

## DEMAND MANAGEMENT AND PRODUCTION CAPACITY IN SERVICE SECTOR MSMEs IN BATAM CITY

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### *Abstract*

*This study aims to find out what methods Irepairgo MSMEs use in accepting the request process, how Irepairgo MSMEs in handling service requests that increase in a period to remain effective and timely, Irepairgo MSMEs demand patterns, and the advantages of Irepairgo MSMEs from other MSMEs. This research uses qualitative methods by using several interview and observation techniques. The results showed that the performance of the iRepair Go MSMEs compared to the iRepairgo MSMEs increased in the second quarter of each year. It can be seen from the demand graph for services from iRepairgo appears to have increased and improved from the 3<sup>rd</sup> quarter of 2020 to the 2<sup>nd</sup> quarter of 2021 before experiencing a slight decline again in the 3<sup>rd</sup> quarter of 2021 and rising again in the 4<sup>th</sup> quarter of 2021. It is also suspected that demand was helped to rise after consumers and enthusiasts of products from Apple were able to get the Apple products they wanted through the iBox online store (PT. Data Citra Mandiri), which is one of the licensees as the first distributor of Apple products in Indonesia, and was then followed by one of the subsidiary of PT. Mitra Adiperkasa Tbk (MAP group), namely Digimap, which is also the official distributor of Apple products.*

Keywords: *Demand Management, Production Capacity, MSMEs, Service Sector*

### 1. INTRODUCTION

The advancement of technology in the direction of digital development is presently undergoing a significant increase. In this age of digital technology, people in general have adopted a new way of life that is inextricably linked to various forms of electronic technology. Technology has evolved into a tool that can assist with the majority of the demands of humans. People have found ways to employ technology to make even the most difficult tasks and jobs more manageable. Because of the significant role that technology has played, human civilisation has entered the digital age.

In this age of digital technology, the cellular sector is making significant strides toward new breakthroughs. The rapidly accelerating growth of the mobile phone sector has increased the already cutthroat level of commercial competitiveness (Piranda et al., 2022). Increasing numbers of people from a wide variety of backgrounds are using smartphones, which is causing an increasing number of people to look at and start a cellphone service counter business. Because of this development in technology, a new concept for a business was conceived in the form of a mobile phone services, one of them is "Irepairgo."

Irepairgo was created in 2020 and provides mobile phone repair services. This business was established to assist customers in repairing damage or issues that arise with their devices. In offering services, the "Irepairgo" promotes friendliness, sincerity, agility, and, competent quality. It should now be easier for customers to repair issues or damage that arises with their technology thanks to the "Irepairgo" company.

Irepairgo places a significant emphasis on social media marketing. Beginning with Irepairgo's website, Instagram, Facebook, and TikTok. The existence of a social media-based information system makes it easier for consumers to locate a reputable and quality-assured provider of cellular service. Additionally, the company Irepairgo has made it easy for customers to discuss beforehand by implementing a chat feature.

Based on the foregoing, this study seeks to determine what methods Irepairgo MSMEs use in the request process, how Irepairgo MSMEs handle service requests that increase once during period in order to remain effective and timely, Irepairgo MSMEs demand patterns, and the advantages of Irepairgo MSMEs over other MSMEs.

## **2. THEORETICAL BASE**

### **2.1. Demand**

Demand can be described as the quantity of goods and services that consumers desire and are able to purchase, notwithstanding varying price levels. With the assumption that all other variables are held constant (*ceteris paribus*) (Sinaga & Samsudin, 2021). The law of demand refers to the inversely proportionate relationship between the quantity of commodities sought by consumers at a particular price level. If the price level rises, the quantity of items demanded will drop automatically. Conversely, if the price is decreased, demand increases (Utama et al., 2021).

### **2.2. Demand Management**

Demands can be influenced by two factors, namely internal factors and external factors. External factors that affect the demand for the company's products or services are factors beyond the company's control (Bob et al., 2021). One example of external factors such as changes in consumer tastes. Changes in consumer tastes can change very quickly. Consumer image of a product is also another determining factor. Meanwhile, internal factors that can affect demand, for example internal decisions regarding product or service design, pricing and advertising promotions. The concept of demand management describes the process of influencing the timing and volume of requests or adapting to demand patterns that are difficult to change (Siwu, 2021).

### **2.3. Demand Pattern**

There are three types of demand behavior, namely trend, cyclical, and seasonal patterns.

1. Trend shows the movement of demand with a pattern of gradual upward or downward movement in the long term. Forecasting methods that are suitable for trend data are linear regression, double exponential smoothing and exponential smoothing.
2. Cycle is an up and down movement of demand that repeats itself and occurs over a long period of time (more than one year).

3. Seasonality is a pattern of demand that moves freely and appears periodically in the short term and repeatedly. Seasonal patterns are often related to seasonal conditions.

#### **2.4. Demand and Service Fluctuations**

Fluctuations can also be interpreted as instability in the value or price of a product. While demand fluctuations are conditions that occur in price changes due to the forces of supply and demand. If there is more demand, the price will go up and if there is less demand then the price will go down (Afida, 2021). The types of fluctuations are as follows:

- a) **Long-Term Fluctuation**

Prices are flexible and also respond to changes in supply and demand. Long-term fluctuations in economic growth are influenced by advances in technology.

- b) **Short-Term Fluctuation**

Short-term fluctuations are influenced by how strongly the economy uses existing employees or workforce. In real short-term fluctuations the business is short-term oriented. Prices of goods and services in short-term fluctuations are not easy to change and have a constant tendency.

#### **2.5. Production Capacity**

Production capacity can be described as the volume or number of products that a production facility or business can create in a certain specific timeframe using the resources available at the moment.

#### **2.6. Reservation System**

Reservation is the process of requesting reservations made by prospective guests or customers for goods, or services desired within a certain period. Reservations are divided into 2 types, namely offline reservations and online reservations.

### **3. RESEARCH METHOD**

This research uses qualitative methods which is a method that is not in the form of numbers but descriptively. In this research, we uses several techniques on data collection which aims to obtain information about research so that it is accurate, reliable, and clear (Gumilang, 2016), namely by:

- a. Interview

Interviews are a direct communication process by asking some questions to the owners and employees of iRepair Go MSMEs to get the information needed at the time of research. Interviews were conducted face-to-face with the aim of obtaining as clear-cut information as possible. Several stages were carried out during the interview, namely:

- a) Introduction,

- b) Explain the reason for our appointment,

- c) Explain the interview material, and

- d) Asking some questions (Yunus, 2010).

- e) The interview was conducted at the location of the research object, precisely at Tiban 3 Ruko Blok B5 No. 7.

b. Observation

In addition to interviews to obtain research information, observations were also made on MSMEs Irepair Go. Observation is a technique of obtaining information by feeling and understanding an object of research that produces conditions, activities, atmosphere, and also one's emotional feelings. Observations were made on iRepair Go MSMEs by looking at responses or reviews from consumers written on google.

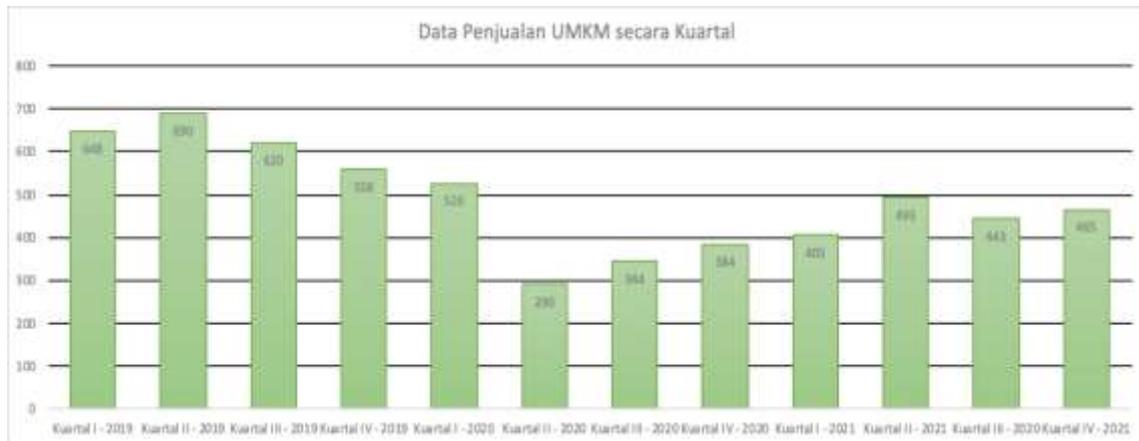
## **4. RESULTS AND DISCUSSION**

### **4.1. iRepairgo's Service Process and Assistance**

In the service stage at irepairgo (Service Encounter Stage) is carried out as SOP that has determined as follows:

1. At first, the admin welcomes the customers as they arrive, then the admin will asks what the complaint is about the customers gadget, then the customer conveys the issue on their cellphone to the admin,
2. After that, the admin told the technician about the damage to the customer's cellphone,
3. Third, the technician checks (Quality Control) as well as dismantling if there is damage to the last machine, calling the customer to tell the solution and the costs that the customer will incur for repairing their cellphone,
4. Fourth, if the customer agrees with the solution and costs provided by the technician, the admin will make an online note first to prove that the customer is willing to have his cellphone to be serviced by the irepair team,
5. Subsequently, the technician can immediately work on or service the customer's cellphone according to the damage, as for the service can be left or awaited depending on what the customer wants.
6. Sixth, if the cellphone has been serviced, the technician will carry out quality control one more time to make sure the cellphone is really safe after being repaired, then the technician gives it to the cashier for the customer to make a payment,
7. Seventh, the admin issued an online note sent via whatsapp, the admin also asked the customer if he wanted to pay using a debit or cash transfer, the admin also explained how long the warranty provided by irepair for the customer's cellphone,
8. Eighth, if the customer's have made a payment, the admin asks the customers for permission to be able to take their picture, which is useful for testimonials on irepairgo social media.

#### 4.2. iRepairgo MSME Sales Analysis



**Figure 1** Quarterly iRepairgo MSME Sales Chart

The performance of iRepairgo MSMEs has increased in every 2<sup>nd</sup> quarter of each year. It can be seen from the graph presented above, the peak demand for services provided by iRepairgo peaked in the second quarter of 2019, which reached 690 requests for services in the period April 2019 to June 2019. Nevertheless, it can be seen that demand in 2020 decreased quite dramatically compared to in 2019 which reached as low as 290 in the second quarter of 2020. It is suspected that this decline was caused by the start of the COVID-19 pandemic accompanied by a new policy, namely the issuance of Minister of Industry Regulation Number 29 of 2019 concerning the Identity Database System for Mobile Telecommunication Devices and Regulation of the Minister of Communication and Information Technology No. 1 of 2020 concerning Control of Telecommunication Equipment and/or Devices Connected to Cellular Mobile Networks through International Mobile Equipment Identity (IMEI) Identification in order to reduce the number of mobile phone usage obtained through smuggling. It is common knowledge that a significant number of the electronic products manufactured by Apple and sold in Indonesia, particularly on the island of Batam, are not authorized for sale within the country. Instead, a lot of electronics, especially iPhones, are obtained from neighboring countries close to Batam, namely Singapore.

As a result, this policy has a negative impact on iRepairgo's business where these MSMEs only focus on repairing electronic equipment produced by Apple and do not accept repairs for electronics produced by other companies. With the IMEI blocking policy for cellphones for which taxes or import duties are not paid, it will reduce the number of cellphone users. Moreover, about 70% of the total use of iRepairgo repair services is repair on iPhones (mobile phones), with the other 30% mixed in other forms of electronic products, such as iPads (tablets), Macbooks (laptops), and Apple Watch (smart watches) which are products from Apple.

However, the demand for services from iRepairgo appears to have improved and improved from the 3<sup>rd</sup> quarter of 2020 to the 2<sup>nd</sup> quarter of 2021 before again experiencing a slight decline in the 3<sup>rd</sup> quarter of 2021 and rising again in the 4<sup>th</sup> quarter of 2021. It is also suspected that demand was helped to rise after consumers and enthusiasts of the product

from Apple they can get the Apple products they want through the iBox online store (PT. Data Citra Mandiri), which is one of the licensees as the first distributor of Apple products in Indonesia, and then one of the subsidiaries of PT. Mitra Adiperkasa Tbk (MAP group), namely Digimap, which is also the official distributor of Apple products.

In iRepairgo MSMEs, the service production capacity owned by the business is in the form of "labor" or specific workforce, workers who have the ability, skills and knowledge related to the mechanisms and parts of Apple devices such as iPhone, iPad, Macbook to Apple Watch, as well as physical facilities and equipment used to process items that need repair, such as workshops, device spare parts, to other supporting equipment such as soldering irons and others.

On a quarterly basis, there is no clear pattern of demand for iRepairgo services. However, according to one of the iRepairgo workers, there is a surge in demand at the beginning of each month and a decline at the end of each month. This is presumably due to the wage cycle, which is generally given to workers at the beginning of the month so that they have the funds to make improvements to their equipment. It was also stated that the weather also influenced the pattern of consumer demand for iRepairgo services, which is usually more crowded when the weather is sunny, and decreases when the weather is rainy.

In accordance with the description above, the demand pattern on iRepairgo does not have a spike that differs much based on the season, but on a weekly basis because it is affected by the payroll period. The weather climate also slightly affects the pattern of demand for iRepairgo services, but it is unpredictable so there is not much that can be done by MSMEs in shaping demand patterns. Although there is no seasonal demand pattern, it is still important for iRepairgo to pay attention to the management of its production capacity in line with business development and a gradual increase in demand along with business development.

### **4.3. How to Increase Sales or Demand for Consumers**

Marketing via social media and enticing price cuts are two ways to boost iRepair Go's sales and demand. In order to pique the interest of customers in using iRepair Go to do repairs on their mobile devices.

## **5. CONCLUSION**

### **5.1. Conclusion**

Based on research conducted on iRepair Go MSMEs, the performance of iRepairgo MSMEs has increased in every 2<sup>nd</sup> quarter of each year. It can be seen from the graph. demand for services from iRepairgo appears to have improved and improved from the 3<sup>rd</sup> quarter of 2020 to the 2<sup>nd</sup> quarter of 2021 before again experiencing a slight decline in the 3<sup>rd</sup> quarter of 2021 and rising again in the 4<sup>th</sup> quarter of 2021. It is also suspected that the demand helped increase after consumers and enthusiasts of Apple products could get the Apple products they want through the iBox online store (PT. Data Citra Mandiri), which is one of the licensees as the first Apple product distributor in Indonesia, and then one of the subsidiaries of PT. Mitra Adiperkasa Tbk (MAP group), namely Digimap, which is also the official distributor of Apple products.

## 5.2. Suggestion

Based on the result and conclusion, following suggestion may be taken into account.

1. Promoting or providing discounts at the end of every month so that demand for MSME services is balanced due to the period of receiving salaries by consumers and helps avoid excess demand at the beginning of each month.
2. Increase the amount of goods that are purchased for ready stock in order to reduce the amount of time that clients have to wait.
3. Opened new branches in the Batu Aji, Bengkong, Batam Center and Piayu areas, because many irepairgo customers come from areas far from irepairgo shop houses.

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