

Business Model, Marketing Strategy and Financial Management of Low-Carbon and Environmentally Friendly Products

-- Taking Recyclable Lunch Boxes as an Example

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Abstract

The implementation of the "double carbon" strategy is the only way to break the resource and environmental constraints and achieve high-quality sustainable development. It is also the inevitable choice to deal with the world's major changes, build a Community of Common Destiny, and promote the harmonious coexistence of man and nature. As a kind of green environmental protection alternative product, the recyclable starch straw low-carbon lunch box provides a new idea for Plastic pollution control, and prospects the future development direction of starch based biodegradable materials. This article takes the analysis of recyclable lunch boxes as an example to analyze the business model, marketing strategy, and financial management of low-carbon and environmentally friendly products.

Keywords

Low-carbon Environmental Protection; Business Model; Marketing Strategy; Financial Management.

1. Introduction

The Fifth Plenary Session of the 18th Central Committee of the Communist Party of China proposed a new development concept of innovation, coordination, green, openness, and sharing, among which green is a necessary condition for sustainable development and an important manifestation of the people's pursuit of a better life. At the 19th National Congress of the Communist Party of China, "upholding the harmonious coexistence of man and nature" was included in the basic strategy of upholding and developing Socialism with Chinese characteristics in the new era, and "beautiful China" was included in the goal of building a modern and powerful socialist country.

In the process of firmly adhering to the path of green and low-carbon development, China has accumulated a lot of valuable historical experience, adhering to the people-centered development philosophy, and enhancing people's well-being is the fundamental goal of development. A good ecological environment is the most inclusive of people's well-being. Green development responds to the growing needs of the people for a beautiful ecological environment, solves prominent environmental problems that harm people's health, provides more high-quality ecological products, and continuously enhances people's sense of acquisition, happiness, and security towards a beautiful ecological environment.

With the prevalence of Disposable tableware, it can be said that it is closely related to our life. As we all know, the oil used to manufacture Disposable tableware is a one-time, non renewable resource, and the burning process of oil will produce carbon emissions. In addition, our country is a country with more coal, less oil and less gas, so on the basis of abiding by the global climate agreement and based on the basic national conditions, It is a must to continue to promote the

adjustment of industrial structure and energy structure, which also means that Disposable tableware must be transformed into green and sustainable. At the same time, due to the non renewable nature of petroleum resources and the issuance of "plastic restrictions" by various countries, the cost of the plastic industry continues to rise. In order to solve the resource and environmental bottlenecks caused by economic development, replacing petroleum based products with bio based materials and biodegradable materials has become a new round of international competition hotspot in the biological industry.

Based on the multiple impacts of domestic economic status, environmental policies, and the international economic environment, our team's "Dian" has set an environmental tone, and the "Straw" net low-carbon win-win - environmental protection lunch box "pioneer" project has emerged in line with the development of the times.

The recyclable starch straw low-carbon and environmentally friendly lunch box is mainly divided into two layers. The inner layer is Corn starch based film. By adding glycerin, cellulose, gelatin, chitosan, synthetic Biodegradable polymer and other additives, natural Corn starch is dried, first plasticized to obtain TPS, and then blended with PP to obtain starch based film. The biodegradability of starch based films has been further enhanced. The extraction and processing of starch starts from the cultivation of corn, including corn harvesting, transportation, milling, drying, and fully utilizing the characteristics of starch based degradable films, which are biodegradable, renewable, low-cost, and efficient. The outer layer is made of straw fiber based materials, which are processed and made into the main shape of the lunch box. Replace plastic with grass and wood with lake to achieve energy conservation and emission reduction. Straw fiber tableware has the characteristics of low carbon and environmental protection, and can be decomposed after 90 days of weathering. It does not contain any harmful chemical components and is gentle and aesthetically pleasing. It also has many advantages such as water resistance, oil resistance, and good load-bearing capacity. It is a new type of tableware that is in line with social development. Straw fiber tableware is a convenient tableware container made from natural regenerated plant fibers such as wheat straw, rice straw, rice husk, corn straw, reed straw etc., and molded through disinfection, crushing, and other processes. Straw is a natural plant that is inexhaustible. It not only saves non renewable petroleum resources, but also saves wood and food resources. At the same time, it effectively alleviates the "white pollution" caused by plastic lunch boxes to the environment, greatly reducing carbon emissions from burning straw, lunch box waste, and other waste to the atmosphere.

As a kind of green environmental protection alternative product, the recyclable starch straw low-carbon lunch box provides a new idea for Plastic pollution control, and prospects the future development direction of starch based biodegradable materials. It not only has good development prospects in the field of disposable food and beverage packaging, but also meets the demand for environmentally friendly alternative products in emerging industries such as e-commerce, tea, and express delivery, which will contribute to the national dual carbon goals and the construction of a beautiful China.

2. Products and Services

2.1. Design Concept

Our team has combined the above two things to create a new type of recyclable starch straw eco-friendly low-carbon lunch box. Its inner wall is composed of starch based film, which is equivalent to adding a layer of clothing to the inner layer of the takeout box and installing a "shell" that separates food and the takeout box. Our team has redesigned and renovated the external sales box. Because starch based films can to some extent prevent oil stains from penetrating, some dishes and even oily foods can be fully presented in the lunch box. And most

of its raw materials come from corn and sweet potato starch, which are safe and hygienic, and can effectively prevent the melting of food boxes due to high temperatures, which can bring harmful substances to the body and be consumed. The outer wall of the lunch box is made of straw fiber, which effectively prevents the lunch box from melting and deforming. The lunch box is divided into rectangular cuboid and column.

2.2. Innovative Design of Lunch Boxes

The starch material used in our lunch box has the characteristic of easy expansion and contraction, while the straw fiber material has the characteristic of non deformation. We make full use of these two points to maximize the functionality and advantages of the lunch box.

The interior of the lunch box can be folded and retracted. This is not only conducive to the collection and storage of takeout lunch boxes, but also effectively utilizes space, making it easy to carry and recycle. The eco-friendly lunch box has a multi-level design. There are grooves on the inner wall of the food box, which can be stacked on top of the food box, facilitating the multi-layer packaging of takeaway food to meet our multi-level and diverse needs for food. You can customize the external design of eco-friendly food boxes with stickers and waist seals to make the appearance of the boxes more advanced and beautiful, and label them with the creative icon of the merchant's store to create customized takeaway tableware, making the takeaway food more creative, innovative, and fashionable.

2.3. Intelligent Recycling Mechanism

2.3.1. Recycling Mode

Box as a win-win team -- Delivery merchants: Our team produces environmentally friendly starch straw low-carbon recyclable lunch boxes, rents the boxes to the delivery merchants, and collects a certain deposit and rent from the merchants to ensure the use and promotion of the lunch boxes. Delivery merchants -- delivery consumers: Delivery merchants use environmentally friendly food boxes to hold food and sell delivery to delivery consumers, earning profits from it. Delivery consumers -- Food box recycling box: Delivery consumers throw their used eco-friendly food boxes into our designated recycling box, confirm the recycling by scanning the code to confirm the information, and then feedback the usage information to the consumers in the recycling box, and refund their rent. Dining box recycling box -- "Box" as a win-win team: The team assigns personnel to regularly collect and clean the lunch boxes, achieving recycling. The recycling box provides feedback to the team on user usage information. Team members regularly analyze the usage of the lunch boxes and develop plans and improvements based on the analysis results. Box as a win-win team -- Delivery consumers: Delivery consumers provide feedback on usage on the platform app, and the team improves production materials and usage patterns based on consumer suggestions.

Our team has launched an intelligent recycling model for environmentally friendly starch straw takeaway food boxes, which forms a four in one effective recycling cycle model for the company team, takeaway merchants, takeaway consumers, and food box recycling boxes. This is beneficial for environmental protection, healthy and green development, and ultimately achieves mutual benefit and win-win situation for everyone.

2.3.2. Intelligent Recycling Box Design

The recycling bin is a self-service recycling bin for delivery users, which is an important transit point for food boxes to flow from the consumer end to the recycling station. There are intelligent sensors in the recycling box to identify others or objects, accurately identifying the lunch box, which is convenient and fast. The sensor of the recycling bin has a strong ability to adapt to the brightness of the environment, including two tubes: emission and reception. The emission tube emits specific infrared rays. When the current side encounters an obstacle, the receiving tube receives the reflected signal. At this time, the voltage comparator makes a

comparison, and the green indicator light will light up. At the same time, the output interface outputs the corresponding signal, which can be rotated.

The Potentiometer can change the detection distance. The effective range is 2-80cm, and the working voltage is 3.3V-5V. The detection distance of the sensor designed in this design can be adjusted by Potentiometer, and has the characteristics of small interference, easy assembly, easy use, etc. It can be widely used in robot obstacle avoidance, obstacle avoidance car, pipeline counting, black and white line tracking and many other occasions.

2.4. Establishment of APP and Mini Program Platform

The two-dimension code of the company's APP and official account platform is printed on the outside of the recycling box, which is convenient for consumers to throw the takeaway lunch box, scan the code and fill in the confirmation information. In this way, the platform will return part of the rent collected to consumers. APP and mini program are designed for delivery users who choose to use recyclable food boxes on the delivery platform. The mini program will register and log in when the user first uses it. In order to facilitate consumer registration, there is an option to log in directly with a WeChat account, and the mini program adopts a real name system.

Function operation: The company establishes an order for the quantity and variety of food boxes with delivery merchants through software. The delivery merchants input the usage of food boxes on the relevant equipment for receiving the food boxes, and the equipment automatically generates a QR code. After scanning the code, the merchants collect the food boxes in bulk. Consumers can freely choose the variety of food boxes when ordering, and their information will be fed back to the delivery merchant Record the real-time logistics status of the lunch boxes. The mini program will record the entire logistics situation of the lunch box in real-time, from merchant delivery, to dining, and finally to successful recycling. The electronic map equipped with the mini program will notify users to search for the nearest recycling bin with enough free lunch boxes and be equipped with multiple navigation routes, providing users with multiple choices. Remind delivery users of the empty space of food boxes in nearby recycling bins. Real time updates of emission reduction data accumulated by users, planting energy seedlings. Every time a consumer uses a recyclable takeout box from Green Enjoy Creativity, their mini program will calculate how much they have contributed to energy conservation and emission reduction, and the cumulative amount will be converted into the number of specific tree saplings planted. There is an environmental community forum on the mini program, where all delivery users can post, check in, comment on each other, and send private messages, promoting communication between environmental users. The APP provides intelligent artificial services online, where consumers can comment on their feelings and suggestions for our team after using eco-friendly lunch boxes. We will promptly understand and update the team's operation mode to adapt to economic development. The APP timely refunds the rent of the lunch box based on the information provided by consumers, achieving effective recycling and mutual benefit between merchants and consumers, promoting environmental protection and economic development. The app adopts a reward mechanism based on user usage and recycling. Effectively promote consumers' enthusiasm for recycling and enhance the driving force of recycling operations.

3. Business Model

3.1. Strategic Model

3.1.1. B2B Mode

The B2B model refers to the process where both the supply and demand sides of e-commerce transactions are merchants (or enterprises, companies) who use internet technology or various

business network platforms to complete business transactions. In today's era of advanced internet technology, enterprises use the internet for online information transmission, and the recycling mechanism of recyclable starch straw lunch boxes requires the internet. Its main operating mode is for our company to reach cooperation with delivery companies, and then delivery companies use recyclable starch straw environmentally friendly lunch boxes to complete delivery orders, while charging customers a deposit for box recycling, Customers can send their eco-friendly lunch boxes to nearby recycling bins after meals, which are labeled with QR codes.

3.1.2. Strategic Cooperation Mode

In 2021, the scale of China's takeaway market will hit a new high, reaching 100 million yuan, while Meituan and Ele.me will have a total trial production share of 90%. According to the Yiguan takeaway market report in July 2022, Ele.me will continue to lead the Chinese takeaway market with a share of 35.5% in the second quarter. Ele.me will timely deliver the products with its "everything 30min" label. The variety of takeaway products is rich and popular with netizens, so its takeaway market is broad.

It is reported that Ele.me launched the "The Blue Planet" plan in 2017. In order to implement environmental protection in the end, the plan is divided into three stages: short, medium and long term. In the short term, it focuses on guiding consumers, introduces the option of "no tableware", and provides customers with bonus points, which are mainly used to claim desert public welfare and exchange Reusable shopping bag. In the medium term, it will comprehensively use economic means to improve the enthusiasm of businesses to use environmental tableware, In the long run, it deepens into the supply chain and forces upstream enterprises to reform with progress on the demand side.

Considering the characteristics of recyclable starch straw environment-friendly lunch boxes, our project combines production, research and sales, and the production of lunch boxes is a major upstream enterprise in the takeaway industry. This project mainly produces such lunch boxes. Starch based bio film and straw fiber based boxes can not only meet the demand for environmental degradation and recycling, but also cooperate with takeaway enterprises to provide them with environment-friendly lunch boxes. In addition, Ele.me's "The Blue Planet" medium-term plan, enhancing the enthusiasm of businesses to use environmentally friendly tableware can greatly improve efficiency and achieve a win-win situation for all parties.

3.2. Operation Mode

3.2.1. Production Lease

Considering the diversity of environmental protection lunch box market and the different materials, the "box" win-win team decided to combine the market's environmental protection lunch box materials, take its essence to remove its dregs, and make environmental protection lunch boxes with starch biological membrane as the inner part and straw fiber base shell as the outer part. The early research and development link focused on this direction, and through continuous research and development, to find the best solution, and finally achieve mass production. After achieving the goal of free production, we will extend our plan to the sales market of eco-friendly lunch boxes. However, we will rent eco-friendly lunch boxes to delivery companies and charge them rent and deposit. The deposit refund mechanism is to consider the recycling rate of recyclable starch straw eco-friendly lunch boxes. This plan takes into account the significant impact of human factors on eco-friendly lunch box recycling, and stimulates delivery companies to make changes through deposit refund, Promote consumers to actively return environmentally friendly lunch boxes. At the same time, we have carried out strategic cooperation with Ele.me. In order to open the market of environmentally friendly lunch boxes, we can actively contact the takeaway merchants, and provide them with certain preferential policies in the early stage. After the order is signed, we can send the environmentally friendly

lunch boxes to the merchants through Ele.me, which can not only save time, but also reduce waste and improve efficiency.

3.2.2. Leasing - Recycling

Environmental friendly lunch boxes are mainly used in takeaway enterprises and have a wide audience. It is difficult to recycle them individually, so we plan to place recycling bins in places with a large number of audience groups and combine recycling bins with Waste sorting bins. This will not only facilitate consumers to put environmental friendly lunch boxes back into the recycling bins while throwing garbage, but also place recycling bins in conspicuous public places to help consumers realize environmental issues.

At the same time, a QR code will be placed on the recycling box, which is mainly used for consumers to scan the code to confirm when returning eco-friendly food boxes, and then obtain the deposit collected when ordering takeout. This also allows our company to understand the current situation and relevant data of eco-friendly food box recycling, positioning eco-friendly food boxes for easy recycling.

3.2.3. Recycling - Re leasing

The recycling box for environmentally friendly lunch boxes is placed at a designated location, so the "Box" win-win team arranges for personnel to collect them at designated locations every day. On the one hand, timely recycling can reduce the damage to environmentally friendly lunch boxes, and on the other hand, the rapid recycling of environmentally friendly lunch boxes can also improve the circulation speed of environmentally friendly lunch boxes, bringing more economic benefits to the enterprise. The recycled environmentally-friendly lunch boxes are taken to the disinfection and separation workshop of the enterprise. The staff will recycle or replace the starch biofilm based on the degree of use of the lunch boxes and the products they contain. However, due to the oil-proof and waterproof effect of the starch biofilm, the external straw fiber box has a lower degree of damage. Depending on the specific situation, it can be recycled and disinfected, then reused, recombined with new starch biofilm, and put back into the market, Conduct re leasing. Recurring, achieving the recycling of environmentally friendly lunch boxes, reducing resource waste and environmental pollution.

3.3. Value Analysis

3.3.1. Project Commercial Value

(1) Product innovation value. The recyclable starch straw eco-friendly lunch box is different from the eco-friendly lunch boxes on the market. It combines two materials for production. Considering environmental protection and resource utilization, this eco-friendly lunch box has a high level of innovation and requires certain levels of research and development technology. It has high commercial value in product innovation.

(2) Brand value. "Box" is a win-win brand and actively cooperates with the Ele.me brand. In the early stage, Ele.me opened its popularity and expanded its market. At the same time, Ele.me also realized the joint development of upstream, midstream and downstream through "Box" as a win-win brand, realizing its "The Blue Planet" plan. From the long-term perspective of the national "Double Carbon" plan, the market potential of recyclable starch straw environmental friendly lunch boxes is huge. In the later stage, both can achieve win-win in the market, Both brands achieve mutual assistance and assistance. In addition, after the recyclable starch straw eco-friendly lunch box obtains a certain level of exposure and usage in the later stage, its system and scale will gradually become standardized. In the context of expanding influence, it will also cooperate with other enterprises to achieve win-win cooperation and work together to achieve green development.

3.3.2. Project Social Value

In the recyclable starch straw environmental protection lunch box, the main material of the outer box is straw, and in the early stage of development in China, Stubble burning has been seriously polluted. Straw is the plant stem left after the harvest of crops. In rural areas, it is mainly used for burning to increase land fertility, but burning will cause air pollution. The reason why we mainly use straw materials as the main outer box is that straw materials can be transformed through technology, and we can recycle straw materials. On the one hand, it can help rural areas solve a large number of waste Stubble burning burning problems, On the other hand, recycling straw can promote the development of rural agricultural economy, achieve economic connectivity between rural and urban areas, and drive rural economic development. Further reduce the waste of resources and the environmental pollution caused by the mass burning of Disposable tableware after use.

4. Marketing Strategy

4.1. Product Strategy

4.1.1. Positioning

Company product: Recyclable starch straw eco-friendly lunch box. This lunch box is mainly used for takeout and merchants who need to pack. For example, students and white-collar workers are more dependent on selling. Snack bar or hotels above star level that need to be packed in front of the public also need to use packed lunch boxes, which are widely used and can bring great convenience to people's lives. So, our company produces recyclable and environmentally friendly lunch boxes, which not only solves the problem of environmental pollution caused by disposable takeout packaging boxes, but also can be reused to reduce costs. Sell in the form of renting lunch boxes, regularly recycle lunch boxes, disinfect and clean them, and reuse them.

4.1.2. Product Development

For the development of new products, the company will conduct market research at different stages. Based on the manufacturing of our lunch boxes, we will update and upgrade them, with the premise of environmental protection, improve product performance, and produce environmentally friendly lunch boxes that are more suitable for the public.

4.2. Price Strategy

For partners, a deposit will be charged when purchasing our company's lunch boxes to ensure orderly recycling of the boxes. Our company charges a certain rent from merchants. The rent includes a deposit for the rental of the lunch box, which is sold by the merchant to the consumer. The merchant collects a certain amount of security deposit for the return of the lunch box from the consumer. After the consumer uses it, they return it to the lunch box recycling box to refund the packaging fee. If the lunch box is not returned, the packaging fee will not be refunded. The deposit will be refunded to the merchant based on the lunch box recycling rate.

4.2.1. Strategies for Reducing the Cost of Food Boxes for Takeout Merchants

For some businesses, there is a high demand for selling boxes to the outside world, and the price of disposable plastic lunch boxes in the market is lower than that of environmentally friendly lunch boxes. Merchants tend to prefer disposable plastic lunch boxes, which poses a great inconvenience to the improvement of environmental pollution. We sell our environmentally friendly lunch boxes through leasing, and the price is also lower than the cost of purchasing a complete set of lunch boxes. If there are too many leftover lunch boxes, they can also be refunded. If a second-generation environmentally friendly lunch box is produced, it

can also be replaced with a new one, thereby reducing the problem of higher costs for environmentally friendly lunch boxes in the market compared to disposable plastic lunch boxes.

4.2.2. Strategies for Reducing Consumer Meal Box Expenses

The products produced by our company are recyclable and recyclable lunch boxes, which are greatly different from disposable lunch boxes. The main focus is on production and recycling. The "Box" win-win team found in their normal business activities that for previous merchants, they would charge a certain packaging fee when packaging takeout, which increases the expenses of long-term takeout consumers. We advocate for consumers to recycle in the form of recycling, after consumers return the lunch box to the recycling box, they can refund the packaging fee on the recycling app, or scan the QR code on the recycling box to refund the packaging fee. This not only promotes the recycling of the lunch box, but also reduces consumers' expenses for packaging fees. For scattered merchants renting recyclable lunch boxes, a membership system can be implemented in the store. Consumers can purchase the right to use eco-friendly lunch boxes for packaging upon entering the store. Simply put, customers can use eco-friendly lunch boxes for packaging, but eco-friendly lunch boxes need to be recycled. In response to this issue, customers can rent and use eco-friendly lunch boxes for a certain period of time, during which they can freely use them. If the usage time is too long, they can also exchange for new eco-friendly lunch boxes at any store we cooperate with. The premise is that it cannot be damaged. If the lease term is reached, we can refund a relative proportion of the rent. For customers who have a long-term need for packaging, this reduces the cost of packaging lunch boxes. It also increases the number of repeat customers in the store and promotes the company's profitability. For consumers, we prefer long-term or short-term leasing. Our company produces recyclable and environmentally friendly lunch boxes, which can not only achieve the purpose of recycling, but also reduce the cost of businesses. For the merchants who rent the company's recyclable lunch boxes, they can issue some shopping Voucher to consumers as intermediaries. For the use of takeaway lunch boxes, rent can be deducted, or cash can be directly deducted during consumption. These are based on the fact that after using the takeaway lunch boxes, they can get Voucher and use them on the applet or APP, This effectively promotes consumers to actively return their lunch boxes, and can also increase their enthusiasm for consumption, resulting in profits for businesses, companies, and consumers.

4.3. Channel Strategy

4.3.1. Direct Channels

Our company produces environmentally friendly lunch boxes, and manufacturers can directly trade with consumers, eliminating intermediate links. Direct sales here means that products can be sold online through online direct distribution channels, or they can contact manufacturers offline for direct sales, using a combination of online and offline methods, so that first-hand information can be collected directly from the market, production can be reasonably arranged, enterprises can sell their products at a lower price, consumers can also buy products lower than the price in the Spot market, and marketing personnel can use online tools, carry out various forms of promotional activities according to the wishes and needs of users at any time to expand the market share of the product.

4.3.2. Indirect Channels

Intermediaries can be found on the internet, whose function is to connect sellers who promote goods or services on the internet with buyers who search for goods or services on the internet, becoming a hub connecting buyers and sellers, making indirect online sales possible. Utilizing online intermediaries can effectively promote the widespread entry of goods into target markets. From the perspective of the entire society, online intermediaries, relying on their

various connections, experiences, professional knowledge, scale of activities, and vast amounts of information, will push products from producers to consumers more concisely and economically than production enterprises promoting their own relationships. This overcomes the shortcomings when we use direct channels.

4.3.3. Marketing Channel

In the era of Personal media, Personal media has a huge user base, and the company can take this opportunity to carry out Personal media operation and promotion on the platform. Video is the mainstream of the current era. By making good use of video, you can skillfully market the company's culture and products, and reach a wide range of people. By integrating multiple platforms for optimization and achieving diversified display, the public can quickly accept the recycling of environmentally friendly lunch boxes.

4.4. Marketing and Promotion Strategies

We will first set up recycling bin placement points near major universities, office buildings, and trash cans, establish target audiences, promote the performance of recyclable and environmentally friendly lunch boxes online and offline, publish short videos online, promote advertisements, and promote environmentally friendly lunch boxes in a cost-effective manner; Organize various activities offline, such as holding a food festival in the city. All packaging boxes for the festival are recyclable and environmentally friendly food boxes produced by our company. Advertising billboards are placed on the streets to introduce the production, usage, and recycling methods of environmentally friendly food boxes. During the process of tasting the food, one can fully understand the purpose and recycling mode of environmentally friendly food boxes. Contact and cooperate with major universities to promote recyclable and environmentally friendly lunch boxes on campus, hold campus environmental protection knowledge competitions, campus food competition, and other similar activities, so that college students can fully understand environmentally friendly lunch boxes and promote them to young people first; In the later stage, the focus will gradually be on the neighborhood, enabling street managers to promote the benefits and uses of recyclable lunch boxes within the community. Strengthen the concept of environmental protection, promote each other among customers, bring the old with the new, and explore customer sources.

4.4.1. Customer Marketing

In the marketing process, we should seize the potential users, actively contact and contact the customer groups with large consumption of lunch boxes, and reach long-term cooperation. Large malls such as Wanda, RT-Mart, and Yaohan, with more food stores, have relatively large external output. We should cooperate with these large malls to promote the environmentally friendly lunch boxes produced by our company. In places with large passenger flow, it is easier for the public to understand the environmentally friendly lunch boxes, Beneficial to our company's operations and product marketing. Major university canteens are also gathering places for lunch boxes, and more economical and environmentally friendly lunch boxes can be promoted in school canteens. The main audience facing students, white-collar workers, and other places can increase our company's market share, enhance brand awareness and influence.

4.4.2. Event Marketing

We can invite celebrities with high visibility to speak for us, increase publicity, and publish staged activities such as food festival, environmental protection lunch box relay activities on Weibo, Tiktok, WeChat official account and other websites to attract consumers' attention with specific events. Elect promotion ambassadors in society, and people of all ages can participate in the selection process to attract customers and increase our company's reputation. We can also participate in public welfare activities to enhance our brand image.

4.4.3. Internet Marketing

The Internet has become one of the indispensable ways to spread information in the contemporary society. The Internet can spread information faster and more quickly. It can regularly hold environmental knowledge Q&A activities on WeChat official account, and provide benefits to the people participating in the activities. For example, the environmental protection lunch box can be exchanged once for free, and 1000 points can be used to exchange small gifts in physical stores, so that the environmental protection knowledge can be better publicized in the knowledge Q&A, It can also attract more people to use our company's products. Regularly promote on Weibo and short video platforms to achieve mutual benefit and win-win cooperation.

4.4.4. Festival Marketing

During holidays, such as World Environment Day, Chinese Tree Planting Festival, and other festivals related to environmental protection. The rental of environmentally friendly lunch boxes can be discounted or a lottery event can be held. Online promotion is more focused on protecting the environment, establishing the company's values and brand influence.

4.4.5. Certification Marketing

We advocate users to authenticate their real names on WeChat official account or APP. In the leasing process of recyclable tableware, real name authentication can better find customer information. Rent collection and return can also be conducted directly on the network platform, facilitating our direct contact with customers. After real name authentication, the food box can be returned with the authenticated information during recycling, and the packaging fee can be refunded. Points can also be redeemed through a QR code.

4.4.6. Recycling Marketing

Environmental protection lunch boxes can be recycled in multiple ways. Firstly, the used environmental protection lunch boxes can be placed in a fixed environmental protection lunch box recycling box. Secondly, environmentally friendly lunch boxes can be handed over to merchants who have a cooperative relationship with our company, and they can serve as intermediaries to return the lunch boxes. Thirdly, for merchants, they can return unused eco-friendly lunch boxes to our company in exchange for new eco-friendly lunch boxes. To better promote the recycling of environmentally friendly lunch boxes, benefits can be provided to users who actively recycle them.

5. Financial Management

5.1. Fund Utilization

The total investment of the project is 6 million yuan, of which 2.5 million yuan is mainly used to purchase some production materials and infrastructure necessary for environmentally friendly lunch boxes. In addition, it is also used to pay for the manufacturing costs of recyclable lunch boxes and lunch box recycling boxes, the cost of purchasing lunch box recycling vehicles and distribution vehicles, the infrastructure construction and maintenance costs of the lunch box storage warehouse, and 1.5 million yuan of working capital is mainly used for various expenses in the early stage, including the rental of the lunch box warehouse, Rental of company office space, etc., with the remaining 1.5 million used to pay employee salaries payable and other current project funds; Finally, there is 500000 yuan as a reserve fund to prevent various risks.

5.2. Financial Management

(1) Financial management objectives. The goal of enterprise financial management is the fundamental goal that enterprises need to achieve in organizing financial activities and

handling financial relationships. It determines the basic direction of enterprise financial management and is the starting point of enterprise financial management work. The goal of our company's environmental protection lunch box financial management is to prioritize maximizing shareholder wealth as the foundation and fundamental goal of enterprise development. On the basis of maintaining solid and stable development of the enterprise, we strive to accelerate the turnover and flow of enterprise funds, and enhance the vitality of the enterprise; At the same time, we also attach great importance to product quality, pay attention to protecting the rights and interests of consumers, and strive to achieve high social benefits while achieving economic benefits.

(2) Financial management process. The main links of financial management include financial forecasting, financial decision-making, financial budgeting, financial control, and financial analysis. The core link is financial decision-making. Our company focuses on using experimental methods in financial forecasting, combining qualitative and quantitative predictions, establishing accurate mathematical models, and predicting consumer preferences and product sales. Based on this, further research and analysis are conducted. Then, based on the actual situation of the enterprise, make strategic goals and plans, and use various methods such as balance method, factor method, proportion method, and quota method to analyze the cash flow generated by the enterprise's operating activities, the enterprise's own financial situation, and shareholder equity, and supervise the coordinated development of all aspects.

(3) Financial decisions. Financial decision-making is the core of financial management, and our company attaches great importance to the accuracy of decision-making. We comprehensively use ratio analysis and comparative analysis methods to accurately calculate structural ratios, efficiency ratios, and related ratios within the company, analyze the feasibility of each project, and then make predictions based on this. Outside the company, a combination of vertical comparative analysis and horizontal comparative analysis is used, with the experience of other companies as a reference. Based on the company's own basic data, decisions are made, and adjustments are made in a timely and flexible manner according to various situations. Exert influence and regulation on the financial activities of enterprises through budget control, operational analysis control, and performance evaluation control.

(4) Financial analysis and assessment. Financial assessment refers to comparing the actual completion of financial indicators during the reporting period with the prescribed assessment indicators to determine whether the responsible units and individuals have completed the tasks. Our company conducts multi-dimensional comparison and sharing on the financial status, operating results, and future trends of the enterprise. Determine the responsibilities of relevant units and individuals, and closely link them with the reward and punishment system to build incentive and constraint mechanisms.

5.3. Financial Analysis

Financial analysis requires the use of various indicators for calculation and judgment. In order to better reflect the debt repayment, operation, profitability, and development capabilities of the enterprise, the following analysis will be conducted from six aspects: investment net present value, investment payback period, internal rate of return, breakeven analysis, risk return analysis, and project sensitivity analysis.

5.3.1. Net Present Value of Investment (NPV)

(1) Calculation formula for net present value of investment

$$NPV = \sum_{t=0}^n \frac{NCF_t}{(1+i)^t} = \sum_{t=s+1}^n \frac{NCF_t}{(1+i)^t} - \sum_{j=0}^s \frac{|NCF_j|}{(1+i)^j} \quad (1)$$

Where, NCF_t is net cash flow of the investment project in year t ; S is project construction period; n is the entire project calculation period.

(2) Indicator significance. Net Present Value (NPV) refers to the difference between the present value of the expected cash inflows for a project and the present value of the cash expenditures for implementing the plan. Projects with a positive net present value can create value for shareholders, while projects with a negative net present value can harm shareholder value.

(3) Evaluation criteria. Net present value indicator - The net present value indicator is an indicator that reflects the profitability of a project's investment. Decision criteria: The plan with a net present value of ≥ 0 is feasible; The plan with a net present value less than 0 is not feasible. Calculated: $NPV=51937$ (ten thousand yuan). The loan interest rate for short-term bank loans is 4.52%, 4.75% for 1-5 years (including 5 years), and 4.9% for those over 5 years. Assuming that the company invests all funds at one time in the initial stage, considering the high risk of early investment and the high probability of Sunk cost, it is temporarily estimated that i is 8.5%. According to the calculation, the NPV value is 5.1937 million yuan, far more than 0, so the investment is feasible and promising.

5.3.2. Investment Payback Period

(1) Calculation formula for investment payback period. If the investment of a certain project is concentrated during the construction period, and the net cash flow from operations in each year after production is equal, the investment payback period excluding the construction period can be directly calculated using the following simplified formula: Payback period excluding construction period (PP') = original total investment/equivalent net cash flow per year. Investment payback period including construction period = Investment payback period excluding construction period + construction period. Or static investment payback period = the year when the cumulative net cash flow starts to show a positive value $-1 + (\text{absolute value of the previous year's cumulative cash flow} / \text{current year's net cash flow})$. Static investment is used here, excluding the payback period during the construction period.

(2) Significance and evaluation indicators. The investment payback period is also known as the "payback period". Simply put, it means returning to the time it took. The shorter the investment payback period, the faster the surface capital turnover speed. Calculated investment payback period = 2.65 (years). The project has a short investment payback period and a high internal rate of return, which is smaller than the industry average payback period. Therefore, the project is feasible.

5.3.3. Internal Rate of Return (IRR)

(1) The calculation method of embedded rate of return. $NPV = NCF_t / (1 + R)_t = \text{Sum of present values of net cash flows for each year} = 0$. Find the value of r in the formula that holds the equation, which is the intrinsic rate of return.

(2) Meaning and evaluation criteria. The so-called internal rate of return refers to the Bank rate that can make the present value of future cash inflows equal to the present value of future cash flows, or the Bank rate that makes the net present value of the investment plan zero. The internal rate of return method is a method of evaluating the quality of a plan based on its inherent internal rate of return. If the internal rate of return is greater than the cost of funds rate, the plan is feasible, and the higher the internal rate of return, the better the plan.

Calculated $IRR=38.23\%$. The embedded return rate has reached 38.23%, which is much higher than the standard discount rate of 10%. This is mainly due to the good market prospects, broad market prospects, and good management foundation of the company, resulting in a high profit margin for service sales. The market growth in the first five years has been very good.

5.3.4. Breakeven Analysis

(1) Calculation formula for breakeven. $BEP = C_f / (p - c_v - t_u)$. Where, BEP is the production and sales volume at the breakeven point; C_f is the fixed cost; P is the selling price per unit product; C_v is the Variable cost per unit product; T_u is the unit product value-added tax and surcharges.

(2) Significance and evaluation criteria. Break Even Point (BEP), also known as zero profit point, breakeven point, breakeven point, breakeven point, profit and loss divergence point, and profit turning point. Usually refers to the output when the total sales revenue equals the total cost (at the intersection of the sales revenue line and the total cost line). At the boundary of the breakeven point, when the sales revenue is higher than the breakeven point, the enterprise profits, and vice versa, the enterprise loses money. The calculated breakeven point is 12784.92. So, the company's breakeven point is 12784.92 units, and when the business volume exceeds 12784.92 units, the company profits. If it is less than 12784.92 units, it will result in a loss. And our expected annual business volume is 5, which is greater than the breakeven point, so the company can make profits and the investment plan is feasible.

5.3.5. Risk Reward Analysis

(1) Calculation formula for risk reward. $K = R_F + R_R = R_F + bv$. Where, R_F is the risk-free return on investment. b is the risk reward coefficient, and v is the standard deviation rate. After years of weighted average, it can be concluded that: $K = R_{Fi} + R_{Ri} = R_{Fi} + bv$.

(2) Meaning and reference standards. Return on Investment (ROI) refers to the value that should be returned through investment, which is the economic return that a company receives from an investment activity. It covers the profit objectives of the enterprise. Profit is related to the necessary assets for investment and operation, as managers must obtain profits through investments and existing assets. The higher the return on investment is, the better the operating status of the enterprise is.

(3) Enterprise reference data. According to the data, $K=27.12\%$. From this, it can be calculated that the estimated funds for risk return in the first five years are: 13,891,500 yuan, 20,031,700 yuan, 22,767,600 yuan, 36,112 yuan, and 514,728 yuan, respectively. From this, it can be seen that the average risk investment return rate of the company in the first five years has exceeded 25%, indicating that the company has strong risk resistance and good business and profitability.

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