# ANALYSIS OF QUALITY OF SERVICE IN CV. MAXCYBER STORE APPROACH TO CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

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## ABSTRAK

Maxcyber Store is a company engaged in the sale and repair of watches. Not currently analyzing the expectations and perceptions of customers after the transaction. So Maxcyber Store did not know how the quality of service that has been provided to the customer in terms of customer ratings. Consequently Maxcyber Store did not know which service among online sales. Offline or repair the product in question related in serving customers. In addition Maxcyber also not biased determine which services should be prioritized for improved services.

Therefore, the application of the concept of CRM (Customer Relationship Management) on the company can be the solution to determine customer expectations and perceptions is by doing an online questionnaire. The purpose of this process is an online questionnaire to determine the gap between customer expectations and perceptions towards layaanan that has been given.

One method to perform clustering of large data that is used Servqual Parasuraman's model. This method is used to calculate the gap between customer expectations and perceptions into five dimensions so they can see the specifics of the attributes - attributes of service quality.

Based on test results, the application has been built to achieve the goal of knowing the quality of service to customers and prioritizing which services should be improved.

Keywords: Customer Relationship Management (CRM), Quality of Service, Servqual Parasuraman's model.

## 1. INTRODUCTION

Maxcyber Store is a company engaged in the sale of accessories. Maxcyber Store sell various brands and types of watches, spare parts watches also serves repairs watches. Based on the interview with Mr. Bayu Aji Satriadi, in the sale of watches at the airport sales Maxcyber Store online and directly to the store. For online there are three kinds of customers served, the first regular customer, reseller and dropshipper. For direct sales, Maxcyber Store serves customers shopping in bulk / shop more than one, and a typical customer.

Store Maxcyber watches import directly from abroad, so that the target customer is not just a consumer like in general, but customers who aim to resell that customers shopping for the party, the reseller, dropshipper. So the three types of customer satisfaction have become important priorities, as to which one of the company's motto is "Your Satisfaction is Our Hope".

Still according to Mr. Aji Satriadi as the owner of CV. Maxcyber Store, in August The reduction of transaction than usual. Because according to him, the average - average sales or transactions of all kinds prosuk it reached 200-300 million. But in August only reached 116 million. Still according to him, a decrease in the number of transactions is caused because kesibukkan in preparing business being pioneered the field convection. From these descriptions, the authors interested in exploring further the possible cause of the decline in sales turnover. Particularly in terms of customer service, the authors then conducted interviews to Customer Service, there were many complaints that the party is especially true for customers and resellers as well as customers who do repairs watches.

To increase sales, the company needs to know what is expected by our customers and maintain customer satisfaction. Customers are entitled to judge about the services it receives so it appears the satisfaction or complaints.

Prioritization of quality improvement of service is needed in order to improve customer satisfaction, which can ultimately increase transaction CV, Maxcyber Store itself.

Under these conditions, we need to hold a relevant research kealitas online sales service and repair services so there are no gaps between the desires and expectations of the customers on the quality of service received.

In this study, the authors use Servqual Parasuraman's model to determine the quality of service received by the customer in a company. In its application, the

strategy used was to build an online questionnaire system for customers Maxcyber Store. In such systems, the calculation method applied by Parasuraman's Servqual Model, which is looking for value Perceived Service Quality (Quality of Service are accepted) to measure the gap between the Expected Service (service expected) with the Perceived Service (received). Researchers use this method, because of the calculation results could be known gap value (the value of quality of service) of each attribute needs. Servqual method, can also be used to determine which attributes should be the focus for improvement. In addition, the questionnaire servqual is reliable, meaning that the question - the question is perceived the same by different respondents.

Therefore, strategies are needed to determine the quality of existing services on Maxcyber Store as well as how to improve the quality of existing services. Quality of service for which the customer expectations will increase customer satisfaction which in turn could also push the transactions increases.

# 1. RESEARCH CONTENTS

## 2.1 Theory

### 2.1.1 *Customer Relationship Management* (CRM)

Customer Relationship closely related to creating value for customers who are closely related to 4p namely: Product, Process, Performance and People. Product or service is the core business is the essence that must be provided by a company with a high quality. While the Process is a way to keep the system continues to work smoothly. Performance is our promise to customers to keep.

Customer Relationship Management (CRM) is a customer relationship management, which is a type of management that discusses the theory of the comestible relationship between the company and its customers with the aim of increasing the company's value in the eyes of its customers. CRM is not just a software, but a business strategy that integrates business processes between customers in direct contact with business people, business processes and supporting technologies. To maintain its position, a company must have a clever strategy. One point which affect the sustainability of a company is how the market share remain in demand by customers. Hence the need for management coaching and controlling relationship between the customer and the company. [3]

### 2.1.2 *Jenis-Jenis Customer Relationship Management (CRM)*

Type of customer relationship management (CRM) is operational CRM, analytical CRM and collaborative CRM / full integrated CRM.

1. Operational CRM deals with a company's business functions that include customer service, order management, invoice or billing, management and sales otomatiosasi.

2. Analytical CRM is an activity that includes storing, transferring, processing, interpreting and reporting data on customers or users, who then mengalisa what they need.

3. Collaborate CRM is the activity to combine all the necessary communication, coordination and collaboration between the vendor and the customer. [3].

### 2.1.3 Metode Parasuraman's SERVQUAL Model

Model sevice Quality (Servqual) is a model that can be used to define and measure the quality of services. This model is already very commonly used in a variety of research on the quality of services throughout the world. The model developed by Zeithaml, Parasuraman and Berry's despite a lot of criticism but it is still a model widely used today. [15]

Parasuraman's method servqual models built on their comparison of two main factors, namely the customer's perception on an actual service they received (perceived service) with actual services customers expect (expected service). If the reality is more than customers expect, then the service can be said but if the quality is less than the fact that customers expect, it is said to be well qualified, and when the same reality with hope, then the service is said to be satisfactory. Thus, the method Parasuraman's SERVQUAL this model defines service quality as to how far the difference between reality with expectations for customer service received (Parasuraman et. At., 1990).

Zeithaml, Parasuraman and Berry do an intensive research and successfully identified ten dimensions that determine the quality of services. The ten dimensions of quality include:

1. Tangibles (the things that real physical), which services the physical evidence, can include physical facilities, equipment to provide services, employee performance, convenience for consumers.
2. Reliability (consistency, reliability), the ability to generate a services produced accurately. This means the company provides its services right since the first moment. It also means that the companies concerned to fulfill his promise, for example, promises kept, quality products, hygiene products, hours, working not while chatting.
3. Responsiveness (responsiveness, responsibility), ie the willingness or readiness of employees to provide services required by customers and run their services correctly, such as rapid response and creative staff to requests or problems faced by consumers.
4. Competence (proficient, proficient, skilled), that have the skills and knowledge necessary to manage these services, such as skilled staff in work, mastering product knowledge.

5. Credibility (unbelievable), namely trust and honesty of the company's employees. Credibility includes the company name, company reputation, personal characteristics and interactions with customers.
6. Courtesy (respect), that courtesy, respect, sincere attention, the patience to listen to complaints and hospitality owned by its employees.
7. Security (security), that is safe from danger, risk, or doubt. These aspects include physical security, financial security and confidentiality.
8. Access (easily reached, contacted), including ease of contact and encounter. This means that the location of service facilities within easy reach, the wait time is not too long, easy corporate communication channel to be informed and others.
9. Communication (communication), it means providing information to customers in a language they can understand, and always listen to suggestions and complaints of customers
10. Understanding the customer (see customer), is the effort to understand customer needs, eg staff understand customer requirements, matters relating to the personal attention of consumers.
In a further development dimension of the services above then summarized into five dimensions servqual. Five dimensions include:
1. Tangibles (the things that real physical), including physical facilities, equipment, personnel and means of communication.
2. Reliability (consistency, reliability), the ability to provide services that were promised to consumers accurately.
3. Responsiveness (responsiveness, responsibility), ie the ability of the staff to help customers and provide service with a response.
4. Assurance (collateral), includes knowledge, abilities and properties owned by the staff to provide a guarantee free of doubts, free from risks and dangers.
5. Empathy (empathy), including ease in the relationship, good communication, personal attention and understand the needs of customers.

These five dimensions of service quality mentioned above should be mixed well. If not, it can cause the gap between the company and customers, because of differences in their perception of the nature of service. Parasuraman et. at. (1990) has developed a conceptual model of service quality that illustrates the gap that is causing the differences in perceptions about the quality of service. According to Parasuraman et.al. (1990), a gap in a service may occur on the part of consumers (ie the expected service consumers with the services received) and on the part of service providers. The gap or gaps consists of five kinds, namely:
Fifth gap or gaps are:
Gap 1: The gap between customer expectations and perceptions of the parties
service providers
This gap shows the difference between the expectations of service users with
perception management regarding expectations of service users. In fact, the management of a company is not always dapoat feel or understand what they want the customer appropriately. As a result, management does not know how a service should be designed and support services / secondary what customers want.
The cause of this gap include:
a. Marketing research is not appropriate
The key to understanding what is expected and required by
the customer is marketing research.

b. Users of the marketing research is not feasible
Incorrect use or not to use the results of marketing research mengkibatkan first gap getting bigger.
c. Lack of interaction between management and customers
Managers who only read and accept the results of marketing research reports will lose the reality of the customer. Managers should also interact directly with customers.
d. The lack of personal contact with the management
Personal contact is the most widely performed to obtain information about the level of interest and customer perception. Ideally this should be done on a regular basis so that all changes to the information of the customer can be heard directly by the management.
e. Study anatara personal contacts and management
Study too much led to increasing bureaucracy. As a result, more and more information will be lost or even misinterpretations between the desires of customers and management.
Gap 2: the gap between the perception of the service provider to
expectations and service quality specifications
This gap shows the difference between the perception of management regarding
expectations of service users with a service specification. Sometimes management is able to understand precisely what the customer wants, but they do not rearrange a certain performance standards are clear. This could be due to lack of total commitment to quality management services, a lack of resources or because of the excess demand. The meaning here is management commitment management capabilities provide a service perceived by customers as a high quality service.
Inadequate management commitment can be caused by the orientation
more short-term management (accounting oriented), such as sales, profits, market share, etc. related to short-term finance. This will cause the employees working at the ministry felt disadvantaged because of operational performance is always measured by the company's revenue.

Gap 3: The gap between service quality specifications and processes
administration / service delivery
This gap shows the difference between service quality specifications
with the delivery of the services provided by the employee (contact
personnel). This gap is a mismatch of service performance
because employees can not afford or do not have the desire to deliver services according to the level of service desired by
customer. This is caused by:
a. The hesitancy of the employee's role (role ambiguity)
The ambiguity of the role of the extent to which employees can perform tasks according to the expectations of the manager and also satisfy customers.
b. Conflicts in implementing role
Role conflict can occur when employees assume that they can not menyenangakan all requests superiors and customers to serve.
c. Incompatibility between employees and work
d. Incompatibility technology with pekerjaannnya
e. Supervisory control systems that do not fit
Of inadequate system of appraisal and reward system
b. Lack of a sense of control
Feelings of control includes the ability to respond. If employees feel in control, their performance will increase. Conversely, if the work procedures are not flexible so it is limiting the space, employees will feel depressed.
c. Lack of value or the spirit of teamwork.

Gap 4: the gap between delivery and external communications
to customers
Customer expectations regarding service quality is influenced by the statements made by the company through marketing communications. Kesernjangan is due to a mismatch between the services promised and delivered services. cause
is:
a. Inadequate horizontal communication.
b. Differences in policies and procedures between branches or departments.
c. The tendency for member appointment excessively.
Gap 5: the gap between customer perception and customer expectations
If the customer's perceptions and expectations regarding service quality perception proved to be equal and even better than expected, the company will get a positive image and impact. Conversely, if the quality of care received is lower than expected, this gap will cause problems for the company.
Some of the advantages of SERVQUAL method are:

1. Can the known value of the quality of service of each level observations on
each of the questions, each variable and each dimension of service quality
so it can be easily traced what actually affects
high or low overall quality rating.
2. Can dikeatahui how consumer expectations of the service
offered and how the assessment of the service provided
company.
3. It is known which variable should be the focus for improvement
The next in order to improve service quality.
4. Knowing picture of the development harapn and consumer perception
from time to time.
For the average of respondents' answers can be calculated by the following equation:

$$\bar{x} = \frac{\sum xi}{n}$$ (2.1 Rumus Rata – rata Jawaban Responden)

Keterangan :

$\bar{x}$ = respondens average answere
$\sum xi$ = Total weight of respondents
$n$ = Total ofrespondents

To determine the value of these gaps by using the following equation:

$$SQ = \bar{y} - \bar{x}$$ (2.2 Formula Value GAP)

Descriptions :

SQ = *gap value*
$\bar{y}$ = The average value of reality
$\bar{x}$ = Hope value average

For average of each dimensions can find by:

$$\bar{x} = \frac{\sum xi}{k}$$ (2.3 Formula of dimensions average)

$\bar{x}$ = Rata-rata jawaban perdimensi
$\sum xi$ = Jumlah rata-rata variabel
$k$ = Jumlah variabel

While the conceptual model of service quality Parasuraman et.al can be seen in Figure 2.1

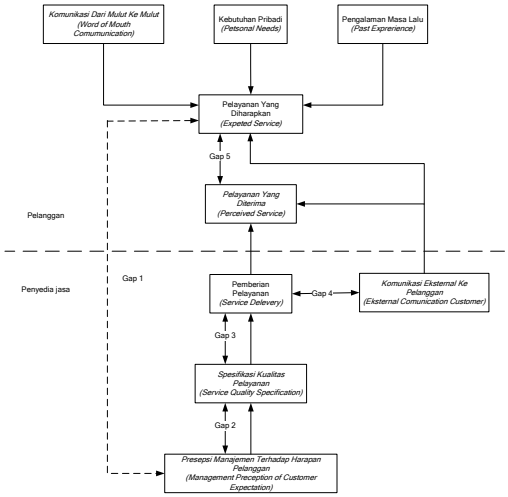


Figure 2.4 Conceptual Model of Quality of Service (Parasuraman et.al, 1990)

Some of the advantages in Parasuraman's SERVQUAL model can be seen in points - the following points:

1) to know the value of quality of service, each variable and each dimension of service quality, thus easily mentelusuri what actually affect high or low overall service.

2) It is known how consumer expectations of the service offered and how the neighbor assessment services provided by the company.

3) It is known which variable should be the focus for further improvement in order to improve the quality of services.

Knowing picture of the development of consumer expectations and perception of time.

2.1.4 Likert Scale

According Suhar Janti in the scientific journal titled analysis of the validity and reliability with skrala Likert against pegembangan SI / IT in the determination of decision implementation of strategic planning in the garment industry, Likert scale is a scale used to measure attitudes, opinions, and perceptions of an individual or group of people on events or social phenomena.

The way the measurement is to confront a respondent with a statement and then asked to answer five answer choices, where the value of the answers have values different answers.

In this research used closed questions with grading scale ranges are: Excellent: 5, Good: 4, Enough: 3, Less Good: 2, No Good: 1.

Population is the generalization region consisting of objects or subjects that have certain qualities and characteristics defined by the researchers to learn and then drawn conclusions.

Samples are partly or representative of the population who have relatively similar characteristics and is considered to represent the population. In this study using Slovin formula for determining the number of samples. [12]

$$n = \frac{N}{1 + Ne^2}$$

Information :

n = Number of Samples

N = Total Population

e = rate of error or inaccuracy due to sampling is still tolerable or desirable.

The percentage value is divided into 5 types of response categories namely excellent, good, fair, poor and not good. The distance of each category based on the highest percentage amount divided by category.

Information :

0% - 19.99% = Not Good

20% - 39.99% = Not Good

40% - 59.99% = Enough

60% - 79.99% = Good

80% - 100% = Very Good.

2.2 Analysis System

System analysis is the decomposition of a complete information sisitem into sections with a view to identify and evaluate the problems, opportunities, barriers that occur and needs expected to be proposed the amendments. Analysis can also be defined as the study of the existing system with the aim of designing a new system or updated. In the process of making the system absolutely must do the research and analysis of the system to be built.

2.3 Analysis of Dynamic CRM Framework

Dynamic CRM developed Chung-Hoon Park and Young-Gul Kim describes the framework from the perspective of external CRM or customer perspective. The framework represents a phase and maturity of the organization and the customer relationship.

Broadly speaking, Dynamic CRM actually describes a series of phases to be done in achieving an organization's customer management in accordance with the company's main business. This framework bias pattern or model is considered the benchmark of an organization in improving their customer management maturity. Within this framework there are several phases, among others:

1. Relationship initation

At the initiation phase relationship with the customer, the organization collected data on customers, usually with a membership registration. Once the customer record, organizations can deduce information about supply what is right for the customer (for-the-customer). After a certain period the customer is satisfied with what the organization has to offer, then the relationship with the customer bias increases to core customer. At this stage the organization can continue the next phase which CRM. In this phase occurs two-way interaction between the customer and the organization. Customers will tell what is needed specifically (by-

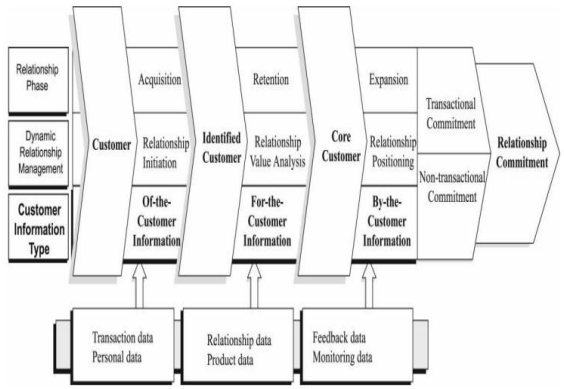
thecustomer). Things like this opens an opportunity for organizations to offer new products or services to customers, improve core business processes and satisfy customer.

2. Relationship Value Analysis

To be more effective CRM, preferably every customer relationship is analyzed from both the standpoint of either the customer or organization. There are two dimensions in determining the value of each customer relationship value from the standpoint of customer rights and organizational point of view. In this phase occurs psychological relationship between the customer and the organization. This usually occurs through a process of segmentation is followed by giving discounts to customers when making large purchases, indirectly increasing customer loyalty.

1. Relationship Positioning

Build a mutually beneficial relationship is very important to maintain a long-term relationship between the customer and the organization. In the application of the strategy of building mutually beneficial relationships, organizations maximize customer it will automatically increase the customer value. In addition to that right fair, the organization should also evaluate the customer relationship from the standpoint of benefits be obtained. If this relationship continues, between the customer and the organization will be formed a strong commitment both transactional and nontransactional and the relationship progressed to the stage of relationship commitment. [3]




Picture 2 Framework of Dynamic CRM

2.4 Analysis of Customer Satisfaction

Analysis of customer satisfaction of customers in this study is based on the quality of services of online sales, offline sales / direct and repair product on the CV. Maxcyber Store. Stages - the steps being taken for the analysis of customer satisfaction are as follows:

1. Identify the attributes of service quality and kaarakteristik respondents.
2. Preparation of Indicators Questionnaire.
3. Examining the Validity and Reliability
4. Distribution Questionnaire
5. Data Processing Questionnaire

**3.1. 6.1. Identification of the Service Quality Attributes and Characteristics of Respondents**

In this study, the identification of attributes based on the observation of researchers to existing business processes in the CV. Maxcyber Store. To reseponden in this study is a customer CV. Maxcyber Store.

**3.1.6.1.1. Identification of Online Sales Service Quality Attributes**

Identification of service quality attributes based on five dimensions of SERVQUAL Parasuraman's model at CV. Maxcyber Store is as follows:

a. Tangibles, such as facility / physical equipment, technology (use of the website or other media to transact) in CV. Maxcyber Store.

b. Reliability (consistency reliability) is the ability of each employee CV. Maxcybre Store to provide services according to the promise of immediate, service without fault and sympathetic attitude of employees in serving customers.

c. Responsivness (responsiveness) is the responsiveness of each employee CV. Maxcyber charge of serving customers online to help and provide services quickly and precisely to the customer with the delivery of information related to the purchase of goods are obvious. Do not let customers wait very long for no apparent reason to create a negative perception on quality customer service.

d. Assurance (warranty / guarantee) is about knowledge, courtesy clerks CV. Maxcyber Store to foster trust customers to do transactions. Also related to the quality of the delivery packaging good products and tidy so that the delivered goods are safe and are not constrained by anything.

e. Empaty is about a sense of caring employees CV. Maxcyber Store to provide individual attention to consumers by trying to understand the customer's needs in detail and has an operating time that is convenient for the customer. For example, an employee trying to recall the name of the customer, the customer last transactions and so on.

Here is the identification of the quality of service on online sales is based on five dimensions Servqual explanation above.

Table. 3.1 Identify Online Sales Service Quality

| Dimensi | Pernyataan Variabel |
|---|---|
| *Tangibles* / Bukti Fisik | Provide proof of delivery receipt is genuine |
| *Reliability* / Reliabilitas | Delivering the receipt and delivery as promised |

| | |
|---|---|
| *Responsiveness*/Daya Tanggap | Admin / Customer Service to inform customers about the certainty of product delivery time |
| | Immediate response to the customer |
| *Assurance* / Jaminan | The photos shown on the website / social media in accordance with the original product. |
| | Employees make customers feel safer when conducting transactions |
| | Employees who gain confidence to customers |
| | Guarantee if anything goes wrong delivery of products that do not fit booking. |
| | Warranty packing goods properly and safely |
| *Empaty* / Kepedulian | Give an enthusiastic response in communicating to customers |
| | Mean - really put the interests of customers |
| | Employees understand customer needs |

Table. 3.3 Identify Offline Sales Service Quality

| Dimensi | statement variable |
|---|---|
| Tangibles / Bukti Fisik | |
| | |
| | |
| Reliability / Reliabilitas | |
| | |
| Responsiveness/Daya Tanggap | |
| | |
| Assurance / Jaminan | |
| | |
| | |
| Empaty / Empati | |
| | |
| | |

**3.1.6.1.2. Identification Offline Sales Service Quality Attributes**

Identification of service quality attributes based on five dimensions of SERVQUAL Parasuraman's model at CV. Maxcyber Store is as follows:

a. Tangibles, such as facility / physical equipment, and technology includes the condition of the store, employee performance, preparation of a good product on the storefront and facilities adequate parking area.

b. Reliability (consistency reliability) is the ability of each employee CV. Maxcybre Store to provide services according to the promise of immediate, service without fault and sympathetic attitude of employees in serving customers.

c. Responsivness (responsiveness) is the responsiveness of each employee CV. Maxcyber Store in charge of serving the customers who came to help and provide fast service and appropriate, to the delivery of a clear product-related information.

d. Assurance (warranty / guarantee) that guarantees and certainty in the form of employee knowledge about products to buy customers that foster trust for transactions, while also courtesy clerks CV. Maxcyber Store and a great attitude of employees CV. Maxcyber Store.

e. Empaty is about a sense of caring employees CV. Maxcyber Store to provide individual attention to consumers by trying to understand the customer's needs in detail through good communication and has an operating time that is convenient for the customer. For example, an employee trying to recall the name of the customer, the customer last transactions and so on.

Here is the identification of the quality of service on offline sales is based on five dimensions Servqual explanation above.

**3.1.6.1.3. Identification Products Repair Service Quality Attributes**

Identification of service quality attributes based on five dimensions of SERVQUAL Parasuraman's model at CV. Maxcyber Store is as follows:

a. Tangibles, such as facility / physical equipment, and technology covering store conditions, equipment servicing the complete appearance of personnel and facilities adequate parking area.

b. Reliability (consistency reliability) is the ability of each employee CV. Maxcybre Store to provide services according to the promise of immediate, repair services without error or malfunction back and sympathetic attitude of employees in serving customers.

c. Responsivness (responsiveness) is the responsiveness of each employee CV. Maxcyber Store in charge of serving the customers who came to help and provide fast service and appropriate, to the delivery of information related to product improvements are obvious.

d. Assurance (warranty / guarantee) that guarantees and certainty in the form of employee knowledge about products to buy customers that foster trust for transactions, guarantees that the product really - really can be fixed or it would not even be a more broken after servicing. In addition, employee courtesy CV. Maxcyber Store and a great attitude of employees CV. Maxcyber Store.

e. Empaty is about a sense of caring employees CV. Maxcyber Store to provide individual attention to consumers by trying to understand the customer's needs in detail through good communication and has an operating time that is convenient for the customer. For example, an employee trying to recall the name of the customer, the customer last transactions and so on.

Here is the identification of service quality on product improvement based on five dimensions Servqual explanation above.
Table 3.5 Identification of Product Improvement of service quality.

| Dimensi | Variabel | statement variable |
|---|---|---|
| Tangibles / Bukti Fisik | V26 | Adequate parking area |
| | V27 | Employees who groomed. |
| Reliability / Reliabilitas | V28 | Structuring the products on display are neat and attractive. |
| Responsiveness/Daya Tanggap | V29 | Provide products as promised |
| | V30 | Providing appropriate price according to the type of customers that party shopping customers, resellers and regular customers |
| Assurance / Jaminan | V31 | Serve immediately for customers |
| | V32 | Willingness to help customers determine which products customers want |
| | V33 | Employees are able to answer customer statement about the quality of the product. |
| | V34 | Employees make customers feel safer when conducting transactions |
| | V35 | Employees communicate with consistently courteous customer |
| Empaty / Empati | V36 | Give an enthusiastic response in communicating to customers |
| | V37 | Bersungguh – sungguh mengutamakan kepentingan pelanggan |
| | V38 | Operating time (office hours) were comfortable. |

From the identification of the above, the next step is giving questionnaires according to the type of customers that have been set by the CV. Maxcyber Store. Customers to purchase online questionnaire will be filled first, customers who transact directly it will fill the second questionnaire, and servicing of products for customers to fill out questionnaires that will be the third. If there is a customer who had received services more than the type of service, it will be shown also according to service ever got.

**3.1.1** Determination of the number of samples

Determination of the number of samples in this study, the authors use the formula Slovin. From the data of customers shopping in August 2016, there were 182 buyers with different shopping instensitas. Using the formula Slovin, with error tolerance limit of 10%, obtained a figure of 65. This value will be used as a target sample questionnaire.

$$n = \frac{N}{1 + Ne^2}$$ (Rumus 3)

$182 / (1 + 182 \times 0{,}1^2) = 64{,}53 \approx 65$

**3.1.8 Questionnaire Design and Deployment Questionnaire**

The design of this kueisioner, researchers used questionnaires that have a direct structured form. Where in this type of questionnaire, respondents answer alternative have been prepared in such a way that the respondent only needs to put a mark on the place in accordance with the answer. In this study, a statement - a statement on the quality of service using the measurement scale with Likert scale.

**3.1.8 Test Validity and Reliability**

From the questionnaire that was distributed, it will be testing the validity and realibilitasnya

3.1.9.1. Test Validity Online Sales Service Quality Attributes

Test the validity of the online sales service quality conducted using SPSS 20. Here are the quality attributes of online sales before the validity test

Tabel 3.10 Atribut Kualitas layanan Penjualan Online

| Variabel | statement variable |
|---|---|
| V1 | Provide proof of delivery receipt is genuine |
| V2 | Delivering the receipt and delivery as promised |
| V3 | Admin / Customer Service to inform customers about the certainty of product delivery time |
| V4 | Respond immediately to customers |
| V5 | The photos shown on the website / social media in accordance with the original product. |
| V6 | Employees make customers feel safer when conducting transactions |
| V7 | Employees who gain confidence to customers |
| V8 | Guarantee if anything goes wrong delivery of products that do not fit booking. |
| V9 | Warranty packing goods properly and safely |
| V10 | Give an enthusiastic response in communicating to customers |
| V11 | Mean - really put the interests of customers |
| V12 | Employees understand customer needs |

In testing the validity of the research questionnaire using Pearson Product Moment, the amount of data processed is 65 (sixty-five) data for gap 5, as a comparison table that can be used is a table r Pearson Product Moment. Pearson product moment correlation figures are compared with the critical r obtained from table r Pearson moment on the attachment.

With the number of respondem 65 (sixty-five), and the level of accuracy that is used α of 5%, the obtained value of r critical = 0:24

Validity test results comparing the expectations and perceptions of the value of the count r r table, if r count is greater than the value of r table then the statement is valid, for more details can be seen in the table - the table below. For the calculation results SPSS. Version 20 can be seen in the following table Hasil Uji Validitas Layanan Penjualan *Online*

Table 3.11 Results of testing the validity of customer expectations online sales

| **Variabel** | **r count (Hope)** | **R tabel 5% (65)** | **Information** |
|---|---|---|---|
| 1 | 0.346 | 0.2441 | Valid |
| 2 | 0.570 | 0.2441 | Valid |
| 3 | 0.462 | 0.2441 | Valid |
| 4 | 0.284 | 0.2441 | Valid |
| 5 | 0.344 | 0.2441 | Valid |
| 6 | 0.308 | 0.2441 | Valid |
| 7 | 0.376 | 0.2441 | Valid |
| 8 | 0.471 | 0.2441 | Valid |
| 9 | 0.654 | 0.2441 | Valid |
| 10 | 0.444 | 0.2441 | Valid |
| 11 | 0.672 | 0.2441 | Valid |
| 12 | 0.503 | 0.2441 | Valid |

Validity of Test Results Table 3.12 Perceptions of customer sales online

| **Variabel** | **r hitung (Persepsi)** | **R tabel 5% (65)** | **Information** |
|---|---|---|---|
| 1 | 0.310 | 0.2441 | Valid |
| 2 | 0.517 | 0.2441 | Valid |
| 3 | 0.417 | 0.2441 | Valid |
| 4 | 0.452 | 0.2441 | Valid |
| 5 | 0.364 | 0.2441 | Valid |
| 6 | 0.278 | 0.2441 | Valid |
| 7 | 0.524 | 0.2441 | Valid |
| 8 | 0.456 | 0.2441 | Valid |
| 9 | 0.475 | 0.2441 | Valid |
| 10 | 0.454 | 0.2441 | Valid |
| 11 | 0.304 | 0.2441 | Valid |
| 12 | 0383 | 0.2441 | Valid |

3.1.9.1. Test Reliability Online Sales Service Quality Attributes

In this reliability testing using Cronbach aplha coefficient and theoretical criteria for Guilford, hail from the calculation of reliability test using SPSS 20 can be seen in the attachment. For reliability test results can be seen from the following table.

Table 3.13 Reliability test results expectations and perceptions of customers

| Statement | the reliability value<br><br>cronbach alpha | Information |
|---|---|---|
| Consumer expectations to services provided by the company. | 0.669 | Cronbach alpha values> 6, then the acceptable reliability |
| Perceptions of service received by consumers to services provided by the company. | 0.672 | Cronbanch alpha values> 6, then the acceptable reliability |

After the test results data is carried out, then the results obtained each attribute-value VALID and REALIABEL.

Here are the results of the validation test and the reliability of the online sales service quality attributes.

Table 3.14 Online Sales Service Quality

| Variabel | Pernyataan Variabel |
|---|---|
| V1 | Provide proof of delivery receipt is genuine |
| V2 | Delivering the receipt and delivery as promised |
| V3 | Admin / Customer Service to inform customers about the certainty of product delivery time |
| V4 | Respond immediately to customers |
| V5 | The photos shown on the website / social media in accordance with the original product. |
| V6 | Employees make customers feel safer when conducting transactions |
| V7 | Employees who gain confidence to customers |
| V8 | Guarantee if anything goes wrong delivery of products that do not fit booking. |
| V9 | Warranty packing goods properly and safely |
| V10 | Give an enthusiastic response in communicating to customers |
| V11 | Mean - really put the interests of customers |
| V12 | Employees understand customer needs |

**3.1.9.1. Uji Validitas Atribut Kualitas Layanan Penjualan Offline**

Tabel 3.15 Hasil uji validitas harapan pelanggan penjualan *offline*

| **Variabel** | **r count (hope)** | **R tabel 5% (65)** | **Information** |
|---|---|---|---|
| V13 | 0.646 | 0.2441 | Valid |
| V14 | 0.388 | 0.2441 | Valid |
| V15 | 0.420 | 0.2441 | Valid |
| V16 | 0.290 | 0.2441 | Valid |
| V17 | 0.282 | 0.2441 | Valid |
| V18 | 0.384 | 0.2441 | Valid |
| V19 | 0.491 | 0.2441 | Valid |
| V20 | 0.512 | 0.2441 | Valid |
| V21 | 0.323 | 0.2441 | Valid |
| V22 | 0.498 | 0.2441 | Valid |
| V23 | 0.305 | 0.2441 | Valid |
| V24 | 0.412 | 0.2441 | Valid |
| V25 | 0.582 | 0.2441 | Valid |

Table 3.16 Results of testing the validity of customer perception of the service offline sales

| Variabel | r hitung (Persepsi) | R tabel 5% (65) | Keterangan |
|---|---|---|---|
| V13 | 0.276 | 0.2441 | Valid |
| V14 | 0.433 | 0.2441 | Valid |
| V15 | 0.556 | 0.2441 | Valid |
| V16 | ~~0.356~~ | ~~0.2441~~ | ~~Valid~~ |
| V17 | 0.409 | 0.2441 | Valid |
| V18 | 0.386 | 0.2441 | Valid |
| V19 | 0.428 | 0.2441 | Valid |
| V20 | 0.348 | 0.2441 | Valid |
| V21 | 0.378 | 0.2441 | Valid |
| V22 | ~~0.414~~ | ~~0.2441~~ | ~~Valid~~ |
| V23 | 0.278 | 0.2441 | Valid |
| V24 | 0.544 | 0.2441 | Valid |
| V25 | 0.441 | 0.2441 | Valid |

From the calculation of the penryataan expectations and perceptions of the above services, all statements declared invalid. But because in previous expectation variables are invalid variable is the variable to 16 and to 22, then to perception will also be eliminated.

**3.1.9.2. Uji Realibilitas Atribut Kualitas Layanan Penjualan Offline**

Tabel 3.17 Hasil uji reliabilitas harapan dan Persepsi pelanggan *offline*

| **Stetement** | **Value of *alpha cronbach*** | **Information** |
|---|---|---|
| Consumer expectations to services provided by the company. | 0.647 | Nilai alpha cronbanch > 6 , maka realibilitas diterima |
| Perceptions of service received by consumers to services provided by the company. | 0.677 | Nilai alpha cronbanch > 6 , maka realibilitas diterima |

After the test results data is carried out, then the results obtained each attribute-value VALID and REALIABEL.

Here are the results of the validation test and reliability against offline sales service quality attributes. The attribute attribute to 4 and to - 10, did not have a significant influence on the results of service quality attributes of online sales today.

Table 3.18 Sales Service Quality Attributes Offline

| Variabel | Statement of Variables |
|---|---|
| V13 | Adequate parking area |
| V14 | Employees who groomed. |
| V15 | Structuring the products on display are neat and attractive. |
| V16 | Providing appropriate price according to the type of customers that party shopping customers, resellers and regular customers |
| V17 | Serve immediately for customers |
| V18 | Willingness to help customers determine which products customers want |
| V19 | Employees are able to answer customer statement about the quality of the |

| | |
|---|---|
| | product. |
| V20 | Employees make customers feel safer when conducting transactions |
| V21 | Give an enthusiastic response in communicating to customers |
| V22 | Mean - really put the interests of customers |
| V23 | Operating time (office hours) were comfortable. |

**3.1.9.3. Test Validity Products Repair Service Quality Attributes**

Table 3.19 Results of testing the validity of the customer's expectations

| Variabel | r hitung (Harapan) | R tabel 5% (65) | Keterangan |
|---|---|---|---|
| V26 | 0.385 | 0.2441 | Valid |
| V27 | 0.433 | 0.2441 | Valid |
| V28 | 0.419 | 0.2441 | Valid |
| V29 | 0.426 | 0.2441 | Valid |
| V30 | 0.423 | 0.2441 | Valid |
| V31 | 0.300 | 0.2441 | Valid |
| V32 | 0.271 | 0.2441 | Valid |
| V33 | 0.552 | 0.2441 | Valid |
| V34 | 0.543 | 0.2441 | Valid |
| V35 | 0.044 | 0.2441 | Tidak Valid |
| V36 | 0.518 | 0.2441 | Valid |
| V37 | 0.145 | 0.2441 | Tidak Valid |
| V38 | 0.045 | 0.2441 | Valid |

From the results of testing the validity of the customer's expectations, there are variables that are invalid variable 12. Then the next reckoned, variable to 12 will be eliminated.

Table 3.20 Validity test results Perceptions of customer product improvements

| Variabel | R count (hope) | R tabel 5% (65) | Information |
|---|---|---|---|
| V26 | 0.411 | 0.2441 | Valid |
| V27 | 0.419 | 0.2441 | Valid |
| V28 | 0.566 | 0.2441 | Valid |
| V29 | 0.385 | 0.2441 | Valid |
| V30 | 0.499 | 0.2441 | Valid |
| V31 | 0.349 | 0.2441 | Valid |
| V32 | 0.425 | 0.2441 | Valid |
| V33 | 0.446 | 0.2441 | Valid |
| V34 | 0.435 | 0.2441 | Valid |
| V35 | 0.295 | 0.2441 | Valid |
| V36 | 0.193 | 0.2441 | Tidak Valid |
| V37 | 0.545 | 0.2441 | Valid |
| V38 | 0.346 | 0.2441 | Valid |

From the calculation of the penryataan expectations and perceptions of the above services, all statements declared invalid. But because in previous expectation variables are invalid variable is the variable to 10, 11 and 13.

**3.1.9.6. Test Validity Products Repair Service Quality Attributes**

Table 3.21 Reliability test results expectations and customer perception of product improvements

| Statements | the reliability value cronbach alpha | Keterangan |
|---|---|---|
| Consumer expectations to services provided by the company. | 0.660 | Cronbach alpha values> 6, then the acceptable reliability |
| Perceptions of service received by consumers to services provided by the company. | 0.692 | Nilai alpha cronbanch > 6 , maka realibilitas diterima |

After the test results data is carried out, then the results obtained each attribute-value VALID and REALIABEL.

Here are the results of the validation test and reliability of the quality attributes of the product repair services. The attribute attribute to 35 and to - 37, did not have a significant influence on the results of the quality attributes of product repair services at this time.

Table 3. 22 Quality Attributes Product Repair Services

| Variabel | Pernyataan Variabel |
|---|---|
| V24 | Adequate parking area |
| V25 | Employees who groomed. |
| V26 | Reliable in improving products |
| V227 | Admin / Customer Service to inform customers about the estimated time certainty finished goods diperperbaiki |
| V28 | Serve immediately for customers who come |
| V29 | Employees are able to answer customer questions about the fine product damage. |
| V30 | Employees communicate with consistently courteous customer |
| V31 | Employees make customers feel secure when doing repairs. |
| V32 | Employees who gain confidence to |

| | |
|---|---|
| | customers |
| V33 | Giving attention really - really explain when a customer product damage. |
| V34 | Operating time (office hours) which is convenient for the customer. |

**3.1.9 Data Processing Questionnaire**

After the data collected from the results of the questionnaire, and then perform data processing frequency questionnaire reply statements, calculating the weight of each variable to calculate the average - average per variables proposed by calculating the gap between consumer expectations about the service and perceived service consumers.

1. Calculation Weighting Questionnaire

This questionnaire weighting calculation as material to calculate the average of respondents' answers and will average this answer as a material for the calculation of the gap between consumer expectations of the service and perceived service consumer perception (gap 5).

Can be calculated as a weighted sum calculation example of weighting for the level of consumer expectations towards the service as follows:Variabel 1 = (1x0+(2x0)+(3 x 0) + (4 x 29) + (5 x 36)
= 296

In the above calculation, shows the variables of the parking lot. This means that the number 29 is the frequency of respondents who expressed the hope both 29, number 36 is a very good frequency states as many as 36 people. As for the number1, 2, 3, 4 and 5 is the weight scale of the level of interest.

For the average - average of respondents'answer can be calculated by the following equation: $\bar{x} = \frac{\sum xi}{n}$ (2. 1 formula Average - Average Answer Respondents)

Descipsions:

$\bar{x}$ = On average respondents

$\sum xi$ = Total weight of respondents

$n$ = number of respondents

Sample calculation:

Is known

The weight of the variable frequency response 1 = 296

Total respondents = 65

$$\bar{x} = \frac{296}{65} = 4.55$$

1. Calculation of Average - Average answers Respondents

For the average response per dimension can be calculated by the following equation:

$$\bar{x} = \frac{\sum xi}{k}$$

2.3 Formula average - average per dimension)

$\bar{x}$ = Average response perdimensi

$\sum xi$ = Average number of variables

$k$ = The number of variables

Examples for the calculation of the average perception of service dimension Tangibles:

Is known

k = 4 variabel

$$\sum xi = \frac{V1 + V2}{2}$$

$$= \frac{3.70 + 4.15}{2}$$

$$= \frac{7.85}{2} = 3.81$$

1. Calculation of Value Gap 5

To know the gap value per dimension can be calculated using the following equation:

$$SQ = \bar{y} - \bar{x}$$

(2.2 Rumus Nilai *GAP*)

Keterangan:

SQ = Nilai *gap*

$\bar{y}$ = The average value per dimension Perception of service

$\bar{x}$ = The average value per dimension consumer expectationsContoh perhitungan nilai *gap* dimensi *Tangibles* :

$$SQ = \bar{y} - \bar{x}$$

= 2.77 - 3.93

= -1.16

**3.1.10.1. Questionnaire Data Processing Services Online Sales**

Data processing here is the calculation of the gap 5 on expectations and customer perception of service Online Sales. Table Frequency response Respondents to the questionnaire consumer expectations towards online sales service.

Table 3:26 Table Frequency Hope Online Sales Service

| **Variabel** | **Expectation Level of Interest** | | | | |
|---|---|---|---|---|---|
| | SS | S | CS | TS | STS |
| V1 | | | | 29 | 36 |
| V2 | | | 11 | 35 | 19 |

| | | | | | |
|---|---|---|---|---|---|
| V3 | | | 5 | 27 | 33 |
| V4 | | | 2 | 38 | 25 |
| V5 | | | | 31 | 34 |
| V6 | | | | 41 | 24 |
| V7 | | | 1 | 37 | 27 |
| V8 | | | 5 | 35 | 25 |
| V9 | | | 8 | 33 | 24 |
| V10 | | | 3 | 33 | 29 |
| V11 | | | 3 | 41 | 21 |

Table 3. Frequency response 27 respondent's perception of online sales services.

| Variabel | Tingkat Persepsi Kualitas Layanan | | | | |
|---|---|---|---|---|---|
| | SS | S | CS | TS | STS |
| V1 | 0 | 11 | 48 | 6 | |
| V2 | 14 | 29 | 22 | | |
| V3 | 4 | 44 | 16 | 1 | |
| V4 | 7 | 34 | 24 | | |
| V5 | 5 | 37 | 22 | | |
| V6 | 3 | 50 | 12 | | |
| V7 | 6 | 46 | 13 | | |
| V8 | 4 | 34 | 27 | | |
| V9 | 3 | 53 | 9 | | |
| V10 | 7 | 47 | 11 | | |
| V11 | 10 | 36 | 19 | | |

**Table 3.28 Table Weighting and Answers Respondents For Online Sales Service**

| Variabel Pernyataan | Tingkat Harapan | | Tingkat Persepsi Pelayanan | |
|---|---|---|---|---|
| | Nilai Pembobotan | Nilai Rata-rata | Nilai Pembobotan | Nilai Rata-rata |
| V1 | 296 | 4,55 | 190 | 2,92 |
| V2 | 268 | 4,12 | 138 | 2,12 |
| V3 | 288 | 4,43 | 144 | 2,22 |
| V4 | 283 | 4,35 | 147 | 2,26 |
| V5 | 294 | 4,52 | 149 | 2,29 |
| V6 | 284 | 4,37 | 139 | 2,14 |
| V7 | 286 | 4,40 | 137 | 2,11 |
| V8 | 280 | 4,31 | 153 | 2,35 |
| V9 | 276 | 4,25 | 136 | 2,09 |
| V10 | 286 | 4,40 | 134 | 2,06 |
| V11 | 278 | 4,28 | 139 | 2,14 |
| Total | | 47,98 | | 24,71 |

Tabel 3. 29 Nilai GAP 5 akhir Dimensi Pernyataan Pelayanan Penjualan *Online.*

| dimension | value | value | Nilai |
|---|---|---|---|

| Statement | expectations | Perception | *Gap* 5 |
|---|---|---|---|
| *Tangible* | 4,55 | 2,92 | -1,63 |
| *Reliability* | 4,12 | 2,12 | -2,00 |
| *Responsiveness* | 4,39 | 2,24 | -2,15 |
| *Assurance* | 4,40 | 2,22 | -2,18 |
| *Empathy* | 4,31 | 2,10 | -2,21 |

From the table above, the result is minus 5 gap. If the value is worth the gap 5 <0, then it means the services provided to customers is worth the bad. If the worth = 0, then the good category, and if it is worth> 0 then the quality of the service ideal.

Table 3.30 Proposed Quality Repair Service Online Sales

| Proposed Quality Repair Service Online Sales | | |
|---|---|---|
| Variabel | statement variable | Improvements suggested |
| V1 | Provide proof of delivery receipt is genuine | Include a photo of the original receipt to the customer |
| V2 | Delivering the receipt and delivery as promised | Resi delivered as soon as possible and be given certainty when it will be given. |
| V3 | Admin / Customer Service to inform customers about the certainty of product delivery time | Delivering clear information related delivery systems of the expedition used. |
| V4 | Respond immediately to customers | Serve customers quickly |
| V5 | The photos shown on the website / social media in accordance with the original product. | Give to an employee learning how to communicate with consistently courteous to customers |
| V6 | Employees make customers feel safer when conducting transactions | Make customers feel safe when performing a transaction by showing testimony - testimony shipments. |
| V7 | Employees who gain confidence to customers | Make customers feel safe when performing a transaction by showing testimony - testimony shipments. |
| V8 | Guarantee if anything goes wrong delivery of products that do not fit booking. | Check out more thoroughly related booking requests from customers. |

| | | |
|---|---|---|
| V9 | Warranty packing goods properly and safely | Items are shipped, at an additional packing well with Buble wrap (plastic bubble) |
| V10 | Give an enthusiastic response in communicating to customers | Show enthusiasm to the customer while communicating. |
| V11 | Mean - really put the interests of customers | Ask in detail what the customer wants, from the model, the size of the arms and so on. |
| V12 | Employees understand customer needs | Employees are taught the techniques of communicating to customers well. |

**3.1.10.1. Questionnaire Data Processing Services Offline Sales**

Table 3. Frequency Table 31 Respondents to the questionnaire response to consumer expectations Offline Sales service**.**

| Variabel | Tingkat Harapan Kepentingan | | | | |
|---|---|---|---|---|---|
| | SS | S | CS | TS | STS |
| V1 | | | 3 | 41 | 21 |
| V2 | | | 3 | 33 | 29 |
| V3 | | | 5 | 27 | 33 |
| V4 | | | | 31 | 34 |
| V5 | | | | 41 | 24 |
| V6 | | | 1 | 37 | 27 |
| V7 | | | 5 | 35 | 25 |
| V8 | | | 8 | 33 | 24 |
| V9 | | | 3 | 38 | 24 |
| V10 | | | 11 | 35 | 19 |
| V11 | | | 0 | 29 | 36 |

Table 3:32 Respondents Frequency response on the questionnaire customer perception of the service offline sales.

| Variabel | Perception level Interests | | | | |
|---|---|---|---|---|---|
| | SS | S | CS | TS | STS |
| V1 | 2 | 19 | 44 | 0 | |
| V2 | 14 | 29 | 22 | 0 | |
| V3 | 4 | 44 | 16 | 1 | |
| V4 | 5 | 36 | 24 | 0 | |
| V5 | 3 | 50 | 12 | 0 | |
| V6 | 7 | 44 | 14 | 0 | |
| V7 | 4 | 34 | 27 | 0 | |
| V8 | 2 | 54 | 9 | 0 | |
| V9 | 8 | 34 | 23 | 0 | |
| V10 | 4 | 44 | 17 | | |
| V11 | | 46 | 16 | | |

**Table 3:33 Respondents Table Weighting and Answers For Offline Sales Service**

| variable Statement | Importance of Hope | | Perception Level Services | |
|---|---|---|---|---|
| | Value weighting | Value Average | Value weighting | Value Average |
| V1 | 278 | 4,28 | 172 | 2,65 |
| V2 | 286 | 4,40 | 138 | 2,12 |
| V3 | 288 | 4,43 | 144 | 2,22 |
| V4 | 294 | 4,52 | 149 | 2,29 |
| V5 | 284 | 4,37 | 139 | 2,14 |
| V6 | 286 | 4,40 | 137 | 2,11 |
| V7 | 280 | 4,31 | 153 | 2,35 |
| V8 | 276 | 4,25 | 137 | 2,11 |
| V9 | 281 | 4,32 | 145 | 2,23 |
| V10 | 268 | 4,12 | 143 | 2,20 |
| V11 | 296 | 4,55 | 140 | 2,15 |

**Table 3.34 Table Value Gap 5 statement offline sales service quality**

| Variabel pernyataan | Nilai Rata-rata Harapan Pelayanan | Nilai Rata-rata Persepsi Konsumen | Nilai *Gap* 5 (lima) |
|---|---|---|---|
| V1 | 4,28 | 2,65 | -1,63 |
| V2 | 4,40 | 2,12 | -2,28 |
| V3 | 4,43 | 2,22 | -2,22 |
| V4 | 4,52 | 2,29 | -2,23 |
| V5 | 4,37 | 2,14 | -2,23 |
| V6 | 4,40 | 2,11 | -2,29 |
| V7 | 4,31 | 2,35 | -1,95 |
| V8 | 4,25 | 2,11 | -2,14 |
| V9 | 4,32 | 2,23 | -2,09 |
| V10 | 4,12 | 2,20 | -1,92 |
| V11 | 4,55 | 2,15 | -2,40 |

Tabel 3.35 Tabel Rata – rata jawaban dan nilai Gap kualitas Layanan Penjualan Offline

| Variabel | Nilai Rata-rata | Nilai Rata-rata |
|---|---|---|
| Pernyataan | Harapan Pelanggan | Persepsi Pelanggan |
| V13 | 4,28 | 2,65 |
| V14 | 4,40 | 2,12 |
| V15 | 4,43 | 2,22 |
| Tangibles | 4,37 | 2,33 |
| V16 | 4,52 | 2,29 |
| Reliability | 4,36 | 2,25 |
| V17 | 4,37 | 2,14 |
| V18 | 4,40 | 2,11 |
| Responsiveness | 4,38 | 2,12 |
| V19 | 4,31 | 2,35 |
| V20 | 4,25 | 2,11 |

| | | |
|---|---|---|
| Assurance | 4,13 | 2,17 |
| V21 | 4,32 | 2,23 |
| V22 | 4,12 | 2,20 |
| V23 | 4,55 | 2,15 |
| Empaty | 4,33 | 2,19 |

Tabel 3.36 Tabel Nilai GAP 5 akhir Dimensi Pernyataan Pelayanan Penjualan Offline.

| **Dimensi Pernyataan** | **Nilai Harapan** | **Nilai Persepsi** | **Nilai *Gap* 5** |
|---|---|---|---|
| *Tangible* | 4,37 | 2,33 | -2,04 |
| *Reliability* | 4,36 | 2,25 | -2,11 |
| *Responsiveness* | 4,38 | 2,12 | -2,26 |
| *Assurance* | 4,13 | 2,17 | -1,96 |
| *Empathy* | 4,33 | 2,19 | -2,14 |

Proposed Table Table 3:37 Sales Service Quality Improvement Offline

| Proposed Quality Repair Service Offline Sales | | |
|---|---|---|
| Variabel | statement variable | Improvements suggested |
| V13 | Adequate parking area | As much as possible allocate parking area |
| V14 | Employees who groomed. | Scolds employee who is not neat, if necessary, provide special uniform company. |
| V15 | Structuring the products on display are neat and attractive. | Create a better arrangement again |
| V16 | Providing appropriate price according to the type of customers that party shopping customers, resellers and regular customers | Create a list of customers that have been categorized by either |
| V17 | Serve immediately for customers | Serve customers better |
| V18 | Willingness to help customers determine which products customers want | Help with more enthusiasm when customers ask for advice which products are suitable for her. |
| V19 | Employees are able to answer customer statement about the quality of the product. | Assign employees to learn more about product information. |
| V20 | Employees make customers feel safer when conducting transactions | Teach good communication techniques to employees, especially CS |
| V21 | Give an enthusiastic response in communicating to customers | Ask in detail what the customer wants, from the model, the size of the arms and so on. |
| V22 | Mean - really put the interests of customers | Teach good communication techniques to employees, especially CS |
| V23 | Operating time (office hours) were comfortable. | Observe the time when most customers visit the store, and adjust |

**3.1.10.2. Questionnaire Data Processing Products Repair Service**

Frequency Table Table 3.38 Respondents answer on the questionnaire expectations of consumers to services Repair Products.

| | **Expectation Level of Interest** | | | | |
|---|---|---|---|---|---|
| | SS | S | CS | TS | STS |
| V24 | | | 3 | 32 | 30 |
| V25 | | | 3 | 28 | 34 |
| V26 | | | 6 | 26 | 33 |
| V27 | | | | 27 | 38 |
| V28 | | | 0 | 32 | 33 |
| V29 | | | 0 | 42 | 23 |
| V30 | | | 1 | 37 | 27 |
| V31 | | | 5 | 35 | 25 |
| V32 | | | 8 | 34 | 23 |
| V33 | | | 10 | 37 | 18 |
| V34 | | | | 31 | 34 |

Frequency Table Table 3:39 Respondents answer on the questionnaire perception perceived service consumers.

| **Variabel** | **Perception level Interests** | | | | |
|---|---|---|---|---|---|
| | SS | S | CS | TS | STS |
| V24 | 0 | 53 | 12 | | |
| V25 | 2 | 41 | 22 | 0 | |
| V26 | 1 | 46 | 17 | 1 | |
| V27 | 4 | 38 | 23 | 0 | |
| V28 | 2 | 39 | 24 | | |
| V29 | 1 | 51 | 13 | 0 | |
| V30 | 1 | 49 | 15 | 0 | |
| V31 | | 38 | 27 | 0 | |

| | | | | | |
|---|---|---|---|---|---|
| V32 | | 55 | 10 | 0 | |
| V33 | 1 | 47 | 17 | | |
| V34 | | 41 | 24 | | |

**Table 3:40 Respondents Table Weighting and Answers To Repair Services Products**

| Variabel Pernyataan | Tingkat Kepentingan Harapan | | Tingkat Persepsi Pelayanan | |
|---|---|---|---|---|
| | Nilai Pembobotan | Nilai Rata-rata | Nilai Pembobotan | Nilai Rata-rata |
| V24 | 287 | 4,42 | 142 | 2,18 |
| V25 | 291 | 4,48 | 150 | 2,31 |
| V26 | 287 | 4,42 | 148 | 2,28 |
| V27 | 298 | 4,58 | 149 | 2,29 |
| V28 | 293 | 4,51 | 152 | 2,34 |
| V29 | 283 | 4,35 | 142 | 2,18 |
| V30 | 286 | 4,40 | 144 | 2,22 |
| V31 | 280 | 4,31 | 157 | 2,42 |
| V32 | 275 | 4,23 | 140 | 2,15 |
| V33 | 268 | 4,12 | 146 | 2,25 |
| V34 | 294 | 4,52 | 154 | 2,37 |

**Table 3:40 Table Value Gap 5 statement quality product repair services**

| Variabel pernyataan | Nilai Rata-rata Harapan Pelayanan | Nilai Rata-rata Persepsi Konsumen | Nilai *Gap* 5 (lima) |
|---|---|---|---|
| V24 | 4,42 | 2,18 | 2,23 |
| V25 | 4,48 | 2,31 | 2,17 |
| V26 | 4,42 | 2,28 | 2,14 |
| V27 | 4,58 | 2,29 | 2,29 |
| V28 | 4,51 | 2,34 | 2,17 |
| V29 | 4,35 | 2,18 | 2,17 |
| V30 | 4,40 | 2,22 | 2,18 |
| V31 | 4,31 | 2,42 | 1,89 |
| V32 | 4,23 | 2,15 | 2,08 |
| V33 | 4,12 | 2,25 | 1,88 |
| V34 | 4,52 | 2,37 | 2,15 |

Table 3:41 Table Average - average response and value quality Gap Repair Service Products

| Variabel Pernyataan | Nilai Rata-rata Harapan pelayanan | Nilai Rata-rata Persepsi Konsumen |
|---|---|---|
| V24 | 4,42 | 2,18 |
| V25 | 4,48 | 2,31 |
| Tangibles | 4,45 | 2,25 |
| V26 | 4,42 | 2,28 |
| Reliability | 4,42 | 2,28 |
| V27 | 4,58 | 2,29 |
| V28 | 4,51 | 2,34 |
| Responsiveness | 4,55 | 2,18 |
| V29 | 4,35 | 2,18 |
| V30 | 4,40 | 2,22 |
| V31 | 4,31 | 2,42 |
| V32 | 4,23 | 2,15 |
| Assurance | 4,22 | 2,33 |
| V33 | 4,12 | 2,25 |
| V34 | 4,52 | 2,37 |
| Empaty | 4,29 | 2,31 |

Tabel 3.42 Tabel Nilai GAP 5 akhir Dimensi Pernyataan Pelayanan Perbaikan.

| Dimensi Pernyataan | Nilai Harapan | Nilai Persepsi | Nilai *Gap* 5 |
|---|---|---|---|
| *Tangible* | 4,42 | 2,28 | -2,14 |
| *Reliability* | 4,51 | 2,34 | -2,17 |
| *Responsiveness* | 4,40 | 2,22 | -2,18 |
| *Assurance* | 4,22 | 2,33 | -1,89 |
| *Empathy* | 4,29 | 2,31 | -1,98 |

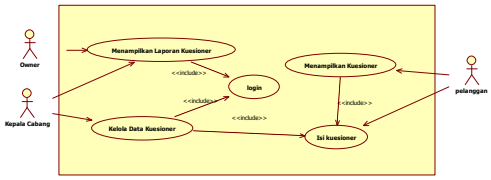
Table 3:42 Table Proposed Quality Repair Products Repair Service

| Proposed Quality Repair Products Repair Service | | |
|---|---|---|
| Variabel | statement variable | Improvements suggested |
| V24 | Adequate parking area | As much as possible allocate parking area |
| V25 | Employees who groomed. | Scolds employee who is not neat, if necessary, provide special uniform company. |
| V26 | Reliable in improving products | If necessary, the cooperation with other |

| | | |
|---|---|---|
| | | companies that are more reliable in servicing the product. |
| V27 | Admin / Customer Service to inform customers about the estimated time certainty finished goods diperperbaiki | Give certainty to customers about the certainty of the goods could have been corrected according to sources in the company dayayang |
| V28 | Serve immediately for customers who come | Serve customers better |
| V29 | Employees are able to answer customer questions about the fine product damage. | .Ajarkan To all employees, especially customer Service on improvement of product knowledge |
| V30 | Employees communicate with consistently courteous customer | Assign employees to learn more about product information. |
| V31 | Employees make customers feel secure when doing repairs. | Teach good communication techniques to employees, especially CS |
| V32 | Employees who gain confidence to customers | Ask in detail what the customer wants, from the model, the size of the arms and so on. |
| V33 | Giving attention really - really explain when a customer product damage. | Teach good communication techniques to employees, especially CS |
| V34 | Operating time (office hours) which is convenient for the customer. | Observe the time when most customers visit the store, and adjust |

**2.6 Requirements Analysis Fungsionel**

Fungsionel needs analysis is an analysis that explains the flow of data atupun information including drawing, design, and manufacture complete and functioning in the manufacture of the software to be built.



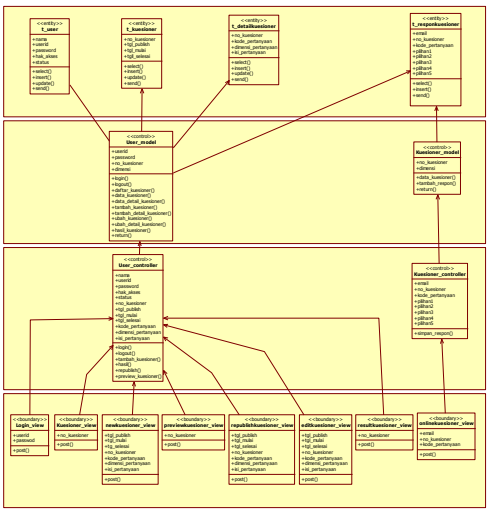

Gambar 5. Use Case Diagram

**2.7 Analysis System Model**

Analysis of the model of the system is an analysis to Determine the Data elements and software functions that represent the business model.

**2.7.1 Class Diagram**

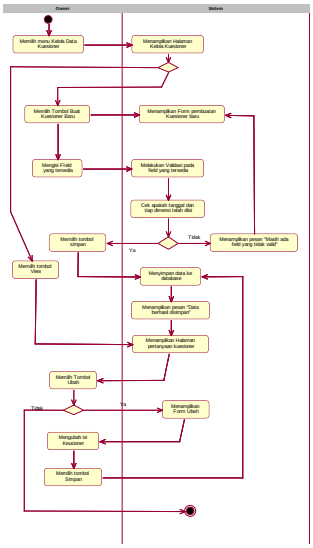
Class diagram describing the structure and relationships between objects in the system. The structure includes attributes and methods that exist in each **class.**



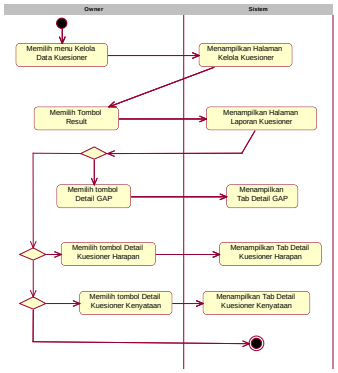
Gambar 6. Class Diagram

**2.7.1 Activity Diagram**

Activity diagram modeling the workflow or workflow of the order of activities in a process that refers to the use case scenario of the use case diagram of the system.



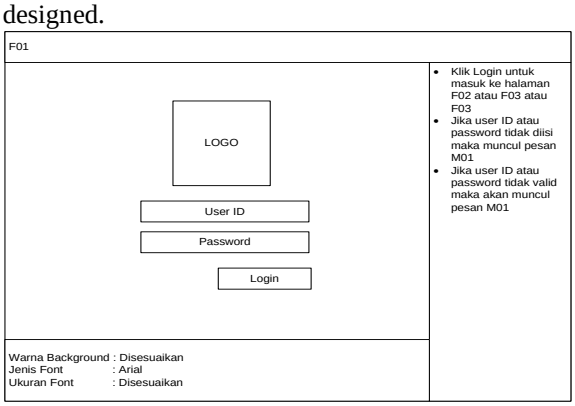

Gambar 5. *Activity Diagram* Pengelolaan Data Kuesioner



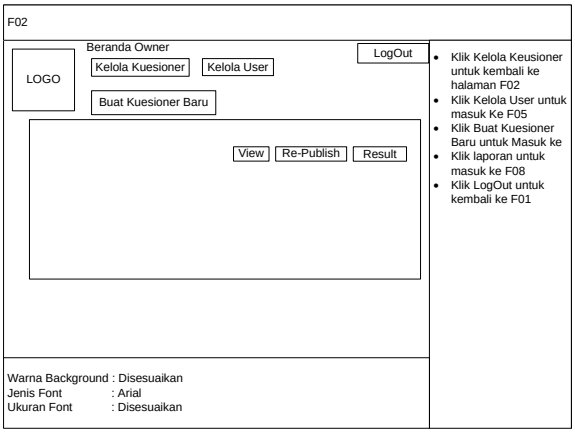

Gambar 6. *Activity Diagram* Laporan Kuesioner

## 2.8 Analisis Technology Model

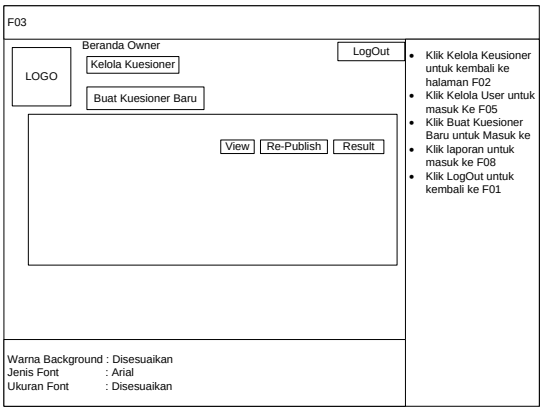
Analysis technology is a physical analysis for the CRM system was designed.



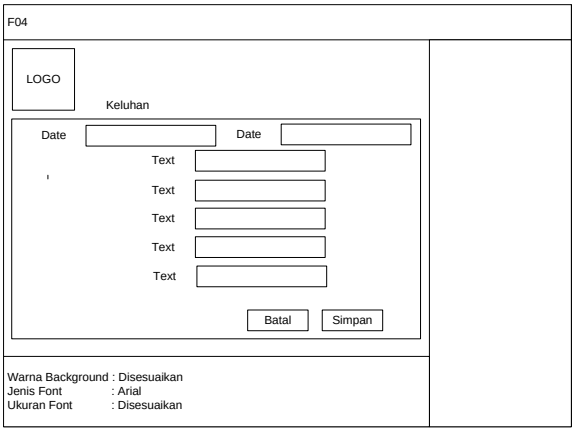

Gambar 8. Rancangan Antarmuka Halaman Login



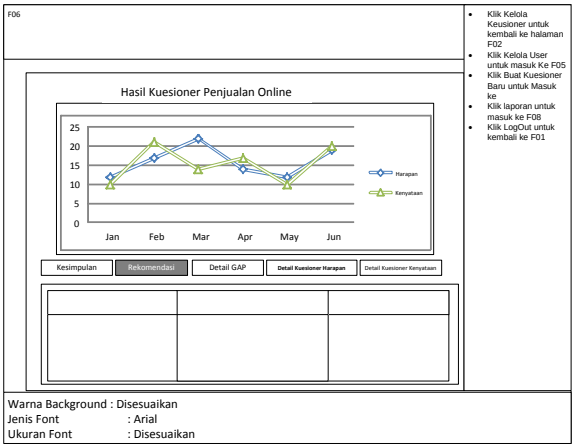

Gambar 9. Antarmuka Halaman Beranda Owner




Gambar 10. Antarmuka Halaman Beranda Kepala Cabang




Gambar 11. Antarmuka Halaman Pembuatan Kuesioner




Gambar 12. Antarmuka Halaman Rekomendasi Perbaikan Layanan

**2.9. testing Systems**

Testing of the system is the cornerstone that aims to find errors or omissions in the information system under test. System testing is to determine the performance of information systems that have been made in accordance with the purpose of information system design. Testing the system uses black box testing. Black box testing focuses on functional requirements of the software.

Test plan will do is to test the system built by Black Box and Beta.

**2. CLOSING**

3.1 Conclusions

After doing the analysis, design and testing. It can be concluded as follows.

1. CRM information system that was built to be a means for the branch to determine the quality of service that has given the company a long-term evaluation.

2. CRM information system that was built to be a means for the branch to be able to determine which services should be improved

3.2 advice

For application development in the period ahead, there are some suggestions that can be done, is about Servqual Model mix method, coupled with the Retail Service Quality for over the maximum ratings

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