

# The flow diagram of the production processes marketing essay



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The company that we choose for our operation management assignment is Shoon Fatt Biscuit Confectionery Factory Sdn. Bhd. Shoon Fatt factory was established in the year of 1967 and started as an entrepreneur by Mr. Loo Yen Chan with only 5 workers in a size of house at Teluk Intan, Perak, Malaysia. With only one manual production machine, biscuits were distributed locally using a bicycle. During this introduction stage, they utilized a lot of manual labors in order to produce the goods and packing process.

In the year 1976, the company had been moved to 3 acres land and started invested a small machine to produce biscuits. Due to the Shoon Fatt Company' business has become bigger, they are able to expanded the business with a 2.5 million to a semi auto machine to produce the biscuit in year 2006. Based on the history, since 1982, the Shoon Fatt Company were able to expand their range of products thus justifying their requirements to fully automate their production lines with the latest in technology to further enhance efficiency and productivity. With the only 30 employees, Shoon Fatt had expanded the business throughout the Malaysia. Tardily, the name of Shoon Fatt start becomes popular and their business continues to expand internationally. So, Shoon Fatt Company started export their products to major parts of the world since 1992 and is catering for customer in Brunei, Cambodia, China, Hong Kong, Kuwait, Maldives, Myanmar, Qatar, Taiwan, and Vietnam.

Now, Shoon Fatt Company operation has divided into 2 shifts which are morning shift and night shift. It has around 200 employees to manage the process in one shift. Their product also has obtained HALAL and estimated to

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obtain HACCP in the year of 2009. The mission of Shoon Fatt Company is continues meet and exceed in the quality of biscuit due to their products is now expand internationally. Where the vision of the company is become one of the top brand in the industry, locally and internationally. In order to increase the Shoon Fatt's reputation, every home must with at least one type of SF biscuit. It also can help to become the choice of employee. However, Shoon Fatt Company also would not forget the acceptance of their product in the society. For example, the storage and distribution responsibilities include working with racking system load and unload palettes, maintaining inventories. The delivers supplies and equipment to department by receiving and transferring items. Shoon Fatt continues to grow with more investment being invested into the business. With the hard work of management in Shoon Fatt factory builds over the years; Now, Shoon Fatt has becomes one of the well-established factories with gained a solid of customer base.

## **2a (i) Production/Operation Processes**

### **2. 1. 0 Flow Diagram of the Production Processes:**

Preparing & Weighting

Mixing & Dough Making

Fermentation

Pressing

Shaping

Baking

Spread Oil

Detection

Creaming

Packaging

## **2. 1. 1Description of the Production Process**

### **Preparing and Weighting**

The Shoon Fatt Company places the raw materials such as sugar, wheat flour, cornstarch, milk powder, chocolate powder, butter, baking powder and baking soda on the ground floor. The workers will lift up the raw materials to second floor when there is an order. The area which is near to the entrance of second floor is called raw material weighting area and this is the area where the workers prepare and weight the ingredient according to needs. In this area, the ingredient to be prepared is just small amount. After the ingredients are weighted, the workers put them in the plastic bags and arrange them according to batch.

### **Mixing and Dough Making**

After the raw material weighting area, there is a wide area called mixing area and there is six huge machine located at there. Among the six huge machines, four are horizontal dough mixer and two are vertical dough mixer. The mixers are connected with the silo. The vertical dough mixer can mix very large amount of dough compared to horizontal dough mixer. These

machines can be operated by either manually or automatically. If operated manually, the amount of ingredients are set by the workers and set the mixing process by man and then the ingredient will flow down from the silo and started to mix. While by automatically, the ingredients are flow down from the silo automatic and the setting are also automatic set by machine. The supervisor or manager will do random checking to ensure the quality of dough.

## **Fermentation**

After the dough is mixed, workers will test the temperature of the dough and then it will send to dough feeding area. In this area, the dough will be putting at here for few hours to allow proper fermentation. Some dough does not need to ferment, and will straight go for pressing after mixed.

## **Pressing**

Beside dough feeding area, there are few containers which are linked to ground floor. After the fermentation of dough, the dough will pour into these containers for pressing. The dough will be laminated into sheet form by lamination machine and pass down the gauge rollers to achieve the standard sheet thickness required.

## **Shaping**

The sheet form of dough will pass through the shaping machine after lamination process. After pass through the shaping machine, the shape of biscuits is formed according to types of biscuits to be produce. In the shaping process, there will have remainder of dough, and the dough will pass back to lamination machine for recycle to avoid waste.

## **Baking**

After the biscuits had form the shape, they will send to baking area. The workers will control the oven temperature and conveyor's speed depends on the biscuits type to be produce. During the baking process, the workers will monitor the temperature of the oven and taken out the unsatisfied baked biscuits and throw them into dustbin.

## **Spread Oil**

The baked biscuits will pass by a machine which will spread oil on them. The oil spread process will greatly improved the appearance, aroma and also the taste of biscuits.

## **Detection**

Before the baked biscuits proceed to creaming or packaging stage, the biscuits will pass through detectors which are installed on the conveyor to check if the biscuit contain any unknown substance and prevent them proceed to next stage. If unknown substances are detected, the detector will block the biscuits.

## **Creaming**

Some biscuits required creaming, they will pass through the creaming machine and the biscuits will be creamed according to the types of biscuits to be produced. For those biscuits which do not need creaming, they will direct pass to packaging stage.

## **10. Packaging**

When the biscuits are done, they will send to packaging process. The biscuits are packaged with the aids of auto feeders. It means the workers will continuously pick up the biscuits and put them in a drain and the biscuits are then wrapped and sealed by machine. On the other hand, the biscuits are packaged by manually also. The workers will pick the biscuits and put them into biscuit tin or container. After packaging, the workers will group the biscuits in categories and now the biscuits are ready for sale.

## **2. 1. 2 Strengths & Weaknesses of Production Processes**

### **Strengths:**

#### **Capital Intensive**

Shoon Fatt's production process is capital intensive due to high proportion of machinery in relation to workers. This can allow the company reduce the cost of production and gain the advantage of economies of scale. Next, the company can also reduce the number of skilled workers by replacing them by machinery. So the company can save the cost of paying high salary to skilled workers.

#### **Higher and Standard Quality**

Shoon Fatt can ensure the high quality of their product because they use machines to replace human workers, so the error can be minimize. The high quality of product can lead to building in good brand name of company.

#### **Time saving**

The automatic production line allows the production process to be operated continuously. The product will proceed stage by stage without any slack time

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and these critical activities can help the company save time and also save cost indirectly.

## **Weakness:**

### **Inflexible of Production Line**

The production line is standardized, it is very difficult to tailored the products according to the preferences of small group of customers. Besides, once the production line is started, the products produced are in large amount in order to minimize the production cost. So, it is very inflexible to alter the production line.

### **Production process may interrupted due to single machine breakdown**

The mechanization of production line has increase the ability and also productivity of the company. However, if one of the machines is broken down, it will affect the whole production line, the whole production process cannot be completed with the absent of any single machines. The maintenance period will affect the operations of company and company may incur big losses if the maintenance period is long.

### **Staffs low incentive**

The workers are doing repetitive and routine jobs every day. The routine works will make them feel bored and demotivate them. The less motive workers will affect the company productivity. Thus, motivation of workers is an important issue for the company and company has to pay attention to it.

2(b) (i) Facility Layout C: Documents and

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Diagram: Facility Layout of the Shoon Fatt's Plant in Teluk Intan, Perak

## **2. 2. 0 Diagram of facility layout and its descriptions**

The Facility layout above is the full view of the Shoon Fatt's Biscuit & Confectionery Sdn. Bhd in Teluk Intan, Perak. The Company is biscuit company. They had been produced many types of biscuit such as popcorn cracker biscuit, sugar cracker biscuit, special butter and cracker, cocoa Marie biscuit and so on . The factory is a two-storey building consists first floor and second floor.

Outside the factory, there are office, canteen, surau and toilet which near the incoming and outgoing area. After enter the factory, there is a changing room at the main entrance. It is allow the company's workers and the visitors to change the appropriate form of clothing prepared by the company. There also provided the washbasins to enable the workers and visitors to wash their hand before enter into the production area. First, we start from the company's raw material storage area and sugar & biscuit crumb grinding room. From there, we can use the staircase in the raw material storage to enter to the first floor. In the first floor, we can see that there is a raw material weighing room. The workers will lift up the require raw material of production from store room 3 which locate in ground floor since there is no wall between ground floor and first floor so it allow the flow of movement of raw material. When they get the raw material they can start to weigh the ingredient after that send to the mixing area. In the mixing area, the company has 6 huge machines to mixes the raw material, the 6 huge machines consists of 4 types of horizontal dough mixer, and 2 types of vertical dough mixer which connect with two pipes. The water and oils flow

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from the pipes into the mixers. The fermentation room is located near the mixing area and washing room is provided in the mixing area.

After the mixing process, it will be send to the dough feeding area to stores the finished dough to wait for further process. Some will be sending to the fermentation room while other which does not need fermentation will directly shift to the dough forming area in the ground floor. In this dough forming area, it is to implement the process for pressing and shaping purpose. Next the finished shaping wet dough pieces will transfer sequence to the oven area. The oven area is the baking biscuit area with a hot condition. The maintenance workshop and toilet are located near the oven area to convenient the employee during the production process.

Beside the oven area, there is wafer production area which carries out the processes like spraying oil and cooling process. Then, the finish biscuit will be transfer by machine to two different places. The two places are the packing area production line 1 on the ground floor which is for packaging of plain biscuits and packing area production line 2 in the first floor for sandwich biscuits which require extra creaming process before the packaging takes place at the assorted biscuit packing area. Both of the biscuit packing area has have their own store room.

Lastly, outside the factory there is a packaging material storage area and finished goods storage area located. The finished biscuit which finish packing from the first floor will be lifted down to store in that area. The retailer and buyers can obtain the products that they want in the delivery area. The

company wills straightforward using the forklift to shift the product to the buyer's transportation vehicle in the delivery area.

## **2. 2. 1 Analyze and address the strengths and the weaknesses.**

### **Strengths of the facility:**

#### **Fully utilized the place to run the operation**

Shoon Fatt company has designed their layout efficiently by arrange according to the direct flow of production. By using the L-shaped biscuit plant layout , they can fully utilized the available width and cut down on the length which lead to less space required between machine and the work in process inventory. It provide a good and safety working environment condition to the employees.

#### **Flexibility of warehouse**

Shoon Fatt Company stores their finished goods in the warehouse. In order to convenient the incoming and outgoing transportation to pick the finished goods easily they decide to place the product which is high ordered near to the entrance of the facility. In this way, order picking is made more efficient. The lorry and van can straight forward get the product from the delivery area.

#### **Efficient planning to the place of the store room**

They rely that their production is required the support of raw material. So that, they have build the store room at the convenient place. It is not far from the place of operations and it let employees the easily to pick raw material within short period. Besides that, the store room also near raw

material weighing room and the packing area to ease the job of workers while saving movements time and costs.

## **Weaknesses:**

### **Poor safety of the factory**

The company has hired 400 employees. Our group noticed that there is no any firefighting equipment and first-aid equipment provided at any corner of the company . This may cause the employees work under a high risk condition. If there is an emergency case occurs in the factory the whole company employees may be having difficulties to escape themselves from danger. Moreover the, the finished goods are stored in the warehouse. It will be a disaster if an accident such as a fire is occurs. They should contain first-aid requisites and should be in the charge of qualified person. Apart from first-aid boxes, it is also desirable to have a stretcher to transport injured persons to a centre where medical care can be provided.

### **Unsuitability of the building design**

Two storey building is not a suitable for a biscuit company. It may result in high production costs which have to bear by the company. As compare to the other competitor who is having single-storey, they are less effectively and efficiently as they required employing more employees to support the operation activities. Another reason is the complex and difficult to keep lifting up and down of the products. It is a waste of the energy. Materials handling becomes very complicated. A lot of time is wasted in moving them between floors.

## **3. 0 Literature Review & Contributions**

### **3. 1 Literature Review**

Quality Management is essential for a company in their industries. It may influence a company profit, reputation and competitive position in the industries. Many company use quality management as a strategic weapon for improving their competitive advance. According to Anh, Abdallah, and Yoshiki (2011), quality management has positive relationship with an organization's competitive performance. Moreover, researcher also indicate quality management system which characterized by top management leadership for quality, close customer relationship; sharp focus on process management, employees' training and participation, and Information feedback have contribute to Japanese manufacturing in gaining competitive advance at global markets. However, organizations that are ineffective at creating organizational knowledge through quality management practices will generate less improvement, which leads to lower levels of improved performance (Kevin, Roger, Srilata, & Charles, 2004) In overall, it is critical for manufacturing industries, especially food and beverages industries to focus on quality management as many researchers have proved the contribution of it for a company.

Besides that, the quality management effectiveness is different between the East Asian and the western cultures (Thomas, 2010). There are 2 GLOBE culture values which is the assertiveness and the uncertainty avoidance will affect the quality management effectiveness. The 2 factor are different between all countries in the world. Furthermore, Hale (2005) suggests that the high performance and high technology company do not trade off their

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quality management for innovation. This is because the foundation for high response of the high technology firm is provided by their quality.

It is important for every business to have some loyal customers. In order to create loyal customers, organizations usually use quality management tools such as total quality management (TQM) to design and create a product which the customer actually wants and desires. Implement TQM programs in an organization can directly and positively impacts customer satisfaction, and most importantly, this relationship is invariant across types of industries and cultures ( Mehra, & Ranganathan, 2008). According to Terziovski (2006), manufacturing firms should place more emphasis on “ soft” quality management practices for example unity of purpose and remove barrier between employees and department can have a significant in productivity improvement as well as customer satisfaction. On the other hand, food and beverages manufacturing industries production is largely depend on customers demand. In other word, quality management which generates customer satisfaction will be the main factors to determine company survivability in different industries.

According to Rui Sousa (2001), quality management can be influence by manufacturing strategy context on customer focus. Customer focus is like the starting point of any quality initiative. Customer needs and satisfaction and internal processes are context of quality management. The manufacturing strategy context are cost leadership, broad differentiator and niche differentiator. Different strategy will affect the customer’s focus and it will directly influence the quality management. Customer focus such like customer relationship, customer involvement in new product design/  
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introduction, collection of information on customer needs are all linked with manufacturing strategy. Critical context characteristics, which appear to strongly affect customer, focus practices.

According to Dong-Young Kim , Vinod Kumar, Uma Kumar ( 2010 ).

Researches are figure out the relationship between the quality management practices and innovation. The researches like to investigate the relationship among quality management(QM) practices and to explore which QM practices are directly or indirectly associated with five types of innovation. It was radical product, radical process, incremental product, incremental process and administrative. Therefore, the study of analysis result indicates that 17 out of 19 hypotheses are supported. It's clearly show that QM practices through process management are directly or indirectly associated with innovation. The innovations such like increase management leadership, provide training, quality data and reporting, process management.

According to M. Van Der Spiegel, P. A. Luning, W. J. De Boer, G. W. Ziggers and W. M. F. Jongen (2004). Food quality management has more important in the agri food sector due to various food incidents. The food-borne diseases and an increased quality awareness of consumer are getting more and more concern about the food quality management. Inappropriate management of food production operation can cause problem with the aspects such like food safety, customer satisfaction and product availability. Therefore, during produce the food, the manufacturer should have well plan for quality management such like the food quality, food store duration, food nutrition and packaging of the food. All of the actions are related to quality management.

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### **3. 2 Literature Review – Advantages**

According to the literature review, there are some advantages we can get when we implement the quality management. Firstly is the manager can learn more and understand more about the quality management practice. If the manager understands about the quality management practice, they may serve the company to evaluate the company quality standard and will improve the areas that are necessary to improved. Besides, the review also let the company know how and when they should implement their quality management strategy in different region.

The advantage of the quality management for firm in the long run is show that, when the firm are well understand about their customer and know which strategy to use to produce the good will often have the ability to complete with others competitor. This is due to the firm know what they should do and how to do to produce good that will satisfaction the customer. Besides that, innovation is the trend in nowadays. Every firm are using innovation to do business to get the opportunities to complete with their competitor. If the firm first to found the innovation, he will always be the leader and others firm will only be the followers. Innovation should be adapt by each firm and each firm should try and come out with more innovative idea in order to benefic themselves also consumers. Furthermore, food quality management is most important for food manufacturing. Because consumer evaluates your brand image, only continue with the taste of the product. If the firm food quality is not good, the brand image will be negative. If the firm brand image is negative, consumer will tend to choose other brand.



### **3. 3 Literature Review – Disadvantages**

According to the review, the quality management also has their disadvantages of limitation. The disadvantages is the firm quality performance are based on the perception only and not on the actual result and the number of firm in our study is slightly lower than in some works cited (Francisco, 2004). This means that a lot of companies use the perception only and they do not know their actual result of the effectiveness of the quality management.

The disadvantage of the customer focus, decision of manufacturing strategy decision and innovation are the program with spending a big cost. The result will be unknown after the firm made the changes. After the changes maybe the sales or firm brand image will increase but its have the possibilities that the firm make the changes in the end the result will be no changes. Besides that, making changes in the firm, the worker or the customer will adapt about it or not is still an unknown. Therefore, the management should make the decision carefully and think of all the possibilities that will occur.

### **3. 4 Shoon Fatt Biscuit & Confectionery Factor Sdn Bhd**

Shoon Fatt Biscuit & Confectionery Factor Sdn Bhd has focus on quality management since they shifted their factory to the current location and implemented various quality control departments fully equipped with instruments to measure quality at every stages of production until the products are reach customers hand. They realized the important of satisfy customers with their precise need and believed that customers first buying experience may affect their future repeat buying behaviour. Besides that, they always meet the demands of ISO 9001(quality management system) to <https://assignbuster.com/the-flow-diagram-of-the-production-processes-marketing-essay/>

ensure their company is managed to the highest quality standards which recognized globally. In fact, by concentrating in quality management, Shoon Fatt Biscuit & Confectionery Factory Sdn Bhd has expanded their market to global since year 1992.

In addition, Shoon Fatt Biscuit is providing 10 measure of the total quality management to let their manager learn and understand about the quality management. This is very important for a company because when their managers have the knowledge about the quality management, the manager can help the company to improve wherever areas are necessary to improve. Shoon Fatt Biscuit always want to meet the demand of the ISO 9000 requirement so they must ensure that the implementation of the 10 factors of the total quality management.

Besides, based on the review, Shoon Fatt Biscuit can know about their quality management whether is effective or not in our country, Malaysia. This is because there are different effectiveness of quality management based on the assertiveness and the uncertainty avoidance. If the assertiveness is low, than the quality management effectiveness will also be low. Furthermore, the high level of the uncertainty avoidance will also lead to high quality management effectiveness. So Shoon Fatt Biscuit has a high level of quality management because our country has high uncertainty avoidance and low assertiveness.

As the manufacturing strategy will affect the customer focus, Shoon Fatt should conduct different survey in order to decide which manufacturing strategy they should apply in order to gain the customer focus. For example,

Shoon Fatt may choose niche differentiator manufacturing strategy to gain the customer focus and have more compatibility to win the competitor. Besides that, innovations have to be adapted by Shoon Fatt in order to have better quality management. Shoon Fatt should improve the management leadership in order to lead the worker in the factory to achieve the goal. With all the innovation adapt by Shoon Fatt, the quality management will be increase, the sales will be increase, the profit will be increase as well. Furthermore, food quality management must be well concern by Shoon Fatt, because the food quality will directly affect the whole manufacturer. If the food quality have any negative comment or complain, it will affect the manufacturer brand image and brand equity. Therefore, quality management is very important for a firm or corporation.

#### **4. 0 Discussion and conclusion**

It is important for every process of the company production to be held as each process plays an important role to the final production of the product. There is 10 process of the company's production which is preparing & weighting, mixing & dough making, fermentation, pressing, shaping, baking, spread oil, detection , creaming and packaging. Preparing & weighting is important as correct amount of ingredient and the correct ingredient in order to produce the biscuits. Mixing & dough making is where the process of mixing of the selected ingredients to produce a dough for further process. This process is important as in order to make a biscuit, the form or dough shape is essential before further process.

Next will be fermentation where the dough is left in the dough feeding area to let it be fermented which is important in order the dough to be hardened  
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and move to the next process to produce a tasty and crispy biscuit. Pressing process is where the dough is laminated and rolled in order to ensure the standard sheet thickness of each biscuit. Shaping is where the biscuits will be shaped according to its type as it is importance to maintain a standardized quality biscuit.

Next it will move to the baking where the shaped dough will be baked in the oven in a high temperature which is control by the workers to avoid any over burnt or uncooked biscuits. Spreading oil is where the baked biscuit will be spread by oils for the biscuit to increase its appearance and the taste of the biscuit itself. Detection is where it detects any unknown material that might have been inside the biscuit to avoid any health problem issues over their biscuit by their customers. Later will be the creaming process where certain biscuit that needed to be creamed is then layered with a cream at each biscuit to maximize the taste of the biscuit . Lastly will be the packaging where the finished biscuits will be packaged according to its type of biscuit. This process is important as the workers need to ensure that every of the biscuit is placed to its right packaging.

Facility layout is important as it enable the production process to be smooth if the facility layout is placed in a strategic place. Shoon fatt has 2 storey building where office, canteen, toilet , surau and factory are situated. Their facility layout is efficient because before entering the factory, workers or visitors needs to go thru the changing room where their outfit is changed to a proper one and wear extra accessories like gloves for hygiene purpose.

From the preparing and weighting stage to packaging stage has a very proper facility layout where efficient layout is made so that movement to <https://assignbuster.com/the-flow-diagram-of-the-production-processes-marketing-essay/>

each stage is short and efficient. They are stairs to enable easy movement to any of the stage and machines that can transport the dough or product to the next particular stage. As for Shoon fatt quality management, it has implement quality control department where it is to measures the quality of every stages from the ingredient to the final product because it is important to maintain a quality where customer will perceived it as a good product and will increase the chances of having brand loyalty for shoon fatt's products.

As to maintain or strengthen the current strengths of the company production processes like capital intensive, Shoon Fatt might need to have a regular check up or maintenance so that the machine run in a perfect and healthy condition. They can also keep up to date and buy the current or latest technology to increase their production line and reduce the time of production. As for higher and standard quality, machines replace workers which the error can be minimize resulting a higher and standard quality of their product. So, regular maintenance of the machine is important to ensure a higher and standard quality product being produced. Time Saving is one of the strength of this company as the machines helps in this continuous production line. Adding machines or regular check for the machine is important as it helps the production line to save time.

As for Shoon fatt quality management, it has implement quality control department where it is to measures the quality of every stages from the ingredient to the final product because it is important to maintain a quality where customer will perceived it as a good product and will increase the chances of having brand loyalty for shoon fatt's products.

As for weakness like its low inflexible of production line, company can increase the flexibility of the production line to meet the changing market demand by reducing the setup times, as setup reduction can allow the company to produce small amount of biscuits based on preference of small customer groups to a more variety choice. Periodic inspection is needed to minimize the breakdown of any of the s