Jurnal Ekonomi Kreatif dan Manajemen Bisnis Digital
Volume 1 (1), 2022: 59 - 78
E-ISSN: 2961-8428

DEMAND MANAGEMENT AND PRODUCTION CAPACITY IN J.LAUFLUEURS SMEs

Ana[1*], Danielson[2], Jessica Novia[3], Kenny Marcella[4], Nia Russiana[5], Veni Sisca[6]
[1-6]Faculty of Economics, Universitas Internasional Batam
E-mail: [1)] 2041020.ana@uib.edu, [2)] 2041035.danielson@uib.edu,
[3)] 2041040.jessica@uib.edu, [4)] 2041008.kenny@uib.edu, [5)] 041009.nia@uib.edu,
[6)] 2041002.veni@uib.edu

Abstract

In running a business, especially in the service sector, management and production capacity is one of the keys to success. This is because with both of these things being good, the opportunity for shortages and excess production will be avoided. In this study, MSME J.Laufleurs became the object of research and the objectives to be achieved were knowing the pattern of demand, the reservation system used, and how to manage demand and production capacity. This study utilizes qualitative data analysis methods in the form of interviews and documentation, as well as quantitative data analysis methods, namely graph/table analysis. Through the results of the analysis, researchers know that over the last three years MSME J.Laufleurs has increased by 15% every year. In addition, researchers also found problems in this business, namely the lack of manpower in producing bouquets which can increase demand when there are certain events, the working hours applied are considered insufficient and subcontracts are still unable to cover production capacity. Overall for the last three years, J.Laufleurs' business has been doing well, this is evidenced by the increase in production every year. However, so that in the future the management of demand and production capacity can run better, the researcher would like to recommend that J.Laufleurs can add workers, work overtime hours and subcontract 2 people, 1.2 hours and 12 units, respectively.

Keywords: *Demand, Capacity, Management*

Abstrak

Dalam menjalankan suatu usaha khususnya di bidang jasa, manajemen dan kapasitas produksi merupakan salah satu kunci keberhasilan. Sebab dengan kedua hal tersebut baik maka peluang terjadinya kekurangan dan kelebihan produksi akan dapat dihindari. Dalam penelitian ini UMKM J.Laufleurs menjadi objek penelitian dan tujuan yang ingin dicapai adalah mengetahui pola permintaan, sistem reservasi yang digunakan, serta bagaimana mengelola permintaan dan kapasitas produksi. Penelitian ini menggunakan metode analisis data kualitatif berupa wawancara dan dokumentasi, serta metode analisis data kuantitatif yaitu analisis grafik/tabel. Melalui hasil analisis, peneliti mengetahui bahwa selama tiga tahun terakhir UMKM J.Laufleurs mengalami peningkatan sebesar 15% setiap tahunnya. Selain itu, peneliti juga menemukan permasalahan dalam usaha ini yaitu kurangnya tenaga kerja dalam memproduksi karangan bunga yang dapat meningkatkan permintaan saat ada event tertentu, jam kerja yang diterapkan dianggap tidak mencukupi dan subkontrak masih belum mampu menutupi kapasitas produksi. Secara keseluruhan selama tiga tahun terakhir, bisnis J.Laufleurs berjalan dengan baik, hal ini dibuktikan dengan peningkatan produksi setiap tahunnya. Namun agar kedepannya pengelolaan permintaan dan kapasitas produksi dapat berjalan lebih baik,

[1]Faculty of Economics, Universitas Internasional Batam
Ana
*E-mail: 2041020.ana@uib.edu

peneliti menyarankan agar J.Laufleurs dapat menambah tenaga kerja, jam kerja lembur dan subkontrak masing-masing 2 orang, 1,2 jam dan 12 unit.

Kata kunci: Permintaan, Kapasitas, Manajemen

INTRODUCTION

Since the turn of the 20th century, technological progress has continued to evolve rapidly and in a complex manner (Teguh, 2019). Internet usage is inextricably linked to technological advancement. In terms of internet usage in Asia, Indonesia ranks third (Kusnandar, 2021) Especially during the Covid-19 pandemic, this motivates many MSMEs to adopt technology within their operations (Mitra, 2020). The managed business begins to use various platforms, such as websites, blogs, and social media. In addition, these micro, small, and medium-sized enterprises have begun to offer service sector businesses to their customers, such as the bouquet service business.

The bouquet business is one of the innovations in the service industry that is currently in high demand. This is due to the fact that this business does not require a substantial amount of capital, but can provide high-value items such as home decoration decorations, birthday gifts, and gifts for special occasions, among others (Azizah, 2022). As business actors, we must be able to offer and demonstrate the superiority of the offered services in order to increase demand and production. Inseparable from the management of production capacity is the provision of superiority in the products and services offered.

Production's important processes include production capacity management. Where production capacity is the maximum quantity that business actors with available resources are able to produce within a given time frame. To be able to produce a product to meet customer demand, careful planning of production capacity is necessary. The number of available human resources, the skills and expertise of its human resources, the quantity of available raw materials and auxiliary materials, and the level of work productivity can all influence a company's production capacity (Fahmi, 2020).

According to the findings of Muzayannah Jabani (2015), human resources play an important role in the production of services for the company. This is a result of the emergence of new technologies, globalization, organizational reorganization processes, and racial differences in the workforce. It can be said that these factors will produce uncertainty

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and that this has been anticipated; therefore, the company is obligated to develop its business and prepare an effective human resource plan in accordance with the determined plan in order to mitigate the risk associated with the uncertainty.

J. Laufleurs is one of the Batam City MSMEs that provides bouquet services. These small and medium-sized businesses offer their services online via Instagram and WhatsApp. The company of J. Laufleurs offers its services to produce bouquets, including flower bouquets, chocolate bouquets, money bouquets, and other types of bouquets. J.Laufleurs does not have a mature production plan for bouquet products; instead, they calculate production capacity based on the previous month's experience of MSMEs. Consequently, many SMEs are unable to meet customer demands and lack production capacity. J.Laufleurs has never taken any action other than refusing to provide services to customers in response to this issue. This will undoubtedly have a negative impact on the customer ratings of these SMEs. Consequently, it is essential for every SME to implement production capacity planning and demand management.

Figure 1 Material Storage Warehouse

Besides being able to avoid receiving bad ratings from customers, the existence of production capacity management and demand management will bring other benefits, namely limiting peak demand, managing raw material capacity more effectively so that costs are minimized, and many other benefits (Basiliusageng, 2017).

The preceding context encourages the author to investigate the demand pattern for MSMEs by J.Laufleurs, so that by understanding the demand pattern, they can determine the optimal way to manage demand and production capacity. In addition, you can determine which reservation system J.Laufleurs SMEs use.

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The purpose of this paper on J. Laufleurs MSMEs is to determine the demand pattern for J. Laufleurs MSMEs, how to manage demand and production capacity, the production capacity of J. Laufleurs MSMEs over the past three years, and the optimal reservation system for J. Laufleurs MSMEs. It is anticipated that this paper will serve as a reference for future authors, and MSMEs will be able to comprehend the demand and production capacity and apply the author's suggestions in order to increase profits. In addition, the author is expected to utilize the lecture-learned information.

THEORETICAL BASE

Demand and Capacity Theory

A. Demand Theory

Demand is the quantity of a product that consumers are willing to purchase and pay for at a given price and time (Andrew, 2020). Demand theory is a law that describes the relationship between the quantity of a product demanded and its price, assuming that all other factors influencing demand remain constant (Hayes, 2020). According to this theory, the demand for a commodity is inversely proportional to its market price (Liu & Song, 2021).

If the quantity demanded exceeds the quantity supplied, there is excess demand (Cahya & Maula, 2021). In this situation, the market price will be less than the equilibrium price, and if the mechanism is effective, the price will rise to the new equilibrium level (Nasrudin, 2022). Demand can generally be categorized based on a variety of factors, including the nature of a product, its purpose, the number of consumers and the number of suppliers. Here are the various types of requests: (Nikmatul et al., 2020).

1) Individual and Market Demand

   Individual and market demand is a demand that can be classified based on the number of consumers in the market. Individual demand is the quantity demanded by each individual for a product at a certain price and time, while market demand is a collection of individual requests for a product at a certain price and time, where other factors are constant (Husan Mulachela, 2021).

2) Organizational and Industry Demand

   Organizational and industrial demand is a classification of demand based on the market. Organizational demand is the demand for products in an organization at a

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certain price and time, while industrial demand is the total demand for products in all organizations in a particular industry (Husan Mulachela, 2021).

3) Autonomous and Derivative Demand

   Autonomous and derived requests are types of requests that are divided based on dependence on other products. Autonomous demand or direct demand is the demand for a product that is not related to the demand for other products and this demand will arise if there is a natural desire from each individual to consume a product, while derivative demand is the demand for a product that arises due to demand from other products. Demand for substitute and complementary goods is also a derivative demand (Husan Mulachela, 2021).

4) Demand for Perishable and Durable Goods

   Both requests are classified based on the use of the goods. Goods are divided into two categories, namely perishable goods and durable goods. Items that are easily damaged or are not durable are items that have disposable properties, while durable items are items that can be used repeatedly (Husan Mulachela, 2021).

5) Short-Term and Long-Term Demand

   Both requests are classified by time period. Short-term demand is the demand for a product that is used for a shorter period of time. This demand depends on the current tastes and needs of consumers, while long-term demand is the demand for the product for a longer period of time. Generally, durable goods have long-term demand (Husan Mulachela, 2021).

B. Capacity Theory

Capacity is an action that ensures an organization can maximize its activities and production results at all times and in all circumstances. Capacity is the measurement of a company's ability to accomplish, produce, and sell a product within a given time frame (Kenton, 2021). This is due to the fact that changes in conditions, external influences, and unanticipated macroeconomic events can have an effect on a company's capacity. With this, the organization must be able to continue meeting expectations while reducing expenses. Implementing capacity will require overtime, outsourcing of business operations, the purchase of additional equipment, and the rental or sale of commercial real estate. When production capacity cannot be utilized to its fullest extent in order to achieve the minimum

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efficient scale, there is excess capacity. In other words, the business is producing a smaller volume of output than anticipated (Lestari, 2016).

Non-current capacity management practices can result in a revenue decline for businesses. This is the result of orders that cannot be filled, a decline in customers, and a decline in market share. Companies that launch innovative new products with aggressive marketing must therefore account for demand spikes. Faced with the difficulties inherent to the effort, businesses must be able to produce at full capacity while minimizing production expenses.

Capacity can be classified into several types including the following:

1) Productive capacity, the amount of work center capacity required to process all production jobs currently listed in the production schedule.
2) Shielding capacity, an additional layer of production capacity that is maintained to provide additional units as needed to keep bottleneck operations from running out of work.
3) Idle capacity, all remaining unused capacity is considered idle. Only this layer of production capacity can be safely removed without affecting the work center's ability to meet all anticipated needs. However, idle capacity should not be eliminated if there is an occasional spike in demand, as additional capacity will be required to deal with it (Riadi, 2020).

Types of Fluctuations in Demand for Services

Fluctuations in demand are conditions that cause price changes as a result of the interplay between supply and demand. The price will increase proportionately to the level of demand. Conversely, as demand decreases, so will the price (Pratama, 2021). In a market, it is inevitable that consumers will seek to satisfy their daily requirements. In most cases, these requests pertain to the manner in which their needs are met to their satisfaction.

In order to make a request, an adjustment must be made between the demand and the income that consumers receive. The number of requests will decrease if the amount of money earned rises. In addition to income, price also plays a significant role in determining consumer demand. When the price of a good or service rises or becomes costly, the number of consumers will decrease. In contrast, consumers will develop a sense of loyalty if the price of the goods or services is relatively low.

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There are two types of fluctuations in the demand for services: short-term and long-term fluctuations. The daily rise and fall of foreign currencies, such as the Singapore dollar versus the Indonesian rupiah, are examples of short-term fluctuations. The impact of fluctuating currency values on a daily basis can be positive or negative. Long-term fluctuations, such as those that occurred during the Covid-19 pandemic, led to the up-and-down movement of currency values. The approach of capacity theory

Production Capacity Management

In conducting this research, the author utilizes a number of references from previous research studies as reference material. This research study is used as a resource for analyzing the benefits and drawbacks that have existed in the past. Included among these studies are:

1) The first research study on case studies written by Rozaqi and Ir. Asmuungi entitled "Planning Production Capacity to Meet Demand Using the Rought Cut Capacity Planning (RCCP) Method" which stated that the company suffered losses due to failure to fulfill scheduled consumer demand. Thus, the profits obtained by the company become less than the maximum. To solve these problems, the company must design a plan related to production capacity to facilitate the production of consumer demand. The method created in this case is the RCCP method. From this method, it is found that there is a shortage of work center production capacity, namely coloring, blocking and night cleaning. From here, the researcher again proposes suggestions to increase the number of machines in the blocking and night cleaning work center. If after the addition of the machine the blocking work center has not been fulfilled, it can be adjusted to the workload that is still experiencing shortages (Rozaqi, 2021).
2) Production capacity planning can be done through data collection such as data on the number of working days, product demand data, and time for product manufacture. Processing data from the results that have been found can use aggregate planning, master production schedules and RCCP methods to determine the company's production capacity. From this research, it is found that the total production capacity of the company is 22 working days with regular time capacity with 308 hours for product manufacture and the output per unit is 221.76. By using the RCCP method, it is expected that the company can maximize production planning in meeting consumer demand Processing data from the results that have been found can use aggregate planning, master production schedules and RCCP methods to determine the

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Demand Pattern Analysis

There are four types of demand patterns in time series forecasting: seasonal, trend, cyclical, and random. A seasonal pattern is a pattern that exhibits fluctuating data, but these fluctuations can be observed repeatedly over a period of time, hence the pattern's name. In addition, the naming of the pattern was determined by seasonal demand. According to seasonal patterns, there are three forecasting methods: the weight moving average method, the moving average method, and the winter method (Praveen et al., 2020).

Long-term changes in demand data are illustrated by the trend pattern. If data is observed to fluctuate over a long period of time and a trend line can be drawn, this line is commonly referred to as a virtual line (Praveen et al., 2020). The exponential smoothing method, the double exponential smoothing method, and linear regression are forecasting methods present in this pattern. Typically, the linear regression method produces the smallest error rate.

A cyclical pattern is one that displays long-term fluctuations in demand that form a wave-like pattern. Similar to the seasonal pattern, this pattern is cyclical. The distinction lies within the resulting waveform. The inability to use time as a guide makes it difficult to determine this pattern data. There are three forecasting methods based on the trend pattern: the weighted moving average method, the moving average method, and the exponential smoothing method. Erratic random pattern is a pattern that depicts fluctuations in demand data over the long term that cannot be explained by the other three patterns. Typically,

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demand fluctuations are ambiguous and even random, so there is no recommended method for utilizing this pattern in forecasting (Febriani, 2022).

Request Management

Demand management is a method that facilitates the fulfillment of requests by the supply chain. A second definition of request management is a method of relying on the fact that people's demand profiles are actively structured so as to be very simple and efficient to meet. Demand management can be compared to altering a pattern so that the supply chain can easily recognize it. If forecasting only views demand as a given input, then demand management will recognize that the input pattern must be altered before it can enter the production management process, which includes forecasting, procurement of raw materials, production of goods, and shipment of products to customers. Typically, a company will not directly incorporate the request into production management, forecasting, the procurement of raw materials, the production of goods, or the goods delivery to customers. However, it will influence the pattern first so that it is more stable (Didikjunaidi & Mas'ud, 2019).

Reservation System

Customers use the reservation system to place orders for goods or services at a specific time (Falihah et al., 2021). According to Setyawan and Wijayanti (2014), a reservation is an order that is placed prior to a specified time through multiple sources using multiple ordering methods to ensure that the order will be delivered on time. The second is that, according to Monahgan (2006), reservation is a clerical process where the product is readily available and can be bought directly.

The advantage of the reservation system is that customers can select the desired model and determine their budget; when there are additional orders, the owner can offer a discount for bulk purchases, thereby enhancing the store's reputation (Khwaldeh, 2020). There are four types of reservations: confirm reservation (order of products that have been approved by showing proof of delivery), guaranteed reservation (guarantee reservation if there is a defect in the product, the manufacturing process will be repeated), advance payment reservation (at this stage you must pay a down payment / down payment), and waiting list reservation (at this stage, the owner must determine whether the product can be ready at the specified time) (Boston, 2021).

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RESEARCH METHOD

The MSMEs that we use as research locations are J. Laufleurs. J. Laufleurs is located in Batam City, Riau Islands Province. The goal to be achieved through this activity is to increase the effectiveness of the MSMEs in meeting the demand and production capacity of bouquet products. To be able to achieve this goal, there are several methods that must be done, namely the addition of manpower, working hours and subcontracting. The methods to be implemented in this activity are the stages of discussion, implementation, monitoring, and evaluation.

1) Discussion Stage

   In this stage, the author will approach the owner through discussions regarding problems and recommendations given by the writing team. The goal to be achieved through this discussion stage is to unite the opinions of the author team and MSME owners so that the recommendations given can run well.

2) Implementation Stage

   After going through the discussion stage, the second stage is implementation. In this case the author will help find workers who have qualifications in accordance with the needs of MSME J Laufleurs. In addition, adjustments will be made to working hours and subcontracts.

3) Supervision Stage

   After the recommendations have been implemented, the writing team will monitor the sustainability of these activities. In addition, the author will also help ensure that everything goes as it should according to the results of discussions with MSMEs.

4) Evaluation Stage

   The last stage is evaluation. In this stage, the author will evaluate all the activities that have been carried out. There will be an assessment of how effective the recommendations are in meeting demand and bouquet production capacity. In addition, the author also wants to evaluate whether there are consumer orders that still cannot be fulfilled after the implementation of the recommendations given. So that if the objectives have not been able to be fully met, in the future further development can be carried out to overcome existing problems.

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Analysis Design Procedure

In carrying out this analysis, it will be explained about the process that was passed by the author to obtain the implementation method which is a stage that must be applied so that the research process can run with direction and make it easier for the author to conduct an analysis of the management of demand and production capacity at J. Laufleurs SMEs. The stages of the process of analyzing how to manage demand and produce at J. Laufleurs SMEs will be explained in general terms, as follows:

1) Literature Survey

   In this stage, researchers collected data in the form of literature, made observations to J.Laufleurs SMEs, conducted interviews with J.Laufleurs, Mrs. Juniyanti through the WhatsApp platform, and searched for other related information.

2) Identification of problems

   The problem that the author's group found through observations, surveys, and interviews was the lack of maturity in production planning on the part of J. Laufleurs so that MSMEs often failed to meet customer demands and lacked production capacity. Therefore, the author's group conducted an analysis related to the conflict, with the aim of assisting MSMEs in implementing production capacity planning and demand management in order to overcome the existing problems.

3) Data collection

   The data collected comes from interviews with J. Laufleurs, so the accuracy of the data used can be guaranteed.

4) Data analysis

   The researcher analyzes the data that has been collected, then relates it to the theories that have been studied such as the theory of the types of fluctuations in demand for services, production capacity management, demand pattern analysis, demand management and reservation systems.

5) Draw a conclusion

   Researchers draw conclusions based on research and data analysis that has been done. The conclusion contains how to implement ways of managing demand and production capacity in J. Laufleurs SMEs.

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Data Retrieval Method

The qualitative method used in sampling and analyzing this data is interviews. Interview is a method that is often used by researchers in taking relevant data to be processed into information. In this case, we conducted an interview with the business owner of J. Laufleurs, Mrs. Juniyanti. The core of the question posed is how is the background? J. Laufleurs effort, how much is the estimated customer request received every month as well as the production capacity of J. Laufleurs, has J. Laufleurs ever experienced difficulties in producing customer requests, has there ever been a failure in fulfilling customer requests, and so on.

Next is the documentation method. In this method, the data collection media used in taking data samples is the J. Laufleurs product sales report document for the last 3 years, namely 2019 to 2020. With this report, it will certainly make it easier for the group of writers to analyze customer demand in a period as well as the ability to SMEs in carrying out production on the products provided.

The quantitative method used in sampling and analyzing this data is graphical analysis. In this study, a graph of demand and production will be presented. This aims to make it easier to analyze demand patterns and the production capacity of J. Laufleurs MSMEs.

RESULT AND DISCUSSION

Based on the observations made by the author, for the last 3 years the demand for J. Laufleurs products has always increased. In 2019 the demand for ordering J. Laufleurs flower bouquets in Batam were 3.339 pieces. Furthermore, in 2020 the demand will increase to 6,255 pieces and in 2021 the demand for J. Laufleurs products will increase to 7.336. The following tables and graphs of demand are presented.

Table 1. Demand for J. Laufleurs Products in 3 years

Month	2019	2020	2021
January	150	450	555
February	220	567	578
March	245	565	688
April	200	337	693
May	290	610	700

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Month	2019	2020	2021
June	344	604	457
July	156	339	788
August	331	538	444
September	274	443	788
October	353	679	336
November	357	345	564
December	419	778	745
Total	**3339**	**6255**	**7336**

Source: J. Laufleurs Sales Report

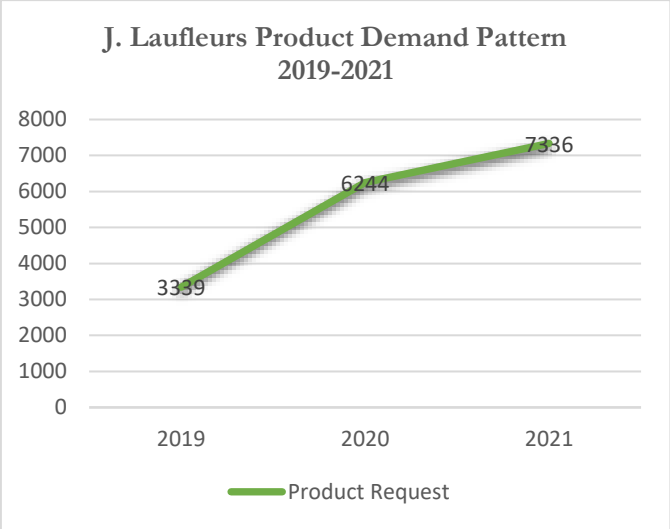

Figure 2. The Pattern of Demand for J.Laufleurs Products in the last 3 years

Based on the table and figure above, it is known that J. Laufleurs has a trend demand pattern. The trend will prove a shift in demand with a gradual upward or downward movement pattern over the long term. From the graph, it is shown that for three years, demand has been increasing with a rare trend of decreasing market demand. Trends are the easiest pattern to detect demand behavior and are usually the starting point for developing forecasts.

According to Nguyen & Huang (2011), sales forecasts are carried out by utilizing several forecasting techniques, including checking whether the techniques used are accountable. The author collects, uses and analyzes previous data and interprets future

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events, then sales forecasts can be designed. For SMEs, sales forecasts are even very helpful for overall planning.

Figure 3 Visitation to Partner Location

The method used in this study is moving average prediction because this method is one of the simplest business forecasting models and is used to predict future situations using historical data sets. The dataset here contains the company's previous annual sales. Based on the results of sales data obtained by the company over the last three years, the increase in demand is stable or the demand data has not changed significantly (Maulidah, 2012).

J.Laufleurs Business Production Capacity Analysis

The production capacity of J. Laufleurs in one day is 20 bouquets to 30 bouquets. Meanwhile, if there is an event, the production capacity of J. Laufleurs increases, to around 200 to 400 bouquets depending on the type of event. Making a bouquet takes around 10 to 30 minutes depending on the model desired by the consumer.

With the increasing production of bouquets at J. Laufleurs, a suitable workforce is needed. Here is an example of the calculations needed by J. Laufleurs:

$f_t = \frac{(Cr-Ca)}{Ca/f}$ $f_t=\frac{(Cr-Ca)}{Ca/f}$

ft $=\frac{(15-9)}{9/3}$ ft $=\frac{(200-27)}{27/3}$

ft = = 2 people$\frac{6}{3}$ ft = = 19.2$\frac{173}{9}$

= 19 peoples

Information:

Ca : available production capacity (hours)

f_t : estimated demand in period t

Cr : required production capacity (hours)

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F : number of workers in the company (persons)

Based on the above calculations, the results obtained are that:

1) The calculation on the left is the calculation on a weekday. So, it can be seen that J. Laufleurs requires an additional 2 people. This aims to be able to meet the production capacity of J. Laufleur
2) The right calculation is the calculation when there is an event. Generally, orders will increase on H-1 and H+1 events. So, J. Laufleurs needed an additional 19 people to fulfill the production capacity.

The addition of overtime hours can increase production capacity. The following is an example of calculating the additional hours of overtime needed by J. Laufleurs:

$\int = \frac{(Cr - Ca)}{f}$ $\int = \frac{(200-27)}{22}$

$\int = \frac{(15-9)}{5}$ $\int = \frac{173}{22}$

$\int = \frac{6}{5}$ = 1.2 hours $\int$ = 7.8 = 8.2 hours

Information:

$\int$: Overtime hours at J.Laufleurs

Ca : available production capacity (hours)

Cr : required production capacity (hours)

Ft : number of workers in the company (persons)

Based on the above calculations, the following results were obtained:

1) On weekdays J. Laufleurs requires overtime hours of 1.2 hours from the usual closing hours. J. Laufleurs closing hours are at 4 o'clock so to meet the production capacity J. Laufleurs must close at half past 6
2) On the left is the calculation for the 3-day event. So, every day J. Laufleurs need overtime for 3 hours 10 minutes.

Subcontracting can cover a shortage of production capacity. The following is an example of calculating J. Laufleurs subcontract needs for the November 2019 period:

Sk = Fn - $\frac{Ca}{Wp}$ Sk = Fn - $\frac{Ca}{Wp}$

Sk = 30 - $\frac{9}{0.5}$ Sk = 400 - $\frac{27}{0.5}$

Sk = 30 – 18 Sk = 400 - 54

Sk = 12 units Sk = 346 units

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Information:

Sk : Sub-contract J.Laufleurs

Wp : product processing time (hours)

Ca : available production capacity (hours)

Fn : number of production requests (units)

Based on the above calculations, J.Laufleurs requires a subcontract of 12 units on weekdays in order to meet capacity requirements. While the event requires a subcontract of 346 units in order to meet the production capacity during the event.

J. Laufleurs Business Reservation System Analysis

To avoid a flood of orders, J Laufleurs made a reservation system. Consumers can order 3 days before the event. Reservations can be made by contacting J Laufleurs via Instagram or WhatsApp. Consumers will be asked to fill out a form provided by J Laufleurs. Furthermore, consumers make a DP as a sign so.

Figure 4 Bouquet Order Reservation

Since the reservation system implemented by J. Laufleurs is less efficient, we would like to give a recommendation, namely the guarantee reservation system. This type of reservation will provide a guarantee or guarantee to the customer. We recommend implementing this reservation system so that customers feel safe and calm when sending

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flowers. Not only that, customers will also feel worth it to buy the product. Because there is a guarantee in the event of damage to the flowers during delivery.

CONCLUSION

Conclusion

J Laufleurs is one of the MSME located in Batam City which is engaged in bouquet services. J Laufleurs offers online services via Instagram and Whatsapp. The services offered by J Laufleurs are in the form of making flower bouquets, chocolate bouquets, money bouquets, and other types of bouquets. This bouquet is usually ordered by teenagers to adults for events such as birthday celebrations, anniversaries, graduations, valentines, and other events.

Based on the results of the research that has been done, it can be concluded that during the last three years MSME J Laufleurs has increased by 15% every year. This increase causes J Laufleurs to be unable to meet consumer demand. Especially when there are certain events, J Laufleurs has difficulty meeting consumer demand. J Laufleurs' failure to meet consumer demand will lead to a negative consumer assessment of MSMEs. Because the demand cannot be fulfilled, J Laufleurs will indirectly refuse this because there is no other solution for J Laufleurs to meet consumer demand. Hence, to meet production demand, J Laufleurs must increase its production capacity. Some solutions that can be done by J Laufleurs are by adding more workers, increasing working hours, and subcontracting (company method). From the calculations that have been done, here are some additional solutions that can be done by J Laufleurs to meet the following production capacity:

1) Additional manpower: that J Laufleurs requires an additional 2 people on weekdays. Meanwhile, when there is an event J Laufleurs requires an additional 19 people to meet production capacity. This aims to be able to meet the production capacity of J Laufleurs
2) Additional overtime hours: On weekdays J Laufleurs requires overtime hours of 1.2 hours from usual closing hours. J Laufleurs closing hours are at 4 o'clock so to meet the production capacity J Laufleurs must close at half past 6. Meanwhile, at the event J Laufleurs requires overtime for 3 hours 10 minutes every day of the event.
3) Subcontract: J Laufleurs requires a subcontract of 12 units on weekdays to meet capacity requirements. Meanwhile, at the time of the event, 346 units of subcontracts were required in order to meet the production capacity at the event.

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In addition, to avoid over-orders, J Laufleurs can implement a reservation system, and conduct surveys on customer satisfaction and buying interest. With the customer satisfaction survey, of course this will make it easier for MSMEs to analyze what bouquets are in demand or which are trendy.

Consumers can order a bouquet well in advance of the event. Consumers can order a bouquet through J Laufleurs' social media. Because the reservation system is considered inefficient, we provide recommendations for the implementation of a guarantee reservation, and the addition of a creative and innovative workforce. The results of the implementation of this reservation system have a good impact on sales. Customers are satisfied with J.Laufleurs products and services. Therefore, J. Laufleurs only needs to be consistent in applying it so that the results obtained are even better.

Recommendation

From the research that has been done, there are several suggestions that the author wants to give, namely the author hopes that the next research can be done by paying attention to overhead costs at J.Laufleurs SMEs such as electricity costs, machine maintenance and so on, so that cost comparisons can be more detailed and accurate, then with The existence of this research is expected to be used as a consideration for the company in overcoming the lack of capacity that occurs in the company.

To avoid failure in fulfilling customer demands, the authors would like to suggest to MSMEs to conduct surveys on customer satisfaction and buying interest more often. With the customer satisfaction survey, of course this will make it easier for MSMEs to analyze customer opportunities to repurchase. In addition, surveys of customer buying interest can also be carried out by utilizing technology such as current social media. According to the author, Instagram is one of the right media in conducting the survey. Therefore, the authors suggest that MSMEs are able to take advantage of the poll, question and answer features and other features to communicate with their followers and customers regarding their interests and what types of bouquets are in demand or trendy.

In addition to conducting a survey, the author also wants to provide suggestions so that J.Laufleurs SMEs can add creative and innovative workers to help complete orders received from customers so that they are able to overcome problems related to failure to fulfill requests. In addition, with the additional workforce, of course all production will take place more quickly, effectively and efficiently.

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Then the author also wants to suggest that the MSME J. Laufleurs place more emphasis on the quality of the products provided. With the high quality provided, it is expected to be able to satisfy customers so that they can maintain consumer demand in the long term. Furthermore, MSMEs must also be able to carry out an analysis related to the budget owned by their customers from all walks of life. By providing bouquet products that have friendly prices with pockets belonging to customers from all walks of life, it will certainly be an added value in developing J.Laufleurs' business.

REFERENCES

Aji, D. K. (2020). *Perencanaan Kapasitas Produksi Untuk Memenuhi Permintaan Konsumen Dengan Menggunakan Metode Rough Cut Capacity Planning (RCCP)*. 1–16.

Andrew. (2020). *Pengertian Teori Permintaan Beserta Penjelasannya*. Gramedia.Com.

Azizah, U. N. (2022). *Ide Bisnis Buket UMKM yang Dapat Mendatangkan Cuan*. Mahasiswaindonesia.Id.

Basiliusageng. (2017). *Pengelolaan Permintaan*. Anakugdepok.Wordpress.Com.

Boston. (2021). *Pengertian Reservasi: Manfaat, Jenis, Tugas dan Tanggung Jawab*. Amesbostonhotel.Com.

Cahya, N., & Maula, K. A. (2021). Faktor-Faktor Yang Mempengaruhi Penawaran Dan Permintaan Bahan Pokok Di Indonesia. *Transekonomika: Akuntansi, Bisnis Dan Keuangan*, *1*(4), 311–320. https://doi.org/https://doi.org/10.55047/transekonomika.v1i4.56

Didikjunaidi, & Mas'ud, I. (2019). Penerapan Metode Forecasting dalam Perencanaan Produksi Bakpia dengan Menggunakan Software POM guna Memenugi Permintaan Konsumen. *Journal Knowledge Industrial Engineering (JKIE)*, *5*(1), 121–127.

Fahmi, A. N. (2020). *Penentuan Alternatif Perencanaan Kapasitas Produksi Untuk Memenuhi Permintaan Pelanggan*. Universitas Pembangunan Nasional Veteran Yogyakarta.

Falihah, N., Siti, A. E., Kusdi, R., & Andriani, K. (2021). Online Reservation System and Online Customer Review: Its Impact on Brand Image, Trust and Hotel Booking Decision. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, *5*(4).

Febriani. (2022). Analisis Perencanaan Persediaan Bahan Baku Dengan Menggunakan Metode Material Requirement Planning (studi kasus pada UMKM keripik usus cabe babe). *Industri Inovatif : Jurnal Teknik Industri*, *12*(1), 12–20. https://doi.org/10.36040/industri.v12i1.3811

Hayes, A. (2020). *Demand Theory*. Investopedia.Com.

Jabani, M. (2015). Pentingnya perencanaan sumberdaya manusia dalam sebuah organisasi. *Muamalah*, *5*(1), 1–10.

Kenton, W. (2021). *Capacity*. Investopedia.Com.

Khwaldeh, S. (2020). *The Impact Of Mobile Hotel Reservation System On Continuous Intention To Use In Jordan*. Journals.Sagepub.Com.

Kusnandar, V. B. (2021). *Pengguna Internet Indonesia Peringkat ke-3 Terbanyak di Asia*. Databoks.Katadata.Co.Id.

Lestari, S. D. (2016). *Dampak Kelebihan Kapasitas Warga Binaan Di Lembaga Pemasyarakatan Klas II A Pekanbaru Dikaitkan Pemenuhan Hak-Hak Warga Binaan Berdasarkan Peraturan Menteri Hukum Dan Hak Asasi Manusia Republik Indonesia Nomor M.HH-07.OT.01.03 Tahun 2011*. *III*(July), 1–15.

Liu, A., & Song, H. (2021). Analysis and Forecasts of the Demand for Imported Wine in China. *Cornell Hospitality Quarterly*, *62*(3), 371–385. https://doi.org/10.1177/1938965520981070

Maulidah, S. (2012). *Peramalan (Forecasting) Permintaan*.

Mitra, S. (2020). *Peluang Bisnis di Masa Pandemi Covid 19*. Lldikti5.Kemdikbud.Go.Id.

Nasrudin, A. (2022). *Kelebihan Permintaan: Definisi, Cara Menghitung, Penyebab*. Cerdasco.Com.

Nikmatul, K., Ratya, A., Nuhfil, H., & Wahib, M. A. (2020). The analysis demand for animal source food in Indonesia: Using quadratic almost ideal demand system. *Business: Theory and Practice*, *21*(1), 427–439. https://doi.org/10.3846/BTP.2020.10563

Pratama, R. (2021). *Pengertian dan Cara Mengatasi Fluktuasi*. Gicindonesia.Com.

Praveen, B., Talukdar, S., Shahfahad, Mahato, S., Mondal, J., Sharma, P., Islam, A. R. M. T., & Rahman, A. (2020). Analyzing Trend And Forecasting Of Rainfall Changes In India Using Non-Parametrical And Machine Learning Approaches. *Scientific Reports*, *10*(1), 1–21. https://doi.org/10.1038/s41598-020-67228-7

Riadi, M. (2020). *Kapasitas Produksi (Pengertian, Aspek, Jenis, Perencanaan dan Strategi)*. Kajianpustaka.Com.

Rozaqi, M. A. (2021). *Permintaan Dengan Menggunakan Metode Rought Cut Capacity Planning (Rccp) (Studi Kasus : Ud . Batik Royyan Collection Tuban)*. 1–17.

Teguh, W. (2019). *Sejarah Perkembangan Teknologi*. Sis.Bisnus.Ac.Id.