#### CHAPTER 1

#### INTRODUCTION

#### 1.1 Background of Study

In this modern world, smartphones have become a daily necessity for each individual. The first portable cell phone produced by Motorola was first invented back in 1973 (https://versus.com/, retrieved in 2022, April 27) and was known only as a medium to conduct two-way communication that only last for not more than half an hour. As technology developments continue to evolve, smartphones are then invented, and with new technological aspects, smartphones now have a lot of different usages such as providing entertainment sources for end-users, finding information through the internet quicker, taking pictures, and many more. With the combination of new technology inventions, excellent device features, and built-in internet capabilities being developed, a small gadget can be used to do a lot of things all at once, leaving it to be more convenient for most people. The usage of a smartphone is also known to provide beneficial effects on individuals' lifestyles due to its efficiency. The duration with which things may be completed on a smartphone is practically incomparable as it enables you to complete tasks while interacting with others while on the go (https://medium.com/ retrieved in 2022, April 27).

The pandemic that happened in early 2019 has led the world to pause in every aspect. This then makes the government encourage each individual to do continue working and learning from home, restricting any activities that are going to be conducted face-to-face, and also putting a large-scale social restriction in

every city in Indonesia. Due to this reason, many businesses are ought to suffer from a lack of revenue or even losses if it's not able to adapt to the situation that is currently happening. But it can be seen that technology devices like smartphones and laptops are being used more frequently during this situation than in other years as a lot of offline businesses are shifting to be more digital in this situation (<a href="https://www.uii.ac.id/">https://www.uii.ac.id/</a>, retrieved in 2022, April 27). This statement is supported by the fact that there is more than a 25% increase in data consumption found in 2020 (<a href="https://theprint.in/">https://theprint.in/</a>, retrieved in 2021, November 30).

Today, technology devices are used not only for communicating and finding entertainment but also for learning and working. The demand for smartphones or gadgets is expected to increase rapidly as everyone needs it, especially during the pandemic outbreak. Based on the data forecasted by (<a href="https://www.statista.com/">https://www.statista.com/</a>, retrieved by 2021, November 30), there is a rapid increase in smartphone users in Indonesia in the year of 2019 to 2020, with a percentage of 17.8%. With this increase, Indonesia came in fourth place with the most countries that use smartphones, alongside China, India, and the US (<a href="https://databoks.katadata.co.id">https://databoks.katadata.co.id</a>, retrieved in 2021, November 30). The Indonesian smartphone users are forecasted to increase up to 26.8% from 2020 to 2022.

Many users lead to many smartphone marketers found in Indonesia. This saying is then supported by an article posted by (<a href="https://www.statista.com/statistics/">https://www.statista.com/statistics/</a>, retrieved in 2021, November 30) where 13 different smartphone brands can be seen in the Indonesian market, including Samsung, Oppo, Xiaomi, Apple, Vivo, Huawei, etc. This eventually leads to a

massive increase in the smartphone penetration rate and the availability of choices available in the country. From the options of smartphones above, it can be further notice that the android system is used more than the OS system. From the list of smartphone marketers above, it can be seen that the android system is seen mainly in Samsung, Huawei, and Xiaomi. It has surpassed almost 90 billion percent of the market share in Indonesia, Brazil, Iran, Turkey, and India (https://www.businessofapps.com/, retrieved in 2021, December 1).

Although there are many options that individuals can choose from, but Xiaomi is known to be one of the most used smartphones in Indonesia. Xiaomi itself is a Chinese-manufactured brand that uses Android as its operating system as it is affordable. Although Google is banned in the origin country, according to (https://www.comparitech.com, retrieved in 2021, December 1), Xiaomi uses Android as an essential support before adopting its own system to the smartphones manufactured in China. Xiaomi entered the Indonesian market in 2014 after releasing its first product in 2011 with Mi (https://tekno.kompas.com/, retrieved in 2021, December 1). Due to its affordable price and innovative features, Xiaomi is mainly loved in Indonesia and has become the third most selling smartphone in 2021, betting Iphone, who placed fifth with only a market share of 8.89% (https://www.statista.com/, retrieved in 2022, April 27) as the price of Iphone are relatively high in Indonesia which only can be purchase by those who have higher income. Up until now, Xiaomi has produced many technology devices from different smartphones type and varieties (Redmi Note Series, Poco Series, and Mi Series), wireless earphones, television, smartwatches, etc.



Figure 1. 1. Figure 1.1 Xiaomi's Logo

Source: https://www.kibrispdr.org/logo-xiaomi-hd.html, retrieved in 2021, December 1,

In 2021 itself, Xiaomi accomplished several achievements such as introducing high-end devices, including new categories of AIoT devices in a form of laptops and tablets, and also the expansion of Xiaomi's physical store to over 400 stores. In addition, there are over 4,000 Xiaomi certified distributors throughout Indonesia and also 400 points that offer after-sales service which eventually make it easier for its users to service Xiaomi smartphones (https://industri.kontan.co.id/, retrieved in 2022, April 27). Furthermore, Xiaomi has become the number one smartphone brand in Indonesia in the second quarter of 2021, with a market share of 28% and the highest year-on-year increase of 112% (https://industri.kontan.co.id/, retrieved in 2022, April 27).

Due to the pandemic, everything is expected to be done virtually and many of the population in Indonesia struggle to meet up with unexpected situations as not all citizen especially those living outside the big cities has smartphones that are going to be used for work or even school. Thus, most people

have to purchase a smartphone to be able to continue learning or working. This situation makes Xiaomi one of the most popular choices in Indonesia. As the brand are able to provide smartphones at an affordable price but with innovative features. Xiaomi Mi 10T Pro is one of the example of smartphone that has an affordable price yet innovative product. These Mi 10T series are known as the flagship product that was produced by Xiaomi and was released in Indonesia in December 2020. The Mi series are equipped with high specifications that can be seen in a smartphone, but with a more affordable prices that is different from other flagship smartphone competitors that can be found in the market.

Xiaomi Mi 10T Pro or the Xiaomi Mi 10T series are the next generation of flagship smartphone in Xiaomi. Many are seen to anticipate the launch of this series even before the product was officially released, leaving the smartphone shall be ordered via reservation first to be able to receive the product on the launch date. This resulted in a massive number of pre-orders that reached up to 5000 orders (<a href="https://www.liputan6.com/">https://www.liputan6.com/</a>, retrieved in 2022, April 9). The release of the Xiaomi Mi 10T Pro series is awaited by the public enthusiastically as these smartphones are provided with new features and innovations that extensive internal storage of 256 GB, superior camera resolution that is equipped with OIS or Optical Image Stabilization, a snapdragon 865 processor, and a battery capacity of 5,000 mAh with a 33W quick charging (<a href="https://dailysocial.id/">https://dailysocial.id/</a>, retrieved in 2022, April 9). This device features that Xiaomi provides can then satisfy its users, eventually turning the buyers into loyal customers in the future.



Figure 1. 2. Interface of Xiaomi Mi 10T Pro

Source: <a href="https://www.gsmarena.com/">https://www.gsmarena.com/</a> retrieved in 2022, April 27



Figure 1. 3. Xiaomi Mi 10T Pro Smartphone Design

Source: <a href="https://www.gsmarena.com/">https://www.gsmarena.com/</a>, retrieved in 2022, April 27

Table 1. 1. Market Share of Smartphone July 2021

No.	Smartphone	Country of Origin	Market Share in April 2021	Market Share in July 2021
1	Samsung	South Korea	18%	21.94%
2	Орро	China	20%	21.28%
3	Xiaomi	China	28%	19.83%
4	Vivo	China	12%	12.27%
5	Realme	China	12%	6.82%

Source: <a href="https://www.statista.com/">https://selular.id/</a> retrieved in 2022, April 27

Table 1.1 shows the smartphone competitors founded in Indonesia. The table above indicates that Samsung is one of the leading vendors with a 21.94% share of the market, Oppo is placed second with 21.28%, Xiaomi is placed third with approximately 19.83%, Vivo with a market share of 12.27%, Apple with a market share of 8.89% and Realme with a market share of 6.28% in August 2021 (https://www.statista.com/, retrieved in 2022, April 27). Although Xiaomi has become the number one smartphone brand in Indonesia in the second quarter of 2021, with a market share of 28% and the highest year-on-year increase of 112% (https://industri.kontan.co.id/, retrieved in 2022, April 27), it eventually changes as other smartphone competitors also try to grasps the current situation and try not only sell more smartphones than usual but also to come out with new innovative ideas, especially during the pandemic era. Taking Samsung as an example, this brand offer a lot of new innovative products such as the Galaxy S21 (https://www.suara.com/, retrieved in 2022, April 27). Since Samsung are able to provide better device features, the brand is able to beat not only Xiaomi (28%) but also Oppo (20%), which are seen to be the leading market shares back in April to June, 2021 (https://selular.id/, retrieved 2022, April 27). From this, it can be seen that the competition between smartphone brands is severe, as brands are trying to seek users' attention by offering the finest device features.

As demonstrated in Table 1.1 above, severe competition is expected in the smartphone sector in July 2021, particularly in Indonesia. The result shows there is a change in the market share positions of Xiaomi and Oppo as the market leaders in April to June 2021 with approximately a market share of 28% and 20%, respectively, to Samsung as the leading market share in July, leaving Xiaomi to be placed third and Oppo second.

Table 1.1 demonstrates the fierce competition in the smartphone industry at the moment as brands strive to release the latest device features and innovative designs that are in accordance with end-user needs and wants, which can then tempt customers to purchase the product and eventually become a loyal customer by emphasizing various features, including new technology and design, when promoting the smartphone brand. (Ting et al., 2011; Ahmed & Moosavi., 2013; Kim & Yoo., 2015). This show an interesting phenomenon to study. In terms of electronics, particularly smartphones, there are numerous factors to consider, as different users' requirements and desires dictate how users use the smartphones. The traits generated by the brand are critical not only for the customer, but also for the manufacturer, as it serve as a meter for determining whether or not people are satisfied with the product and will remain loyal to the brand (Abdulfattah., 2012; Bacile, Wolter, Allen, & Xu., 2018).

Additionally, it can be inferred that customer loyalty is essential for Xiaomi and should be prioritized in order to remain competitive in the smartphone industry. Yusuf et al (2019) emphasized that customers aid in the company's market competitiveness. Thus, maintaining customer loyalty is much

more desirable than recruiting new consumers, not just because it is less expensive, but also because it influences customers' repurchase intentions since customers entrust the brand with the customers' money in exchange for something valuable (Oliver., 1999). Customer loyalty eventually enables the brand to gain a deeper understanding of its customers through the relationship established between buyer and seller. When businesses are able to ascertain what customers want in a smartphone, the manufacturer can create it to meet those needs, ensuring customer satisfaction and loyalty to be established.

Due to this reason, customer loyalty shall be increased by Xiaomi to be able to compete with other brands. Haeruddin & Haeruddin (2020) explained loyalty as something that can be seen as a positive aspect of the customers. When customers have reached this stage, there will then be a connection with the brand which resulted in feeling confident while using the product. If customers are happy with using the product, customers then have the need always to use products from that specific brand. From the data obtained in 2019, there are more than 20 million active users of Xiaomi in Indonesia (<a href="https://www.liputan6.com/">https://www.liputan6.com/</a>. Retrieved in 2021, December 2). Hence, it can conclude that there are a lot of loyal customers of Xiaomi in the country.



Figure 1. 4. Customers Review on Customer Loyalty
Source: https://www.youtube.com/watch?v=3lJwfeM3YzY&t=237s, retrieved on 2022, April 7

Another important aspect that should be considered is customer satisfaction, Redda & Shezi (2019) explained that customers' satisfaction is

defined as a response and evaluation of a product the users have consumed. If customers' expectations of the products are met, customers will then be identified as satisfied, and brands will be able to mark its success. Generally, a customer will feel a sense of satisfaction when the product or service customers had purchased has met or the users' expectations. Customer satisfaction is an important aspect, especially for brands, as it is a way to know whether customers are happy with the product or services that is being offered. In addition, Saputra et al. (2020) also added that satisfied customers could automatically share experiences with other people through the word of mouth marketing. Figure 1.5 shows Xiaomi official store on marketplace, Shopee. Based on the official store, it can be seen that Xiaomi Mi 10T Pro are able to maintain the rating of 4.9 out of 5 with approximately more than 450 buyers only through Shopee. This could then be considered that customers are satisfied with Xiaomi Mi 10T Pro.



Figure 1. 5. Rating of Xiaomi Mi 10T Pro Source: https://shopee.co.id/, retrieved on 2022, April 30

Gadgets are made out of two features: hardware and software. Hardware is the tangible feature that can be physically seen, like design, colors, and sizes. Meanwhile, the software is usually the operating system used to make the device work, like the iOS or Android system, which is mainly used in most Chinese manufactured smartphones. Kim et al. (2016) stated that device features have a relationship with customer satisfaction, as device features shape user behavior and customer attitudes. These features could then be divided into different aspects such as applications, functions, usability, design, and price. This essential trait and measurement strongly affect the brands to know whether customers are satisfied with the products (Kim et al., 2016). Meanwhile, Ling et al. (2014) added that device or product features are compelling aspects seen first by the customers before purchasing a product, positively impacting customer satisfaction. Xiaomi Mi 10T Pro supports 5G connectivity and has a 6.67-inch touchscreen display with a resolution of 1080x2400 pixels and a 20:9 aspect ratio (https://gadgets360.com/, retrieved in 2022, April 27). Furthermore, the device aspects can be seen in figure 1.3.

Applications refers to an a user interface that has similarities that make it easier for its users to learn and use the application every day. Generally, the application found on a smartphone has the ability to help the users interact with one another who have the same application as to benefit the users themselves (Afrian, 2018). Buyens (2001) added that an application is a unit of software that is created to serve the needs of several activities. Moreover, Nugroho & Widodo (2020) explained that customer satisfaction is significantly influenced by

application. There are two types of applications that can be seen in a smartphone where one is the application that came directly from the manufacturer and cannot be deleted like a camera, clock, or contacts, second is the application that shall be first downloaded through the Play Store. As seen in Figure 1.3, these are the applications that can be seen in Xiaomi more specifically in Xiaomi Mi 10T Pro. If users feel the need to download another application, users could directly go directly to the play store app on the home screen and download the wanted application.

According to Widaningsih and Koesworodjati (2022), design is something that is important for a product before it is produced where business owners are ought to consider what kind of design they are going to create that is currently in great demand by consumers. Alma (2016: 96) added that when a product has an attractive design to it, it may affect the selling price of the product. Tan and Sie (2015) also shares that design is the aesthetic quality of a product. As design can eventually affect customer satisfaction, companies need to channel its creativity and innovation to produce attractive designs according to consumer tastes (Kim et al., 2016) as it is used to also distinguish the company's products from competing products (Sutojo, 2009). In Xiaomi Mi 10T Pro, Xiaomi offers a different design than the previous Mi line, which then also comes with new colors such as comic blue, lunar silver, and aurora blue (https://www.mi.com/, retrieved in 2022, April 27). Figure 1.3 above shows the overall design of the Xiaomi Mi 10T Pro and its colors.

According to Ulhaq et al. (2022), price is the money or cash that must be paid to obtain a product. The cost offered must be appropriate to the buyer's interest which also consists of record values, discounts, rewards, installment period, and terms of credit. Kotler and Armstrong (2012) defined price as the amount of money charged for a product or service. It can also be broadly known as the amount of value that consumers exchange for the benefit of owning and using a product or service that allows the company to earn a reasonable profit by being paid for the customer value it creates. Furthermore, Kim & Cho (2015) mentioned in the research that customer satisfaction is significantly influencing device price. The price offered by Xiaomi for Xiaomi Mi 10T Pro is still relatively considered as affordable because although it was fulfilled with highend aspects in terms of screen, and speakers, but the price that is being offered is at around Rp. still relatively cheap 5.999.000 to Rp. 6.999.000 (https://www.blibli.com/jual/xiaomi-mi-10t-pro/ retrieved on April 27, 2022).

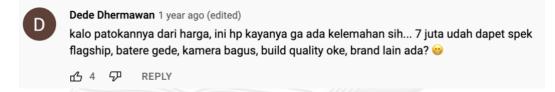


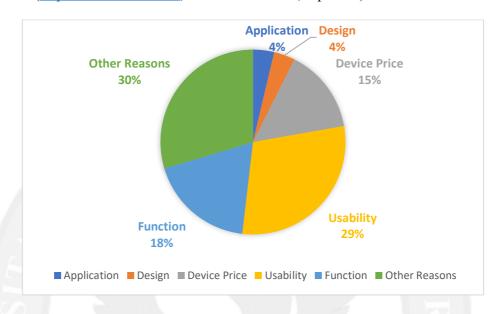
Figure 1. 6. Customers Review on Device Price Source: https://www.youtube.com/, retrieved on 2022, April 29

Usability is referred as the level of quality of a system that is easy to use and is easy to learn. It then encourages its users in using the system as a tool to help users in completing any provided tasks (Ikhsanuddin, 2021). The usability can also be interpreted as a measure, by which users can then access the functionality of a system specifically smartphones more effectively, and

efficiently. Oghuma (2016) added that it also refers on how simple it is to use, learn, and operate a device. Kim et al. (2016) claimed that usability shows a significant influence on customer satisfaction, through the ability a smartphone has in providing easiness in using the product or smartphone to its end-users. It was classified as a system used by the end-users to attain given goals with effectiveness, efficiency, and satisfaction (Harrison et al., 2013). Like any other smartphone, Xiaomi Mi 10T Pro offers an easy navigation mechanism where it uses the standard swipe up for home, swipe up and hold for recent, swipe from the sides to go back, and swipe across the bottom of the screen to easily switch between applications (https://www.gsmarena.com/, retrieved in 2022, April 27).

According to Salleh et al. (2017), function is a specification of software where it reflects on how effectively a software corresponds to or complies with a certain design. Deng et al. (2010) added that functions are related to the practical or technical benefits that consumers may obtain from utilizing a product as a result of its numerous functions, hence encouraging users to use it more frequently. When it comes to determining whether or not to acquire a product, functions are viewed as the most influential factor (Sweeney and Soutar, 2001). The study of Kim et al. (2016) insisted that functions are one of the most influential factors influencing customer satisfaction. Regarding Xiaomi Mi 10T Pro, it can be seen that the camera that is available in the smartphone has a total of cameras on the back which are protected by Corning Gorilla Glass 5. The main camera comprises a 108-megapixel wide-angle camera sensor, Samsung Bright S5K HMX, f/1.69, Auto Focus, 7P lens, OIS, and Up to 8k 30fps video recording.

With these aspects, it can be capable of producing extremely excellent image quality, and clear and natural colors that match the original item both indoors and outdoors (<a href="https://inet.detik.com/">https://inet.detik.com/</a>, retrieved in 2022, April 27).



**Figure 1. 7. Pre-Test Respondents Data**Source: Prepared by the writer (2022, April 24)

The reason that specific application, design, device price, usability, function, and customer satisfaction are being concentrated in this study is then being supported by the pre-test held among the 30 respondents which the details can then be found attached in the appendix section at the end of the paper. Based on the pre-test research, most of the respondents are seen to have been using Xiaomi Mi 10T Pro for 1.59 years which can then be considered quite a long time as Xiaomi Mi 10T Pro was released back in 2020. For the questionnaires, respondents are being questioned on why do the users choose to use Xiaomi, and out of the 30 respondents, 27 respondents claimed to be satisfied with brand. The outcome of the test is being determined by Application (1), Design (1), Device Price (4), Usability (8), and Function (5). Eventually, respondents also considered

other reasons which are not related which include users have been using the product for a long time (1) and promotions (2).

To eventually conduct the pre-test that further support this study, simple-qualitative research is undertaken which eventually shows the severe situation is happening in the smartphone industry, particularly in this digital era. As a result, it is known that Customer Loyalty is very critical for smartphone manufacturers particularly Xiaomi to be able to compete within the industry. Putting forward customer loyalty as the main question in the pre-test results in several answers which are dominated by those variables that has been mentioned before. The outcome of this research eventually is compatible or aligned with the results from several previous studies, which will then be used as references in this study. Thus, this research will then be conducted to discover the factors that may influence customer loyalty of Xiaomi users in Medan as it is a way to maintain competition in the industry.

### 1.2 Problem Limitation

There will be a problem limitation that took place during this research, which will be as stated as follow:

This research will study several variables including; Customer Loyalty,
 Customer Satisfaction, and device features that specifically contain
 Application, Design, Device Price, Usability, and Function. Specifically
 on the research object of Xiaomi Mi 10T Pro.

- 2. The data that is going to be used in further analyzing the research model is going to be collected in a form of questionnaires that are designed based on the research object.
- 3. The sample that will be further analyzed in this study is narrowed to a set of criteria; both males and females, the age range of 18 to 60 years old, currently living in Medan, have used Xiaomi Mi 10T Pro for the past year and is the one being the decision-maker in purchasing Xiaomi Mi 10T Pro.

#### 1.3 Problem Formulations

This research uses Xiaomi Mi 10T Pro as the research object, and based on the background study mentioned above; the research problem formulation will be as follow:

- Does application significantly influence customer satisfaction of Xiaomi
   Mi 10T Pro users in Medan?
- 2. Does design significantly influence customer satisfaction of Xiaomi Mi 10T Pro users in Medan?
- 3. Does device price significantly influence customer satisfaction of Xiaomi Mi 10T Pro users in Medan?
- 4. Does usability significantly influence customer satisfaction of Xiaomi Mi 10T Pro users in Medan?
- 5. Does function significantly influence customer satisfaction of Xiaomi Mi 10T Pro users in Medan?
- 6. Does customer satisfaction significantly influence customer loyalty of Xiaomi Mi 10T Pro users in Medan?

- 7. Does customer satisfaction mediate the effect of application on customer loyalty of Xiaomi Mi 10T Pro users in Medan?
- 8. Does customer satisfaction mediate the effect of design on customer loyalty of Xiaomi Mi 10T Pro users in Medan?
- 9. Does customer satisfaction mediate the effect of device price on customer loyalty of Xiaomi Mi 10T Pro users in Medan?
- 10. Does customer satisfaction mediate the effect of usability on customer loyalty of Xiaomi Mi 10T Pro users in Medan?
- 11. Does customer satisfaction mediate the effect of function on customer loyalty of Xiaomi Mi 10T Pro users in Medan?

# 1.4 Objective of Research

The study aims to identify a solution and a conclusion from the hypotheses created to be able to deliver and offer advantages to any users who may benefit from this report. According to the background of the research, the goal of this research is to identify further and:

- 1. To determine whether Application has a significant influence on Customer Satisfaction of Xiaomi Mi 10T Pro users in Medan?
- 2. To determine whether Design has a significant influence on Customer Satisfaction of Xiaomi Mi 10T Pro users in Medan?
- 3. To determine whether Device Price has a significant influence on Customer Satisfaction of Xiaomi Mi 10T Pro users in Medan?
- 4. To determine whether Usability has a significant influence on Customer Satisfaction of Xiaomi Mi 10T Pro users in Medan?

- 5. To determine whether Function has a significant influence on Customer Satisfaction of Xiaomi Mi 10T Pro users in Medan?
- 6. To determine whether Customer Satisfaction has a significant influence on Customer Loyalty of Xiaomi Mi 10T Pro users in Medan?
- 7. To determine whether Customer Satisfaction mediates the effect of Application on Customer Loyalty of Xiaomi Mi 10T Pro users in Medan?
- 8. To determine whether Customer Satisfaction mediates the effect of Design on Customer Loyalty of Xiaomi Mi 10T Pro users in Medan?
- 9. To determine whether Customer Satisfaction mediates the effect of Device Price on Customer Loyalty of Xiaomi Mi 10T Pro users in Medan?
- 10. To determine whether Customer Satisfaction mediates the effect of Usability on Customer Loyalty of Xiaomi Mi 10T Pro users in Medan?
- 11. To determine whether Customer Satisfaction mediates the effect of Function on Customer Loyalty of Xiaomi Mi 10T Pro users in Medan?

## 1.5 Benefit of Research

The researcher really hopes that this report could offer benefits for any stakeholders under this specific topic not only theoretically but also practically, as follows:

#### 1.5.1 Theoretical Benefit

In terms of theoretical benefit, this report is expected to provide appropriate information and investigation regarding the influence of factors consists of application, design, device price, usability, and function toward customer loyalty through customer satisfaction. Moreover, the researcher expects that this study will be utilized as a future reference for both general and academic research.

### 1.5.2 Practical Benefit

The purpose of this report would have been to give practical benefits such as:

- For readers and future researchers, the findings of this study ought to
  provide important insights and foundation regarding how application,
  design, device price, usability, and function are influencing customer
  loyalty through customer satisfaction.
- 2. For the policymaker or management team of Xiaomi, the research wishes to be able to provide appropriate data and evaluation on those factors; application, design, device price, usability, and function that might influence customer loyalty through customer satisfaction. Hence, the Xiaomi management team will be able to prepare even better strategies to maintain customer loyalty in this competitive era.