts of market segmentation, the identification of suitable market targets, and effective positioning. The initials S, T, and P stand for the key actions involved, namely Segmenting, Targeting, and Positioning. STP theory is the core of modern marketing theory. According to STP theory, the market is a complex of multi-level and diversified consumer demands. No company can meet all the demands of consumers. The company should divide the market into consumer groups composed of similar demands, namely several sub-markets, according to different demands, purchasing power, and other factors. That's market segmentation. According to the company's own strategy and product situation, the company can select the market segments with a certain scale and development prospects from the sub-markets, and in line with the company's goals and capabilities as the target market of company. Then, the company needs to position the product in the position preferred by the target consumers, and convey this information to the target consumers through a series of marketing activities, so that they can notice the brand and perceive that this is the product or service they need. (Tan, Li, Hu & Yao 2021, 8, Chapater 4.)

Specifically, market segmentation refers to the process of dividing the market of a product or service into a series of market segments according to the differences in consumer demand. Target market refers to one or several sub-markets selected by a company after market segmentation to meet its needs with a certain product or service. Market positioning is to determine the product or service in a certain position in the target market during the marketing process, that is, to determine the competitive position of the product or service in the target market, also known as competitive positioning.

#### 2.2 4Ps Theory

The 4P marketing theory can be summarized as the strategic combination of four fundamental elements: product, price, promotion, and place. These four words, with their English prefixes all starting with the letter P, are commonly referred to as the 4Ps in conjunction with the term "strategy".

Products form the foundation upon which a company thrives within the market. Product strategy entails the company aligning diverse elements such as product quality and aesthetics in order to fulfill the expectations of consumers, thereby paving the way for operational profitability. (Kotler & Keller 2012, 29.)

The price of a product is an important index that affects the competitiveness of the product market. When pricing, we should not only consider the quality and competitiveness of the product itself, but also weigh the fluctuations of the market, so as to use various methods and skills to make the appropriate price, to achieve the ultimate goal of product marketing. (Kotler & Keller 2012, 29.)

Channel strategy refers to the establishment of product sales channels by the company to achieve the purpose of product circulation and radiation, usually including middlemen, dealers, sales outlets, and other different ways. (Kotler & Keller 2012, 29.)

Promotion should be a series of marketing behaviors including brand publicity (advertising), public relations, promotion, and so on. It means that the company can increase the purchase number of consumers through various means to achieve the role of product publicity and promotion. (Kotler & Keller 2012, 29.)

#### 2.3 PEST Analysis Method

PEST analysis refers to the analysis of the macro environment, P is politics, E is economy, S is society, and T is technology. When analysing the external environment of a company, the four factors are generally used to analyse the situation faced by the company. (Zhang 2020, 30-36.)

# 2.3.1 Political Environment

The political environment mainly includes the political system, political situation, the attitude of the government, etc. The legal environment mainly includes the laws and regulations enacted by the government. The political and legal environment includes the main national policies, laws, and regulations enacted by the state and local regulations, which are the political opinions of a country or region on a certain issue. The bias at the political level often has a great influence, and the national policies and guidelines will have a great impact on the development environment of enterprises. Therefore, when carrying out the macro-environmental analysis, the company shall include national policies and laws, and regulations related to the industry as important factors. (Zhang 2020, 30-36.)

#### 2.3.2 Economic Environment

The key strategic elements of the economic environment include GDP, interest rate level, fiscal and monetary policy, inflation, unemployment level, disposable income level, exchange rate, energy supply cost, market mechanism, market demand, etc. On the one hand, the economic environment is the macroeconomic environment, which refers to the general economic situation of a country such as the general situation of national income, which can often reflect the overall situation of a country's economic operation. On the other hand, microeconomic environment refers to the economic conditions such as people's consumption level, ideas, and even savings in a specific region, which are also essential for market development in the region. The company is in this situation and must adjust its strategy at any time and take it easy. (Zhang 2020, 30-36.)

# 2.3.3 Social Environment

The biggest influences are demographic environment and cultural background. Population environment mainly includes population size, age structure, population distribution, ethnic structure, income distribution, and other factors. The social and cultural environment includes a series of cultural soft power elements such as local traditional culture and folk customs, as well as residents' education level, personal aesthetic preference, and consumption habits. The social and cultural environment has an irreplaceable influence on the company's local market development and product strategy development, and these differences will directly affect the company's product positioning and other production activities. (Zhang 2020, 30-36.)

#### 2.3.4 Social Environment

The technological environment includes not only inventions but also the emergence, development trend, and application background of new technologies, new processes, and new materials related to the company's market. In addition to scrutinizing the evolving technological landscape within the company's field of operation, it is crucial to stay abreast of the nation's strategic investments and pivotal support for scientific and technological advancements. Understanding the trajectory of technological progress, as well as the comprehensive costs of research and development, the swiftness of technology transfer and commercialization, and the status of patents and their protective measures, ensures a comprehensive perspective. (Zhang 2020, 30-36.)

# 2.4 Porter's Five Forces Analysis Model

"Porter's Five Forces" analysis model was proposed by Michael Porter in the early 1980s. According to Porter, competition in an industry is not only carried out among the original competitors but also exists five basic competitive forces, which together affect the attractiveness of the industry and the competitive strategic decisions of the existing companies. The five forces are the bargaining power of suppliers, the bargaining power of buyers, the entry ability of potential competitors, the substitution ability of substitutes, and the current competitiveness of competitors in the industry. The change of the different combinations of the five forces ultimately affects the change in the profit potential of the industry. (Kotler & Keller 2012, 252.)

Porter's Five Forces analysis belongs to the microenvironment analysis in the external environment analysis, which is mainly used to analyse the competition pattern of the company in the industry and the relationship between the industry and other industries. In essence, it is an application tool of management thought at the strategic level of the company's marketing management practice activities, requiring the company's marketing managers to manage the company from the perspective of strategic analysis. Emphasis is a kind of strategic awareness or the use of strategic thinking.

#### 2.5 SWOT Analysis

SWOT analysis means to list the main internal strengths and weaknesses and external opportunities and threats closely related to the research object through investigation and arrange them according to the matrix form. Then, using the idea of systematic analysis, various factors are matched and analysed to draw a series of corresponding conclusions, which usually have certain decision-making. Using this method, the situation of the research object can be studied comprehensively, systematically, and accurately, and the corresponding development strategies, plans, and countermeasures can be formulated according to the research results. Typically, internal factors encompass two types of constraints, namely strengths and weaknesses, while external factors predominantly consist of opportunities and threats. (Zhang 2020, 44-54.)

Advantages are the competitive advantages of a company, such as the company's financial situation and capital strength, product and technology innovation, good brand image, excellent customer base, efficient management team, and so on. Disadvantage refers to the weaknesses or defects of a company, including backward production technology, chaotic management, lack of core technology, capital turnover difficulties, internal disagreements among shareholders, overstock of products, poor competitiveness, etc. Opportunities are favourable factors that a company may face, including new products, new markets, new demands, new technologies, and competitors' mistakes. Threats are external factors that a company may face, including new competitors, the emergence of more alternative products, the deterioration of the market environment, changes in industry policies, economic recession, changes in customer preferences, emergencies, etc.

# 2.6 Water Environmental Governance EPC/EPC+O Model

EPC is Engineer, Procure, and Construct. Its Chinese meaning is to undertake the "design, purchase, and construction" of a project. O is operation and repair, operation and maintenance. EPC+O refers to the general contracting mode integrating design, procurement, construction, and operation. It is an extension of the backend operation link based on the EPC general contracting mode. It can improve the operation efficiency of the project and reduce the cost of the whole life cycle through this integration method. (Detailed understanding of EPC+O mode 2022.)

#### 2.7 Summary

Through the collation of domestic and foreign literature in the field of marketing and printing and dyeing wastewater treatment equipment, it can be concluded that foreign research in the field of marketing is more in-depth because of the earlier start. At present, the marketing experience introduced in China is more modern and international. Marketing has changed from the traditional sales field to the establishment and application of customer relationship value, and the marketing concept has been developing to modernization. According to past research in the field of printing and dyeing wastewater treatment equipment, due to the pressure of China's environmental protection policy and the actual emission situation of the printing and dyeing industry, the printing and dyeing wastewater treatment industry will still maintain rapid development and extensive market development in China and even the world. The current research literature in this field has basically described the technical level of printing and dyeing wastewater treatment equipment products, the marketing situation, and the future product development direction that the company should pay attention to. However, it is not difficult to see from the research literature that there are still many printing and dyeing companies in China to cope with superior inspection and environmental protection policies to install printing and dyeing wastewater treatment equipment. The occurrence of this situation is mainly from the current printing and dyeing of wastewater treatment products with high use cost, high maintenance cost, difficult operation, difficult cleaning, and other problems. Therefore, although China's printing and dyeing wastewater treatment equipment was developed early and the market is perfect, there is still huge room for product progress, and the requirements for product upgrading and innovation remain high, and the market development direction is relatively broad.

## **3 METHODOLOGY**

The thesis adopts a qualitative research method. Qualitative research is a process during which the researcher employs a range of methodologies to gather data, such as interviews, observations, and physical analysis, in authentic settings. The objective is to conduct a comprehensive and intricate investigation of the research subject, deriving findings and theories based on the primary data, and achieving an interpretive comprehension of the actions and meaning formation of the research object through engagement with it. (Chen 2000, Chapter 1.)

Qualitative marketing research is to help enterprises better understand the market demand and develop appropriate marketing strategies through the analysis of non-numerical data such as customers, market environment, and competitors. Compared with quantitative research, qualitative research pays more attention to the understanding of objective things and subjective thinking and is often used in the research of market environment and product design. In actual market research, qualitative research is often combined with quantitative research in order to obtain more accurate and comprehensive market information. In addition, for different market research questions, different qualitative research methods may need to be adopted to arrive at more valuable results. (Kotler & Keller 2012, 112.)

The thesis takes Shaoxing Heyuan Environmental Technology Co., Ltd. as the research object, obtains the original marketing materials and secondary data from within the enterprise, lists all aspects of the problems encountered in the marketing activities of the enterprise, and analyses the causes of the problems in an all-round way, which is especially suitable for the analysis of the problems existing in the current situation of the enterprise.

#### 3.1 Desk Research

The purpose of market research is to collect the necessary information through various methods and analyse and organize it to get the correct research results. According to the information source of market research, the data can be divided into original data and secondary data. Primary data refers to the data collected by investigators through field investigations. Secondary data, also known as indirect data, is the data that has been arranged and processed.

Primary data is typically acquired through the processes of observation, investigation, experimentation, and discourse. Secondary data, on the other hand, encompasses the internal statistical systems of an enterprise, including the records from relevant departments, statistical tables, reports, financial accounts, and user correspondence. It also includes statistical data published by government agencies and financial institutions, publicly available journals, literary magazines, books, and research reports. Additionally, secondary data incorporates information from market research institutions, consulting agencies, advertising companies, industry publications from trade associations, product catalogues, samples, product brochures, public relations materials from competing entities, relevant governmental policies, regulations, and planning documents. Information provided by sales personnel, suppliers, distributors, and corporate intelligence networks, as well as publicly disseminated information at exhibitions and trade fairs, also fall under the category of secondary data. Generally, primary data acquisition entails higher costs, but offers strong data applicability, while the opposite holds true for secondary data. (Wenner 2003, Chapter 4.)

# 3.2 Research Background

Printing and dyeing is also called dyeing and finishing. Is a kind of processing mode, that is pre-treatment, dyeing, printing, finishing, washing, and other procedures of the general name. Data show that the registered number of related enterprises in China's printing and dyeing processing industry is on the rise from 2018 to 2021. The number of enterprises registered in 2021 was 8,434, and as of June 23, 2022, the number of newly registered enterprises was 4,586. China's textile printing and dyeing enterprises are mainly concentrated in Jiangsu, Zhejiang, Guangdong, Shandong, and other provinces, among which the textile industry in Shaoxing, County of Zhejiang Province has the most complete industrial chain in China. The textile industry in the county has distinct characteristics and concentrated distribution, forming several characteristic industrial towns (China printing and dyeing industry competition situation research and development strategy analysis report (2022-2029) 2022.). Textile printing and dyeing wastewater discharge has been among the top in China's industrial industry, its wastewater discharge accounts for about 11% of the national industrial wastewater discharge, 2 to 2.3 billion tons per year, its wastewater discharge and total pollutants ranked the second and fourth in the national industrial sector, accounting for more than 70% of the textile industry wastewater.

With the rapid development of China's social economy, the problem of environmental pollution, especially water pollution, has gradually emerged. The Outline of the 13th Five-Year Plan for National Economic and Social Development of the People's Republic of China (2016-2020) issued the Guidance for the Development of the printing and dyeing industry in the 13th Five-Year Plan, which clearly pointed out the energy conservation and environmental protection target of the printing and dyeing industry. By 2020, the water consumption of ten thousand yuan of the output value of the printing and dyeing industry will decrease by 20% and energy consumption of ten thousand yuan of output value by 15%. (Guidelines for the development of printing and dyeing industry during the 13th Five-Year Plan Period 2016.)

Under the dual background of industry development opportunities and market competition challenges, enterprises need to develop reasonable marketing activities to explore the market, seize the market and seize the development opportunities in the competition. The marketing activities of enterprises mainly focus on the target market positioning, product, price, channel and promotion, and other factors. Any single-factor marketing strategy can't meet the competition requirements of the current enterprises. Therefore, combination marketing based on the above factors should be paid attention to and studied. Constructing a good combination marketing strategy is a decisive factor for enterprises to carry out marketing activities smoothly and realize sustainable and healthy development.

Considering the aforementioned factors, the printing and dyeing sector is confronted with significant challenges such as energy efficiency, emission reduction, environmental protection, technological advancement, and environmentally friendly production. However, these challenges also present business opportunities for enterprises focused on environmental protection, particularly those involved in printing and dyeing wastewater treatment. As a result, the market for the printing and dyeing wastewater treatment industry is experiencing increasing demand, driven by continuous advancements in technology, safety, and product variety. These innovations have significantly expanded the application scenarios for such treatment processes. Therefore, how to make good use of the current policy advantages and market advantages, to open a wider distance with competitors, to achieve their own strategic goals, the company needs to develop more in line with its own characteristics, more cater to the market positioning and customer orientation of the marketing strategy.

#### **3.3 Data Collection and Analysis**

The thesis takes Heyuan as the research object to analyse and study the company's marketing strategy. Through the company's internal access to the original marketing materials and external open government data and business data, launched investigation activities, and data collection. STP theory, 4PS marketing mix theory, SWOT, and other analysis tools were used to divide Heyuan's current internal and external environment and its own situation and summarize the causes of the problems in the company's marketing management process.

Additionally, the thesis also employed the method of interviews to conduct research with relevant personnel. Interviews were conducted on September 13th, October 12th, and October 16th with the sales director, focusing on how to gain a deep and accurate understanding of customers, how to achieve sales upgrade through marketing, and how to efficiently acquire customers through multiple channels. Interviews were conducted on September 16th, November 11th, and November 16th with the general manager, focusing on the company's business integration (Appendix 1), how environmental entrepreneurs can upgrade from a sales mindset to a marketing mindset, and how to develop competitive products. In 2022, an interview was conducted with the sales director on January 18th, with the topic being the selection of target customers. On July 1st, an interview was conducted with the general manager, focusing on cross-department collaboration.

#### 3.4 Validity and Limitations

There are three main advantages to using secondary data. In general, it is relatively easy to obtain, and its cost is much lower than that of collecting primary data. It can be obtained quickly, so researchers always give priority to using secondary data to solve problems when possible. However, the disadvantage of secondary data is poor correlation. Secondary data is not collected specifically for the problem that the researcher needs to solve, it is collected for other purposes, which inevitably causes the secondary data and the data required by the project in many ways inconsistent. Poor timeliness, secondary data is the data that existed before the current research project, so there is a gap in reflecting the current market, consumer, and environment information. The reliability is low, the secondary data is untrue, and even the statistical data of the government departments has a certain degree of error, and even some data has a lot of moisture. (Jing & Zeng 2010, 119-136.)

# **4 ANALYSIS OF MARKETING STATUS AND PROBLEMS**

The thesis introduces the marketing status of Heyuan and analyses the existing problems.

#### 4.1 Validity and Limitations

Heyuan was established in 2016 with a registered capital of 50 million yuan. It is a subsidiary of Shanghai Heyuan Environmental Technology Co., LTD., which was established in October 2012. Heyuan focuses on the field of printing and dyeing wastewater treatment, the technical leader graduated from the Harbin Institute of Technology environmental engineering master and doctor, and the technical team has a deep foundation, and is familiar with all kinds of printing and dyeing enterprise's production processes and wastewater characteristics, has accumulated rich practical experience in the field of printing and dyeing wastewater treatment, and the existing printing and dyeing wastewater treatment process to improve, enhance and innovate. In order to realize the low investment, low operating cost, low sludge, high recycling rate, and three-low-one-high solutions of wastewater treatment, create value for the sustainable development of the textile printing and dyeing industry. The team has strong research and development ability, and currently owns 15 patents on printing and dyeing wastewater reuse, decolorization filter material modification, and regeneration technology.

Heyuan's business scope encompasses a wide range of activities, including provision of technical services, development and consultation, exchange and transfer of technology, promotion of technological advancements, wastewater treatment and recycling, services related to water environmental pollution prevention and control, professional design services, environmental protection consulting services, engineering management services, sales of specialized environmental protection equipment, sales of water pollutant monitoring and testing instruments, sales of industrial automatic control system devices, installation services for environmental health and public facilities, research and development of resource recycling technology, engineering and technology research and test development, research and development of unconventional water utilization technology, research and development of mechanical equipment, research and development of biobased materials, research and development of carbon emission reduction, carbon conversion, carbon capture, and carbon storage technologies, research and development of new materials, research and development of biological chemical products, software development, and environmental protection monitoring. Heyuan is the second venture of the founder of Shanghai Heyuan Environmental Technology Co., LTD. When first started the business, Shanghai Heyuan was mainly engaged in the treatment of industrial wastewater in the chemical industry, food fermentation industry, and pharmaceutical industry. However, Shanghai Heyuan didn't focus on one of these fields and accumulated influence and competitiveness. In addition, the main business model is EPC, which has a single mode and poor cash flow but has technical accumulation. In addition to the accumulation of technical founders, Heyuan introduced a full set of biochemical technologies from Dutch companies and transformed them in China from 2012 to 2015, laying a good technical foundation. (Company marketing training manual.)

#### 4.2 Organizational Structure

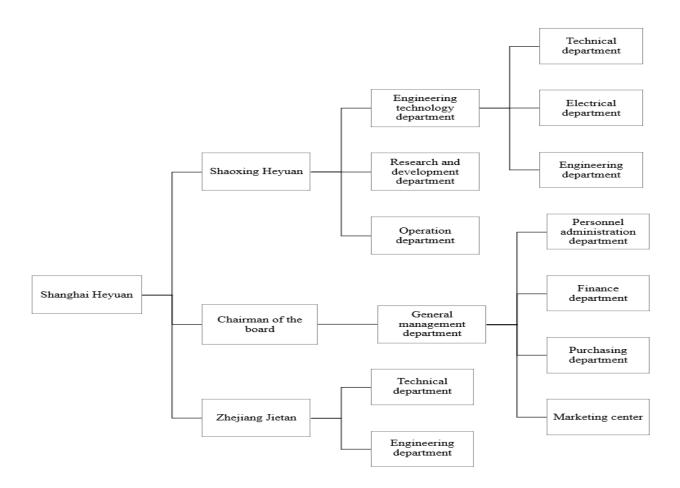


FIGURE 1. Organizational structure (Company marketing training manual)

#### 4.3 Marketing Concepts and Business Processes

Heyuan's business philosophy is fast-sensing customer and market demand. The main business model of the company is EPC+O/EPC for the wastewater treatment project of the newly built printing and dyeing company or the operation of biochemical + water trustee for wastewater treatment of the exist-ing printing and dyeing company. Heyuan upholds the customer-first business principle, for different categories of printing and dyeing production processes, wastewater characteristics and differences, spends energy on research, verification, and communication, to understand customer needs. Stand in the customer's point of view, and make the suitable for the customer's characteristics of the solution. In the field of printing and dyeing wastewater treatment, Heyuan adheres to the sincere support of customers, doesn't exaggerate, doesn't cheat, polishing the company's hardware and software, so that Heyuan printing and dyeing wastewater solutions more scientific, more reasonable technical implementation details, less sludge, lower energy consumption, water resources reuse space is larger. The overall operating cost is generally more than 20% lower than the competition, especially in the woven category. (Company marketing training manual.)

Heyuan in-depth understanding of target customers, newly built or rebuilt wastewater treatment printing and dyeing companies, and industrial parks, with quality and sustainable development requirements for high-end customers. In newly built EPC or EPC+O systems, generally the total designed water consumption is not less than 4000m3/ day. The project can be divided into phase I and phase II for implementation. The Yangtze River Delta and South China and other areas with good business integrity are the main market areas of Heyuan, including mature textile printing and dyeing industrial clusters or industrial parks in Zhejiang, Jiangsu, Fujian, Guangdong, and other places, or emerging textile printing and dyeing industries driven by the investment of companies from the above regions to the central and western regions. (Company marketing training manual.)

Customer development primarily involves two approaches. The first is proactive development, wherein the sales team compiles a list and systematically identifies customer needs one by one. The second approach involves leveraging resources to indirectly locate customers. Marketing personnel utilize channels such as design institutes, industry authorities, industry associations, management committees, investments, and partnerships to identify target customers. Additionally, seminars, exhibitions, training sessions, and other avenues are utilized to acquaint customers with Heyuan and foster a deeper understanding of our offerings.

In addition to understanding customer needs, businesses also take into account the perception of customers regarding concepts such as quality, reputation, and more, through third-party assessments. These assessments serve as evaluation criteria for selecting customers for Heyuan. From a technological standpoint, if technical personnel identify any technical risks or determine that a project exceeds Heyuan's capabilities, appropriate measures are taken to address the infeasibility. The feasibility conclusion of a project is evaluated by the sales staff, their superiors, the chairman, and the general manager. The sales staff is responsible for submitting customer research forms and providing written sales reports.

Project follow-up is mainly reflected in two aspects, business follow-up and scheme follow-up. Business follow-up is to find the key opinions and final decision makers in the customer project decision chain, such as the authorized project leader, technical evaluator, expert group member, environmental protection leader, project general manager, etc. Because the decision-making method or process of each project may be different, therefore, the sales staff need to understand the decision-making method of each project and the functions of all the people on the decision-making chain clearly, find the final decision makers, get clear support from the final decision makers, so that Heyuan get the opportunity to cooperate with the target customers. Program follow-up is to ensure that the Heyuan program and customer need an accurate match. In the initial stage of project follow-up, Heyuan pays attention to whether the land of the client's project has been approved or not and the start time of environmental assessment. The goal is to include the wastewater treatment scheme in the client's environmental assessment data and gain the opportunity to participate in the project. For government or state-owned projects, a design or consulting contract is required. During the program follow-up process, it is crucial for the sales staff to collaborate closely with the technical support team. This collaboration aims to gain a comprehensive understanding of the customer's requirements for printing and dyeing wastewater treatment. This includes factors such as the need for high-quality benchmarking engineering, consideration of project cost-effectiveness, and any specific requirements in terms of project details. The objective is to ensure that Heyuan's technical staff can develop a solution that aligns with the customer's perspective and fulfils their needs.

Business follow-up and program follow-up are complementary and simultaneous processes. The sales staff must pay attention to the customer's feedback on the Heyuan program. If the customer is not satisfied with the program, the sales staff and technical support must seriously modify and improve until the customer is satisfied. A responsible, professional, serious, and pragmatic attitude is the basis for

obtaining the support of key opinions or final decision-makers in the customer decision chain. (Company marketing training manual.)

Winning the competition is the sprint stage of the project follow-up. In this stage, the goal of the sales staff is to let the customer decision-makers unanimously recognize that Heyuan is the best choice for customers. The main work of Heyuan is to introduce to target customers the advantages and disad-vantages of the scheme compared with the competitors, such as technical rationality, investment, operating cost, land area, etc., and the value of the scheme and technical clarification, make one or more rounds of explanation, to impress the value of the customer's decision-makers. (Company marketing training manual.)

A reasonable offer is the Heyuan scheme can create unique value for customers, such as the most complete and reasonable process, operating costs are lower than competitors are more obvious, the Heyuan pricing space is larger, and vice versa. The situation of competitors, the customer's price expectation, the way of customer negotiation, and the strategic significance of the project to Heyuan and other factors affect the quotation strategy. Sales staff master the above information through communication, comprehensive consideration, and the use of the project cost-profit model table set Heyuan can accept the final transaction price. Based on this plus leaving the customer bargaining space, is the offer. The quotation shall be confirmed by the superior of the sales staff and the general manager before it can be quoted. (Company marketing training manual.)

Price negotiation is to strive for a higher price based on obtaining the project, which is the key embodiment of the negotiation ability of the sales staff. Before the price negotiation, we must formulate the price target and discount strategy. The sales staff should prepare the project cost profit model table, and clearly understand the project gross profit, tax, intermediate expenses, and other costs corresponding to different prices, as well as the net profit within the project quality assurance period. According to the discount space and discount strategy reserved during the quotation, we should offer the price rhythmic. It can also be traded for better terms of payment. If the company has reached the bottom price, the target customer still refuses to close the deal, the sales staff should consult with the superior supervisor, the chairman, and the general manager to adjust the negotiation strategy or goal. (Company marketing training manual.)

Heyuan requires that the project must have reasonable profit and a good payment method. If the customer doesn't have high-quality requirements for the project, and the pursuit of low prices, Heyuan will not consider projects that require lower quality standards, meet regulatory requirements, or don't represent Heyuan's technical philosophy. In the process of project negotiation, as far as possible, the construction period should be less or no capital, and the payment method should be normal. Under normal circumstances, no down payment, or bad payment method for the project, in principle will not be considered. In principle, wastewater treatment system with investment is not considered, water projects can be considered with investment. The activated carbon adsorption project temporarily doesn't have the project scale requirements, but for the payment method, the profit rate is required, the profit rate reference is 25%, and can't float too much. (Company marketing training manual.)

# 4.4 Analysis of Macro Marketing Environment (PEST)

The macro marketing environment mainly includes four aspects, political environment, economic environment, social environment, and technical environment. This section uses the PEST analysis method to analyse the macro marketing environment faced by Heyuan step by step.

#### **4.4.1 Political Environment**

Since the 13th National Congress of the Communist Party of China, from 2015 to 2017, the state has promulgated a series of environmental protection policies and carried out reforms from multiple dimensions, transforming passive and vague environmental management in the past into proactive and clear environmental management. The pattern of big supervision has been formed and the era of deep cultivation has begun.

The time dimension of policy. From 2018 to 2019, the work of environmental protection was gradually strengthened. From administrative documents to laws, administrative and economic documents, environmental policies, and measures, as well as the initiative and measures of third parties to deal with pollution were put in place. With the promulgation of relevant laws and regulations, such as the Ten Regulators on Water, Ten regulations on air, and Ten regulations on soil, the innovation of China's environmental protection industry continued to deepen.

The implementation of policies. Following the inaugural round of centralized environmental protection oversight in China in 2016, the public gained a profound comprehension of the significance of environmental preservation. The majority of enterprises recognized the intimate connection between environmental protection and their own operations. Proactively, these companies familiarized themselves with new legislation and regulations, and integrated environmental preservation into their day-to-day business practices and management, aligning with the mandates of national policies. In 2020, a new round of environmental supervision has also started. Compared with the first round of central environmental protection in all regions and industries has made great progress and improvement.

In 2018, the Ministry of Environmental Protection was renamed the Ministry of Ecological Environment, and its functions have also changed. The new agency has normalized the task of environmental supervision. Environmental inspectorate is no longer a whirlwind sport, but a core part of the daily work of local Ecos.

# 4.4.2 Economic Environment

In accordance with the 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Outline of Long-term Goals for 2035, the 14th Five-Year Development Guideline for the Printing and Dyeing Industry, as compiled by the China Printing and Dyeing Industry Association, explicitly stipulates certain targets. These targets include a reduction in water consumption per unit of woven fabric in the printing and dyeing industry from 1.8 tons of water per 100 meters to 1.5 tons of water per 100 meters, representing a decrease of 17%. Additionally, the guideline aims to increase the water reuse rate from 30% to 40%, resulting in a 10%-point increase. By 2022, the dyeing and dyeing wastewater treatment industry will have a 30% increase (Guidelines for the development of printing and dyeing industry during the 14th Five-Year Plan Period 2021). Local policies have also been introduced to improve the overall penetration rate of the printing and dyeing wastewater treatment industry caterate of the printing and dyeing wastewater treatment industry. According to the latest data released by the National Bureau of Statistics of China, China's investment in environmental governance has maintained rapid growth since 2018. In the first three quarters, the investment in the ecological protection and environmental governance industry increased by 33.7% year-on-year. (National Bureau of Statistics of China 2018.)

The year 2022 was a crucial year for the development of the printing and dyeing wastewater treatment industry. First, new policies and regulations affecting the development of the industry have been promulgated from the perspective of the external macro environment. The transformation of economic growth mode and strict energy saving and emission reduction policy has a more direct impact on the development of the printing and dyeing wastewater treatment industry. In addition, there are indirect influences from inflation, RMB appreciation, rising human resource costs, and other factors. From the perspective of the internal discussion of the company, the competition of various industrial chain links, the continuous upgrading of technology, the gradually shrinking export market, the increasingly complex product sales market, and other problems are urgent for the company's decision-makers to face and solve.

# 4.4.3 Social Environment

Public environmental awareness mainly includes two aspects, the level of public awareness of environmental protection and the level of public consciousness of environmental protection behaviour. According to Maslow's hierarchy of needs theory, people will pay more attention to the satisfaction of social and psychological needs after their physical needs are satisfied. (Peng 2003, 329-330.) People's growing need for a better life has increased public awareness of the environment. At the same time, due to the support of environmental protection education and environmental protection laws and regulations, the public's awareness of environmental protection and environmental protection behaviour has been significantly enhanced.

In the current consumer goods market, companies and their products that advocate environmental protection and energy saving are often favoured by young consumers. The gain of economic benefits can make companies inclined to transition to green production. The expansion of the scale of green consumption has prompted a fundamental change in the production behaviour of the company. The company takes the initiative to adopt environmentally friendly related technologies in the production process, which will vigorously promote the development and wide application of green production technology.

Due to the hidden nature of pollution behaviour, the disclosure of pollution information will not be conducive to the maximization of polluters' own interests. Polluters will tend to block information,

thus resulting in fewer and fewer information sources for polluters. Therefore, it is necessary to improve smooth channels to disclose and reveal pollution behaviour. The widespread publicity of environmental protection by mainstream media has made the public fully aware of the inextricable relationship between environmental protection and quality of life. Secondly, the official websites of environmental protection authorities at all levels have set up environmental protection forums with functions such as pollution reporting, publicity of pollution projects, and public evaluation, providing a platform for the public to identify pollution behaviours and make suggestions. Public participation in the development, implementation, and monitoring of environmental protection schemes helps governments and companies to receive public comments and suggestions in a timely manner, so as to make improvements and adjustments.

As people's psychological needs for a better environment and a green home become increasingly apparent, the ideology of green environmental protection makes people spontaneously pursue environmental protection and resist pollution. The root demand for health and environmental protection from people's hearts makes the environmental protection industry get extensive support, and as an environmental protection company, Heyuan will also be able to develop well in this cultural environment.

# 4.4.4 Technical Environment

The progress of environmental technology drives the development of the environmental protection industry and even changes the pattern of the environmental protection industry. The environmental protection industry is a technology-intensive industry, which is a comprehensive high-tech industry formed by the cross of multiple disciplines such as biology, chemistry, new materials, and new energy. All the disciplines involved in the development of high and new technology will greatly promote the progress of environmental protection technology, promote the development of the environmental protection industry, and even change the pattern of the environmental protection industry. According to the function of technology, environmental protection technology can be roughly divided into five categories, clean production, terminal management, comprehensive utilization of resources, energy-saving technology, and new energy technology. In recent years, these technologies have been deeply developed, and one or more aspects of the technical progress will bring great improvement to the environmental protection products and business level. According to the data of the Low Carbon Environmental Good and Services (LCEGS) Report 2016-2020, all the top ten patentees in the field of wastewater biological treatment in the world are from China. China already leads the world in bio-treatment technology, and other environmental protection technologies are also being applied in a mature way. (Low Carbon Environmental Good and Services (LCEGS) Report 2016-2020.)

Information technology has made decisions smarter and helped companies work more efficiently. At present, relatively mature information technology has the following three kinds. First is Internet technology, it helps build market access for company products and effectively convey information, thus ensuring effective communication and improving sales efficiency. Second is big data and cloud computing technology, the collection and analysis of massive data can provide the basis for various decisions of the company. The third is Remote control technology, remote monitoring, and the Internet of Things technology promote the environmental protection industry to step forward in smart environmental protection. In recent years, the great progress of these technologies has provided a powerful means for the marketing of environmental products, which hasn't only improved the intelligent decision-making of the company but also improved the working efficiency of the company.

The scientific and technological environment is the fundamental decision of the development of the environmental protection industry, environmental protection products and businesses are greatly dependent on the current science and technology, and with the improvement of the level of science and technology, the environmental protection industry will also usher in new opportunities and challenges. Therefore, Heyuan in the process of development needs to always pay attention to the development trend of environmental protection technology, and make full use of its own and surrounding scientific and technological forces in a timely manner, to create sustainable competitiveness.

The favourable political, economic, and cultural environment has brought a large number of market opportunities to the environmental protection industry. The development of science and technology provides a technical basis for environmental protection companies to consolidate their own technology and research and development force and provides strong support for environmental protection companies to create new opportunities by means of science and technology and seize opportunities by means of information. Heyuan should constantly strengthen its own strength and actively seize the opportunity to achieve rapid growth.

#### 4.5 Industry Competition Environment Analysis (Porter's Five Forces)

The section uses Porter's Five Forces Model to analyse the current competitive environment of Heyuan. This analysis is a microenvironment analysis in the external environment analysis, which is mainly used to analyse the competitive landscape of the enterprise in the industry and the relationship between the industry and other industries. It is an application tool of management thought in the strate-gic level of enterprise marketing management practice activities. It requires enterprise marketing management practice activities, emphasizing that it is an application of strategic consciousness or strategic thinking.

#### 4.5.1 Bargaining Power with Suppliers

Printing and dyeing wastewater treatment products are composed of a wide range of products and services. Suppliers of different products have different bargaining power. The suppliers have strong bargaining power for the raw materials with high technology content and small supply quantity in the products, such as biological agents, special membrane components, electrochemical components, catalytic oxidation materials, etc. As for service products, it is responsible for providing technical consultation, solutions, research and development, design, and other service providers with high technical content and strong bargaining power. For services with certain technical content but large market supply, such as environmental assessment, environmental equipment operation, and maintenance management suppliers, the bargaining power of the supplier is weak. The bargaining power of raw material suppliers with low technology content and large supply quantity fluctuates with the price fluctuation of raw materials. The profit margin of printing and dyeing wastewater treatment products mainly depends on the optimization and innovation of its pollution control technology. Even if the same raw materials are manufactured by printing and dyeing wastewater treatment companies with different solutions and technical capabilities, the profits generated may be several times different.

#### 4.5.2 Bargaining Power of Buyers

The customers of domestic printing and dyeing wastewater treatment projects mainly come from the government and polluting enterprises, so the buyers of pollution control products are mainly divided into government and corporate buyers. As the main demand side of printing and dyeing wastewater treatment, government purchasers have strong bargaining power, while corporate purchasers limited by environmental policy pressure have weak bargaining power. Take the pollution company purchaser

as an example, due to the different conditions such as the production mode of pollutants, discharge mode, discharge time, pollutant composition, and discharge index requirements, its demand is inconsistent, resulting in the printing and dyeing wastewater treatment company to provide its products with strong customization characteristics. Therefore, when purchasing environmental protection products, buyers are often unable to widely inquire, compare and negotiate prices, resulting in weak bargaining power for polluters. But with the continuous development of information technology, pollution company purchasers will have more ways to contact printing and dyeing wastewater treatment companies, and their understanding of printing and dyeing wastewater treatment technology and products will continue to increase, so their bargaining power will also be improved.

As Heyuan is a small enterprise, its bargaining power with sellers can't reach the level of leading companies in the industry, and its bargaining power in the market is generally not strong. Therefore, it needs to improve its bargaining power by improving the quality of products and services and providing better products and differentiated solutions.

# 4.5.3 The Ability of Potential Competitors to Enter

The main potential entrants of the printing and dyeing wastewater treatment industry are the companies with high correlation degrees with printing and dyeing wastewater production links or the companies with close contact or business relationship with pollution companies. Although entering the printing and dyeing wastewater treatment industry has a certain convenience, but because of the existence of high industry barriers, it is more difficult to enter the field. Industry barriers mainly include five aspects, technical barriers, capital barriers, qualification barriers, talent barriers, and performance experience barriers.

In terms of technical barriers, printing and dyeing wastewater treatment technology is the result of the cross-combination application and deep integration of a variety of disciplines, so the technology involves a relatively wide range, and relying on a single technology to control pollution projects is often difficult to achieve results. Printing and dyeing wastewater treatment project in engineering design, equipment research and development and production and project implementation, and other links of the non-standardization degree is very high, the project contractor's design ability, research and development ability, engineering experience, and other aspects have higher requirements. At the same time, due to the increasing intensity of environmental supervision, testing methods are more and more

strict, discharge standards are higher and higher, and the challenge of printing and dyeing wastewater treatment company governance technology is also higher and higher. New entrants can hardly survive in the market without strong technical capabilities.

In terms of financial barriers, the government mainly undertakes the investment and construction of large-scale printing and dyeing wastewater treatment projects, and the scale of the project capital needs to be large. If the government is the buyer, the project will adopt EPC, PPP, BT, and BOOM delivery, which requires a large amount of capital for printing and dyeing wastewater companies to do this kind of business. When the pollution company acts as the buyer, because it can't judge the pollution control performance of the printing and dyeing wastewater treatment products before the project standard acceptance, it will be more prudent in the payment of funds. It will require the printing and dyeing wastewater treatment company to submit the performance bond and technical deposit, and even require the advance payment of funds in the equipment purchase and construction link. In this way, the self-protection behaviour of the pollution company has become financial pressure on the printing and dyeing wastewater treatment company, which puts forward certain requirements for the financial strength of the printing and dyeing wastewater treatment company and sets a larger financial threshold for potential entrants.

In terms of qualification barrier, the printing and dyeing wastewater treatment company needs to have the corresponding qualification in the engineering design, implementation, and operation management and other aspects of the work, environmental engineering special design qualification, environmental engineering professional contracting qualification, environmental protection facility operation qualification, solid waste disposal and other relevant special qualifications. The acquisition of relevant qualifications requires a long time and a high cost. Therefore, it brings high start-up costs and high qualification barriers to new entrants.

In terms of talent barrier, a mature printing and dyeing wastewater treatment company should deploy or effectively mobilize comprehensive professionals in the following fields, chemistry, microbiology, water supply and drainage, architecture, programming and automatic control, environmental engineering, engineering management, marketing, etc. However, the construction of China's environmental protection human resources market is very backward, the output of professional talents trained by colleges and universities can't meet the needs of the market, and the continuing education and other social training market are short of talent training for printing and dyeing wastewater treatment. The human resources market hasn't formed the printing and dyeing wastewater treatment talent service, introduction, recruitment, flow pattern and mechanism. The overall stock of environmental protection talents is small, causing talent barriers for new entrants.

In terms of performance barrier, the complexity and diversity of printing and dyeing wastewater discharge make the treatment project have obvious customization characteristics. Printing and dyeing wastewater treatment is a comprehensive project, involving many professions, each link of uncertainties and risks. Therefore, under the background of strict policies and strong law enforcement supervision, to ensure the successful standards and stable operation of the pollution control projects built, the buyers are more inclined to the printing and dyeing wastewater treatment companies with more successful cases and rich experience, and less simply consider the cost factor. This creates performance barriers for new entrants.

As the printing and dyeing wastewater treatment industry has a high entry barrier, it is imperative for Heyuan, as a company in this field, to focus on enhancing their technological capabilities, qualifications, talent pool, performance, and other advantageous aspects.

#### 4.5.4 The Substitutability of Substitutes

In the 21st century, China's textile industry production process was brought about by the large consumption of resources, the emission of pollutants is increasingly apparent, the state issued a series of policies and regulations, and the textile printing and dyeing industry also frequently issued warnings. Energy saving and emission reduction has become the most frequently used term in printing and dyeing companies. It has become the management target of governments at all levels and the printing and dyeing industry. Printing and dyeing companies are facing unprecedented pressure. Therefore, accelerating energy conservation and emission reduction, the promotion and application of advanced applicable technologies are important measures and inevitable ways to promote the green development of the printing and dyeing industry and enhance international competitiveness of the printing and dyeing industry.

The new water-saving printing and dyeing process has successfully achieved a breakthrough in the water-saving technology of textile dyeing and finishing production processes, which can effectively save more than 90% of the water consumption of textile printing and dyeing companies. This technology has two main advantages. One is to reduce the water consumption of printing and dyeing companies by more than 90%. Second, to reduce the cost of wastewater treatment. Other advantages include relatively low energy consumption costs, no change to the existing production process flow no additional harmful compounds being produced, protect the ecological environment. The development and production of foam dyeing and finishing technology, knitting open-width dyeing and finishing technology, inkjet printing technology, environment-friendly printing, and dyeing auxiliary will have an impact on the existing printing and dyeing wastewater treatment companies. (Central People's Government of the People's Republic of China, Ministry of Industry and Information Technology, Ministry of Water Resources 2021.)

#### 4.5.5 The competitiveness of existing competitors in the industry

The demands for treating printing and dyeing wastewater are increasing continuously, and the benefits of integrated service providers in this field are becoming increasingly apparent. The supplier landscape in the industry is diverse, with five distinct formations emerging. Currently, there are multinational printing and dyeing wastewater treatment companies, state-owned listed companies specializing in printing and dyeing wastewater treatment, state-owned trans-regional development companies specializing in printing and dyeing wastewater treatment, state-owned regional companies specializing in printing and dyeing wastewater treatment, and private enterprises that have emerged as the leading forces in China's printing and dyeing wastewater treatment market. Among them, foreign-funded enterprises possess advantages in terms of capital, technology, and management. However, their localization advantages are notably insufficient compared to domestic enterprises. State-owned enterprises, on the other hand, possess strong capital and maintain close relationships with local governments, giving them a significant edge in winning contracts.

Printing and dyeing wastewater comprehensive treatment task is urgent, and quality companies stand out. Different from the operation mode of a single printing and dyeing wastewater treatment company, the comprehensive printing and dyeing wastewater treatment project have a large investment and more sub-projects, which puts forward higher requirements for the comprehensive treatment ability of printing and dyeing wastewater treatment companies. In this context, comprehensive suppliers of printing and dyeing wastewater treatment with strong technology, sufficient experience, and many benchmark projects in the industrial chain of printing and dyeing wastewater treatment will be more favoured by the government and stand out in the field of printing and dyeing wastewater treatment.

#### 4.6 SWOT Analysis

SWOT analysis is to list the main internal strengths, weaknesses and external opportunities and threats closely related to the research object through investigation, and arrange them according to the matrix form, and then use the idea of systematic analysis to match various factors and analyze them, from which a series of corresponding conclusions are drawn, and the conclusions usually have certain decision-making. Using this method, the situation of the research object can be studied comprehensively, systematically and accurately, and the corresponding development strategies, plans and countermeasures can be formulated according to the research results.

#### TABLE 1. SWOT analysis

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Internal strengths and	Strengths	Weaknesses
weaknesses	1. Brand advantage	1. High cost and high price
	2. Technical advantages	<ol><li>Limited market development resources</li></ol>
	<ol> <li>Manufacturing quality advantage</li> </ol>	3. Little brand promotion
External opportunities	<ol> <li>Sales model advantage</li> </ol>	<ol> <li>Insufficient after-sales outlets</li> </ol>
and threats		5. Lack of funds
Opportunities	SO Strategy	WO Strategy
<ol> <li>Market opportunities</li> </ol>	<ol> <li>Make use of brand advantages to growing bigger</li> </ol>	1. Segment the market and find target customers who pay
2. Policy support	and stronger in key customer areas.	attention to quality.
3. Increasing market demand	2. Exploit technological advantages to open up new	2. Adopt reasonable and effective ways to develop the market
	markets and strive to be the industry leader.	and strive for the maximum utilization efficiency of resources.
	3. Take advantage of manufacturing quality to instill	3. Adopt appropriate publicity methods, market segmentation, and
	the concept of high quality and parity with customers.	precision marketing.
	4. Make use of the rich features of the product lineup to	4. Develop a cooperation platform and try the after-sale mode of
	increase the product mix and improve customer loyalty.	channel suppliers.
		5. Develop a new operating system to increase customer
		stickiness through software upgrades.
		6. Establish a customer training system platform for remote
		learning.
Threats	ST Strategy	WT Strategy
1. The threat of substitutes	1. Market segmentation, precision marketing, and	1. Develop different pricing strategies for different types of
2. Large enterprises compete	selecting high-end customers who pay attention to	customers and carry out different promotions.
3. Competition from other new entrants	quality and technical strength.	2. Adopt different sales strategies and pricing strategies for
4. Competition among small technical teams	2. Ensure the stable and efficient operation of the	customers in different regions.
	company's R&D team, and keep abreast of new	
	market technologies.	

# 4.6.1 Strengths

After years of marketing efforts, Heyuan has successfully established a strong and reputable brand image for its high-quality professional products. This has led to the unanimous recognition and trust of our customers, giving Heyuan a significant competitive advantage in the market. In the case of the same industry, each case is a successful case, the equipment runs stably, the processing effect is good, won a good reputation. Some customers find Heyuan through word-of-mouth communication between the industry and become new customers of Heyuan, which also saves a lot of advertising costs for Heyuan, especially in today's information age. With a good reputation, Heyuan has a big advantage.

In the early stage of the establishment of Heyuan, the concept of leading technology is put forward. Over the years, it has persistently invested a lot of manpower, material resources, and financial resources in new technology research, so that Heyuan has the domestic leading technology advantage, and has obtained 15 national patents. These patented products have brought Heyuan a stable customer base because they patented products can effectively solve the problems faced by customers. Heyuan can't only solve problems that competitors can't solve but also can come up with better solutions to problems that competitors can solve. Leading technology, Heyuan has brought a huge competitive advantage.

Although Heyuan product manufacturing, installation, and commissioning are entrusted to a third party to complete, Heyuan upholds the guiding ideology of excellence, from the selection of raw materials to the strict control of quality, to ensuring product quality stability and excellence. So far there has been no scrap due to product quality problems, the staff is also proud of the company's high-quality products and proud.

Heyuan sales operation mode is EPC/EPC+O mode, which sets design, procurement, construction, and operation. The advantages of this model in marketing are as follows, it has more bargaining space than competitors in the same industry and can spread the costs of manufacturing and construction in the later operation and maintenance, providing continuous cash inflow.

#### 4.6.2 Weaknesses

In order to ensure quality, the production and manufacturing equipment is the best raw materials, and accessories, many motor and electronic control accessories are all used abroad famous brand products, which leads to the Heyuan products being compared with other competitor's products at relatively high price.

Heyuan is a pioneering enterprise in terms of technology, with significant investments in human, material, and financial resources dedicated to product research and development. However, this focus on R&D has resulted in relatively limited resources for market development. As a result, large-scale publicity and promotion have been constrained, leading to a slower spread and popularity in the market. Additionally, the high turnover rate of marketing personnel has contributed to team instability, which has become a current weakness in our marketing efforts.

The main customers of Heyuan are categorized based on industry, with a relatively concentrated regional distribution. As a result, brand promotion efforts have been limited in cross-regional situations, particularly in second and third-tier cities where brand awareness is low. In many similar areas, the actual demand for our products is not substantial. However, it is worth noting that some key areas hold great potential for future business growth.

Compared with foreign capital or state-owned printing and dyeing wastewater treatment companies, Heyuan has fewer after-sales service outlets, and can only rely on sending or entrusting a third party, which also affects further development, which is a bottleneck to opening the market in other places. The after-sales network also needs to continue to strengthen, to meet future market needs and customer requirements.

Although the current operating efficiency is fine, the purchase funds paid to the supplier have no accounting period, getting the user's advance funds less, in the project on the amount of cushion capital and other factors lead to financial tension. Due to the lack of funds, some quality projects must give up on the initiative and turn to some of the capital needs of the small, short cycle of the project. And this kind of project competition is fiercer, and operation has brought adverse effects. In addition, due to the lack of funds, such as new technology research and development, new equipment development, high-end test equipment procurement, talent introduction, and other aspects can't invest too much money, resulting in these aspects of the formation of a weak board.

#### 4.6.3 Opportunities

In recent years, the macro policy environment of important links such as industrial development, industry promotion, and market regulation of printing and dyeing wastewater treatment has been gradually improved. In 2019, The State Council successively issued three policy documents closely related to printing and dyeing wastewater treatment, laying a key policy foundation for the development of printing and dyeing wastewater treatment. At the same time, the Office of the Central Cyberspace Affairs Commission of the Communist Party of China issued a document on the printing and dyeing wastewater treatment management, which has played an important role in the printing and dyeing wastewater treatment industry. In terms of the business model for printing and dyeing wastewater treatment, there has been a clear emphasis on leveraging internet resources through auxiliary service offerings. Additionally, relevant market management policies have been issued to support this approach. The Ministry of Industry and Information Technology, PRC released the Three-year Action Plan for the Development of Dyeing Wastewater Treatment (2019-2022) in 2019, which put forward the guiding ideology, basic principles, development goals, key tasks and safeguard measures for the development of dyeing wastewater treatment in China.

The policy is an important driving factor for the development of the industry. The industry demand is expected to be released quickly under the promotion of accelerated unification of the process and refined management requirements. At the same time, the Internet plus printing and dyeing wastewater treatment, big data, and intelligent application have entered the substantive implementation stage, business innovation is clearer. Pattern optimization and system complexity significantly increased, making the leading advantage more obvious, industry centralization is expected to accelerate the improvement, quality companies stronger. With the substantial optimization of the industry margin, decentralization continues to improve, and printing and dyeing wastewater treatment industry prospects will be vaster.

The implementation of national environmental protection policies and industrial regulations has created a vast market space for printing and dyeing wastewater treatment companies. It is evident that the country has begun to actively promote the development of the printing and dyeing wastewater treatment industry. Previously, the industry relied on a single profit model, which led to a decline and a lack of direction for development. Despite efforts, there was a lack of response and returns, causing many to lose confidence in the industry. However, with the support of integrated development and practical policy measures, the printing and dyeing wastewater treatment industry, along with related industries, will experience significant growth. This support will help the industry discover new breakthroughs and profit models, establishing a new path for development. China's economic development has entered a new phase, and innovation in dyeing wastewater treatment is not only an international trend but also a suitable choice based on China's national conditions.

First of all, at the national level, in 2019, Premier Li Keqiang proposed supply-side structural reform for the first time in the Government Work Report of The State Council that year to deepen supply-side structural reform and unleash the vitality of the real economy. (Government work report of The State Council, State Council of the People's Republic of China, 2019.) Supply-side structural reform is to eliminate backward production capacity and industries with high pollution, energy consumption and water consumption, and environmental protection policies have naturally become a powerful tool to eliminate backward production capacity. Small and medium-sized enterprises in low-value-added industries that rely on extensive operation will be shut down if they fail to meet environmental protection requirements, and the problem of overcapacity will be alleviated accordingly. State-owned companies with standardized production will have improved bargaining power, significantly improved profits, and have the ability to invest more resources in energy conservation and environmental protection. Such a virtuous circle will gradually take shape. It is this virtuous cycle that increases the market demand for environmental protection equipment of regularized companies. Regularized companies also require the purchase of environmental protection equipment that is a formal product with scientific and technological content, which provides unprecedented opportunities for printing and dyeing wastewater treatment companies.

Secondly, from the perspective of the local government, under the promotion of environmental protection policies and environmental protection pressure, the local government moved small and mediumsized printing and dyeing companies into the newly built printing and dyeing industrial park and concentrated treatment of printing and dyeing wastewater discharged by such enterprises. This can't only improve the effective use of water resources but also reduce the company's investment in environmental protection, so that more human, material, and financial resources will be invested in the production and operation, creating more corporate benefits. At the same time, the new printing and dyeing industrial park increased government procurement, but also increased the market demand for printing and dyeing wastewater treatment companies.

## 4.6.4 Threats

In the environmental protection industry, printing and dyeing wastewater treatment field, the treatment of the same kind of printing and dyeing wastewater can have a lot of process combinations, each process, each combination has its own advantages and disadvantages, so for customers with relatively poor knowledge of environmental protection, how to choose their own process and combination has become a problem in front of customers, customers choose Heyuan's products can easily solve these problems. But because the replacement company's publicity and customers on their needs are not accurate enough, they may choose to use the products of the replacement company, which is also a threat. How to let customers make the most sensible choice, how to choose the product equipment, and let customers be clearer, is the future to work towards a direction.

Local state-owned environmental protection companies generally monopolize local environmental protection infrastructure construction and mainly focus on the investment and construction of large and medium-sized printing and dyeing wastewater treatment projects, so the demand for printing and dyeing wastewater treatment subsector hasn't realized the real market. More and more traditional industrial giants are transforming into the field of environmental protection, which promotes healthy competition in the environmental protection industry and encourages environmental protection companies to constantly improve their technical level and operational capacity, forming a new situation. This kind of company has strong strength, complete qualifications, and strong talent-building ability, mainly will compete for some large and medium-sized printing and dyeing pollution control projects. Although these large companies will not be in direct conflict with Heyuan, they make other printing and dyeing wastewater treatment companies adopt the sinking strategy, thus forming a positive market competition with Heyuan.

New entrants who have long-term cooperative relations with pollution companies in other fields will join other printing and dyeing wastewater treatment companies to seize market share and pose a threat. In addition, new entrants often adopt the low-price competition strategy to compete in some low-technology and small-scale projects, thus dragging down the average profit level of the industry.

In recent years, the emergence of independent designer teams and other personalized small technical teams is a new phenomenon in the printing and dyeing wastewater treatment industry. They generally have a working background in design institutes and large environmental protection companies and have rich experience and strong technical ability. Their main business is to provide printing and dyeing wastewater treatment solutions and design for middle and low-end pollution companies, and guide printing and dyeing companies to complete the construction of printing and dyeing wastewater treatment systems. As a result of high comprehensive cost performance, small printing and dyeing wastewater treatment companies bring serious threats.

## **5 MARKETING STATUS, STRATEGY PROBLEM AND REASON ANALYSS**

This section mainly analyzes the marketing status of Heyuan, its Marketing strategy existing problems, and the causes of the problem.

### 5.1 Market Positioning Status

According to the main business situation, Heyuan is mainly engaged in the construction or reconstruction of wastewater treatment printing and dyeing companies and industrial parks and has the requirements of quality and sustainable development of high-end customer, newly built EPC or EPC+O systems generally the total designed water consumption is not less than 4000m3/ day. The Yangtze River Delta and South China and other areas with good business integrity are the main market areas, including the mature textile printing and dyeing industrial clusters or parks in Zhejiang, Jiangsu, Fujian, Guangdong, and other places, or the emerging textile printing and dyeing industry driven by the investment of enterprises from the above regions to the central and western regions.

### **5.2 Product Status**

The main products of Heyuan are cooling towers, grates, hydrolysis reactors, and three-phase separators with patent rights, which involve all aspects of the printing and dyeing process. But generally speaking, most of the products are hardware equipment. Although some of the products have patent rights, most of the products are applied to transformation or improvement, and the products of independent innovation are relatively few. Some products need to be imported from abroad.

## 5.3 Pricing Status

Heyuan's current product pricing method is relatively single, mainly divided into engineering quotation and late operation and maintenance quotation. Engineering quotation adopts the cost-plus method, that is, on the basis of the product costs and marketing costs, increase the minimum profit and maximum profit expected by the enterprise as the product quotation range. Sales staff can be in the order negotiation, according to the actual situation of the negotiation on the basis of this price.

# 5.4 Channel Status

At present, the marketing channels are mainly its own sales team, and there is no direct branch, formal network sales channel, and related channel business system. Marketing staff through the design institute, industry authorities, industry association, management committee, investment, partner binding, seminars, exhibitions, training, and other ways to find customers, let customers know Heyuan and understand Heyuan.

# **5.5 Current Situation of Promotion**

First of all, the promotion strategy is mainly personnel promotion, which doesn't involve traditional advertising promotion or online new media promotion. Because there are few salespeople, the mode of relying on personnel promotion leads to low promotion efficiency of the company. Secondly, as an environmental protection company, Heyuan hasn't carried out activities related to the construction of social public relations and failed to use public relations marketing to promote sales. In terms of product promotion, the capital delivery mode follows a secure approach that involves direct purchase, money and goods clearing, and property transfer. Specifically, this entails a deposit of 20%-30% at the time of purchase, followed by a payment of 30%-40% upon project completion. An additional payment of 35% is made after the project passes environmental acceptance. A quality deposit of 5% is retained for 1-2 years. However, adjustments to these terms can be made based on individual negotiations with the customer.

## 5.6 Problems in the Company's Marketing Strategy

The important function of printing and dyeing wastewater treatment products is to meet the different pollution control needs of different customers and avoid environmental risks of customers. As cus-

tomer demand is the core of product strategy, environmental products need to meet customers' differentiated needs through continuous product innovation and better quality, and lower prices. At the same time, maintaining excellent after-sales service to create a satisfactory customer experience, so as to improve customer value is also an important focus of the environmental protection product strategy. From the current situation of the product strategy, there are mainly three problems, the lack of product innovation ability, the poor product structure, and the lack of after-sales service ability.

## 5.6.1 Insufficient Product Innovation Ability

From the perspective of innovation, the products are mostly derived from the method improvement, application transformation, process combination, and experience summary and problem improvement of the mainstream printing and dyeing wastewater treatment technology. The modular three-phase separator which was designed by Heyuan, technology is from the Netherlands. There are only two patented products of Heyuan, indicating that the product innovation ability is seriously insufficient, and the current product improvement hasn't carried out fundamental reform and innovation on the mainstream process and products. At the same time, industrial solutions and environmental impact assessment, overall acceptance of environmental protection, printing and dyeing industry are also few, resulting in the company's temporary inability to provide customers with a package of printing and dyeing environmental protection services.

# 5.6.2 Poor Product Structure

Currently, the standout products are wastewater treatment and reclaimed water reuse products. Additionally, the sales volume of environmental monitoring equipment has experienced a significant increase in the past two years. This suggests that the company may have overlooked other untapped market opportunities. Heyuan should promptly optimize and adjust its product portfolio based on its capabilities and market demand. By focusing on building a superior product line-up, the company can better position itself in the market.

### 5.6.3 Insufficient After-sale Service Ability

Due to the printing and dyeing wastewater treatment products' large and systematic characteristics, and high technical requirements, the after-sales service mainly take telephone diagnosis, telephone guidance, and technical personnel door-to-door service way to complete. But with the growth of the number of customers, the number of after-sales service also increased significantly. Since 2019, along with the rapid growth of after-sales service costs, customers have had more and more complaints about after-sales service, and some customers even terminated the commissioning of operation and maintenance services with Heyuan. The lack of after-sales service ability has become a great obstacle to the company's reputation and development.

## 5.6.4 Single pricing model, product price is difficult to take advantage

In the increasingly fierce and diversified market competition environment, price is the most variable marketing factor, and also affects whether customers decide to buy the company's products. Therefore, in the current market environment, the company should not simply consider the influence of a certain pricing factor but should comprehensively consider the pricing factors such as cost, demand, and competition, timely adjust the pricing strategy and product's price, highlighting the flexibility of the company's pricing strategy and market adaptability.

From the current pricing status, the main problem is that its pricing model is single. Heyuan adopts the cost-plus pricing method, which is desirable in the early stage of the development of the company and the market and can guarantee the company's product income stably. However, with the expansion of the company's scale, the increase of product types, and the sharp increase in market competition, the adoption of the single-cost pricing model will make the company lag behind its competitors in price competition, further affecting the turnover of products and limit the development of the company. The single-cost pricing model has become the core issue of the current price strategy, which needs to be dealt with.

# 5.6.5 Lack of Effective Channels

As a channel to convey customer value, marketing channels can accurately and efficiently deliver the company's products and services to the target customers, so as to maintain the efficiency and effect of the company's marketing activities. The effectiveness and efficiency of sales channels are extremely important. Lacking effective sales channels is the main problem. Heyuan has only its own sales team as its main sales channel, whose sales performance growth rate is not outstanding. With the substantial increase in market demand, the lack of effective sales channels will become a serious obstacle to its business expansion, so actively developing a variety of effective sales channels will be an effective way to increase sales in the future.

## 5.6.6 Imperfect Promotion Mechanism

Heyuan's printing and dyeing wastewater treatment equipment products primarily focus on physicochemical, hydrolytic acidification, aerobic processes, and sludge reduction. These products have been developed to cater to diverse market needs, each serving a unique function. Consequently, this necessitates the implementation of promotion strategies that meet higher requirements.

At present, Heyuan's promotion strategy is simple and straightforward, taking all products as the whole scope and implementing a one-size-fits-all price promotion strategy. After cost accounting, it no longer carries out the second division and separate accounting of consumer groups facing the products, and the product promotion strategy is not targeted and effective.

Given the constraints of a limited marketing team, Heyuan faces challenges in effectively allocating human resources for its product sales in the Yangtze River Delta and South China. The team often struggles to meet the demands of large customers and contracts, resulting in difficulties in deploying sufficient marketing resources. Consequently, it becomes challenging to offer targeted and appealing promotion programs, as well as tailor promotion strategies to different customer groups.

China has a vast area, a large span of east and west, different customs in the north and the south, the level of economic development and the total amount of printing and dyeing emissions are different, the use of water quality is different, therefore, customers around the printing and dyeing wastewater treatment equipment products are not the same requirements. This shows that in the same type of product manufacturing, the emphasis on product performance is not the same, and the use of raw materials and

the grasp of the technical level are also different. At the same time, the company should take into account the market competition level of local printing and dyeing wastewater treatment equipment products, the same product promotion strategy can't be unchanged. Interpersonal customs vary from place to place, in customer relationship maintenance, if each time to send new sales personnel to marketing contact, it is difficult to form a more stable interpersonal relationship with the target customers, every time to regain the trust of customers, inevitably increasing marketing costs.

## 5.6.7 Marketing Team Lack of Personnel Training

Marketing team and personnel are important elements of marketing, customer communication, contract performance, and so on are inseparable from the marketing team personnel. Marketing channel construction and management, contract signing, payment, performance, and so on need professional personnel to complete. The current marketing team needs to be supplemented, and relevant personnel needs to be trained accordingly to make up for the shortcomings of the current marketing.

#### 5.6.8 Low Management Efficiency

Lacking management tools, the process is still offline. The industrial process of Heyuan is managed in the traditional offline way, and the needs of all parties are communicated by telephone, WeChat, and email. This traditional management method is not only inefficient but also prone to mistakes and waste of labour costs. Accordingly, the lack of ERP, OA, and other basic modern management tools directly leads to high operating costs and low efficiency.

### 5.6.9 Incomplete Understanding of Assets and No Trace to Follow

Printing and dyeing wastewater treatment industry in addition to hardware equipment, a variety of asset equipment, printing and dyeing company generated variety of data are important assets. The beginnings, changes, and life cycles of these assets, if not documented, can lead to untracked management.

### 5.7 The Cause of the Marketing Strategy Problem Analysis

The weak product innovation ability is the root cause of the lack of market competitiveness, mainly two internal and external reasons. The internal reason is that the management at the present stage doesn't deeply and urgently realize that innovation is the sustainable competitiveness of Heyuan, so they don't pay enough attention to innovation and fail to form the mechanism and environment to drive innovation. Secondly, due to the lack of ability to analyse market demand, the company can't understand the fundamental market demand in advance or even in time, so it can't grasp the direction of product innovation. The external reason is that Heyuan used to be small, so it didn't build a mechanism to communicate and learn from external innovative forces, nor did it pay attention to building and form a system and mechanism to use external forces to provide help, guidance, and support for the company's innovation.

The inadequate analysis of customer demand is the primary factor contributing to the suboptimal product structure. The sales of printing and dyeing wastewater treatment products are heavily influenced by factors such as environmental policy guidance, varying demands among printing and dyeing companies, regional industrial structures, and climate disparities. Without a comprehensive understanding and awareness of the evolving demands of printing and dyeing companies, it becomes challenging to establish an optimized product structure, potentially resulting in missed opportunities.

On the one hand, as the number of customers increases year by year and the geographical scope gradually expands, the service demand and workload also increase rapidly. In this case, the traditional aftersales method is still adopted, which will inevitably make the number of after-sales personnel, aftersales ability, and after-sales service demand seriously mismatch. Secondly, relying solely on increasing the number of after-sales personnel to improve after-sales service will greatly increase labor costs, resulting in reduced benefits. The backward way of after-sales service is an important reason for the decline of after-sales service ability and quality. On the other hand, due to the low quality of after-sales personnel, the accuracy of fault judgment is not high, and the repeated after-sales service and low after-sales efficiency are also the main reasons for the decline of after-sales service quality.

The inadequate analysis of competitors is another issue faced by Heyuan. The company lacks a systematic approach to competitor analysis. When it comes to product pricing, the market competition is only estimated based on the sales team's experience, which then determines the sales price. However, relying solely on experiential analysis is imprecise and irrational. This approach often leads to price conflicts with competitors and leaves Heyuan at a disadvantage when responding to changes in competitors' pricing strategies.

The inadequate analysis of consumers is yet another challenge faced by Heyuan. The acceptable price of a product is contingent upon the consumer's perceived value and purchasing power. Unfortunately, Heyuan has not conducted a thorough investigation and analysis of the historical shifts in target customers within key areas, nor has it fully grasped the differentiated demands of these target customers. As a result, the company primarily relies on cost-based pricing methods, which is the main reason for this issue.

The project risk analysis conducted by Heyuan is insufficient. The company lacks a risk prevention mechanism and fails to recognize the risk factors associated with the printing and dyeing wastewater treatment project. Furthermore, there is a lack of thorough treatment and analysis of the impact these risk factors may have. As a result, the risk factors cannot be quantified and factored into the product price, ultimately leading to project failure and financial risk. Therefore, it is imperative to convert these risks into costs for comprehensive consideration.

There are many factors to be evaluated in the process of channel selection. Common main factors include capital requirements, specialization requirements, and personnel allocation requirements. Under the influence of various factors, whether the standard of channel selection is appropriate becomes the decisive factor in whether the company can successfully develop new channels. However, at present, Heyuan hasn't formulated an effective and reasonable channel selection standard, so it can't carry out the channel construction smoothly.

There are four main reasons for the imperfect promotion mechanism, lack of customer relationship management system, lack of promotion means, distortion of promotion information, and lack of awareness of public relations construction.

The absence of a customer relationship management system mechanism is a significant drawback for Heyuan. The company lacks the ability to effectively track and manage information pertaining to both new and existing customers, resulting in lost opportunities, rushed decisions, and marketing. Additionally, the absence of unified customer management standards and effective communication methods for marketing staff leads to a high degree of arbitrariness in customer interactions. This, in turn, results in inadequate, untimely, and inaccurate communication. The weak customer management practices severely hinder the company's promotional activities.

There is a lack of sales promotion efforts in Heyuan. Given that printing and dyeing wastewater treatment products are high-value and high-risk commodities, potential customers, such as printing and dyeing companies, may face limitations in terms of capital investment and project risks. However, with a well-designed promotion strategy, marketers can stimulate the desire of these companies to purchase and even attract new customers away from competitors. Therefore, it is crucial to develop various customer acquisition methods based on the unique characteristics of printing and dyeing wastewater treatment products. Unfortunately, Heyuan currently lacks such promotion means and programs.

The promotion information is distorted. Although relying on personnel to promote the way can effectively communicate with customers, for the printing and dyeing wastewater treatment industry with high technical requirements, personnel promotion can't accurately grasp the real pollution situation and needs of customers. Due to the limitation of professional and technical literacy, the promotion personnel can't accurately understand the needs of users, which will lead them to choose a single value transfer method in the promotion, which can't achieve the expected promotion effect. The key to the improvement of the company's promotion strategy is to build an efficient personnel promotion plan, ensure that Heyuan can clearly and accurately understand the customer needs, and improve the targeting of promotional activities.

Heyuan lacks awareness of the importance of public relations construction. Public relations can be defined as a series of activities undertaken by a company to enhance its relationship with the public, promote public recognition, understanding, and support, and ultimately establish a positive organizational image and drive product sales. Public relations play a crucial role in the company's marketing efforts, as they help establish an effective communication channel with external stakeholders and shape a favourable market image. Unfortunately, Heyuan has not yet realized the positive impact that public relations construction can have on marketing activities, nor has it proactively fulfilled its social responsibilities as an environmental protection enterprise. The lack of progress in public relations construction has consequently hindered the establishment of a strong market image for the company.

# **6 MARKETING STRATEGY SELECTION AND DEVELOPMENT**

This section mainly introduces the marketing strategy analysis of Heyuan (STP).

#### 6.1 Market Segmentation

Reasonable market segmentation can help the company explore new market opportunities, better deploy its own advantageous resources to adapt to the market demand and changes, and also help the company to combine the market demand to develop and optimize the marketing strategy. Based on the scale of the printing and dyeing company's operations and the impact of its printing wastewater and pollutant emissions on customer service, they can be roughly classified into three distinct categories.

The first type for large printing and dyeing companies should also be positioned as Heyuan's strategic customers. Cooperation with such customers generally requires the establishment of cooperation intention with customers, becoming their qualified suppliers, and obtaining service contracts through bidding at a later stage. This kind of cooperation process is relatively long, and the payment cycle is long, but once the cooperation relationship is established, it is possible to become the strategic partner of Heyuan and become a stable customer resource, but this kind of customer is relatively few. Due to the difference in textile materials, the printing and dyeing production process and the use of dye additives are also very different, so large printing and dyeing wastewater discharge and characteristics are different, the pollutant composition is complex, so there is no way to include all their printing and dyeing wastewater and pollutant treatment. Because large printing and dyeing company departments and personnel configuration are complete, environmental protection personnel professional knowledge and skills are relatively high, large printing and dyeing companies to suppliers the price will not be high, but once the bid is won, the market share is guaranteed, so like large company customers, Heyuan must have 2 to 3. This will be of great help in establishing brand effect and ensuring annual sales performance.

The second type is for small and medium-sized printing and dyeing companies, this kind of company has formed a certain production scale, the product is relatively single, and printing and dyeing wastewater and pollutants treatment is relatively simple. Small and medium-sized printing and dyeing companies of printing and dyeing wastewater and pollutant emissions relative to large printing and dyeing companies not much but compared with small and micro printing and dyeing companies and a lot of environmental protection requirements are higher than small and micro printing and dyeing companies, and there are shortcomings in the allocation of departments and environmental protection personnel. The professional knowledge and skills of environmental protection personnel are relatively weak, so Heyuan needs to organize personnel to conduct professional training for them. As a result, the transaction price of these customers is the highest, which not only increases the income but also improves the bargaining space of the company.

The third type is for small printing and dyeing companies, this kind of customer base is large, and printing and dyeing wastewater and pollutants emissions are limited. For this kind of customer for printing and dyeing wastewater and pollutant treatment company choice, there are only two points, one is to be cheap, and the other is to solve the problem once, can't be punished by the environmental protection department is enough.

# 6.2 Selection of Target Market

Determining the target market is the weight of the company's marketing strategy planning, but also the premise and basis of the company's marketing mix strategy. The target market selection strategy usually includes an undifferentiated marketing strategy, a differentiated marketing strategy, and a concentrated marketing strategy. (Tan, Li, Hu & Xianxia Yao 2021.8, 110-116.)

The undifferentiated marketing strategy is that the company takes the whole product or service market as the target market with a single marketing strategy and makes the same sales and promotions to all the markets and customers. Undifferentiated marketing strategies only involve the common needs of consumers or users and don't consider their different types of actual needs. Undifferentiated marketing strategies can't be applied to every market and customer. (Tan, Li, Hu & Yao 2021.8, 110-116.)

Differentiated marketing and non-differentiated marketing strategies work the same way because the company is committed to meeting the needs of all markets and customers, with a focus on the overall market. Concentrated marketing strategies focus on one or more segments of the market, specializing in production and sales. In pursuing this strategy, the company is actually targeting one or more market segments and trying to take a larger share of them, while abandoning the others entirely. A concentrated marketing strategy is essentially a targeted breakthrough in order to capture the market. This

strategy is very beneficial for small and medium-sized companies with limited resources. With limited capital, manpower, and materials, small and medium-sized companies can't compete with large companies in the overall market. However, when they choose to concentrate their resource advantages to break through a certain market, they may achieve unexpected results, so as to avoid being completely suppressed by large companies. A differential marketing strategy is simply that the overall market is divided into a number of different markets, each market segment should have an independent market-ing plan and market strategy. (Tan, Li, Hu & Yao 2021.8, 110-116.)

From the above target market segmentation process, it can be found that the target market of Heyuan has the following characteristics. The difference in customer scale is significant, with some customers operating on a large scale, producing tens of thousands of tons of printing and dyeing sewage and pollutants annually. These customers have high environmental management standards, with a dedicated budget for environmental protection disposal. They also have a specialized environmental safety management department and personnel responsible for ensuring the company's environmental safety. On the other hand, there are customers with smaller scale operations, resulting in lower volumes of printing and dyeing wastewater and pollutants. These customers may not be as willing to allocate significant manpower, material resources, and financial resources towards environmental protection.

Each of the three marketing strategies has its advantages and disadvantages. According to the analysis of customer scale, Heyuan should choose small and medium-sized printing and dyeing companies as the main target market. Small and medium-sized printing and dyeing companies have a large market scale, and it is relatively quick to establish cooperative relations. Heyuan provides the whole process service from project planning and management to operation and maintenance services for small and medium-sized printing and dyeing companies. It is easy to become a part-time EHS expert for small and medium-sized printing and dyeing companies and establish long-term stable cooperative relations. Secondly, small and medium-sized printing and dyeing companies. Heyuan should also choose 3-5 large printing and dyeing companies, which is the basis and guarantee of annual sales performance, as long as the winning of the large printing and dyeing company is every year, the next year's sales performance is guaranteed.

# 6.3 Market Positioning

According to the above analysis of market segmentation and target market, in order to do a good job in market expansion, combined with the existing conditions of Heyuan, should provide differentiated services with other competitors to enhance its competitiveness and differentiation advantage. Firstly, the company provides the whole process service for printing and dyeing companies and becomes the service steward of printing and dyeing companies, so that customers can feel the professionalism of Heyuan in the service process. Most small and medium-sized printing and dyeing companies for printing and dyeing wastewater and pollutants management platform use, because there is no person responsible for environmental protection and safety, so there is no professional training, don't know how to do management and plan. Heyuan offers customers a comprehensive range of services, covering the entire process from start to finish. Once customers sign the contract and make the payment, Heyuan takes care of everything else. This includes setting up a management platform for printing and dyeing wastewater and pollutants, developing an annual management plan, and handling equipment operation and maintenance. Heyuan is a private enterprise, and the operation is more flexible, can add a special person to be responsible for the management of customer accounts and platforms. Foreign, stateowned, and listed companies don't have this flexibility.

Furthermore, Heyuan aims to establish collaborative partnerships with printing and dyeing industry associations or organizations. Through these partnerships, Heyuan will develop customized agreements for the treatment of dyeing wastewater and pollutants, taking into account the specific needs and requirements of the industry. These agreements will be differentiated based on price and service, ensuring that they are tailored specifically for the industry. Heyuan will also optimize the agreements by considering factors such as operation and maintenance, as well as overall management.

## 6.4 Market Strategy Formulation

The current market positioning of Heyuan is to establish distinct personality characteristics through its own products and create its own unique temperament to attract target customers in line with its own design. Its position is to be a leading technology, leading products, leading quality, leading service of high-quality printing and dyeing environmental protection equipment manufacturers and service providers. The current marketing strategy is also based on this market positioning to develop and execute.

### **6.4.1 Product Strategy**

The main products of Heyuan are a cooling tower, grid, hydrolysis reactor, and three-phase separator with patent rights. However, the product sales of Heyuan contributed less to sales and profit, which was due to the smaller variety of specialty products of Heyuan. The featured products of Heyuan are patented products of independent research and development, so they always give priority to the promotion of their own patented products in the market, which leads to the specific printing and dyeing of wastewater and pollutants that need to be treated, if the patented products of their research and development can't solve the problem, there are no other alternatives for customers to choose. Although the processing performance, capacity, and effect of pa-tented products are very good, they can't meet all customer needs, and such a situation will limit the company's business expansion. Therefore, Heyuan should expand its product line, make use of its technological advantages, tailor it to customers, and meet their needs. Secondly, it should accelerate the pace of product upgrading, introduce Internet technology to make products develop towards intelligent and industrial interconnection, and maintain the leading edge in technology.

#### 6.4.2 Price Strategy

Customers always want to spend the least money to do the biggest thing, with the lowest price to buy the best goods. Therefore, when purchasing printing and dyeing wastewater and pollutant treatment products, they often shop around. However, due to the market positioning of Heyuan and the cost of raw materials and accessories, the price of the products is always 30-40% higher than other alternatives.

Such price positioning also leads to a lot of difficulties for sales personnel in the process of communicating with customers. They need to communicate with customers many times and explain a series of reasons for the high price, which also brings some difficulties to sales work. Not all customers can accept the idea of high quality and price, which will have a certain impact on the sales work and sales of Heyuan.

# 6.4.3 Channel Strategy

The marketing channel of Heyuan is mainly its own sales team. At present, it has not established effective and reasonable criteria for channel selection, so it is unable to carry out channel construction.

Channel strategy is based on the company's market positioning and development goals to establish suitable channel selection criteria for its own situation. Secondly, in order to ensure a close connection between the company and customers, new technologies can be adapted to facilitate channel construction and vigorously develop Internet channels. While effectively reducing channel costs, communication and contact between the company and customers can be enhanced. Thirdly, to ensure that the company can meet the needs of customers with low cost and high efficiency in channel construction, it is necessary to maintain smooth upstream and downstream channels. In the construction of marketing channels, it is also necessary to vigorously develop strategic partners, and rational use of upstream and downstream channels to achieve mutual assistance and win-win. Therefore, Heyuan should formulate effective and reasonable criteria for channel selection as soon as possible, so as to complete the short board of channel strategy.

# 6.4.4 Promotion Strategy

Flexible product transaction modes can eliminate customer purchase concerns, avoid vicious price competition, and improve the conversion rate of prospective customers. Use lease trial to purchase conversion and dispel customer concerns. For equipment with a high degree of standardization, Heyuan can provide trial services to customers by leasing for a limited period of time and in the form of free rent after the transaction. On the one hand, it can dispel customers' concerns about the source printing and dyeing wastewater treatment equipment and build trust. On the other hand, it can avoid fierce price competition with competitors and reduce product quality and profit dilution.

Leasing and operation are sold together to avoid competition and obtain double benefits. For customers with the high operation and management requirements and large consumption of consumables, Heyuan can directly adopt the leasing mode of sales. During the agreed lease period, the company will sell the equipment together with operation management and obtain the double benefits of equipment leasing and operation management while ensuring the environmental protection standards for customers. In this way, customers can package and transfer the risk of environmental protection violations to Heyuan, and Heyuan can't only avoid the fierce competition brought by direct sales of products, but also can create unique market competitive advantages in the fierce market competition. Heyuan utilizes a cutting-edge 5G high-speed network video interaction system to facilitate seamless communication between our sales staff and customers. This advanced system enables our sales team to provide professional and personalized services, ensuring a precise understanding of customer needs while eliminating any potential distortion of information during the promotion process.

By leveraging the power of this technology, Heyuan not only meets the printing and dyeing wastewater treatment requirements of our customers but also takes advantage of the emotional connection that comes with face-to-face interactions. This approach allows us to overcome the limitations of one-sided value transfer promotions and ensures a more comprehensive and effective communication experience.

Public relations marketing serves as a direct means of promoting products and shaping the company's image. The establishment of exceptional public relations is crucial in determining the company's growth potential. Therefore, it is imperative to establish strong public relations during the promotion process. Heyuan can implement the following measures to cultivate public relations.

Develop viable plans for environmental protection public welfare activities and actively collaborate with local governments, relevant authorities, and printing and dyeing companies to carry out environmental protection initiatives. This includes providing printing and dyeing companies, particularly those with significant pollution levels, with regular and complimentary sessions on printing and dyeing pollution, covering topics such as policies, regulations, standards, technical solutions, and government support. Through these efforts, the company aim to enhance the environmental consciousness of printing and dyeing companies.

Engage actively in public environmental education activities. The company can compile, reprint, and disseminate a series of informative articles on printing and dyeing pollution control through popular social media platforms like WeChat and Weibo. By collaborating with mainstream media and professional journals, the company can conduct public welfare environmental protection activities. Additionally, inviting news media for interviews and reports and contributing to prominent environmental journals will help showcase the company's commitment to social responsibility.

# **7 MARKETING STRATEGY IMPROVEMENT**

In order to establish a set of marketing strategies with high feasibility and outstanding practicability, Heyuan not only needs to design a reasonable marketing plan, but also needs to guarantee the construction of marketing team, performance incentive planning, technical service support, information system construction and other aspects, so as to cooperate with the implementation of the marketing strategy, and strengthen various management capabilities along with the development of the marketing strategy, so as to achieve the goal.

# 7.1 Guarantee of Human Resources

Improve marketing team building according to marketing strategy requirements. To ensure the successful implementation of the product marketing strategy, the company needs to have enough human resources as a guarantee. At present, Heyuan has a serious shortage of marketing personnel, and the turnover of marketing personnel is large. The establishment of an excellent marketing team is the current primary task.

An excellent marketing team is very important. Because of the industry characteristics of printing and dyeing wastewater treatment equipment products, product sales are very dependent on the sales of sales personnel, which puts forward high requirements for the quality level of the marketing team. Only through the marketing team selling the products, can make the production equipment into economic benefits, to achieve company profits. To build an excellent marketing team, first of all, strictly control the recruitment, the company should continue to absorb new blood, but also pay attention to raising the recruitment threshold, obtain excellent talent resources at the source, for the later shaping and training to provide a high starting point.

Heyuan should strengthen the construction of corporate culture, because the corporate culture, as the spiritual pillar of the company, is very conducive to the long-term development of the company. The construction of corporate culture is rich in content and centred on the company's concept and values. The values here do not refer to the general cultural phenomena of corporate management, but mainly represent the values advocated by the company or its employees when conducting business. Let the

company talent have a sense of gain and belonging, willing to pay for the company's wisdom and efforts.

# 7.2 Strengthen Business Training for the Marketing Team

Providing training to the marketing team is indispensable for the company's long-term success. Through business training, the work of all marketing personnel is unified in the same direction, which is conducive to the smooth implementation of the company's overall marketing strategy. Training the marketing team can improve the staff's business ability and ensure the success rate of bidding and signing rate of the company at a high level. The second is to improve the comprehensive quality and ability of employees, guide employees to make career planning for themselves, improve their subjective initiative in work, and form a healthy atmosphere of competition within the company.

## 7.2.1 Training for Senior Managers

The sales department undertakes the marketing responsibility of the whole company, and the senior management of the marketing team should improve their own ability and maintain a unified marketing concept and market sensitivity with the company's management. The company should make some achievements in the suggestions on the management marketing strategy, the communication of the management marketing strategy to the subordinate marketing staff, and the implementation of the management marketing deployment. Heyuan should focus on expanding the knowledge vision of senior managers, so as to better grasp the development direction of the marketing team.

# 7.2.2 Training for Marketing Personnel

Printing and dyeing wastewater treatment equipment have a fixed product type, and the market and customers are also relatively fixed. After more than ten years of steady development, it has shaped the unique marketing methods of Heyuan. For ordinary marketing personnel, these marketing experiences are precious and rare, which should be sorted out and taught within the company, so that each marketing personnel can master these marketing methods and negotiation skills. So as to improve the success rate of business negotiations, and really enhance the overall business strength of the marketing team. In the training of marketing personnel, a course effect assessment plan should be formulated for the participants to assess the training effect of the participants, and emphasis should be placed on the practicability of the training content and the practical application ability of the participants.

#### 7.2.3 In-service Training for New Employees

The advantages of the new staff are high education, low age, rich and solid theoretical knowledge of marketing, but lack of practical experience. To ensure the effectiveness of such training, it is essential to organize comprehensive and large-scale centralized job training sessions. These sessions will provide new staff with an objective understanding of their future responsibilities, particularly by explaining the company's articles of association, business processes, basic production techniques in printing and dyeing, and other relevant information. This will help new employees quickly adapt to their roles and responsibilities. In terms of job training, emphasis should be placed on practical operations, guiding new employees to engage in hands-on practice and encouraging them to apply their knowledge in real-world scenarios.

## 7.3 Developing Reasonable Incentive Mechanism

Performance evaluation is a quantitative indicator of employees' contribution. Differentiated performance evaluation mechanisms can fully quantify employees' work performance and serve as the basis for the implementation of a salary incentive mechanism to stimulate healthy competition among employees and stimulate their individual potential. Different positions require different means of differentiated performance evaluation. For R&D personnel, post-evaluation plus differentiated evaluation of bonus incentives can be carried out according to their contribution rate of R&D results. As for senior managers, they should be given binding and matching reward policies according to the profit income and performance level of the company in the current year, and such performance evaluation, so as to increase the corporate empathy of senior managers. For front-line marketing personnel, the method of combining post salary and project performance should be realized to fully motivate the marketing enthusiasm of the marketing personnel and give full play to the business creativity of the marketing team.

The difference in individual needs requires that the incentive methods of the company can't simply apply the model formula, but the effective incentive methods should be targeted to meet the different needs of individuals, adopt different ways, and build a diversified incentive system. For employees with a demand for achievement, completing the task itself can give them a great sense of achievement. Therefore, more challenging tasks should be assigned according to their personal abilities, and skills training should be paid attention to broaden their vision, assist them to constantly complete challenges, and obtain satisfaction. For employees with power demand, recognition from leaders and colleagues is their source of motivation, and absorbing employees into leadership positions according to their business level and personal quality is a very attractive incentive method. Employees with relationship demand, are more persistent in establishing friendly and stable customer relationships within the business scope. Heyuan can provide them with stable marketing positions according to the region they are responsible for, which can not only fulfil their own relationship needs but also determine stable business objectives for the company. For employees whose motivation is not clear enough, it is more suitable to carry out traditional incentive methods. First, high flexibility of salary feedback is used for them; second, individual performance is defined in project assessment, the assessment cycle is shortened, and real-time evaluation is carried out according to marketing projects. Neither the compensation system nor the performance evaluation mechanism can be generalized to all marketing personnel. The truly positive and effective incentive method is to scientifically apply the above methods and methods under the principle of meeting the needs of employees themselves, giving full play to the incentive effect, and realizing the win-win situation of the company and employees.

## 7.4 Providing Solid Financial Security

A good budget is conducive to the early arrangement and grasp of the key market areas and key industries of the marketing plan and to a certain extent, it is conducive to coordinating the relationship between the company's departments and making all the existing resources to achieve the optimal allocation. All the operation, sales, and income of Heyuan involved in the expenditure details are included in the financial management system, so as to more effectively manage, control, and supervise the funds, so as to know the accounting. The company's accounts receivable is an important source of the company's operating funds. The development of a detailed and thorough accounts collection plan is conducive to the coordination and unification of the company's various departments in the collection of accounts receivable improves the efficiency and results of the collection of accounts receivable, and ensures the stability and effectiveness of the company's important fund supplement channels. The establishment of a comprehensive financing network is of utmost importance. Firstly, the company will leverage the value of fixed assets, tax contributions, intellectual property, and business performance as solid guarantees for financing. This will enable Heyuan to establish stable and fruitful partnerships with esteemed financial institutions. Secondly, Heyuan will proactively venture into the multi-level capital market, seeking out top-tier financing channels. Lastly, by synergizing with reputable financial institutions and high-value customers, Heyuan can't only drive product sales but also secure a steady stream of capital through the avenue of financial leasing.

## 7.5 Information System Construction

Through information construction, the digitization of management can be realized, and the working efficiency of enterprises can be improved while the core competitiveness and management level of enterprises is enhanced.

The introduction of the OA system has several advantages. First, it can realize the rapid response of business processes without the traditional way of signing departments by department or even across regions. OA system can make the office work faster and less distant. The second is the standardization of business processes. The daily workflow can be realized through the standard electronic flow.

To enhance operational efficiency, promptly address customer requirements, ensure transparent and traceable contract execution, and facilitate comprehensive tracking and subsequent follow-up of each contract, it is imperative to move beyond conventional statistical and form-based contract management methods, as they no longer suffice to meet present demands.

To achieve the above goals, Heyuan must rely on a customer relationship management (CRM) system centred on customer data management, which uses science and information technology to automate marketing, sales, service, and other activities, and then set up a system to collect, manage, analyse and use customer information, so that enterprises can choose to use customer-centric management mode. A customer relationship management system includes a highly controllable database, stronger security, real-time data update, and other advantages, to provide a schedule, order, invoice, and knowledge base for four aspects of management. With the help of the CRM system, Heyuan can realize customer information management, customer quotation, contract approval, receivables management, collection and transportation management, etc., to facilitate market and business development.

In the future, the influence of the Internet on the printing and dyeing wastewater treatment industry will be more far-reaching. The company uses the Internet+ platform technology to improve the level of network services and enhance its competitiveness. The printing and dyeing wastewater treatment quality and safety big data and Internet supervision technology platform created by the printing and dyeing industry will effectively monitor the quality and important safety indicators of printing and dyeing wastewater treatment to achieve a close connection before, during, and after the supervision of printing and dyeing and dyeing wastewater treatment.

With the development of industrial interconnection and 5G technology, the operation and maintenance of printing and dyeing wastewater treatment equipment will develop in the direction of intelligent and unmanned operation, which has a subversive impact on companies with the EPC/EPC+O marketing model. Therefore, Heyuan should take precautions to improve the technical content of printing and dyeing sewage treatment equipment so that printing and dyeing sewage treatment equipment to the intelligent, unmanned direction of development. This can't only improve the technical content of equipment but also reduce the operation and maintenance personnel, reduce the company's labour costs, and increase the company's profits.

### **8 CONCLUSION**

In this thesis, the author utilizes the PEST, Porter's five forces, and SWOT analysis methods to examine the internal and external environment of Heyuan. Drawing upon the STP and 4Ps theories, the marketing status quo of Heyuan is meticulously examined and analyzed, highlighting the existing issues in product pricing, product innovation, pricing models, marketing channels, promotion mechanisms, marketing teams, management efficiency, and other aspects of Heyuan. By thoroughly analyzing market demand and considering the specific circumstances of Heyuan, an optimized marketing strategy is proposed. Additionally, as an environmentally conscious enterprise, Heyuan is urged to fulfill its social responsibility. The primary conclusions of this thesis are as follows.

Product optimization strategy, revise the current singular product scenario by enhancing product research and development efforts, and implementing a distinctive product strategy that caters to the unique requirements of customers. Expedite product upgrades and integrate Internet technology to maintain Heyuan's technological superiority. Price optimization strategy, points out that the price is not only related to the product itself but also fully reflects the quality of the product, brand premium, corporate reputation, etc. A reasonable pricing strategy can bring good competitiveness to the enterprise. Channel optimization strategy, changes the current situation of its own sales team, formulate effective and reasonable criteria for channel selection as soon as possible, and complete the shortcomings of channel strategy. Promotion optimization strategy, provides customers with diversified product trading methods, prevent the distortion of promotion information, and use public relations marketing and other means to improve the promotion effect.

In the course of the research on Heyuan, it is found that the lack of industry data affects the accuracy of the conclusions of the paper to a certain extent. First of all, because some of the data involve the company's trade secrets, they can't be explained and demonstrated publicly. In addition, limited to the reason that the financial data of small companies are not disclosed, this thesis can't comprehensively collect the data of other small companies participating in the industry competition, so it can't carry out a comprehensive comparative analysis, resulting in a certain deviation in the positioning of the market position, and competitive situation of the matching source. It is hoped that through the improvement of the company's information technology capability, the company can actively track and collect relevant data of similar rival companies in the subsequent research, so as to improve the research and analysis work and propose more accurate marketing strategies.

# REFERENCES

Borun Environmental protection Technology Co., LTD. 全球环保行业发展现状及趋势分析 [Global environmental protection industry development status and trend analysis]. 2015. Available at: <u>http://www.newborun.cn/index.php/zh/hangyenews/2015/12-15/40.html</u> Accessed date: 2023.09.20

Central Government of the People's Republic of China. 政府工作报告[Government work report]. 2019. Available at: <u>https://www.gov.cn/premier/2019-03/16/content\_5374314.htm</u> Accessed date: 2023.09.20

Chen, X. 2000. *Qualitative research methods and social science research*. Publishing place: Educational Science Press.

China Cotton Textile Association. *欧盟实现染整生产工艺节水技术突破 [EU achieved water-saving technology breakthrough in dyeing and finishing production process]*. 2016. Available at: <u>http://www.ccta.org.cn/jnhb/xmps/201612/t20161227\_2338935.html</u> Accessed date: 2023.09.20

China Printing and Dyeing Industry Association. 印染行业"十三五"发展指导意见[Guidelines for the development of printing and dyeing industry during the 13th Five-Year Plan Period]. 2021. Available at: <a href="https://www.zjbiaozhun.com/index.php/article/146.html">https://www.zjbiaozhun.com/index.php/article/146.html</a> Accessed date: 2023.09.20

China Printing and Dyeing Industry Association. 2021. 印染行业"十四五"发展指导意见 [Guidelines for the development of printing and dyeing industry during the 14th Five-Year Plan Period]. Available at: <u>1639363599301168.pdf (cdpa.org.cn)</u>

Accessed date: 2023.09.19

Jianfang Law Firm. 2022. 何为"EPC+O"模式? [What is the "EPC+O" model?]. Available at: <u>http://www.jf-lawyer.cn/news/798.html</u> Accessed date: 2023.09.19

Jing, F. & Zeng, F. 2010. Marketing research. Publishing place: Higher Education Press.

Kotele, P. & Keller, K. 2012. *Marketing Management*. 14th edition Global edition. Publishing place: China Renmin University Press.

National Bureau of Statistics. 2018. Available at: <u>https://data.stats.gov.cn/easyquery.htm?cn=C01</u> Accessed date: 2023.09.20 NetEase. 2022. 中国印染加工行业竞争态势研究与发展战略分析报告(2022-2029)[China printing and dyeing industry competition situation research and development strategy analysis report (2022-2029)]. Available at: <u>https://3g.163.com/dy/article/HDEES44U0518H9Q1.html</u> Accessed date: 2023.09.19

Peng, D. 2003. General Psychology. Publishing place: Beijing Normal University Publishing Group.

Tan, J., Li, M., Hu, S. & Yao, X. 2021. *Marketing Planning*. Publishing place: Tsinghua University Press

Wenner, R. 2003. Marketing Management. 1st Edition. Publishing place: Peking University Press.

Zhang, Y. 2022. Enterprise strategic management. Publishing place: Fudan University Press.

# **APPENDIX 1. Interview Questions and Answers**

Q1: What's the relationship between printing and dyeing industry and textile industry?A: The printing and dyeing industry is in the middle of the textile and garment industry chain, which plays a connecting role and provides fabrics for downstream garment manufacturing enterprises. The printing and dyeing industry plays a major role in enhancing the value of the textile industry chain.

China's textile industry is one of the most complete industrial chains in the world, completely owned by China. Printing and dyeing as an intermediate link in the textile industry is a link between the preceding and the following. Taking polyester filament as an example, from the extraction of filament  $\rightarrow$ woven cloth  $\rightarrow$  dyeing printing  $\rightarrow$  finished products  $\rightarrow$  export, in Jiangsu, Zhejiang, Shandong, Fujian, and Guangdong provinces the whole industrial chain is complete, more than 90% of the country's production capacity is concentrated in these five provinces. Other provinces in China, such as Henan, have cotton and clothing but no complete industrial chain, no printing and dyeing lack of manufacturing, which can't form a complete industrial chain.

Q2. The reasons why we choose to serve the printing and dyeing industry?

A: The textile industry is one of the five leading industries in the world, and the industry is stable On the basis of people's livelihood, the state encourages the development of more sustainable technologies and products with higher added value.

From the perspective of environmental protection: the water consumption and water consumption of printing and dyeing water, sewage discharge in China's subdivided industrial fields can be discharged to the top 4 in the country, and the wastewater production volume accounts for about 10% or more of the country every year.

A large amount of engineering: If a large-scale printing and dyeing factory wants to build a new sewage treatment plant, the total investment is generally more than 50 million.

Large operation space: the treatment of printing and dyeing wastewater is more difficult, and enterprises are more willing to outsource the operation of sewage treatment to environmental protection companies. The state has a limit on the total amount of sewage discharge, and for enterprises with large sewage discharge, the sewage reuse business has a certain space.

High environmental protection requirements: the proportion of environmental protection in the industry is high, and printing and dyeing is an important intermediate link in the textile industry, for the printing and dyeing industry, the most important thing is environmental protection. Q3. Which provinces are the main centers of the printing and dyeing industry?A: Printing and dyeing enterprises are mainly distributed in the eastern coastal provinces.Jiangsu, Zhejiang, Fujian, Guangdong, Shandong

Reasons: 1. There is a large amount of water and abundant water resources in coastal areas 2. Printing and dyeing sewage contains salt, and the sewage can be directly discharged into the sea after treatment to meet the standards. The inland discharge will destroy the ecological environment of the entire inland river.

Q4. What are the trends in the relocation of the textile printing and dyeing industry in recent years? A: Redevelopment in industrial reserves or relocation to the Midwest industrial reception area. The industrial land in the southeast coastal area is tight the land price is high, and the tax revenue and production capacity of enterprises cannot reach the expected value of the government. The old printing and dyeing factories that already exist and occupy a large area, should relocate or enter the centralized park. Printing and dyeing plants have relatively large requirements for land, and land prices in the Midwest are cheaper than in these regions, and labor is also cheaper. At the same time, receiving the industrial transfer from the five coastal south-eastern provinces can also complement the shortcomings of the large textile industry chain.

A considerable number of enterprises to Southeast Asia and Africa to build factories. Southeast Asian countries are generally in the downstream of the entire large textile industry, mainly processing plants. Lacking fabric manufacturing printing and dyeing, most of the industries in Southeast Asia are invested by Chinese entrepreneurs, filling the short board of the industrial chain.

Q5. The market regions where we already have customers.A: Jiangsu Province: Suzhou, Wuxi, Xuzhou, SuqianZhejiang Province: Shaoxing and HangzhouFujian Province: QuanzhouGuangzhou Province: Foshan

Q6. The target market regions for future customers.A: Central and western industries receiving areas

Q7. The services we provide.

A: Printing and dyeing wastewater treatment and reuse, with water investment and operation, complete sets of equipment as the main business model, can provide customized products and services according to the different water quality of enterprises, to meet customers' water reuse needs.

Q8. Brief description of our business model.

A: EPC project (pipe payment method, whether the payment is delayed, default, etc.): The customer will deliver the project to the company, and the company is responsible for completing the design, procurement, and construction. The project can be large or small, and the client only needs to pay according to the progress of the project.

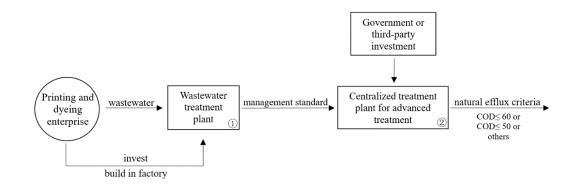
Operation: The daily operation of the wastewater treatment plant is entrusted to a third-party

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Investment (or part of it) + operation
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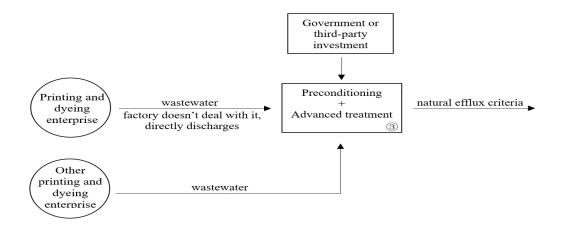
Above combination

BOO: The investment and ownership of the equipment belongs to the company, and the customer does not need to pay for the equipment. Corporate fees include investment costs and operating profits. BOT: The company is responsible for the initial investment and construction, and the customer repurchases it after a certain period of time. (Underfunded operation, similar to EPC+O)

Mode 1:



Mode 2:



Business scope: ①, ②, ③ class sewage treatment plants, design + construction + operation management, suitable projects can also invest

Q9. The different categories of our customers.

A: Customer or potential customer (single dyeing plant, centralized park) Government or industry organization

Government: Industrial Park cooperation, funded by the government construction of sewage treatment plants. Under normal circumstances, the government will find the platform company to contract with the company, and the payment will be made by the government. The sewage treatment plant is owned by the government and provides sewage treatment services to enterprises.

Q10. What are the ways we acquire customers?

A: Conference marketing (planned two to three months in advance): Open meetings, no format. About 4-6 shows per year. Organize by oneself or find a partner. After the meeting evaluation results. Generate customers right away.

Advertorial marketing (planned one month in advance).

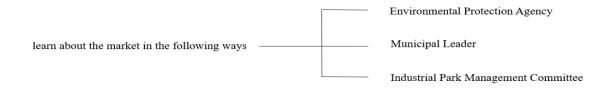
Push door to door.

Channel introduction.

Advertising.

Government cooperation: The form is similar to door-to-door push, an indirect way to obtain customers

Internet marketing



1.Understand whether there are sewage plants in the enterprise or downstream centralized sewage plants that are not up to standard, unstable operation, and treatment capacity or standards to be upgraded (referred to as upgrading).

2. Whether the existing printing and dyeing plant needs to be relocated, to build a new park, and to build a new sewage plant

3. The government's attitude towards local textile printing and dyeing enterprises (or written guidance, development planning, etc.)

Q11. What are our competitive advantages.

A: Familiar with printing and dyeing water, focus, and professional, which is the biggest competitive advantage.

The technical team of the company has a good foundation, and it is more understanding and dedicated than the general environmental protection company to the printing and dyeing process. Optimize the process design according to different project characteristics to obtain better benefits for the owner. Technical achievement.

Q12. Sales process description.

A: Project information acquisition  $\rightarrow$  demand investigation  $\rightarrow$  feasibility judgment  $\rightarrow$  plan formulation and communication  $\rightarrow$  contract negotiation and signing  $\rightarrow$  contract implementation  $\rightarrow$  after-sales service