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Designing Production Lines And Producing Fish Nuggets In The Crunchy Nugget Business

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Abstract

The purpose of this study was to determine the condition of "Crunchy Nuggets" from the aspect of production management. This research was conducted from September to December 2022, and data were analyzed using qualitative descriptive analysis. The concept of this business is to sell fish-based nuggets, This business development includes marketing, operational and financial planning. The marketing plan includes promotion using social media. The operational plan includes purchasing raw materials, producing nuggets, and distributing products to consumers directly. The findings show that Crunchy Nugget has provided benefits, but still faces several problems, such as sudden engine damage, non-standard products and difficulty finding ingredients.

Keywords: *Fish Nugget, Production, Crunchy Nugget*

Introduction

Production management is the process of planning, organizing, implementing, and supervising the efforts of members of the organization and the use of other organizational resources in order to achieve organizational goals that have been set (Handoko, 2013) The most important functions in an effort to achieve company goals are planning, organizing, implementing and controlling production. As for what is meant by planning, organizing, implementing and supervising production is determining and determining production activities to be carried out to achieve company goals, and overseeing the implementation of production processes and results, so that what has been planned can be carried out and the expected goals can be achieved. So planning, organizing, implementing and supervising production are coordinating activities of the existing parts in carrying out the production process (Assaury, 2001) This production activity is carried out at the Crunchy Nugget Business which is located at the Sungai Panas Housing Complex, Batam City. The Crunchy Nugget business is one of the businesses that processes fresh fish in the form of nuggets, in this case crunchy nuggets use mackerel as the main raw material. but this effort requires perseverance, thoroughness, accuracy and hard work, not just how to cook but must also be paid attention to continuously with all related fields (Oda I. B. H. , 2017). Procurement of equipment, supplies, raw materials, control, quality of materials, processing with standard processes and recipes, are important factors for business success. Crunchy Nugget, which serves

fish nuggets, is an increasingly competitive industry that requires its managers to work hard to choose the right strategy to attract as many consumers as possible, especially in the production process, from processing raw materials to being ready for sale. Production planning and control is the activity of how to manage the production process. Production is a process of converting raw materials into finished products. The production system is a set of activities for the manufacture of a product which involves labor, raw materials, equipment or machinery, energy, information, capital and management actions (Komang B. A et, al 2017). Activities in the production system are grouped into two categories, namely the production process and production planning and control. Below are the objectives to be achieved for this project:

1. To find out the types of raw materials used for the process of making nuggets at Crunchy Nuggets.
2. Designing the production process that is carried out on more precise Crunchy Nuggets.
3. To find out the constraints that occur during the Crunchy Nugget production process.
4. Planning, organization, and implementation of production at Crunchy Nugget.

Methods

The method of data collection required by the author in this discussion is:

1. Interview method

According to (Sanusi, 2014) argues that "the interview method is a data collection technique that uses questions orally to research subjects". Data collection was carried out by the author by asking questions directly to nugget sellers, nugget consumers and the general public.

2. Observation Method

According to (Sanusi, 2014) suggests that "the observation method is a way of recording the behavior of subjects, objects or events systematically without questions and communication with the individuals studied".

Data collection was carried out by the author by making direct observations on the Crunchy Nugget production section to find out the implementation of the nugget production process that is being carried out.

3. Documentation Method

According to (Sanusi, 2014) argues that "the method of documentation is usually done to collect secondary data from various sources, both personally and institutionally". This method is carried out by using literature that can support the data obtained by interview or observation.

Result and Discussion

1. Raw materials used

a. mackerel

Fresh mackerel that has passed the selection process or meets the Crispy Nugget requirements. The requirements for fresh milkfish are: bright red gills, reddish white fish flesh, intact and shiny scales, shiny clean eyes.

b. other ingredients

Spices are aromatic substances that come from plant parts. In an effort to get the preferred taste of chicken nuggets, it is necessary to add certain spices. The seasoning used is known as a premix, which is a mixture of spices that gives the product the desired taste. This premix in the form of powder is taken from the premix room which is the place for making premix mixtures. Salt is one of the supporting ingredients that acts as a binder during the dough-making process. Salt and spices play a role in giving the desired flavor to the nugget product. Salt must be there because besides functioning to form flavors.

Picture 1.
Ingredients

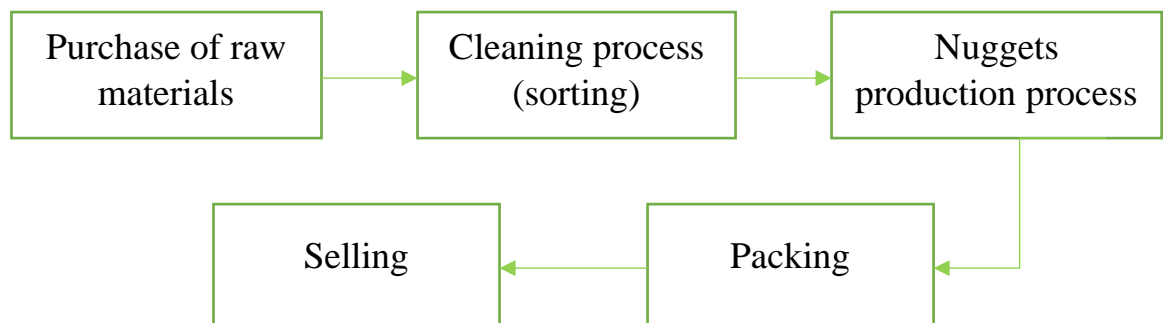


Source: Author (2022)

2. Nuggets production process

Production is the process of creating goods and services. Operations management is a series of activities that produce value in the form of goods and services by converting inputs into outputs. Activities that produce goods and services take place in all organizations. In manufacturing companies, production activities that produce goods can be seen clearly (Heizer & Render, 2012) The production flow at Crunchy Nugget uses a step by step pattern with an emphasis on quantity and quality results in each process. The following is the sequence of processes in producing nuggets:

Picture 2
Production Process



Source: Author (2022)

a. Purchasing of raw materials

Purchasing of raw materials is important in a production process. Purchases of raw materials are purchased from regular suppliers

b. Sorting raw materials

The process in which after selecting mackerel according to the provisions of crunchy nuggets, the scales and entrails are removed and ground.

c. The process of making nuggets

The basic ingredients are fish meat which is finely ground and seasoned and mixed with a binder then molded into a certain shape then dipped in batter, breading then fried or stored first in the freezer before frying. Ground meat comes from fresh fish that has been removed from the head, scales/skin, fins, entrails and gills and after being separated from the bones (Mesra, 1994).

Picture 3

Mixing Ingredients



Source: Author (2022)

d. Packaging process

After the nuggets are ready then the nuggets are packed and ready for sale.

Picture 4

Packing Nugget



Source: Author (2022)

3. Product

In accordance with its field, Crunchy Nugget is a business that operates in the food sector. One of the important parts is Quality Control in order to maintain product quality, therefore raw materials before entering the production process are selected according to the Crunchy Nugget (Sorting) standard, if they meet the standards then they will enter the production process stage. Below is an example of a nugget product at Crunchy Nugget.

Picture 5
Product “Crunchy Nugget”



Source: Author (2022)

4. Obstacles encountered

In carrying out the Crunchy Nugget production process, there are still problems or problems among these problems, namely a sudden engine failure. this will cause a loss not only of time but also relatively expensive repair costs, delays in raw materials due to lack of communication resulting in a shortage of raw materials, and the existence of products that do not comply with standards, sometimes in the production process the products produced do not comply with established standards.

5. Budget Plan

Capital requirements for this business include investment capital and working capital. Invested capital is capital used at the beginning of the operating period to build or acquire equipment to support the sale of the business and to use it profitably until it can no longer be used economically.

a. Investment

Picture 6
Investment Cost

Biaya Investasi Crunchy Nugget					
No.	Komponen	Jumlah	Satuan	Harga per Unit (Rp)	Total Biaya (Rp)
1	Kompor gas	2	Unit	300,000	600,000
2	Tabung gas 12 kg	2	Unit	200,000	400,000
3	Pisau	1	Set	250,000	250,000
4	Talenan	5	Unit	15,000	75,000
5	Blender Bumbu	1	Unit	300,000	300,000
6	Timbangan	1	Unit	50,000	50,000
7	Pengukus Bertingkat	2	Unit	200,000	400,000
8	Pengorengan	2	Unit	80,000	160,000
9	Cetakan Nugget	10	Unit	10,000	100,000
10	Bekam	5	Unit	10,000	50,000
11	Grinder	1	Unit	1,100,000	1,100,000
12	Food Processor	1	Unit	900,000	900,000
13	Presser Machine	1	Unit	250,000	250,000
14	Sealer Machine	1	Unit	200,000	200,000
15	Freezer	1	Unit	1,500,000	1,500,000
16	Cooler Box	1	Unit	130,000	130,000
Total Biaya					6,465,000

Source: Author (2022)

b. Production

Picture 7
Production Cost

Biaya Produksi Kruchy Nugget						
No.	Komponen	Jumlah	Satuan	Harga (Rp)	Total Harga Produksi (Rp)	Total Harga Tahun (Rp)
1	Bahan Tenggih	15	Kg	35,000	525,000	6,300,000
2	Tepung Terigu	6	Kg	12,000	72,000	864,000
3	Tepung Maizena	3	kg	8,000	24,000	288,000
4	Tepung Roti	8	kg	15,000	120,000	1,440,000
5	Yelut	30	Butir	1,700	51,000	612,000
6	Minyak Goreng	5	liter	40,000	200,000	2,400,000
7	Garam	0.5	kg	10,000	5,000	60,000
8	Gula	2	kg	12,500	25,000	300,000
9	Bumbu	1	kg	30,000	30,000	360,000
Total Biaya					1,052,000	12,624,000

Source: Author (2022)

c. Operational

Picture 8
Operating Cost

Biaya Operasional Kruchy Nugget			
No.	Komponen	Biaya/Bulan (Rp)	Biaya/ Tahun (Rp)
1	Listrik dan Air	300,000	3,600,000
2	Transportasi	700,000	8,400,000
3	Promosi dan Telepon	500,000	6,000,000
4	Tenaga Kerja	2,000,000	24,000,000
5	Peneliharaan Alat	300,000	3,600,000
6	Biaya lain-lain	500,000	6,000,000
Total Biaya			51,600,000

Source: Author (2022)

d. Profit

Picture 9
Profit

Total Biaya Produksi = Biaya Produksi + Biaya Operasional	
= 105,200,000 + 51,600,000	
= 156,800,000	
= 13,066,667	
Total Pendapatan = HPP x Jumlah Produksi	
= 25,000 x 10000	
= 250,000,000 Per Tahun	
= 20,833,333 Per Bulan	
Total Keuntungan = Total Pendapatan - Total Biaya Produksi	
= 20,833,333 - 13,066,667	
= 7,766,667	

Source: Author (2022)

6. Instagram Account

Picture 10
Instagram Account



Source: Author (2023)

Conclusions

In closing the subject matter of the production process the author will convey the description that has been described, the conclusion from the description of the crunchy nugget production process is that in carrying out the activities of the nugget production process through several stages, namely: purchasing raw materials, supplying to the production area, sorting, production process, packing. During the production process at Crunchy Nugget there were several obstacles, namely sudden engine damage and the presence of products that did not meet standards. However, the company has a solution to solve these problems or obstacles.

References

- Assaury, S. (2001). *manajemen oprasi dan produksi*. Edisi Revisi Jakarta: Lembaga penerbit fakultas ekonomi universitas indonesia.
- Handoko, T. H. (2013). *manajemen*. yogyakarta: bpfe.
- Heizer, & Render. (2012). *Manajemen Operasi*. Jakarta: Salemba Empat.
- Komang B. A. , Sari W. , Lily S., Setyo H. W. (2017). The impact of absorptive capacity, organizational inertia on alliance ambidexterity and innovation for sustained performance. *Academy of Strategic Management Journal*, 16(3), 1-19.
- Mesra. (1994). *Kajian Kelayakan Teknis dan Finansial Produksi Nugget Jamur*.
- Oda I. B. H. (2017). The Meaning Of Offering Local Wisdom In Ritual Panjang Jimat, *International Journal Of Scientific & Technology Research* 6 (6)
- Sanusi, A. (2014). *Metodologi penelitian bisnis*. Jakarta: Salemba Empat.