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## **Plan to increase sales of Apha Company**

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Master in Applied Management

Supervisor:  
Professor Doctor Rui Vinhas da Silva, Full Professor,  
ISCTE-IUL

September 2024



Department of Marketing, Operations and General Management

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## **Abstract**

Alpha Corporation is an American instrument brand agent in China, the company experience laboratory analytical equipment. The company takes "sincerity, trust and knowledge creation" as its corporate values, and takes "focusing on the micro world and exploring nanotechnology" as its mission, focusing on the exploration and project of micro and nano particles. The company's product is an analytical instrument that can analyze the size of particles in liquids, and it has dabbled in the pharmaceutical, semiconductor and biological industries. However, this brand is an American brand. In the Chinese market, Alpha Company needs to make marketing plans and strategies according to the attributes of this product.

The purpose of this project is to increase Alfa's final sales, increase product awareness and brand influence. Adjust marketing strategies and methods to achieve the purpose of increasing sales.

In order to achieve this goal, a series of marketing plans and strategies, external situation analysis, internal situation analysis, SWOT analysis are outlined. Finally, the corresponding solution is proposed according to the current situation of the company.

**Keywords:** Marketing, pharmaceutical, laboratory instruments, analytical instruments, particle size instruments

**JEL Classification:** M31

## Resumo

Alpha Corporation é um agente de marca de instrumentos americanos na China, a empresa experimenta equipamentos analíticos de laboratório. A empresa tem como missão "sinceridade, confiança e criação de conhecimento" como seus valores corporativos, e tem como missão "focar no mundo micro e explorar a nanotecnologia", com foco na exploração e pesquisa de micro e nanopartículas. O produto da empresa é um instrumento analítico que pode analisar o tamanho das partículas em líquidos e se interessou pelas indústrias farmacêutica, de semicondutores e biológica. No entanto, esta marca é uma marca americana. No mercado chinês, a Alpha Company precisa fazer planos e estratégias de marketing de acordo com os atributos deste produto.

O objetivo deste projeto é aumentar as vendas finais da Alfa, aumentar o conhecimento do produto e a influência da marca. Ajuste as estratégias e métodos de marketing para atingir o objetivo de aumentar as vendas.

Para atingir esse objetivo, são delineados uma série de planos e estratégias de marketing, análise de situação externa, análise de situação interna, análise SWOT. Por fim, a solução correspondente é proposta de acordo com a situação atual da empresa.

Palavras-Chave: Instrumentos de comercialização, farmacêuticos, de laboratório, instrumentos analíticos, instrumentos de granulometria

JEL Classification: M31

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## **Glossary**

PV - Page View

UV - Unique Visitor

## 1. Introduction

"The 21st century is the century of nanotechnology", nanotechnology has become one of the most innovative scientific project fields of human beings and an important source of transformative industrial manufacturing technology.

Alpha company has long been engaged in the field of nano-science and technology, providing comprehensive solutions for the production, particle size characterization, application development, analysis and improve of nano-materials. Alpha company continues to introduce and develop leading technologies and products in the field of nanotechnology, and is committed to serving China's industry 4.0 industrialization upgrade.

Alpha was founded in 2010, with its headquarters and R&D center located in Shanghai, China, and is a national high-tech enterprise. As early as 1980, the team has carried out relevant project in the field of nanotechnology in California Institute of Technology, and entered the Chinese market in 2000. The company's starting business mainly serves the semiconductor manufacturing and pharmaceutical industries. Team members focus on the application of nanotechnology in drugs, and have made due contributions to the technology and quality standard upgrading of complex pharmaceutical dosage forms such as liposomes and fat emulsions. At present, the company's business and partners have covered the pharmaceutical, semiconductor, aerospace materials, 3D printing, solar energy industry, new materials, chemical, filtration and other high-tech industries, providing strong technical support for the upgrading of China's industry.

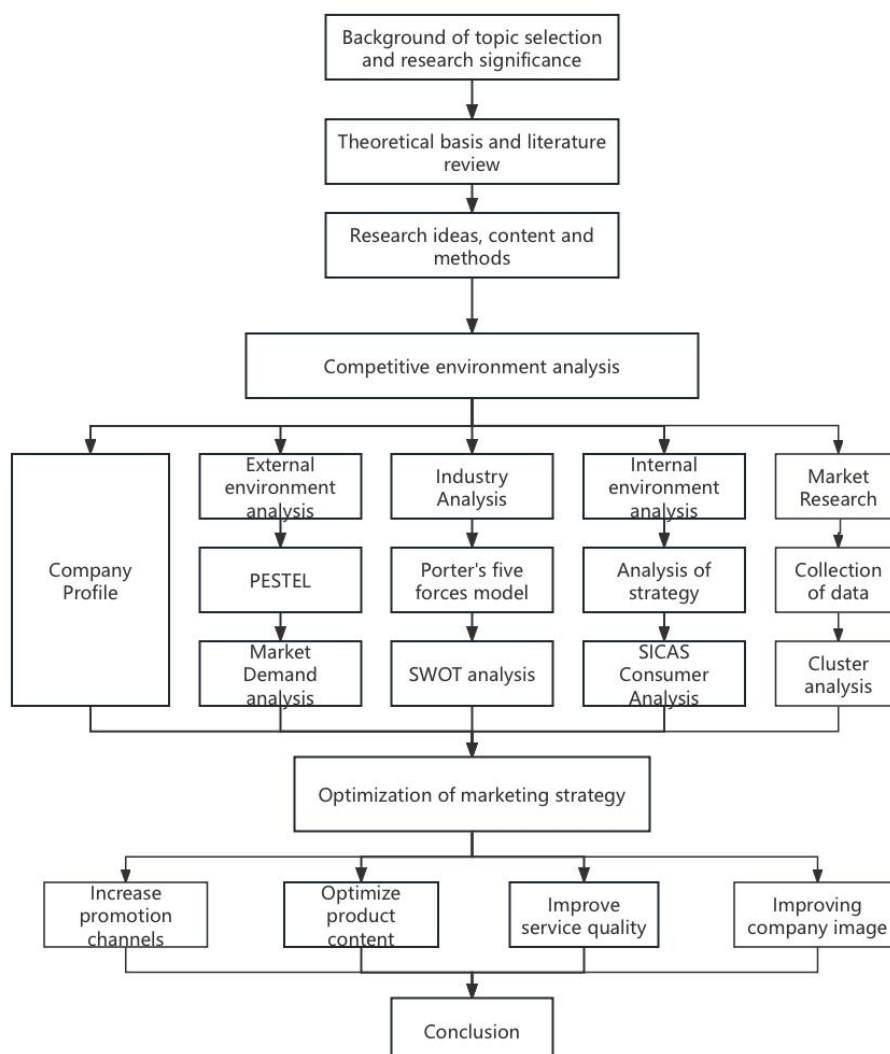
Alpha Company belongs to a small enterprise in China, the company operates laboratory analysis equipment, the company was founded in 2010, is now the domestic general agent of the United States laboratory analysis equipment brand. The mission of the company is to "focus on the micro world and explore nanotechnology", and the company focuses on the exploration and project of micro and nano particles. The annual sales volume will reach 30 million yuan in 2020. But starting in 2021, the company will face a bottleneck that product marketing cannot break through, and the company's annual sales will gradually decline.

This project takes Alpha Company as the project object, analyzes and combs the marketing of Alpha company, and puts forward the improve plan according to the actual situation of the Chinese market, so as to achieve the purpose of increasing the sales of Alpha Company.

Therefore, through the analysis of the company's internal environment and external environment, combined with the swot model to analyze the competition problems of the company, and then use the SICAS model analysis, the use of marketing theory to analyze the positioning strategy selection of different products in the market. This topic is divided into

five chapters. The first chapter is the introduction, which introduces the background of the project, the problems found, the goals and the solutions. The second project is a literature review, which analyzes the domestic and foreign pharmaceutical marketing, introduces in detail the marketing of specific types of products and domestic and foreign brands in domestic and foreign markets, and elaborates on the marketing methods and related marketing content. The third chapter is the project method, which analyzes and demonstrates the formation process of each view. Chapter 4 presents the plan of Alpha Company in the follow-up product marketing and provides a detailed analysis of the company. The final chapter is the conclusion.

Figure 1 Technology Roadmap



Source: Author (2024)

## **2. Literature Review**

### **2.1. Marketing concept**

According to Kotler & Armstrong (2018), marketing is a comprehensive activity for enterprises to meet customer needs. It involves the development, pricing, promotion and distribution of products or services, with the goal of creating value for customers and achieving the marketing goals of enterprises. Modern marketing theory emphasizes customer-centered and attaches importance to in-depth analysis and understanding of customer needs. Enterprises should be committed to providing high-quality products and services to meet the needs and expectations of customers, so as to win the favor and support of customers. This can not only enhance customer loyalty, but also help enterprises build a good brand image and reputation.

It is worth noting that the service-dominant logic proposed by Narasimhan (2009) believes that value is not created unilaterally by enterprises, but jointly constructed between enterprises and customers. Customers are the participants of value co-creation, and the role of enterprises is the condition to create value for customers. Vargo and Lusch(2016) also pointed out that enterprises should position themselves as service providers and meet customer needs by providing quality services rather than just selling products. This customer-centric philosophy helps enterprises better understand and meet the diverse needs of customers. In addition, marketing activities also need to combine the actual situation and development strategy of the enterprise, rationally allocate marketing resources, and formulate feasible marketing strategies. Only in this way can enterprises occupy a favorable position in the fierce market competition and achieve sustainable development.

Modern marketing pays more attention to the customer as the center, and emphasizes the interaction and value co-creation between enterprises and customers, which provides a new idea and direction for enterprises. Only by firmly grasping the pulse of customer demand, can enterprises stand out in the fierce market competition.

## **2.2. Consumer behavior theory**

Consumer behavior theory discusses the complex behavior characteristics of individuals and groups in the process of selecting, purchasing, using or disposing products and services. The project in this field has formed a relatively mature theoretical system.

Blackwell, Miniard, and Engel (2001) proposed a more detailed model of consumer decision-making process. The model consists of five stages: demand confirmation, information search, alternative evaluation, purchase decision and post-consumption evaluation. This model emphasizes that consumers' behavioral decisions will be affected by many complex factors such as personal factors (such as demand, motivation, knowledge, etc.), environmental factors (such as culture, economy, society, etc.) and marketing stimuli (such as products, prices, channels, etc.).

Compared with previous models, the consumer behavior model proposed by Kotler and Armstrong (2018) is more classic and well-known. The model includes five main stages: demand recognition, information search, evaluation and choice, purchase decision and post-purchase behavior, which comprehensively describes the whole behavior process of consumers from the realization of demand to the final completion of purchase. This recurring pattern vividly illustrates the dynamic nature of consumer behavior.

The theory of consumer behavior profoundly reveals the complexity and diversity of consumer behavior. Kotler and Keller (2016) emphasized that enterprises must have a deep understanding of consumers' psychological characteristics and decision-making process, and formulate targeted marketing strategies to improve customer experience and achieve marketing goals. This is essential for the long-term sustainable development of enterprises.



## **2.3. Digital marketing and new media marketing**

### **2.3.1. Rise and development of digital marketing**

According to Chaffey & Ellis-Chadwick (2019), digital marketing refers to marketing activities carried out through digital channels such as the Internet, mobile devices and social media . In recent years, with the continuous development of information technology, consumers' media usage habits have undergone profound changes, and digital marketing has gradually become the core content of enterprise marketing strategies.

Lamberton and Stephen (2016) found that digital marketing can effectively enhance brand exposure and word-of-mouth communication, thus influencing consumers' purchase decisions. Kannan and Li (2017) pointed out that digital marketing has the advantages of precise delivery, real-time feedback and low cost, which can better meet the personalized needs of consumers. In addition, with the help of big data technology, enterprises can deeply analyze consumer behavior, improve marketing strategies, and achieve precision marketing.

### **2.3.2. Application practice of social media marketing**

Social media marketing is an important part of digital marketing, which refers to the marketing activities carried out by enterprises using social media platforms. Social media provides a channel for consumers to express their needs, share their experiences, and enable businesses to better understand and engage with their target audience.

According to Rialti et al. (2019), social media marketing helps promote brand loyalty and word of mouth. According to Voorveld (2019), different types of social media platforms are suitable for marketing activities for different purposes. For example, Tiktok is better suited to display visual content and enhance brand image; Wechat is more suitable for releasing preferential information to promote sales transformation. Businesses need to choose the right social media platform for their marketing goals.

In addition, businesses can leverage social media for user-generated content marketing. According to Yadav and Rahman (2017), content marketing can enhance consumer engagement and trust, thereby improving marketing performance. But at the same time, it is also necessary for enterprises to strengthen the management and guidance of content to prevent negative effects.

### **2.3.3. Application of big data in marketing**

Big data refers to the data set with huge scale, wide variety and fast updating speed, which provides massive information support for enterprise marketing. Companies can use big data technology to deeply analyze consumer behavior and make personalized recommendations and precision marketing.

According to Leeflang et al. (2014), big data analysis can also help enterprises accurately predict market demand and develop more targeted marketing strategies. According to Wedel and Kannan (2016), big data helps enterprises to better segment the market, improve the product portfolio, and maximize the returns of marketing investment.

But at the same time, big data applications also face challenges such as data privacy and security. According to Malthouse et al. (2019), enterprises need to focus on the protection of consumer privacy when using big data to enhance consumer trust.

#### **2.3.4. Performance evaluation of digital marketing**

According to Chaffey and Patron (2012), performance evaluation of digital marketing is an important means for enterprises to achieve marketing goals, and it is a digital marketing performance evaluation framework including exposure, interaction, conversion rate and other indicators. According to Jarvinen and Karjaluo (2015), it is emphasized that digital marketing performance should be linked to the overall goals of enterprises to ensure the effect of marketing investment.

According to Hoffman and Fodor (2010), enterprises should choose appropriate evaluation indicators according to different marketing objectives. For example, if the goal is to increase brand awareness, you can focus on metrics such as number of followers and likes; If the goal is to boost sales conversion, focus on metrics such as click-through rate and conversion rate. At the same time, enterprises should also pay attention to the analysis and application of the evaluation results to continuously improve the marketing strategy.

## **2.4. improve of marketing strategy**

Enterprises should constantly improve their marketing strategies according to the characteristics of consumer behavior, so as to enhance market competitiveness and business performance. According to Lemon and Verhoef(2016), enterprises need to deeply analyze consumers' experience at each touchpoint, improve products, prices, channels and promotion strategies, and finally achieve the coordination of overall marketing strategies.

In terms of product strategy improve, the importance of product positioning is pointed out according to Keller(2020). Enterprises should accurately grasp the demand characteristics of target consumer groups, and highlight brand image through differentiation advantages to attract consumers' attention. According to Melnyk et al. (2019), consumers are more interested in novel and creative products.

In terms of price strategy improve, Hinterhuber and Liozu(2017) suggested that enterprises should deeply analyze consumers' price sensitivity and adopt differentiated pricing strategies according to different market segments. At the same time, with the development of digital technology, dynamic pricing has also become a new trend of pricing strategy improve.

In terms of channel strategy improve, according to Verhoef et al. (2015), enterprises should create a seamless connection between online and offline channels to provide consumers with all-channel and consistent shopping experience. At the same time, enterprises should also pay attention to the development of emerging digital channels.

In terms of promotion strategy improve, Kumar et al. (2016) emphasized the importance of promotion innovation, such as adopting personalized promotion plans for different consumer groups or using digital technology to achieve dynamic improve of promotion. At the same time, enterprises should also pay attention to the evaluation of promotion effects.

Enterprises should systematically improve marketing strategies such as products, prices, channels and promotions to better meet consumer needs and enhance brand competitiveness. In the future, enterprises also need to pay attention to the application of digital technology in marketing to further improve the accuracy and efficiency of marketing strategies.

## **2.5. Industry Applications**

Laboratory analytical instruments can be used in various industries, especially particle size analytical instruments. particle size analysis is an important characterization technique in materials science. particle size meter can quickly and accurately measure the size distribution of particles or particles in various dispersed systems. In recent years, particle size meter has been widely used in chemical, pharmaceutical, food and many other

industries. As a general analysis tool, it plays a key role in product quality control, process improve, new product development and other aspects.

According to Merkus (2019), particle size measurement technologies such as laser diffraction and electrostatic light scattering are widely used in the analysis and characterization of chemical products such as catalysts, coatings and polymers. From the perspective of the chemical industry, particle size analysis plays an important role in the quality control of raw materials, intermediates and products. According to Fissan et al. (2021), the application of particle size meter in the pharmaceutical industry is mainly discussed. particle size analysis of apis, preparations and biologics is essential for the development of quality standards and process validation. At the same time, the measurement technology for sub-micron particles also shows a good application prospect in the new drug delivery system.

In the field of food processing, according to Kulkarni and Biswas (2022), particle size distribution is an important factor affecting key quality indicators such as food texture and taste. They detailed the application practice of laser diffraction, image analysis and other technologies in food raw materials and products such as cereals, dairy products and beverages. According to Querol et al. (2023), attention was paid to the role of particle size meter in the field of environmental monitoring, emphasizing its importance in the detection of atmospheric suspended particles and soil pollutants, and discussing the application of environmental management such as emission source analysis and exposure assessment based on project size analysis. According to Meyer (2024), the application of particle size meter in the characterization of emerging materials such as nanomaterials and composite materials is reviewed. The authors pointed out that particle size analysis plays a key role in material synproject improve, performance prediction, and is an indispensable key tool in material project and development.

### **3. Methodology**

This project uses the literature project method, strategic analysis method and data analysis method to analyze the literature project of marketing strategy, combined with the current situation of Alpha Company's marketing strategy, finds out the urgent problems to be solved in marketing improve, and takes Alpha Company as an example.

Literature project is an important project method in the project process, which is mainly used to provide theoretical basis, background information and project status for new project by consulting, sorting out and analyzing existing project literature. This approach is particularly important for the study of marketing strategies to understand the current project progress and theoretical framework in the field.

Strategic analysis method is an important tool to study the internal and external environment, competition pattern and formulate effective strategy of enterprises, and make full use of PEST, SWOT analysis method, Porter's five forces model analysis method and SICAS model analysis method. Analyze the internal and external environment of the enterprise, the competitive environment of the enterprise and the analysis of consumer behavior, find out the marketing strategy suitable for the current situation of the enterprise.

Data analysis method by selecting appropriate data sources, including primary data (such as questionnaires, experimental data) and secondary data (such as market reports, open databases) and other effective data, combined with data analysis software for analysis. This project uses real market data of the company and conducts cluster analysis through spss software. Analysis of available data to study marketing methods suitable for the current market.

This project selects Alpha Company's products as the project object, uses relevant theoretical tools to analyze the marketing status and marketing environment of Alpha Company's products, through macro and micro internal and external analysis, combined with the problems existing in Alpha company's product marketing, puts forward the corresponding solutions and safeguard measures, and finally achieves the effect of improving the marketing strategy and improving the turnover.

## **4. Plan to increase sales of Apha Company**

### **4.1. Executive Summary**

The competition in China's laboratory instrument market is very fierce, especially when China launches the policy of increasing the R&D and production of domestic brands, and the pressure of international imported brands is also increasing. The main purpose of the project is to increase the revenue of Alpha Company, adjust the current marketing strategy of the company, attract new customer groups, improve the buyback rate of original customers, and improve the number of inquiries, so as to expand the business and become sustainable.

With these objectives in mind, we conduct a comprehensive analysis of the enterprise, whether it is internal management analysis, external environment analysis or competition analysis, which we conduct using relevant theories and models. PEST model is used to analyze the influence factors of Alpha product brand in the Chinese market. According to Alpha's corporate characteristics, strategy and positioning, combined with Alpha's mission, vision and values, the company's problems in marketing were analyzed. Finally, in combination with SICAS, suggestions for subsequent business operations are put forward to achieve an increase in earnings.

## **4.2. External Situational Analysis**

### **4.2.1. PESTEL Analysis**

#### **4.2.1.1. Political Context**

The policy trend of China and the United States in trade, science and technology and other fields directly determines the degree of leniency of the import environment. If Sino-US trade friction escalates, it may lead to tariff increase, thus affecting the price competitiveness of products; And if China further relaxes controls on the import of high-end technology, it will bring new development opportunities for US laboratory analytical instrument brands. In addition, the Chinese government continues to introduce policies to support the transformation and upgrading of the manufacturing industry, which also brings new challenges to imported brands. Therefore, imported brands need to pay close attention to the changes in the political environment and adjust their business strategies accordingly. China implements strict access management on the import of laboratory equipment, involving product certification, import licensing, tariff rates and many other links. This not only increases the cost of entry for foreign brands, but also requires a lot of effort to deal with complex compliance requirements. At the same time, the frequent changes of policies and regulations such as intellectual property protection and environmental protection standards have also brought many uncertainties to the operation of foreign brands. Therefore, foreign brands must pay close attention to policy trends and adopt proactive compliance strategies to ensure smooth entry into the Chinese market.

#### **4.2.1.2. Economic Context**

The stability of China's GDP growth rate and the change of manufacturing prosperity directly affect the demand situation of laboratory equipment market. In addition, exchange rate fluctuations also have a direct impact on the price of imported products. It is worth noting that with the improvement of Chinese residents' disposable income, the demand for high-end laboratory equipment will also continue to increase. The competition pattern in the Chinese market is fierce, and local brands pose a great threat to foreign brands by virtue of their price and channel advantages, testing the competitive strength of the latter. At the same time, attracting and retaining outstanding local talent is also a challenge, requiring competitive compensation packages. In addition, there are great differences in consumption power and demand characteristics between first-tier cities and second-tier and third-tier cities, so foreign brands need to develop differentiated business strategies according to local conditions.

#### **4.2.1.3. Socio-Cultural Context**

Chinese consumers' awareness of imported high-end brands and their purchase intention determine the breadth of the market base. At the same time, the number and distribution of project institutes and laboratories are also an important reference for the layout and sales network of imported brands. In addition, with the acceleration of urbanization and the improvement of education level, the change of population structure will bring a new demand pattern. The preferences of Chinese consumers are obviously different, and foreign brands must deeply understand their unique behavioral characteristics and needs to meet differentiated needs. At the same time, it is also important to adopt marketing strategies in line with Chinese cultural elements to continuously enhance brand awareness and reputation in the local market. In addition, the rapid development of e-commerce has changed consumers' purchasing habits and put forward new requirements for the marketing mode of foreign brands.

#### **4.2.1.4. Technological Context**

The technological level of the global instrument manufacturing industry continues to improve, bringing unprecedented product competitiveness to imported brands. But on the other hand, the catch-up of China's manufacturing sector in some areas has also increased the pressure on imported brands to continuously enhance their independent innovation capabilities. For example, China has made breakthroughs in instrument calibration and intelligent manufacturing. Imported brands must increase R&D investment and continuously improve product performance to meet the challenges of domestic brands. In addition, the vigorous development of e-commerce channels has brought great impact to the traditional sales model, and foreign brands need to increase the investment and layout of online channels. In addition, consumers' demand for intelligent and digital experience of products is increasing day by day, which puts forward higher requirements for the digital level of foreign brands.

#### **4.2.1.5. Environmental Context**

The concept of energy saving, environmental protection and resource recycling is becoming more and more popular, which puts forward new requirements for the performance of laboratory equipment. For example, laboratory equipment must meet standards such as energy conservation, emission reduction and pollutant discharge. Imported brands need to continuously improve product solutions according to the latest environmental protection laws



and regulations to meet market demand. At the same time, we should also pay attention to the impact of carbon neutrality targets on the development of the industry. China's environmental standards are increasingly stringent, and foreign brands must constantly improve the environmental performance of their products to meet regulatory requirements. At the same time, consumers' attention to environmental issues such as environmental protection and energy conservation continues to increase, which has become a key area for foreign brands to pay attention to.

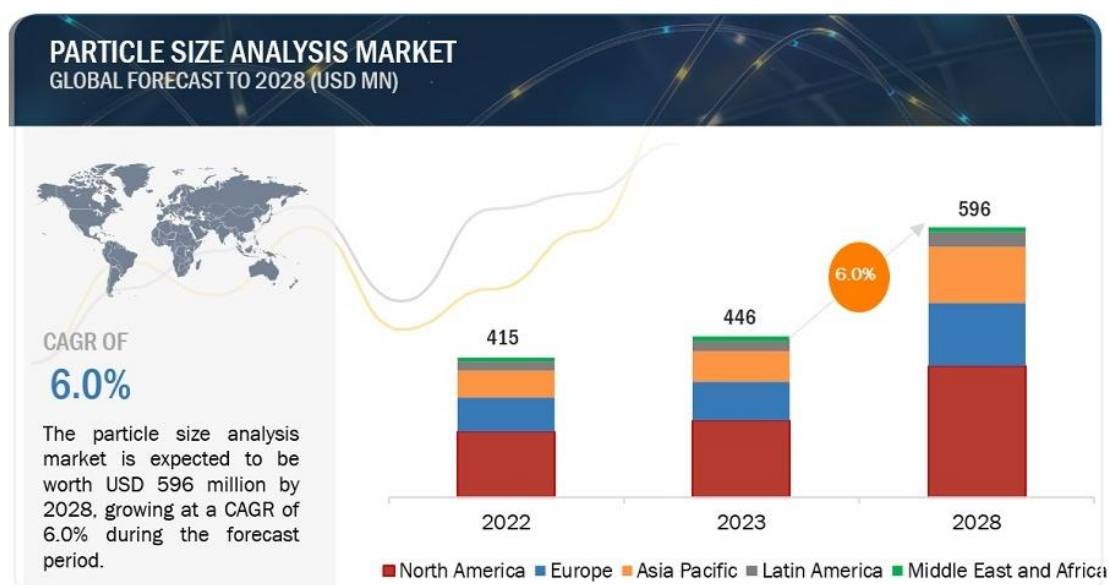
#### **4.2.1.6. Legal Context**

The stricter protection of intellectual property rights requires imported brands to increase investment in independent project and development to ensure the technical advantages of products. At the same time, it is necessary to pay close attention to the changes of relevant laws and regulations, such as import license management, product qualification certification, etc., to ensure compliance operation. Imported products need to go through multiple links such as complex certification, licensing and customs duties, which poses continuous challenges for foreign brands in compliance management. In addition, regulations change frequently and are uncertain, so foreign brands need to be on high alert. In addition, product quality, safety and other aspects of the supervision is constantly strengthening, the access of foreign brands to form a certain barrier.

#### **4.2.2. Sector Analysis**

The laboratory analytical instrument industry is a technology-intensive and highly capital-intensive industry, involving a wide range of products, including particle size meters, chromatograph, mass spectrometers, spectrometers and other types, which are widely used in chemistry, biology, medicine and other scientific project and industrial fields. With the progress of science and technology and the growth of market demand, the laboratory analysis instrument industry is developing towards the direction of intelligence, automation and high efficiency. The global granularity analytics market revenue is forecast to reach USD 446 million by 2023 and is expected to reach USD 596 million by 2028, registering a CAGR of 6.0% from 2023 to 2028, according to the project report.

Figure 2 Particle size analysis market



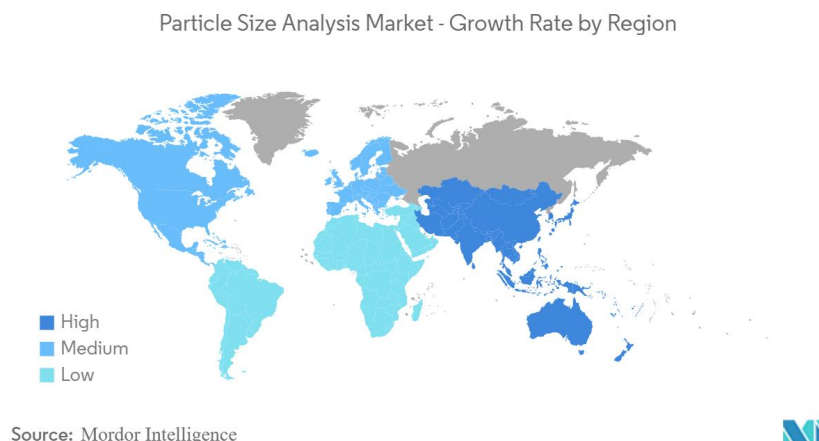
Source: MARKETSANDMARKETS (2023)

Internationally renowned laboratory analytical instrument companies such as Thermo Fisher Scientific, Danaher, and Agilent occupy the high-end market, while domestic companies, although numerous, are mainly concentrated in the low-end market. Major domestic enterprises include Jiangsu Tianrui Instrument Co., LTD., Beijing Lebotaike Instrument Co., LTD., Focus Technology (Hangzhou) Co., LTD., etc. The technological development of laboratory analysis instrument industry is changing with each passing day. Especially with the emergence of new materials, new processes and new principles, the industry is developing towards the direction of high precision, high sensitivity, automation and intelligentization. For example, the integration of artificial intelligence, big data and other technologies has injected new vitality into experimental analysis instruments. With the strong demand for the development of strategic emerging industries such as low-carbon economy, environmental protection and medical and health care, the laboratory analysis instrument industry has ushered in new opportunities and markets. In the fields of environmental protection, food safety, biomedicine and so on, the demand for high-precision and high-efficiency experimental and analytical instruments is particularly urgent.

The laboratory analysis instrument industry is in the golden period of rapid development, and the dual promotion of technological innovation and market demand makes the industry prospect promising. Investors should pay attention to key areas such as technological innovation, green and environmental protection products, service transformation and policy support when choosing to invest in the laboratory analytical instrument industry. At the same

time, enterprises need to increase R&D investment and improve product quality and competitiveness to cope with challenges such as market competition and talent shortage.

Figure 3 Particle size analysis market - growth rate by region



Source: Mordor Intelligence (2023)

#### 4.2.3. Competitor Analysis

According to MARKETSANDMARKETS 'report on the granularity analytics market, among the major vendors in the global granularity analytics market, the Marwin and OMicron brands of the company are still in the top position, followed by Beckman Coulter of Danaher, HORIBA and Anton Paar in the third and fourth place respectively. China's Dandong Best Instrument Co., Ltd. ranked fifth, Germany's Feizhi, Shinpatek and 3P Instruments ranked seventh, 11th and 18th respectively, Switzerland's LS Instruments ranked eighth, the Netherlands' Feld Instruments ranked 10th, and the United States' McMeritek Instruments ranked 16th.

Figure 4 Global particle size analysis brand ranking



Source: MARKETSANDMARKETS (2023)

## The Malvern Corporation

Malvern Pannaco is a supplier of analytical instruments formed by the merger of Malvern Instruments in the UK and Pannaco in the Netherlands in 2017. It is part of the Materials analysis segment of the UK group Spirogge. The company focuses on the field of material characterization, providing a variety of high-end analytical instruments and technologies including laser particle size analysis, X-ray analysis, molecular interaction analysis and so on. Malvenpanaco's products are used in a wide range of fields including materials science, chemicals, building materials, mining, metallurgy, pharmaceutical and life sciences, with a particular role in the pharmaceutical industry.

Malvern Instruments was founded in 1963 as part of the UK Defence Industry Laboratories. In 1970, Malvern Instruments manufactured the world's first commercial laser particle size analyzer, and in subsequent years launched a series of innovative particle size analysis instruments. Panarco is a leader in X-ray analysis with a long history of X-ray analysis and a number of patented technologies. The combination of the two companies gives Malvenpanaco a significant position in the material characterization analytical instruments market, able to provide comprehensive solutions from macro to micro, from morphology to X-ray analysis.

Malvenpanaco's product line covers a wide range of analytical techniques from particle size analysis, dynamic light scattering and nanotracking analysis to X-ray diffraction and X-

ray fluorescence. Malvenpanaco has a wide customer base worldwide and its products serve a variety of industries, including but not limited to pharmaceutical, chemical, food, environmental protection and other fields. In the Chinese market, Malvenpanaco provides customers with full support including sample measurement, method development and technical training through its strong technical support and professional service team.

### **Beckman Coulter**

Beckman Coulter, Inc., founded in 1935, is an American company specializing in the development and manufacture of instruments, reagents, and application software in the medical field. Headquartered in California, the company is part of Danaher Group, a global innovator in science and technology. Beckman Coulter has a wide range of businesses in clinical diagnostics and life sciences, providing a wide range of products, including automatic biochemical analysis instruments and automatic chemiluminescence immunoassay instruments, to help make greater progress in medicine and project.

As a global leader in the laboratory instrument industry, Beckman Coulter has a rich product line and strong project and development capabilities, and constantly introduce innovative products to meet the needs of different customers. The company's products are stable and reliable, and have a wide range of applications in the field of biomedicine. However, Beckerman Coulter's product prices are relatively high, which may affect its market competitiveness.

Beckerman Coulter occupies an important position in the field of medical diagnostics and life sciences with its deep history, strong project and development capabilities and extensive product lines. However, in the face of fierce market competition and changing technology environment, the company needs to innovate continuously to maintain its market leading position. At the same time, the company's localization strategy in the Chinese market and focus on local innovation provide a solid foundation for its future development.

### **Dandong Baxter**

Founded in 1995, Dandong Baxter Instrument Co., Ltd. is a famous particle size testing technology project and development base and instrument manufacturer in China. The company focuses on particle size testing technology project, instrument manufacturing, sales and service, won the trust and praise of customers. Baxter products existing laser particle size instrument, image particle size instrument, settling particle size instrument, powder

characteristics tester and other varieties, products are sold to 34 provinces and cities in China, and exported to the United States, Germany, South Korea, Brazil, Japan and other 92 countries and regions, in the market share, technical indicators, quality performance and other aspects of the leading position in the industry.

Dandong Baxter's core competitiveness lies in its continuous innovation ability, highly sophisticated talent team, and a wide range of industrial applications. The company has 95 patents, 26 software Copyrights, a total of 137 independent intellectual property rights, filling a number of gaps in China. Baxter's laser particle size meter products have achieved 21 CFR Part 1040.10 and 1040.11 certification, which ensures the validity and reliability of the results and helps users ensure that their products meet regulatory requirements.

According to the latest market analysis report, Dandong Baxter has performed well in the global laser diffraction particle size and shape analyzer market, and its product specifications, parameters, and market applications have been widely recognized. In the first 10 months of 2023, Dandong Baxter achieved an output value of more than 200 million yuan, up 32% year on year.

With its outstanding product performance, continuous innovation spirit and broad market vision, Dandong Baxter has become one of the leading enterprises in the field of particle size analysis instruments in the world. In the future, with the company's further expansion in the international market and continuous deepening of technology project and development, Dandong Baxter is expected to continue to consolidate its leading position in the industry and provide more accurate and efficient granular analysis solutions to global users.

#### **4.2.4. Porter's Five Forces Analysis**

China's laboratory analysis equipment market is a dynamic and opportunity area. With the vigorous development of domestic scientific project and the acceleration of industrialization, the demand for high performance and high precision analysis equipment is constantly rising. In this market context, Chinese local brands are accelerating their rise and competing fiercely with multinational brands.

##### **Supplier bargaining power:**

The vendors in the laboratory analysis equipment market in China mainly include instrument parts manufacturers and raw material suppliers. With the rise of domestic brands, the bargaining power of these suppliers has increased. For example, Zhejiang Province is an important instrument parts production base in China, with many professional supporting suppliers, who are able to provide high-quality parts at low cost to domestic brands. On the

other hand, domestic brands are also constantly improving their supply chains and improving their bargaining power.

#### **Buyer's bargaining power:**

The main buyers of laboratory analysis equipment in China include project institutes, university laboratories and industrial laboratories. Because these buyers are numerous and less concentrated, their bargaining power is strong. In recent years, with the rapid development of domestic brands, buyers have more alternatives to choose from, which further strengthens the bargaining power of buyers. For example, domestic brands such as Shandong Haineng Instrument and Anpu Science have replaced imported brands in many fields by virtue of their cost-effective advantages.

#### **New Entrant threats:**

The entry barriers of laboratory analysis equipment market in China mainly include technology accumulation, brand awareness and sales channels. With years of technology accumulation and local service advantages, domestic brands such as Anyi Instrument and Shanghai Instrument have formed a certain competitive advantage, which poses a certain threat to new entrants. But at the same time, there are also many emerging domestic brands, such as PerkinElmer, Shimadzu, etc., with financial advantages and technological innovation, are rapidly entering the market, challenging the existing domestic brands.

#### **Threats of substitutes:**

Substitutes in China's laboratory analysis equipment market mainly include similar imported brands and some domestic instruments with similar functions. In recent years, the continuous improvement of performance and reliability of domestic brands such as Anpu Science and Puji General has gradually replaced imported brands in some fields, forming a certain substitute threat. However, for some high-end and professional analysis equipment, imported brands still occupy a dominant position, and the threat of substitutes is temporarily limited.

#### **Competition in the industry:**

China's laboratory analysis equipment industry is increasingly competitive. On the one hand, multinational brands such as Shimadzu and Thermo Fisher occupy an important position in the Chinese market by virtue of their technological advantages and global influence. On the other hand, domestic brands such as Ampus Science, PerkinElmer and Anyi Instruments are rising rapidly and seizing market share with their cost-effective advantages. At the same time,

there are many small and medium-sized domestic brands to participate in the competition, the industry concentration is low. In order to cope with the fierce competition, enterprises need to constantly innovate and improve product performance and service level.

In general, the competition in China's laboratory analysis equipment market is becoming increasingly fierce. Domestic brands are developing rapidly by virtue of their cost-effective advantages, but imported brands still occupy an important position by virtue of their technological advantages. In the future, domestic brands need to continue to improve product quality and service level, while increasing R&D investment and improving independent innovation ability, so as to stand out in the fierce market competition and achieve greater development.



#### **4.2.5. Consumer Analysis**

The main consumer groups of laboratory analytical instruments include four categories: project institutes, biomedical enterprises, environmental monitoring departments and industrial enterprises. Project institutes are the core demand side of the industry, mainly including universities, project institutes and other units. They have the strongest demand for high-end analytical instruments, constantly update and upgrade experimental equipment, and are the largest consumer group. As the main participants in the project and development and production and testing of new drugs, biomedical enterprises have also become an important consumer group. Environmental monitoring departments and related testing institutions have a large demand for environmental monitoring analysis instruments, which is another main consumer group. Analytical instruments are also widely used in R&D and quality testing of industrial enterprises, which is an important customer base in the industry.

From the perspective of consumer preferences, performance parameters are always a key factor in the purchase decision. Users have high requirements on the sensitivity, resolution, detection limit and other performance indicators of the instrument, hoping to meet the accuracy requirements of experimental detection. At the same time, more and more attention has been paid to the friendliness of user interface operation and the convenience of data analysis software. Product reliability and maintenance support are also key concerns for consumers. The stability and reliability of the instrument and equipment directly affect the accuracy of the experimental data, and the response speed and professionalism of the maintenance service are also related to the use cost. Given the same performance, domestic brands are gaining more market share by virtue of their price advantage.

As a technology-intensive industry, the consumer group of laboratory analysis instruments has high requirements on product performance, reliability and other indicators, which also poses a higher challenge to the technological innovation ability of enterprises in the industry. In the future, meeting the personalized needs of consumers and providing professional after-sales service will become the key to differentiated competition of enterprises in the industry. The analysis is now conducted for Alpha P brand granulometer consumers through customer-sourced data from June 1, 2023 to May 30, 2024. The brand accounts for 70 percent of Alpha's revenue and is the company's flagship product. The brand is promoted online and offline. Online is promoted by search engines, third-party platforms and official websites, while offline is self-developed dealers and market exhibitions. All customer inquiries must be distributed to each sales according to the region through the Marketing Department, so all data are recorded and summarized by the Marketing Department, and the information is true and accurate. Part of the data is shown as follows:

Table 4.1 Summary of customer consultation Information

No.	Name	Channel	Type	Products	Focus	Position
1	SZHSK	Distributors	Pharmaceutical	3000 Series	Technology first	User
2	GZJY	Distributors	Pharmaceutical	3000 Series	Consider both	User
3	FDU	Distributors	College of University	7000 Series	Price first	Purchasing personnel
4	SHQL	Distributors	Pharmaceutical	7000 Series	Price first	User
5	JSYT	Third party platform	Pharmaceutical	2000 Series	Price first	Project Leader
6	CQBT	Distributors	Pharmaceutical	3000 Series	Technology first	Purchasing personnel
7	SZSB	Website	Chemical industry	3000 Series	Focus only on price	R&D
8	WCL	Website	Pharmaceutical	2000 Series	Price first	Purchasing personnel
9	SZLT	Third party platform	Pharmaceutical	2000 Series	Price first	Project Leader
10	GZAD	Third party platform	Pharmaceutical	2000 Series	Technology first	R&D
11	SHQM	Website	Pharmaceutical	2000 Series	Technology first	R&D
12	JSJD	Third party platform	Chemical industry	2000 Series	Price first	Purchasing personnel
13	TDHY	Website	Chemical industry	7000 Series	Focus only on price	R&D
...						
286	BCKJ	Third party platform	Pharmaceutical	9000 Series	Consider both	User
287	GZYKU	Third party platform	College of University	7000 Series	Technology first	Project Leader
288	BJAAM	Distributors	Pharmaceutical	7000 Series	Consider both	R&D
289	NJYM	Distributors	Pharmaceutical	3000 Series	Technology first	Project Leader
290	GZYKU	Third party platform	College of University	3000 Series	Focus only on technology	R&D
291	KYLC	Third party platform	Pharmaceutical	3000 Series	Focus only on price	R&D
292	GZYKU	Distributors	College of University	7000 Series	Focus only on price	User

Source: Alpha Corporate Marketing Department (2024)

The above data need to be further refined to make cluster analysis, so as to carry out accurate user analysis. Therefore, according to the actual situation of Alpha Company, the author makes the following classification and scoring scale for the above data, as shown in Table 4.2:

Table 4.2 Alpha user classification rating scale

Content of the scale	Scale score	Description	Content of the scale	Scale score	Description
Area scale	1	Yunnan, Guangxi, Guizhou, etc	Unit attribute scale	1	College of University
	2	Sichuan, Chongqing, Hunan, etc		2	The government
	3	Anhui, Henan, Hebei, etc		3	Pharmaceutical
	4	Jiangsu, Zhejiang, Tianjin, etc		4	Chemical industry
	5	Shanghai, Beijing, Guangdong, etc		5	Semiconductor
Product model list	1	3000 Series	Scale of concern	1	Focus only on technology
	2	2000 Series		2	Technology first
	3	7000 Series		3	Consider both
	4	9000 Series		4	Price first
	5	online Series		5	Focus only on price
Consultant scale	1	User	Consultation channel Scale	1	Distributors
	2	R&D		2	Third party platform
	3	Purchasing personnel		3	Website
	4	Project Leader			
	5	Manager			

Source: Author (2024)

In the classification scoring scale, the ip address of the market consulting channel can be used to know which region the user completed the online courses in. Combined with Table 4.1 and Table 4.2, the scoring table of data information of the project is obtained, as shown in Table 4.3:

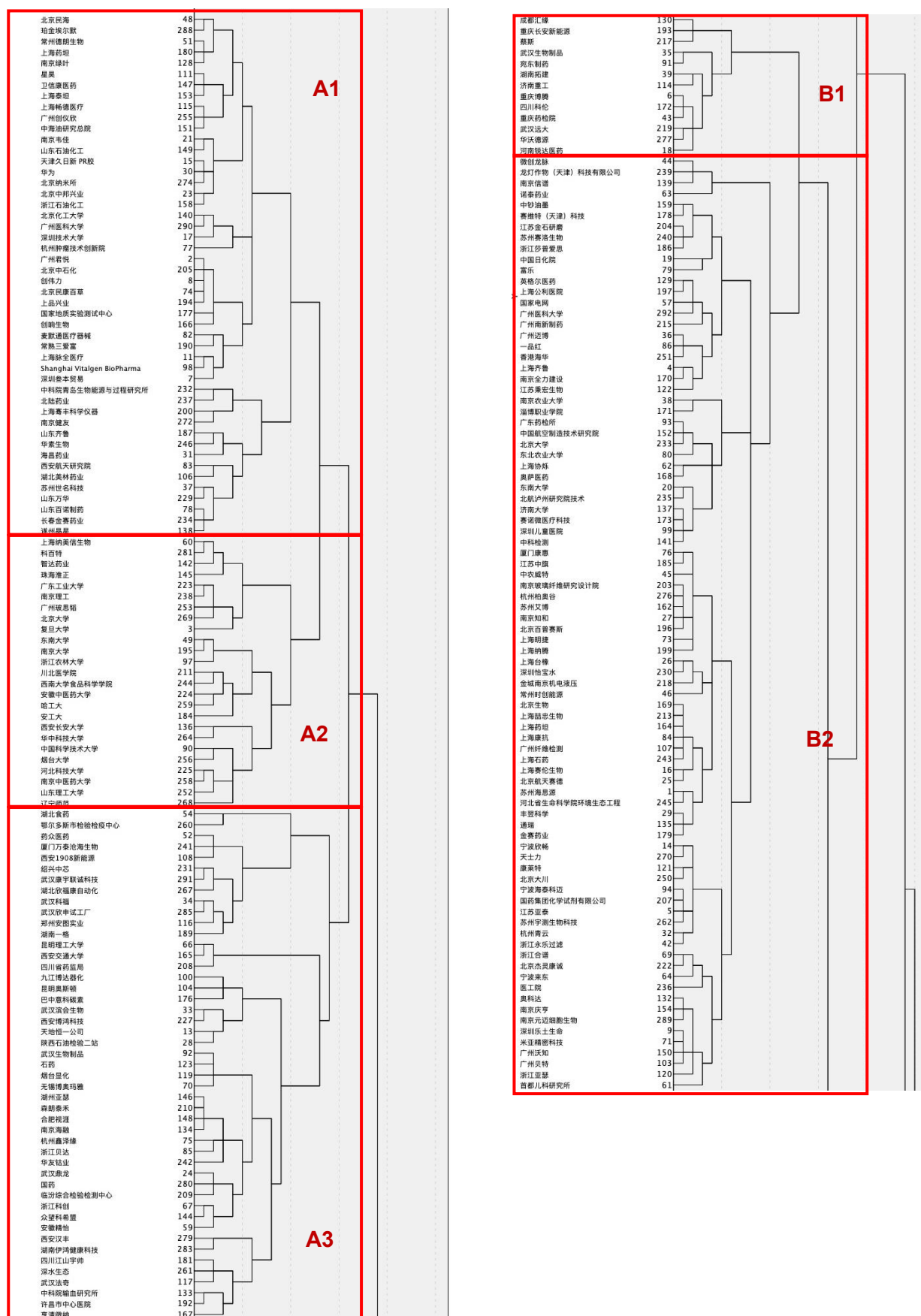
Table 4.3 Scoring Table of Customer project Data Information

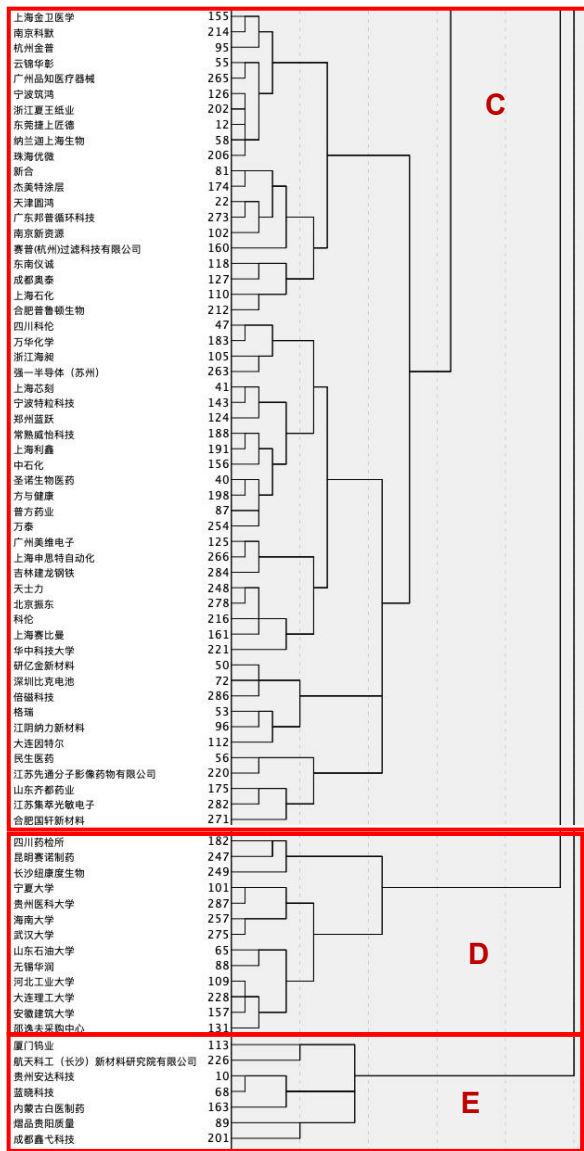
No.	Name	Type	Channel	Area	Products	Focus	Position
1	SZHSK	3	1	4	1	4	5
2	GZJY	3	1	5	1	3	3
3	FDU	1	1	5	3	1	1
4	SHQL	3	1	5	3	5	1
5	JSYT	3	2	4	2	2	4
6	CQBT	3	1	2	1	4	1
7	SZSB	4	3	5	1	3	3
8	WCL	3	3	5	2	5	4
9	SZLT	3	2	5	2	1	5
10	GZAD	3	2	1	2	2	3
11	SHQM	3	3	5	2	4	5
			...				
279	XAHF	3	3	1	1	1	2
280	ZGYY	3	1	2	2	5	2
281	KBT	3	1	4	3	3	1
282	JSJC	5	2	4	5	3	3
283	HNYH	3	3	2	1	5	1
284	JLJL	4	1	3	4	2	1
285	WHXS	3	2	2	1	4	2
286	BCKJ	5	2	5	4	2	2
287	GZYKU	1	2	1	3	3	4
288	BJAAM	3	1	5	3	2	3
289	NJYM	3	1	4	1	3	5
290	GZYKU	1	2	5	1	1	4
291	KYLC	3	2	2	1	5	5
292	GZYKU	1	1	5	3	5	4

Source: Alpha Corporate Marketing Department (2024)

Cluster analysis is used for the above data, and users can be classified through cluster analysis. IBM SPSS Statistics 19 software is used for cluster analysis. Systematic clustering is used for clustering, and Pearson correlation is used for algorithm.

Table 4.4 User cluster analysis table





Source: Author (2024)

Through the results of cluster analysis, we can roughly divide the above data into five categories, and the specific explanations are as follows:

There are 119 A-type customers, accounting for 37.32%, all of which are pharmaceutical customers. Among them, there are 48 A1-type customers, all of which are project institute customers; There are 25 A2 customers, all of which are Chinese universities; There are 46 A3 types, all of which are Chinese corporate customers. Consultants are all enterprise managers or users. General pharmaceutical customers before contact, like to consult the price at a number of dealers and then compare the price, confirm that the product technology meets the requirements of the company's R&D team, the price is cost-effective enough. The demand of such enterprises is middle and high-end products, which can be bundled with

some value-added services of after-sales service. For such customers, we need to establish a dealer sales network system, provide regular training for dealers, build a professional brand image, and improve customers' trust in the brand and brand awareness. Starting from the technology, to impress customers with a professional image, so as to achieve the purpose of increasing sales.

There are 100 enterprises of type B, accounting for about 34.25%. These customers are some high-end project institutions, among which there are 13 enterprises of B1 type, which belong to biological project institute enterprises and are mainly engaged in biological products. There are 87 types of B2, which belong to industrial project institutes and are mainly engaged in industrial manufacturing and energy manufacturing. The consulting crowd of enterprises are all purchasing personnel or team managers, who know the product information through the search engine to confirm whether the product functions are top enough and whether the product has its own unique advantages. The demand of such enterprises is high-end products, and such products must have their own unique advantages. For such customers, Alpha company needs to adjust the algorithm of all search engines in China, and can establish cooperation with search engine companies to design the style of search results and edit the content of search results according to the background of search engines, so as to reflect the advantages of products.

There are 53 category C enterprises in total, accounting for about 18.15%. These customers are mainly chemical enterprises. The consulting groups are R&D personnel or instrument users, who can learn the technical core information of products through third-party platforms. Must confirm the product information to meet their own needs before contact. The demand of such enterprises is for high-end products.

There are 13 D-type enterprises in total, accounting for about 7.88%. These customers are Chinese universities and colleges, and the consulting groups are university R&D team managers. They learn about product information through third-party platforms and make sure whether the product technology conforms to the project topic before contacting them. However, the products they choose must meet their experimental requirements, so they also have some technical requirements for the products. Such enterprises need products with sufficient functions and technology, but do not need top matching. For type C and type D customers, we can increase efforts on the third-party platform, or increase the number of third parties. From "point" to "surface", increase the probability of customer query results, attract customers to enter the product page to understand the details.

There are 7 enterprises of type E, accounting for about 2.40%. Category a companies are all semiconductor technology companies, which are high-end and top companies and account for 19.7 percent of the company's overall sales. The consulting group are all

enterprise managers or team managers, who know the product information through the company's official website and make contact only after confirming that the product information meets their own needs. The products required by such enterprises require the highest level of technology. For such customers, we should improve the website information and style, and improve the website structure and calculation method according to the Chinese Internet search engine rules. Increase the content of projects on the website and technical literature about the product to attract customers.



### **4.3. Internal Situational Analysis**

#### **4.3.1. Characterization of the company**

Founded in 1977 and headquartered in Florida, USA, Alpha Corporation is a professional scientific instrument design and manufacturer. It has been providing leading technology detection and analysis instruments for particle detection and analysis for more than 40 years. The instruments developed and developed by the company have enjoyed high reputation in the world for many years, and have been awarded the best experimental instruments in the United States for many times. The company has always been committed to the development of functional excellence, advanced technology granulometer, to R & D, quality control and production to provide powerful production tools.

Alpha company has been focusing on the field of nano-science and technology for a long time, providing comprehensive solutions for the manufacturing, particle size characterization, application development, analysis and improve of nano-materials. Alpha company continues to introduce and develop leading technologies and products in the field of nanotechnology, and is committed to serving China's industry 4.0 industrialization upgrade.

Alpha was founded in 2010, with its headquarters and R&D center located in Shanghai, China, and is a national high-tech enterprise. As early as 1980, the team has carried out relevant project in the field of nanotechnology in California Institute of Technology, and entered the Chinese market in 2000. The company's starting business mainly serves the semiconductor manufacturing and pharmaceutical industries. Team members focus on the application of nanotechnology in drugs, and have made due contributions to the technology and quality standard upgrading of complex pharmaceutical dosage forms such as liposomes and fat emulsions. At present, the company's business and partners have covered the pharmaceutical, semiconductor, aerospace materials, 3D printing, solar energy industry, new materials, chemical, filtration and other high-tech industries, providing strong technical support for the upgrading of China's industry.

#### **4.3.2. Mission, vision and values**

Mission - Explore and develop international cutting-edge micro and nano technologies, popularize nanotechnology and granularity knowledge in China, and support China's industrial upgrading and scientific and technological innovation.

Vision - Continue to introduce and develop leading technologies and products in the field of nanotechnology, committed to serving China's industry 4.0 industrialization upgrade.

Values - To provide a comprehensive solution for the production and manufacturing of nanomaterials, particle size characterization, application development, analysis and improve.

#### **4.3.3. Business Strategy**

The P brand is the brand that Alpha has been operating since its establishment. From 2010 to 2013, as the brand was newly introduced into the Chinese market, the company initially participated in small exhibitions to increase its exposure, and relied on the founder's contacts and sales managers to visit potential customer companies to simultaneously expose its products. However, the annual sales volume was only more than 10 sets, and the sales volume was only about 4 million yuan. From 2014 to 2017, with the rise of new media, the company began to increase investment in online promotion as The Times changed. Baidu is a promotional platform that many enterprises will think of. 60% of customers in China project their unknown or known products on Baidu, and Alpha Company is no exception. However, the lack of familiarity with search engine algorithms, promotion tools, marketing platforms and related communication tools results in poor online customer acquisition. Subsequently, the focus was still on offline exhibitions, increasing the investment budget and increasing the types of conferences. From ordinary small exhibitors, to large exhibitors, and finally planned to hold relevant forums. With the increase of offline promotion efforts, the sales volume in recent years has skyrocketed and exceeded 10 million yuan. In 2018, the boom of "online mall" swept the country, and a series of online mall platforms for FMCG, such as Taobao, Tmall and Jingdong, appeared in front of consumers, and mobile terminals became increasingly convenient. Alfa also felt that this hot marketing approach would help the brand, and in that year, the company put the P brand on the major laboratory equipment trading platform, and began to improve the product information. While improving the third-party platform, AF company also began to adjust the keyword SEO and matching mode of search engines after getting familiar with Baidu and other search engines in the past few years. So far, the company is still online and offline synchronous promotion. Online for search engines and third-party platforms, offline for exhibitions and seminars.

With the advent of the digital era, the comprehensive outbreak of effect advertising, the traditional offline brand advertising, obviously has been unable to meet the needs of advertisers. Alfa Company can only participate in the exhibition related to its own brand P offline, but this kind of marketing cost is huge, and the cost of participating in the traditional exhibition is high, which requires a lot of manpower, financial and material resources. Usually, it needs to pay the travel expenses of the participating staff, the transportation cost of the

exhibits, the rent of the venue, the construction cost of the exhibition and so on. Time and space limitations are large, and the traditional exhibition space and time limitations are strong, and the influence scope is relatively small. The exhibition is held for a fixed period of time, requiring the participants to attend the exhibition activities at the designated place at a fixed time; The scale is limited. Traditional exhibitions are usually for participants in a specific region or industry, while some are for professional trade participants.

#### **4.3.4. The Customers of Alpha**

Alpha's main customers include the pharmaceutical industry, chemical industry, food and beverage industry, material science project institutions, and environmental monitoring departments. In the pharmaceutical industry, customers have a wide range of requirements for particle size analysis. Pharmaceutical companies need to conduct particle characteristics analysis of APIs, preparations, etc., to ensure stable product quality and compliance with standards. Biopharmaceutical companies need to analyze the particle characteristics of bioactive substances such as proteins and peptides to improve the production process and improve the performance of preparations. Chemical industry customers include chemical raw material producers and chemical project and development departments. They need real-time monitoring and fine control of the particle size of the product to ensure stable product quality. At the same time, the chemical project and development department also makes extensive use of particle analysis instruments to develop and improve new materials and formulations.

In the food and beverage industry, customers need to pay close attention to the granular characteristics of raw materials such as additives, ingredients, etc. For example, the particle size and distribution of milk powder, sugar and other raw materials directly affect the taste, solubility and other properties of food. Beverage producers also need to perform particle analysis of raw materials to improve formulations and ensure product quality. Material science project institutions, such as universities, institutes, etc., make extensive use of particle analysis techniques. When they are engaged in basic project and application development involving nanomaterials, ceramics, composites and other fields, they need to conduct in-depth analysis of the microstructure and particle properties of materials. In addition, government environmental protection departments and factory emission monitoring departments are also important customers of the company. They need to use particle analysis technology to monitor and control ambient air quality and factory emissions, so as to provide scientific basis for environmental protection work.

#### **4.4. SWOT Analysis**

##### **Strenghts**

- Alpha's agent P brand has a good reputation, and consumers have a high degree of trust in its product quality and technical level.
- P brand has many years of industry experience and strong project and development strength, in the core technology has a first-mover advantage.
- Perfect marketing network and after-sales service system, can provide high quality products and professional support for Chinese customers.
- Brand P has established a center of excellence in China, which can better meet the needs of the local market.

##### **Weaknesses**

- Compared with domestic brands, the product price of brand P is generally higher, and the cost performance advantage is not obvious.
- The brand has a low degree of localization and lacks in-depth understanding of the Chinese market and targeted services.
- In terms of sales and channel building, it is sometimes difficult to respond quickly to the needs of Chinese customers.
- Some brands are under pressure from rising costs due to tariffs and other factors.

##### **Opportunities**

- With the rapid development of China's scientific project and industrialization process, the demand for high-end analytical instruments continues to be strong.
- The Chinese government vigorously supports independent innovation and provides more market opportunities for foreign enterprises.
- Chinese consumers maintain a high degree of recognition and purchase intention for well-known foreign brands.
- The increasingly fierce competition in China's analytical instrument market provides space for further development of high-quality brands.

##### **Threats**

- Domestic brands are rising fast, grabbing market share in China with cost-effective advantages.
- The growing strength of some domestic brands in technological innovation is challenging American brands.

- The Chinese market is highly competitive, and some US companies have difficulty adapting to the rapidly changing market demand.
- Trade frictions and other factors could create uncertainty for U.S. brands doing business in China.

#### **4.5. Objectives of the plan**

Alpha Company's market plan for brand P is made to increase sales, which must be feasible and in line with the company's current strength and strategy. The target should be implemented around the following key points:

- Perceive market dynamics and adjust customer development direction.
- Increase input in product innovation and increase knowledge output.
- Improve customer maintenance methods to increase customer viscosity.
- After-sales service changes in real time according to the market.
- Improve communication methods to keep pace with The Times.

#### 4.6. Segmentation, Targeting and Positioning

This chapter uses STP analysis method to analyze Alpha P brand particle size analyzer. According to the analysis in the above chapters, this project makes a more systematic analysis from three aspects: segmentation, targeting and positioning.

##### Segmentation

Classification by customer type:

Table 4.5 Breakdown of customer types

	College of University	Government agencies	Pharmaceutical enterprises	Chemical industry enterprises	Semiconductor companies
Focus	The price must be within the range that the school or tutor can afford	The price is within the range and the product features meet the requirements	Both price and function need to meet the internal requirements of the enterprise	Product functions need to meet the standard, the price as far as possible preferential	Product function must meet the requirements, and is the international or domestic top requirements
Position	User	Project Leader	Purchasing personnel	Manager	R&D personnel
Channel	Search engine	Search engine	Distributor	Third party platform	Third party platform
Products	Low-end products	Mid-range products	Middle and high-end products	Middle and high-end products	High end products

##### Targeting

All the above customers are target customers, but for the advantages of the company and products, pharmaceutical enterprises are the key target customers of the company, followed by chemical and semiconductor enterprises, and finally universities, colleges and government agencies cannot be abandoned. All customers need to be maintained, but pharmaceutical customers are the main target customers.

##### Positioning

The P brand particle size analysis instruments are positioned to provide customers with professional and reliable particle size measurement solutions.

- In the pharmaceutical industry, the system can accurately measure the particle size distribution and shape characteristics of APIs, preparations, etc., helping customers to ensure that the product quality is up to standard.
- Chemical industry customers, the system can achieve real-time online monitoring, precise control of product particle size, to ensure stable production quality.
- In the food and beverage industry, the system can finely measure the particle characteristics of various raw materials such as milk powder, sugar, etc., providing customers with data support to improve the formulation and process.
- For materials science project institutions, the system plays an important role in basic project and application development in fields involving nanomaterials, ceramics, composites, etc., providing them with in-depth particle analysis data.
- To meet the needs of government environmental protection departments and factory emission monitoring departments for ambient air quality monitoring.



## **4.7. SICAS model Analysis**

### **4.7.1. Sense**

As a professional particle analysis instrument, P brand has both opportunities and challenges for its development in the Chinese market. On the one hand, with the upgrading of China's manufacturing industry and the deepening of scientific and technological innovation, the demand for advanced testing equipment is increasing day by day, which opens a broad space for the development of P brand. On the other hand, with the rapid emergence of similar products at home and abroad, the market competition is becoming increasingly fierce, enterprises must always maintain a keen sense of market, pay close attention to the industry dynamics, timely adjust product strategy and market positioning.

### **4.7.2. Interest & Interactive**

In order to enhance the attention and influence of P brand in the Chinese market, enterprises need to continuously increase investment in technology project and development, maintain product innovation ability, improve customer interaction mechanism, and actively participate in industrial exchanges. Enterprises should continue to increase investment in technology project and development, keep up with the development trend of the industry, and launch a new generation of products to meet customer needs.

### **4.7.3. Connect & Communicate**

In order to enhance the ability of P brand to reach customers in the Chinese market, the enterprise needs to further improve the nationwide sales and service network, improve the marketing communication strategy combining online and offline, and establish a sound customer relationship management system. Enterprises should further improve the national sales and service network to ensure that customers can obtain professional consultation, installation, commissioning and maintenance support nearby. Only by establishing service outlets covering the whole country can enterprises quickly respond to customer needs and improve the convenience of products and services.

### **4.7.4. Action**

In order to improve the customer conversion rate of P brand in the Chinese market, enterprises need to start from the three aspects of product positioning, service quality and after-sales guarantee to continuously improve the overall market competitiveness. Enterprises should subdivide product lines and improve pricing strategies according to the demand characteristics of different customer groups. The high-end market pursues performance excellence and is less price sensitive, while the middle and low-end market

focuses more on cost performance. By providing differentiated product choices, enterprises can meet the needs of different customer groups and comprehensively improve the overall market competitiveness.

#### **4.7.5. Share**

In order to further enhance the brand influence of P brand in the Chinese market, enterprises need to continuously promote the construction of brand image, give full play to the influence of the industry, and enhance the brand exposure through multi-channel communication. Enterprises should continue to promote the construction of brand image, and highlight their advantages in technological innovation and industry influence through multi-channel content marketing strategies. This not only helps to enhance customers' awareness and goodwill to the brand, but also lays a solid foundation for subsequent market expansion.

#### **4.8. Promotion suggestions**

Based on the five categories of customers in the user cluster analysis, combined with Alpha's plan to increase sales, the following suggestions are summarized:

##### **4.8.1. Perceive market dynamics and adjust customer development direction**

Enterprises should continue to pay attention to market dynamics and closely follow the development trend of new technologies and products in the same industry at home and abroad. Through in-depth understanding of the latest development direction of the industry, enterprises can adjust their product project and development focus in a timely manner to ensure the launch of innovative products in line with market demand. At the same time, enterprises should also strengthen in-depth communication with major customers in the industry, fully understand their pain points and demand changes, and provide a reliable basis for product project and development and service improve. Only by having a deep insight into market demand can enterprises continuously introduce high-quality products that meet customer expectations and occupy a favorable position in the fierce market competition. Enterprises also need to pay attention to the development of the low-end market. Although the high-end market has great development potential, the middle and low-end market also contains rich business opportunities. Through differentiated product lines and after-sales services, enterprises can meet the needs of different customer groups and gradually increase the overall market share. This will not only increase the revenue source of enterprises, but also help strengthen the brand influence, laying a solid foundation for future high-end market expansion.

##### **4.8.2. Increase input in product innovation and increase knowledge output**

Particle analysis technology is changing with each day. Only by constantly improving their own innovation strength, can enterprises remain invincible in the fierce market competition. This project analyzes the application of particle analysis technology in particle analysis technology, and puts forward corresponding countermeasures. At the same time, it is also crucial to improve the customer interaction mechanism. Enterprises can regularly organize technical seminars, exchange forums and other activities to enhance in-depth communication with customers, listen to customer needs, and timely feedback on product project and development progress, which helps to enhance customers' sense of participation and trust in the enterprise. Enterprises should also give full play to their influence in the industry and actively participate in domestic and foreign industry exhibitions, standard formulation and other activities. On the one hand, by participating in the industry event, enterprises can fully understand the peer dynamics and insight into the market development trend; On the other hand, by actively participating in the formulation of industry standards,

enterprises can not only enhance their own technical voice, but also contribute to the healthy development of the industry, so as to further enhance the credibility and influence of the brand in the industry.

#### **4.8.3. improve customer maintenance methods to increase customer viscosity**

Combined with the characteristics of different customer groups, enterprises improve the combination of online and offline marketing communication strategy. Online channels can improve brand reach efficiency and customer experience, while offline channels help to enhance in-depth communication with customers and achieve organic integration of online and offline. Enterprises should also establish a sound customer relationship management system and strengthen the refined operation of key customers. By building customer portraits, enterprises can more accurately understand customer needs, and develop personalized service plans to improve customer engagement and loyalty. At the same time, enterprises can also regularly invite key customers to participate in product project and development or experience activities, fully listen to their feedback, and enhance customers' sense of participation and trust. Only by establishing a solid customer relationship can enterprises continue to maintain a dominant position in the fierce market competition.

#### **4.8.4. After-sales service changes in real time according to the market**

Enterprises strengthen professional training of technical service teams to improve the response speed and problem solving ability of front-line service personnel. Only with professional and efficient service support, high-quality products can truly create value for customers and improve customer satisfaction. Strengthen after-sales service guarantee, ensure product reliability and stability, continue to create value for customers, improve customer conversion rate.

#### **4.8.5. improve communication methods to keep pace with The Times**

In the selection of communication channels, P brand should adopt differentiated strategies for different audience groups according to local conditions. In addition to traditional industry media, brands can also actively expand emerging social media platforms, using video, live broadcasting and other forms to attract the attention of young consumer groups. At the same time, brands can also use industry big Vs and opinion leaders to plant content and help the rapid spread of brand word-of-mouth.

## 4.9. Implementation

### 4.9.1. Schedule

According to the theoretical model and the proposed improvement suggestions, we will formulate the marketing work, the specific work is shown in the following table:

Table 4.6 Annual schedule of market work

Key point	Time	Project	Specific contents
Increase input in product innovation and increase knowledge output.	All year round	Paper	Independently wrote 60 technical guidance short projects; Independently wrote 40 authoritative projects on application; Independently wrote 60 scientific short projects
	Three months	Brochure	Add new brochures and improve the content of brochures; Produce a collection brochure; Make Chinese brochures, English brochures, guidance brochures.
Improve customer maintenance methods to increase customer viscosity.	All year round	Offline exhibition	CPhI World Pharmaceutical Exhibition; CIPM Pharmaceutical Equipment Exhibition; Pharmaceutical Preparations Congress, etc.
improve communication methods to keep pace with The Times.	Three months	Official Website	Continue to improve the page content style, website code style. Add the function of online mall (for similar fast-selling products) to achieve transparent unit price.
improve communication methods to keep pace with The Times.	Three months	Search engine	The search engine adjusts the unit price and keyword promotion method of all keywords under the account, pays attention to the data in real time, and combines keyword SEO to achieve data rise.
	All year round	Online platform	Brands stay hot online, update product information in real time, and follow events and advertising services on major platforms

Source: Author (2024)

#### 4.9.2. Budget

Table 4.7 Annual Budget of the market

Type of business	Name	Specific contents	The budget
Equipment business online promotion budget	Chem17	Increase the scope of product delivery and increase the channels for customers to obtain information	¥27,800.00
	Instrument Info		¥28,980.00
	Cnpowder		¥10,300.00
	Biomart		¥6,000.00
	YQW		¥8,000.00
	GDHGW		¥23,400.00
Improving search engines	Search engine improve	improve the probability of your site appearing in search engines	¥60,000.00
	Official website improve	improve website structure and customer experience	¥20,000.00
Exhibition and exposition	Instrument equipment business offline exhibition budget	Two CIPM Pharmaceutical machinery exhibitions	¥150,000.00
		Cphi China	¥120,000.00
		Laboratory Analysis Exhibition in Munich	¥80,000.00
	API&Chemcals business offline exhibition budget	Pharmaceutical Preparations Conference	¥50,000.00
Seminar	4 shows a year		¥160,000.00
Distributor training session	North and Central China Training Conference		¥30,000.00
	Northeast Southwest Training Meeting		¥30,000.00
Budget for the year			¥804,480.00

Source: Author (2024)

#### 4.9.3. Control and assessment

Table 4.8 KPI of market work

Project	KPI
project reserve	Complete 60 technical guidance essays; 40 projects with applied authority; 60 general essays, each of which must be read more than 10,000 times
Brochure	Complete the production of new brochures, collection brochures, Chinese brochures, English brochures, guidance brochures, and print 500 copies of each brochure for publicity and distribution
Offline exhibition	To participate in all the exhibitions in the above plan, you must obtain 100 customer inquiries for each exhibition
Official Website	improve the structure of the website, check the background, and increase the UV and PV of the website by 30% compared with last year
Search engine	improve search engine algorithm, according to the background data, compared with last year to increase 30% customer inquiries
Online platform	Maintain all products on the platform, improve the ranking of products, and improve 50% of products on the platform to the top five
Sales volume	Annual sales increase by at least 10% compared with last year

Source: Author (2024)

## **5. Conclusions**

### **5.1. project conclusions**

In the Chinese market, the competition of laboratory analytical instruments has been very fierce. Each brand changes its marketing plan every year in order to increase the advantage of its brand or product according to the changing market conditions. In this project, the main purpose of Alpha is to increase the sales amount of P brand, increase the weight and awareness of P brand in the granularity analysis industry, increase the new customers of P brand granularity analyzer, maintain the stickiness of old customers and increase the repurchase rate, and finally increase the turnover of P brand granularity analyzer. First of all, various literature materials were collected for this project, and products with the same brand attributes as Alpha P were selected for analysis. Meanwhile, market competition, product positioning and customer segmentation were analyzed. Based on the environmental analysis, market opportunities and threats of Alpha Company, the challenges faced by P brand products are summarized. From a macro perspective, changes in China's domestic policies, economic growth, and greater inclusiveness of social concepts will create market opportunities. From the micro point of view, with top technology, good brand reputation; However, the marketing method is too traditional, the customer channel is single, the product innovation degree is not enough and so on. Analyzing these issues will be helpful in increasing the turnover. Based on the above problems, combined with the company's current strategy, arrange the annual work plan, and in order to increase the number of customers, apply for a budget of ¥1,004,080.00, combine the project reserve, color page poster, offline exhibition, official website, search engine, online platform and other working points to arrange the work. For example, independently write technical guidance short projects, application authority projects and popular short projects; Add new brochures, collection brochures, Chinese brochures, English brochures, guidance brochures; Participate in international exhibitions; improve page content style, website code style; Adjust the unit price of all keywords in search engine and the promotion method of keywords; Major brands maintain the popularity of online platforms and improve product rankings.

### **5.2. project limitations**

Since the market data of Alpha Company has been collected since June last year, it cannot be refined to a specific profession or field. In addition, with only Alpha company as the project object, the project lacks breadth and cannot be extended to the whole industry or companies with the same attribute.



### **5.3. Suggestions of Future project**

The amount of data can be increased to include more brands, which can improve the generality of the project; Increase data fineness and improve the accuracy of project. It is also possible to add different companies of the same type to conduct differentiation project, and it is also possible to add comparative project on regional differentiation. In this way, the applicability of the project can be increased, and more companies can be referred to.

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