Analysis of Management of Demand and Production Capacity
(Study on One of the MSME Laundry in Batam City)

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ABSTRACT

Batam City is renowned for its industrial workers who work from morning until dawn, leaving them with no time to attend to household chores such as washing clothes. As a result, laundry services have become a solution for the busy workers in Batam City. This study aims to analyze demand management and production capacity in one of the laundry small and medium-sized enterprises (SMEs) in Batam City. A qualitative descriptive research method uses in this study. The results show that to control demand variation and optimize capacity management, the company needs to establish factors that affect demand and choose the right reservation system. Furthermore, the company must also consider the conditions of insufficient capacity, adequate capacity but adequate demand, and excess capacity but insufficient demand to optimize the function of demand management and reservation systems effectively.

To improve demand management and production capacity in laundry businesses in Batam City, the company also needs to consider other factors such as service quality, laundry delivery speed, and competitive prices. Considering these factors, the company can improve customer satisfaction and maintain its market share in Batam City. In addition, in facing increasingly tight competition, the company can also utilize technology to improve demand management and production capacities, such as online reservation applications or automated production management systems. Thus, laundry companies in Batam City can effectively and efficiently optimize demand management and production capacity to meet customer needs and maintain business sustainability.

Keywords: laundry, demand, production capacity.

INTRODUCTION

Laundry is one of the booming micro, small, and medium enterprises (MSMEs). They provide laundry services from washing to drying, ensuring that the clothes distributed to customers meet their expectations. K'fresh is a

laundry business that primarily focuses on improving its services to customers. To expand the business, we need to introduce it to the public by offering laundry services based on the total weight (kg) or monthly subscriptions to customers at a lower price than other laundry services while prioritizing quality.

The demand for laundry services is increasing, and K'fresh has over 100 monthly customers, especially among busy workers, staff, and students. Laundry services are a time-saving alternative for people with specific jobs. K'fresh maximizes its capacity on special occasions such as Eid to accommodate more customers. However, during the pandemic, demand should be kept to a minimum because many people are experiencing negative impacts on their health and income, making it crucial to manage demand for business.

Production capacity determines the capital needs and affects most of the costs. It also determines the amount of production equipment needed to fulfill the demand. Therefore, maximizing production capacity to develop and market the products is essential, increasing the business's profitability. To effectively run the business, we need to optimize the production capacity because the current processes limit adequate capacity and may be lower than other companies designed for the previous product version, as achieved by companies with the current process limitations.

This research can provide new knowledge to be learned in various fields, as discussed earlier, to understand something through a certain process, or more precisely, through research, which can provide development for certain service businesses. This can expand the analysis of production capacity in a company, making production a specific target that will be evaluated to determine whether the distributed goods will meet customer demand or provide input for the company to determine how to streamline production planning in the future. The same goes for demand management, where specific management cannot be used in various situations.

If demand exceeds capacity, the seller or company will limit demand by scheduling a long wait time, raising prices, or reducing profits. However, if it is due to unsupported facilities, it can reduce revenue, so the usual long-term solution is to increase capacity. (De Vries et al., 2018; Gurvich et al., 2019) If capacity exceeds demand, the company or seller will aggressively market or lower prices, with product changes to accommodate market share. However, when demand decreases, the factory will be controlled to adjust capacity to demand. (Bernstein et al., 2021; Guo & Wu, 2018)

There are two types of demand in inventory, namely independent demand and dependent demand. Demand can be called independent because the requested product has no relation to

other products, while dependent products are products related to other products. (Dey et al., 2019)

In economics, fluctuations can be considered as imbalances that occur so that finances are unbalanced. This triggers the price of goods to become unbalanced, going up or down. Factors that cause fluctuations include government policies aimed at maintaining the value of the national currency, which affect price fluctuations in the market. Excessive expectations about the future, because expectations of something can lead to government policies being made to achieve those expectations. However, if expectations fail, it can lead to fluctuations. International trade, if exports and imports between countries become more active, this will affect the country's economy. Changes in demand and supply, when supply is low, but demand exceeds the limit, the price of goods will increase. However, when there are many goods available, but demand is low, the price will decrease.

Production capacity concludes that the acceptance, ability, and storage of facilities and production output units in storage have reached a limit or maximum. This condition determines the amount of demand requested using existing facilities. (Sabet et al., 2020)

Forecasting can also be called the long-term basis of a company's planning. This situation is very important for management decision-making.

In finance, it is the basis of budget planning and cost control. The goal is to manage the resources needed effectively. Demand forecasting is also the foundation of strategic decision-making. Products already mature in the market generally have relatively stable demand, making forecasting demand, such as basic needs, easier. Meanwhile, products or services more sensitive to promotion will require more attention. Managing product demand aims to coordinate and supervise resources more efficiently and effectively.

Two factors affect demand: External Factors, factors that affect the demand for products or services that occur outside the company. One of them is economic development, which can affect the company's products or services. Another external factor is consumer preferences. Consumer preferences such as culottes, denim pants, shirts, or blouses will change as times change. Internal Factors are factors that affect the demand for products or services that occur within the company. For example, price, promotion, product or service, design, packaging, and the quota of sales personnel. (Novitasari & Agustia, 2021; Oláh et al., 2020)

Demand management and reservation systems, if the company wants to control demand variations, the company must determine the factors that affect demand. Several approaches can be applied to manage demand, such as doing nothing, where the company does

not add or reduce demand. This approach influences inadequate-capacity situations, adequate capacity but adequate demand, and excess capacity but insufficient demand. Reducing demand is done when demand is much greater than capacity. Increasing demand can be made when capacity is adequate. Storing demand with a reservation or booking system is storage of demand until capacity is adequate. This way, customers will be served promptly, so they do not have to wait long, like in hotels. Storing demand with a formal queue is a storage system that develops a formal queue. (Pinto et al., 2022) The company ensures customer comfort while waiting to be served. Developing complementary services or services while busy provides alternatives for waiting for customers, such as ATMs or games in the cinema lobby.

METHOD

This research uses a qualitative descriptive research method. The research method results from data with a specific purpose and usefulness. Therefore, we chose this method by determining how to search, collect, process, and analyze the research data. The basis of our thinking in this method is that this research is carried out to know the existing data in a natural condition, not an experiment. In addition, this method is suitable for use because the researcher is online or through social media.

The data collection technique used is Interviewing. In this research, the interview subjects are business owners, employees, consumers, or related parties regarding MSME K'KFRESH LAUNDRY. The descriptive method is used to collect data and information by randomly selecting a sample from a population. Then, determining the characteristics of the sample and concluding the population's characteristics based on the sample. The researcher will obtain information and data from the sample.

This research is conducted to make plans for MSME K'KFRESH LAUNDRY. The appropriate method is the qualitative descriptive method, which consists of descriptive and interview techniques. Data analysis for this research is done in as much detail as possible to describe the actual events. Then the researcher can also understand the current conditions and what is best to do for further research so that the results can be studied more deeply.

RESULT and DISCUSSION

A laundry service business is a small-medium enterprise that operates in the household service sector, which is overgrowing at present. The demand pattern in the laundry business is increasing, so employees have busy schedules daily. Therefore, with the presence of Kfresh Laundry, it will become a solution that can

lighten the human workload and save time. However, the increasing consumer demand in this laundry service business will undoubtedly pose risks to Kfresh Laundry's business, such as competitors with the same laundry service business and the quality of service. Therefore, to maintain Kfresh Laundry's business, a strategy is needed to analyze various problems that will be faced, such as weaknesses, strengths, opportunities, and threats, or SWOT for short. With SWOT, Kfresh Laundry can compare its business results with other laundry businesses. Data analysis can be obtained in various ways, such as through interviews or observations, while for data sampling, the questionnaire method can be used from respondents who have visited Kfresh Laundry. With the technology available today, it will undoubtedly be easier to maintain Kfresh Laundry by promoting it through popular media such as Instagram, YouTube, and others and rewarding customers for making them loyal and attracting other consumers' attention.

KFresh Laundry is a small-medium enterprise that operates in the service sector. Kfresh Laundry provides services in the form of laundry, and the process is quite simple, such as washing clothes and drying clothes until the clothes are ready to be given back to the customer. In addition, KfreshLaundry washes clothes and offers other services, such as washing dolls, shoes, and bed sheets. This laundry business has a lower risk than other businesses, such as culinary and others, because this laundry business can be done at home, so there is no problem finding a place to open a business or renting a place.

Demand management has two techniques: independent demand and dependent demand. Independent demand is self-sufficient demand because the requested product does not require the assistance of other products, while dependent demand is the opposite of independent demand, where the product requires assistance from other products. Production capacity management is a task that involves accepting and storing stock items and the output-input amount of a product. Production capacity has three parts: design capacity, adequate capacity, and efficient capacity. The design capacity is the output of a system that runs from one specific time to another. Adequate capacity is the maximum output of an operation, and adequate capacity is the production of products that have high quality. The raw materials used are relatively easy to obtain. Efficient capacity is the design result of a company's targets for its products. The design result is seen from where the company produces its products and the tools or machines used to produce its products.

Effective production demand management carried out by laundry can increase productivity so that the improvement of laundry quality can satisfy customers.

The demand pattern analysis carried out by Kfresh Laundry is through forecasting, which is very important when making management decisions. Therefore, we can control budget planning and management expenses with this forecast. Not only that, but forecasting can also control the human resources needed by the company to be more stable, such as basic needs and warehouse stocks. Moreover, two factors impact this demand: external and internal. External factors affect products and services outside the company. In contrast, internal factors affect the company's demand for products and services, such as product prices, product promotion, product design, and others. (Novitasari & Agustia, 2021)

The reservation system implemented at Kfresh Laundry is intended to increase the number of consumer demands when production capacity is still stable, creating a system of appointments so that the service provided to consumers does not take too long and developing a service system that provides good service to customers so that they feel delighted with the service they receive.

Based on the examination of information and the final results obtained in this review, the author provides ideas or suggestions that Kfresh Laundry can consider achieving its targets and win the competition, as well as recommendations for further research. Kfresh Laundry's administration must always strive to improve management qualities, including the five variables, especially reliability, responsiveness, assurance, empathy, and assurance, particularly in the reliability and assurance segment. (Foster & Sidharta, 2019) Overall, the quality and recognition are satisfactory, but there are some minor issues, such as the need for scent in clothes, which can be overcome by adding scent liquid. In addition, laundry pick-up data can be improved by preparing employees and expanding the consistency of work execution. Kfresh Laundry's administration must work on stable execution by controlling the washing and drying processes and always maintaining the commitment that has been made. Satisfaction can make clients fulfilled and eventually loyal, so they will continue to use Kfresh Laundry without hesitation. Tangible factors are one of the most dominant factors in developing client loyalty. Therefore, the company must focus on and continue to work on these elements. Respondents generally express disappointment with the interior appearance and employee appearance, which can be addressed by adding extra nuances to the store's presence, such as serious clothing, more attractive variations, and a friendly and clean employee during the ongoing representation. (Kurniawan & Sidharta, 2016) Although uniforms have been worn, the appearance must be more convincing. Although tangible variables may not seem essential, tangible factors have the most dominant

influence. Expanding the drying machine to speed up the clothes drying system can meet client demands.

CONCLUSIONS

Demand management and reservation systems are necessary if the company wants to control demand variations. This is influenced by inadequate capacity situations, adequate capacity but inadequate demand, and excess capacity but insufficient demand.

If the demand exceeds the capacity, the seller or company will limit the demand by scheduling a long wait time, increasing the product's price, or reducing the profit. Conversely, if the capacity exceeds the demand, the company or seller will market aggressively or lower the price, accommodating changes in the product market share.

To address the competition in laundry services, focusing on shoe washing and offering more shoe-cleaning services is recommended. Many clothing laundries are available, and shoe cleaning services still need to be discovered to the public. In the local area, many young people and adults love branded and mid-range shoes, but they may need to learn how to properly handle or care for them. This approach could be another opportunity for Kfresh Laundry to catch up with the competition by offering shoe cleaning and maintenance services.

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