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Ice Business Feasibility Analysis

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ABSTRACT

This research is a feasibility analysis of the tube ice business of Madiun State Polytechnic based on planning. The preparation of the Madiun State Polytechnic ice tube business plan consists of several aspects, namely external and internal aspects. External aspects consist of industrial aspects. While the internal aspects consist of marketing aspects, management aspects, human resources aspects, operational and layout aspects, financial aspects and legal aspects. The object of this study is the tube ice business of the Madiun State Polytechnic located in Madiun. Researchers want to develop a business plan related to the ice tube business of Madiun State Polytechnic. The purpose of preparing a tube ice business plan for the Madiun State Polytechnic is to find out if the tube ice business for the Madiun State Polytechnic is feasible or not. Based on the explanation above, it can be concluded that the marketing aspect of Es Poll has a focus on the target market for culinary entrepreneurs and individual consumers. And this ice poll business deserves to be run into a business

INTRODUCTION

The use of ice can be absorbed in various sectors, including those who need and use ice, namely in the food and fisheries sector. In the food sector, ice is used as a mixture of fruit drinks, mixed ice and ice cream. The fisheries sector uses ice to cool cabins so that the fish they catch don't spoil quickly later.

In the usual ice production process, it still uses the conventional system which takes quite a long time. As an example of a freezer machine in a household, it takes approximately 12 hours to completely freeze ice, as well as ice blocks produced by factories. So to increase ice production, research was carried out which aimed to apply tube ice machine technology using the Smart Relay-based Quick Freezing Method. This tube ice machine was developed from a manual system to a digital control system using a smart relay. With the development of this digital system, the production process is easy to control automatically and the maintenance process is easier to do.

The ice molding machine used is in the form of stainless steel pipes which are arranged vertically and lined up in the evaporator, the number of which is in accordance with the machine capacity. The refrigerant will be sprayed with high pressure into the evaporator which contains pipes which are ice molds. The pipes will be fed with water which is pumped from the bottom up and then will go down through the pipe holes that have been frozen by the refrigerant, so that the water flowing through the pipes will be trapped and freeze. Water that has not frozen will go down to the water reservoir below and will then be raised again by the pump upwards to be flowed again into the pipe. So that in the pipe a layer of ice will form which is getting thicker and thicker. After the pressure inside the evaporator is low enough, the freezing process has been completed which will be followed by the process of releasing ice from mold by inserting hot refrigerant gas from the condenser into the evaporator.

So that the ice will be released from the pipe and will go down. After the ice drops to the bottom, the next process will be cut by a cutting knife driven

by a motor. The cut ice will fall into a rotating disc which moves with the cutting knife, then the ice will come out through the deflecting blade (A. Nasir, A. Mohammed, A. S. Adegoke 2013). Once the ice is used up the cycle will start over again automatically.

This automatic process is controlled using a smart relay. In the future, we will add equipment to support the ice machine production process and improve product quality by developing a control system using HMI that can be monitored and controlled remotely using the internet. So that the resulting product can be more competitive and able to compete with imported products. The tube ice machine is expected to help the community in the culinary and fishery fields. With this tube ice machine, culinary entrepreneurs can get ice supply quickly and hygienically. This tube ice machine is designed with a model that is very sturdy and easy to operate, it doesn't need to require a large area. So that it can function as a micro, small and medium enterprise that can support the community's economy (Mochammad Farhan Ariq, Muh. Anis Mustaghfirin n.d.).

With the existence of a tube ice machine using a smart relay that was created by the Madiun State Polytechnic research team, we hope to be able to contribute to the creative economy, especially by meeting the need for tube ice in the city of Madiun. the product that has been created can be utilized by the Madiun State Polytechnic academic community as a Business Incubator that can be sustainable and beneficial to many parties. To support this it is deemed necessary before running the tube ice business to do a business feasibility analysis.

METHODS

The data obtained is in the form of qualitative and quantitative data. Qualitative data analysis was carried out to determine the characteristics of the company presented in non-financial aspects in the form of descriptive descriptions, tables, charts or pictures to facilitate understanding.

Researchers collect the data and information needed in this study in several ways, namely:

1. Primary Data is Obtained by:
 - a. Observation, namely by directly observing the object of research so that a real picture of the state of the company can be obtained.
 - b. Interview or interview, namely by conducting direct question and answer with the deputy Main Director and employees who have the necessary information.
2. Secondary data is obtained by:
 - a. Reading process
 - b. Previous research
 - c. Study and take the necessary information from the book
 - d. Materials and other data sources related to the problem to be studied.

RESULTS AND DISCUSSION

A. Segmentation

1. Demographic Segmentation

- a. Age : 5 –50 and above
- b. Gender : Male and Female
- c. Nationality : Indonesian, Japanese, Korean, Chinese, British, Australia, Germany, France
- d. Income : 500k - 5 million and above
- e. Type of Work : Student / Student Beverage entrepreneur Restaurant Entrepreneur, Restaurant entrepreneur, Café entrepreneur, Catering Entrepreneur, Entrepreneur angkringan, Employee, ASN
- f. College : Kindergarten, Elementary, Middle School, and High School education
- g. Geodemographic Segmentation of Manguharjo District, Kartoharjo District
- h. Psychographic Segmentation : Personality Likes cold drinks, Can't stand the heat, Love sweet drink, It's not easy to catch a cold, Have no allergies, Lower Middle Socioeconomic Level, Intermediate, Middle to above, Lifestyle Likes to snack, Loved the drink, Prioritize food hygiene

- i. Segmentation of the Children's Cohort, Young generation, Old generation
- j. Technographic Segmentation : family orientation, Culinary orientation, Technology orientation, Orientation combined with motivation, attitude and spending

Benefit Segmentation

Benefits for consumers Improved satisfaction Seek health benefits, Look for the benefits of hygiene, Lifestyle enhancement, More economical

Benefits for the culinary business: The decision to buy the right product, Assurance of ice quality and cleanliness, Increase business activities, Increase efficiency, Increase satisfaction, Increase credibility

Determination of Market Targets (Targeting)

In choosing a target market, the author tries to evaluate the above market segments before determining or choosing a target market. The process of determining target markets based on quantity. In the travel business, it is usually distinguished by the price, the more people, the cheaper it is. So there are several groups that become the target market. The target market based on the number of tube ice consumers is:

Ice Tube Agent Reseller

Tube ice agents or resellers are businesses that do retail again to consumers. The agent's target market absorbs the need for quite a lot of ice cubes per day.

Frenchise/Franchise Iced Drinks

Beverage franchising entrepreneurs are a good target market for the tube ice business because by meeting the needs of one branch that has 5-10 outlets, there is already a considerable demand for tube ice needs, each beverage branch requires an average of around 30 kg of tube ice per day, if you have 5 branches, you need up to 1.5 quintals of ice tubes per day.

Catering

The need for tube ice for the catering industry is also quite high, especially during the many seasons of events and weddings. However, in this business the need for ice tubes is not consistent every day. The need is very high during certain seasons.

Restaurants, cafes, the restaurant industry, and stalls

Consumers in the restaurant or restaurant business segment have a significant daily need of around 20-50 kg per day, so this is a very appropriate market for the tube ice business.

Individual

The individual market segment needs less, the need for individual tube ice when individuals hold events so that quite a lot of ice is needed which cannot be made by yourself using a personal refrigerator. The average requirement is around 5-15 kg per individual on each order

C. Marketing Mix

Product (Product)

The product produced by PNM ice pol is crystal ice. For now the resulting product is still only one type. However, it is sold in two different forms of packaging, namely 5 kg packaging and 10 kg packaging. The 5 kg packaging is intended for consumers who need crystal ice in small quantities, while the 10 kg packaging is provided for consumers who need more crystal ice. PNM Pol ice crystal ice also serves purchases without plastic packaging. Non-plastic purchases are aimed at catering business consumers and large industries. PNM's pol ice facilitates large capacity purchases using stereo foam boxes. A product is said to have high quality if the level of satisfaction obtained from consuming the product is also high. So even though the price of a product is not cheap as long as it satisfies users, the product is of good quality. On the other hand, even though the product is expensive, it cannot satisfy the user, so for the consumer concerned, the quality of the product is low. PNM Pol Ice presents quality and prices that consumers can afford. In terms of the quality of the PNM ice crystal ice, the water quality is very good.

As shown in the picture above, ice poll has two sizes. Medium pack and big pack. The medium pack weighs 5 kg while the large pack contains 10 kg.

Prices

In setting prices for now, based on research that has been carried out, the Espoll team has very affordable prices. Ice poll competitors set a price of 9,000 to 15,000 for a 10kg pack. while ice poll is only priced at 8,000. Pricing will be carried out where we are looking for relative profits so that we can run the business continuously to increase market share.

Place

In terms of a strategic place or location, it will be one of the advantages for the company because it is easily accessible to consumers. In selecting the location, the ice poll was in the Madiun State Polytechnic Campus building, which is located at Jalan Serayu 84 Madiun. the location is very strategic because around the campus there are lots of ice poll traders or consumers. The need for tube ice around the Serayu area and the park is quite high, up to 1.5 tons of ice cubes per day.

Promotions

Promotion is an important aspect in marketing management because promotion can attract customers to buy a company's package so that by itself it will increase the number of customers. There are several promotional activities that will be carried out by the PNM ice poll consisting of:

Personal Selling (Personal Sales). Individual sales can be said to be "mouth to mouth", because of course the initial choice for potential customers is family and closest friends. So they will convey to their relations or friends to use the services they have chosen. This promotion is one of the promotions that is very efficient and inexpensive. By providing samples directly to consumers, it will make it easier for potential consumers to get to know and know about Es Polll products

1. Sales Promotion.

This sales promotion method can encourage consumers of ice poll products. The sales promotions conducted by the PNM ice poll are as follows: (1) discounted prices; (2) special price offers for first time customers or regular customers; and large purchases (3) provision of monthly payment facilities for regular customers

2. Advertising.

Advertising or advertising can be used to convey information to consumers by requiring media so that potential consumers can see, hear, read, know, and are interested in the products being promoted by a media. One of the advertising media that doesn't require a lot of money, social media, and brochures. As the right choice for ice polls who are just starting their business.

CONCLUSION

Based on the explanation above, it can be concluded that the marketing aspect of Es Poll has a focus on the target market for culinary entrepreneurs and individual consumers. And this ice poll business deserves to be run into a business. All aspects of marketing have been fulfilled properly

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