DETERMINATING OF PRODUCT'S DELIVERY AND PRIORITY HANDLING OF CUSTOMER'S COMPLAINTS AT HOUSE OF SMITH WITH CRM APPROACHES

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ABSTRACT

House of Smith *is a brand retail fashion under the management of* PT. SMITHINDO MITRA MANDIRI, *was established on 8 January 2010 in Bandung.* House of Smith *currently has 10 branches of stores spread across various cities in Indonesia.*

Based on interviews with the company, Smith can not facilitate his customers to delivering products from his branches and can't determine from which regional branch store the product can be delivered, which will result in shipping cost. Then, when handling customer complaints, the complaint is solved only based by the order of complaints through the messenger without seeing the priority of which complaints must be handled first, the consequence are the customer going uncomfortable with the slow handle of company's complaints solves. Based on the problems that occur, it requires a Customer Relationship Management Information System. The purpose is to help a consumers to get a recommendation of regional store which has the cheapest shipping cost, and to helps company to solves customer complaints based on their priority order. The using of Rajaongkir.com*'s API Key for crawling a data of* JNE*'s shipping cost will help consumers in getting branch shop recommendations with the cheapest shipping cost. While the AHP method (Analytical Hierarchy Process) is a method used to determine the priority of customer complaints handling.*

Based on the results of functional testing, UAT and end-user testing, this research concludes that this system helps consumers in detetermines branch store recommendations with the cheapest shipping cost and make priority process of handling complaints.

Kata kunci : *Information System of Customer relationship management, Complaint Handling Priority, Determinating Of Product's Delivery, Decision Support System, AHP Methods.*

1. INTRODUCTION

1.1 Background

House of Smith is a brand retail fashion under the management of PT. SMITHINDO MITRA MANDIRI, *and was established on 8 January 2010 in Bandung. Goods and service are the 2 things to pay attention to from the company*. House of Smith *as a brand retail fashion selling items from head to toe such as hats, t-shirts, shirts, jackets, polo shirts, sweaters, backpacks, belts, wallets, sandals, and shoes. By maintaining the quality of goods in production and set a competitive prices, the company aims to increase the loves of local brands. Apart from the quality of goods in production, customer satisfaction is also the goal for the company, therefore the company also prioritizes good service and also satisfactory. Until now House of Smith already has 1 central store located in Bandung, 10 branches of stores spread across various cities in Indonesia, and 1 factory located in Bandung. 10 branches of stores are spread each at Bandung, Purwokerto, Banjarmasin, Semarang, Pekanbaru, Kolaka, Banjarbaru, Tasikmalaya, Cirebon, and Padang. With the spread of store branches in various cities, company expecting to facilitate potential customers to be more comfortable when shopping. House of Smith also has a messenger account and social media as a container to promote their products, as well as answering complaints that come in. Especially for Instagram social media accounts, House of Smith has an account for each of its branches, it aims to advertise House of Smith products available at the branch stores.*

Based on the results of interviews with Rizky Octavian *as Area Manager and* Andy Rahadian *as Head of Promotion from House of Smith, conditions that occur at the moment found some problems related to customer complaints. The current situation of product shipment from online ordering to all cities in Indonesia is only done from central warehouse in Bandung using JNE expedition. Some potential customers assume that the product which advertised on Instagram can also be sent from the branch store, but what happens currently hasn't done yet. This situation makes some potential customers complaining that House of Smith can not facilitate its customers to serve the products shipment from the store branch, as complained by some potential customers. This happens because the branch stores does not involved into an online ordering system. This resulted in some potential customers unable to determine from the regional branch stores where the*

ordered product can be shipped. Some potential consumers also stated that the shipment from the central warehouse using JNE *expedition from Bandung will charge more fee to be paid by some potential customers for the shipment. Potential customers who complains this, mostly cancel their intention to buy the products from online. It is a problem for the company if potential customers are not served which the company will be abandoned by the customers.*

Still associated with the complaining issue, the company providing customer complaints with is using messenger application (Line, Whatsapp) and social media Instagram.. In handling customer complaints, Head of Promotion resolves the complaint only based on the order of complaints entered through the messenger / Instagram account without seeing the priority of which complaints must first be handled.. And from the complaints, Head of Promotion should check the complaint category, if having a trouble at answering it, Head of Promotion should report the complaint to a more responsible parties in order to be handled, these are the category of complaint complaints based on the responsibility of the ranks in House Of Smith *parties*:

a) *If the complaint relates to product, shipping, and packaging, then Head of Promotion should contact Head of Distribution*

b) *If the complaint is related to the shopping experience, then Head of Promotion should contact the Director of the Company*.

From the ongoing complaints handling process, the indirect complaints are conveyed to the other parties that has more responsible for the complaint, so that makes it slow to be handled, the consequences are customer will feel uncomfortable with the slow complaint handling by the company.

Based on the problems that occurred in House of Smith, the solutions is how to determine the product shipments from the cheapest House of Smith *branch stores region using JNE expedition, and build an Information System of Customer Relationship Management (CRM). This system is expected to help customers to reduce the shipment cost, and to help Head of Promotion's* House of Smith *to be able to resolve customer complaints in order of priority*.

1.2 Formulation of the Problem

Based on the problems described above, the formulation of the problem in this research is how the consumer can determine the product shipments from the cheapest House of Smith *branch stores region using JNE expedition and Head of Promotion can solve customer complaints in order of priority*.

1.3 Research Purposes

The purpose of this research is to build a system to determine product shipments in an online order based on cheapest shipment cost from House of Smith*'s branch stores region using JNE expeditions to improve company performance and customer satisfaction and to resolve customer complaints in order of priority.*

1.4 The Benefits Of Research

The benefit of this research is to help the company in maintaining relationships between customers and company.

2. REVIEW OF THE LITERATURE

The literature review is a collection of theories that became the basis for the development of Customer Relationship Management Information Systems at House of Smith.

2.1 Understanding System Information

Information system is a system within an organization to meet the needs of the management of the daily transactions, supporting operations, managerial in nature, and the activities of the strategy of an organization and provides a certain outside parties with reports required [1].

2.2 Understanding CRM

CRM is a strategy binis that uses information technology to yield competent company, terpecaya and integrated with the customer based on the customer's side so that all processes and interactions with customers helps the rights and improve the favorable relation relationship. CRM is a dynamic process in regulating the relationship between the customer with the company so that the customer can choose to continue mutually beneficial commercial relationships and to anticipate the relationship in order to not become unprofitable companies[2].

CRM has three stages, namely [3]*:*

1. *Acquire new customers (Acquire), by promoting the excellence of a product or service in terms of innovation and ease because the value of a product or service to the customer is a better product and supported by outstanding services.*
2. *Increase the profits obtained from existing customers (Retain) by encouraging the creation of komplaimen products or services and the sale of a product or service that is better than the product or service that is owned by the customer.*
3. *Retain customers (Enchange) which gives an advantage, offering what is needed by specific customers is not required by the market, because customers value the product or service to the customer is the value of proactive that best suits their needs, the company's focus at the moment is how to maintain existing customers definitely benefit the company rather than how to get new customers who are not necessarily profitable.*

2.3 Framework of Dynamic CRM

To set the feature of CRM properly, as the Foundation for putting together the Software Requirement Specification (SRS), the necessary framework as a reference. CH. Park & YG Kim proposed a CRM Framework called "A framework of dynamic CRM". This framework describes a series of stages in the development/implementation of CRM. His most important substantive information is retrieved from the customer so that the output is obtained in the form of Relationship Commitment, the model can be seen in Figure 2.2. Information that becomes the focus of attention is as follows [4] *:*

1. *Information about customers*
2. *Information for customers*
3. *Information by customers*

Based on of the three above are obviously very important information for the realization of Customer relationship management (CRM) Organization to conduct the competition, by performing processing such information will be obtained from customer behavior, because customer behavior at this time are more likely to want how they feel are present already, served as well as ketanggapan of the organisation as a provider of services to them and usually the tendency not to view the total price that they spend more. With the ever increasing customer service of an organisation should should already be separated as the author discussed in advance which facilities and where a service [4].

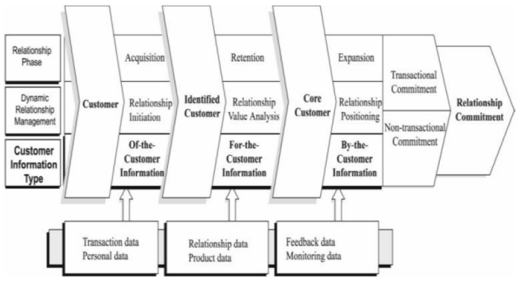


Image 1. *Framework of Dynamic CRM*

2.4 Decision Support System

Decision support system (SPK) are usually built to support the solution of a problem or an opportunity. Application of decision support system (SPK) be used as a computer-based system that consists of three interacting components i.e. language system (mechanisms to provide communication between the user and other components of the decision support system), a system of knowledge (respositori knowledge of the problem domain in decision support systems or as data or as a procedure), and system processing problems (relationship between two other components, consisting of one or more general problem manipulation capabilities are treated for decision making) [5].

2.5 Analytical Hierarchy Process

Analytic Hierarchy process (AHP-Analytical Hierarchy Process) developed by Dr. Thomas l. Saaty from Wharton School of Business in the 1970s to organize information and judgement in choosing the most preferred alternative. By using AHP, an issue will be solved within a framework of thinking that terorganisasir can be expressed, thus allowing to take effective decisions over the issue. Complex issues can be simplified and sped up the process of taking its decision [6].

The working principle of the AHP is a simplification of a complex issue that is not structured. Strategic, and dynamic into its parts, as well as organize within a hierarchy. Then the importance of each variable is assigned a numerical value subjectively about the significance of the variable given a numeric value subjectively about the relevance of such variables on a relative basis compared to other variables. Of the various considerations are then done synthesis for menentapkan variables that have a high priority and the role to influence the outcome of the system [6].
AHP enables the user to provide a value for the relative weight of a compound criterion (or criteria of a pluralist alternative) intuitively, i.e. by doing a comparison of paired (pairwise comparisons) [7].

AHP has a lot of advantages in explaining the process of decision-making, because it can be described graphically, making it easily understood by all parties involved in decision making. With the AHP process complex decisions can be decomposed into smaller decisions that can be handled with ease [6].
The following are the steps that are performed in the calculation using AHP [7]:

1. *Decompositions*
   This step was creation of hierarchy of problems encountered. Making the hierarchy needs to be done to break down the whole issue into its elements, namely the criteria and alternatives (sub criteria).

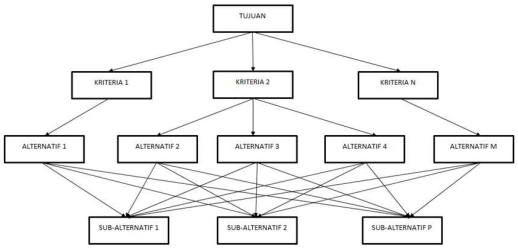


Image 2.*Hierarchy AHP*

2. *Assessment criteria and alternative*
   Making judgements about the relative importance of the two elements on one level in particular that in relation to one level above through comparative matrix pairs. This assessment is at the core of the AHP, as it will have an effect on priority elements. In a review of the criteria and alternatives

according to Saaty (1983), for a variety of issues, a scale of 1 to 9 is the best scale in expressing opinions, can be seen in table 1.

Table 1. *Scale Comparison Of Saaty (1983)*

VALUE	*DESCRIPTION*
1	*Criteria/Alternatives with the same essential criteria/Alternative B*
3	*A little more important than B*
5	*A clearly more important than B*
7	*A very obviously more important than B*
9	*A more absolute pentingdari B*
2,4,6,8	*If in doubt between two adjacent values*

3. *Sythesis of Priority*
   For each of the criteria and alternatives would do a comparative matrix pairs. From each matrix of pairwise comparison then sought to obtain the eigen vector local priority. Because the matrix pairwaise comparison at each level, then to get global priority to do synthesis in each local priority. Here are the steps in finding the value of determination of priority:
   1) *A comparison with the value of B is 1 (one) divided by B with A value comparison.*
   2) *After making a comparison matrix, the next step is to add up the value of the perkolomnya, so that the obtained values of* Σ *column for each criterion. This value will be used in determining the value of the matrix ternormalisasi Matrix values divided by means of a comparison with the value* Σ *column or are written*:
      Normalized Matrix (i, j) = *Matrix comparison* (i, j)/Σ *Column to*-j
   3) *After getting the value matrix of Ternormalisasi, the priority value can be obtained by searching the average of the comparison matrix per line or Π Criterion per line.*
4. *Logical Consistency*
   Consistency has two meanings. The first is that objects that are similar can be grouped in accordance with the uniformity and relevance. The second meaning is concerned the level of relationships between objects based on certain criteria. This step is an important characteristic of the AHP. This is achieved by menagresikan the entire eigen vectors obtained from the different levels of hierarchy and subsequently obtained a weighted composite vector which generates a sequence of decision making. Here are the steps to calculate a ratio consistency :
   1) *Calculate a value of* λ *mengkalikan Matrix values by way of a comparison with the results of Local Priority divided average perbaris.*
   2) *Calculating* λ *Max with the formula*
      λ max = Σ(λ) / n (1)
   3) *Calculate the value of CI with the formula*
      CI = (λ max-n)/(n-1) (2)
   4) *Calculate the CR with the formula*
      CR = CI / RI (3)

2.6 Web Crawl

Web crawl or also known as a web spider or web robot is a program that works with certain methods and automatically collect all the information contained in a website. Web crawler will visit every website address given to it, then absorb and store all the information contained in the website. Every time a web crawler visits a website, then he will also record all the links that exist in the page that visited it to then visited again one by one.

When the crawlers find the web page, the next step is to retrieve the data from the web page and store it into a storage. These stored data will later be accessed when a query is related to the data. To achieve of collecting billions of web pages and presenting them in seconds, search engines need a very large and large data center to manage all this data.

The process of web crawlers in visiting each web document is called web crawling or spidering. The crawling process in a website starts from listing all the urls of the website, searching them one by one, then putting it in the list of pages on the search engine index, so that every time there is a change on the website, it will update automatically. Web crawling is the process of taking a collection of pages from a web to do indexing so as to support search engine performance. One example of a site that implements web crawling is www.webcrawler.com.

Web crawlers are commonly used to make partial or complete copies of the web pages they have visited in order to be further processed by the indexing system. Crawlers can also be used for the maintenance of a website, such as validating the HTML code of a web, and crawlers are also used to obtain special data such as collecting e-mail addresses.

Web crawler included into the software agent or better known as the bot program. In general, crawlers begin the process by listing a number of website addresses to visit, called seeds. Every time a web page is visited, the crawler will search for another address contained therein and add it to the previous list of seeds.

Crawler Architecture:

1. *A simple scheme for crawling requires some appropriate modules.*
2. *URL borders, containing URLs must still be retrieved during subsequent crawls (in case of continuous crawling, URLs may have been retrieved before but returned to the border for re-fetching).*
3. *A DNS resolution module that specifies the web server from which to retrieve the page specified by the URL.*
4. *Fetching module that uses http protocol to retrieve web page at URL.*
5. *A parsing module that extracts text and page sets from a web link.*
6. *A duplicate elimination module that determines whether the extracted link is already on the new or retrieved URL border.[*8]

2.7 Rajaongkir.com

RajaOngkir is a site and web service (API) that provides postage information from various couriers in Indonesia such as POS Indonesia, JNE, TIKI, PCP, ESL, and RPX. In general, RajaOngkir is aimed at users who want to know and compare postage from various couriers and specifically to online store owners, as well as to people who frequently shop online.

The uniqueness of the KingOngkir system is unified data. You just once enter the name of the city of origin, city of destination, and weight, the system King Otok automatically check to all supported couriers. RajaOngkir save you time and energy!

RajaOngkir provides postage APIs that developers can use to develop applications for various platforms, such as Android, BlackBerry, iOS, desktop, and more.

RajaOngkir provides a RESTful API (Application Programming Interface) that can be used to create various applications that require data postage. The postage data is taken directly from the web of each courier to maintain data accuracy.

RajaOngkir can be integrated because it uses REST architecture with the format of reply in the form of JSON supported by almost all programming languages. [9]

2.8 System Testing

Testing is a process of examination or evaluation systems or system components manually or automatically to memverikasi whether the system meets the needs dispesifikan or identify the differences between the expected results with the results of the case. Testing should include the following three concepts [11]:

1. *Demonstration of the validity of the software at each stage in the system development cycle.*
2. *Determination of the validity of the final system is associated with the user's needs.*

Examination of the behavior of the system by executing the system on a test sample data.

2.8.1 Black Box Testing

The concept of the black box is used to represent the system's way of working in it is not available for inspected. Inside the black box, the tested items are considered "dark" because the logic is not known, it is known just what comes in and what comes out of the black box [11].

On black box testing, we try various entries and checking the output generated. We can learn what box, but do not know at all about how the conversion is done. Testing technique of black box can also be used for scenario-based testing, where the content in the system may not be available to be inspected but the input and output are defined with use case and other analysis information [11].

2.8.1.1 Functional Testing

On the type of testing this software tested for functional requirements. Testing was conducted in written form to check whether the application runs as expected. Although functional testing already is often done at the end of the development cycle, each of the components and processes can be tested at the beginning of development, even before the system is working, this is already testing can be performed on the entire system. Functional testing covers how well the system carry out its functions, including user commands, data manipulation, searches and business processes, user screens and integration. Functional testing also includes a surface clear of the type of functions, as well as the backend operations (such as security and how to improve the system) [12].

2.7.1.2 User Acceptance

On the type of testing this software will be left up to the user to find out whether the software meets user expectations and work as expected. In software development, user acceptance testing (UAT), also called beta testing (beta testing), testing application (application testing) and the testing of the end user (end user testing) is the stage of development of software when the software was tested in the real world that are intended by the user. UAT can be performed by in-house testing by paying volunteers or subject testing using software or distribute software extensively with test versions are available for free for download over the web. The experience of the early users will be forwarded back to the developers who make the changes before finally releasing commercial software [12].

3. ANALYZING SYSTEM

Analyzing System can be defined as a description of a whole information system into parts of its components with a view to identifying and

evaluating problems, opportunities, barriers that occur and the expected needs so as to proposed repair

3.1 Framework of Dynamic CRM Analysis

Framework of Dynamic CRM that is used in the application in this system uses stages of Acquisition, Retention, and Expansion.

3.1.1 Acquisition Stage

In this phase of the process will be done to attract new customers or at the stage of development of the CRM called Acquire. This step is a step that will be used to attract the interest of potential customers House of Smith in order to be interested in buying the products offered by the company. The following is a facility that will be built in phases of acquisition:

1. *Company Information*
   At this facility will be explained about the entire information about the House of Smith to facilitate customers to know and get product information and company
2. *Determining Product's Delivery from The Cheapest JNE's Shippment Fee from Branch Stores*
   The policy that is being applied by the company is the customers online orders will only be sent from House of Smith's *central warehouse in Bandung via* JNE *expedition. With the basis of consumer complaints data, the authors propose that online orders for consumers does not have to go through the company's central warehouse in Bandung, but can be done in all branch stores.*
   With the recommendation of JNE*'s cheapest shipping cost as the main reference to attract customers to make transactions, then the calculations applied in the system is to find the smallest value of the crawling shipment fee* JNE's *API.*
   .a. *Data Crawling*
   Crawling data is a process that aims to collect data about what is on the web pages that are public. Data collection from this research is data from Rajaongkir.com server in the form of data of city / regency as origin shipment and destination shipment, type of shipment and postage. The data retrieved begins with API Key which has been given by Rajaongkir.com to enable the information system to be built can interact with Rajaongkir.com server and share data that has been matched with JNE server.
   b. *Shipment Fee Recommendations*
   From the existing problem related to the cheapest shipment fee recommendation for the consumer, the saved address of customer district will be the destination shipment which will be matched with the Rajaongkir.com server so that it can produce provincial / city / sub district id. Recommendations JNE cheapest shipment fee will appear when the information system that will be built to compare the city / county subscriber with the city / region branch of the store House of Smith, so it will get JNE shipment fee from each branch of the city / district ID destination shipment and city / county id as origin shipment, later the information system to be built will sort JNE postage which is the cheapest by type of shipment, by adjusting available stock from each branch.

3.1.2. Retention Stage

This phase will be conducted in the process of improving the relationship between the customer with the company or at the stage of development of the CRM called Retain. This step is a step that will be used to improve relationships between companies with customers. The following is a facility that will be built on the retention phase:

1. *Products Discount*
   With the ongoing policy, a fee deduction is made on every product that is necessary to be provided in accordance with the Head of Promotion proposal discussed with the Head of Marketing and Area Manager to each Store Manager. With the development of CRM information systems to be proposed, Head of Promotion will have the authority to determine which products will be awarded a discounted fee in accordance with the percentage discussed with the Head of Marketing and Area Manager.
2. *Transaction Discount*
   At this facility for every customer who has registered to the user in House of Smith then automatically will get the right of membership. Which is where the benefit of membership is to get a special discount outside the promo per product held House of Smith. With the condition of the consumer must conduct transactions within the information system to be built. Transaction history will be recorded in the information system to be built, so the system will automatically provide certain amount of discounted cost to the consumer based on transaction history class. The specified classes for the total transaction history can be seen in table 2.

Tabel 2. *Transaction History Record*

	CLASS A	*CLASS B*	*CLASS C*	*CLASS D*
Transaction History Record	X >= Rp3,000,000	Rp1,000,000 < X < Rp3,000,000	Rp100,000 < X < Rp1,000,000	X <= Rp100,000

The percentage of discount amount for each class can be seen in table 3.

Table 3. *Terms of cost per transaction*

	CLASS A	CLASS B	CLASS C	CLASS D

Minimum products bought	>= 5pcs			
Discount percentage for each transaction	20%	10%	5%	-

Newly registered customers will be automatically in Class D, because the Transaction History Record is still Rp0, and Class D has a transaction history of <= Rp100.000. Discounts apply if the customer enters into a transaction by ordering a product of 5 or more pieces, the system will substantially reduce the total cost of the subscriber's expense and show the message that the customer is entitled to a discounted fee in accordance with the transaction history. done during shopping in the system.

3.1.2 Expansion Stage

In this phase will be the process of maintaining a regular customer customer or at the stage of CRM development called Enchange. This stage is a step that will be used to keep customers constantly against the use of existing products in the House of Smith*. Here are the facilities to be built in the expansion phase*:

1. *Complaints*

   At this facility for each member can submit online customer complaints based on Complaint Category, so that the type of complaint can be directly handled directly by those who are more responsible for complaints submitted, no longer waiting for Head of Promotion as the holder of social media messenger account to refresh the solution of complaints from customers. For each incoming customer complaint will be through the priority process of handling the complaint, where each complaint will be calculated so that the weight can be sorted based on predetermined criteria, in this case the ordering of complaints will use AHP decision support system.

4. TESTING

This stage is a process after analysis and system design. Implementation system is the stage of laying the system so it can be operated. Implementation aims to confirm design modules so that system users can provide input to system development.

4.1 Functional Testing

Black box testing is focused on the functional requirements of built software. CRM testing system information scenarios in House of Smith *done on each part can be seen in Table 4.*

Tabel 4. *Functional Testing Scenarios*

Functional Testing Name	*Testing Detail*
Login	*User Login/Customers*
Forgot Password	*Forgot Password User/Customers*
User Processing	*Showing User Data* *Adding User Data* *Deleting User Data* *Activating User Data* *Deactivating User Data* *Reset User Password*
Profile Processing	*Showing Profile Data* *Editing Profile Data* *Editing Username* *Editing Password*
Customers Processing	*Showing User Data* *Register User Data* *Deactivating User*
Products Processing	*Showing Product Data* *Adding Product Data* *Editing Product Data* *Deleting Product Data*
Branch Processing	*Showing Branch Data* *Adding Branch Data* *Editing Branch Data* *Deleting Branch Data*
Size Type Processing	*Showing Size Type Data* *Adding Size Type Data* *Editing Size Type Data* *Deleting Size Type Data*

4.2 User Acceptance Test (UAT)

Newly built applications must be tested for their suitability and reliability through UAT test (user acceptance test) as a condition that the application has been accepted by the user. It can be said UAT as a test find a new defect (defect) not found by the developer. The new application testing process involves potential users will be performed by CRM information system administrators in the House of Smith*. The UAT Administrator testing scenario can be seen in Table 5.*

Tabel 5. *UAT Scenario Test*

No	Test Description	Test Procedure
1	Testing User Login	▪ Click menu Login ▪ Enter your username and password ▪ Press the Enter
2	Testing The Addition Of User Data	▪ Enter the username, password, email and level ▪ Press the Save button
3	Testing Editing User Data	▪ Click the user you want to edit ▪ Edit the attributes that will be modified for the username, password, email and user-level ▪ Press the Save button
4	Testing The Addition Of Customer Data	▪ Click the list menu ▪ Enter your username, email, password, password and repeat capctha ▪ Press the new list
5	Testing Editing Of Customer Data	▪ Click the profile menu ▪ Edit the attributes that will be converted to your username, email, status, contributions, the types of customers, no hp, address and source ▪ Press the edit button
6	Testing The Addition Of Product Data	▪ Enter product name, type, status, price 1, 2, 3 price price and image files ▪ Press the Save button
7	Product Data Editing	▪ Select the product that you want to edit ▪ Edit the attribute to be changed for a product name, type, status, price 1, 2, 3 price price and image files ▪ Press the Edit button
8	Testing The Addition Of Data Types	▪ Enter the name of the type ▪ Press the Add button
9	Testing Editing Of Data Types	▪ Select the type that you want to edit ▪ Edit the attribute to be changed to the name of the type ▪ Press the Edit button
10	Testing The Addition Of Transaction Data	▪ Search for the product to be purchased and press buy ▪ Press menu Deals ▪ Press the button Continue the transaction ▪ Enter the number of the qty will be purchased ▪ Press the confirmation key
11	Testing Editing Of Data Transaction Receipt	▪ Select the transaction you want to edit and click the edit button ▪ Enter the number of Sage ▪ Press the Save button
12	Testing The Addition Of The Data Receipt Number	▪ Choose a product that will do the development ▪ Enter a new question or select questions and press the Add button ▪ Select questions to be plus sub question ▪ Enter the answer to the question that is selected and press the Add button ▪ Press the Save button
13	Testing Editing Of The Data Receipt Number	▪ Select the kueisoner you want to change

		and then press button View ▪ Edit the attributes that will be regenerated to product status, questions and questions ▪ Press the Edit button
14	Testing Data Receipt Number	▪ Select a questionnaire that will be filled and press Join ▪ Answer all the questions ▪ Press the button to save the results of a questionnaire
15	Testing Editing Of Data Criteria	▪ Select the criteria you want to edit and then press button view ▪ Edit the attributes that will be changed to the name criteria, weighting relationships ▪ Press the Edit button
16	Testing The Addition Of Complaints Data	▪ Enter the type of complaint, the nature of the complaint, and the contents of the complaint ▪ Press the submit button
17	Testing Data Editing Complaints	▪ Select a complaint you want to edit and then press button view ▪ Edit the attributes that will be changed to the status and content of responses to complaints ▪ Press the Save button
18	Removal Of User Testing	▪ Select the user that you want to delete ▪ Press the delete button ▪ Select Yes
19	Testing Of Product Removal	▪ Select the product that you want to delete ▪ Press the delete button ▪ Select Yes
20	Testing The Removal Of This Type Of	▪ Select the type that you want to delete ▪ Press the delete button ▪ Select Yes
21	Testing The Removal Of Questionnaire	▪ Select the kueisoner that will be deleted ▪ Press the delete button ▪ Select Yes
22	Testing Editing Transactions Change Status	▪ Select the transaction you want to edit ▪ Select the new status for the transaction ▪ Select edit
23	Testing User Appearance	▪ Select the user that will be viewed ▪ Press View
24	Testing The Appearance Of Customers	▪ Select the customers you want to view ▪ Press View
25	Testing The Appearance Of Transactions	▪ Select the transaction you want to view ▪ Press View
26	Testing Of Product Appearance	▪ Select the product you want to view ▪ Press View
27	Testing The Appearance Type	▪ Select the type you want to view ▪ Press View
28	Testing Receipt Number Appearance	▪ Select the kueisoner you want to view ▪ Press View
29	Testing The Appearance Of Product Development	▪ Select product development that will be seen ▪ Press View
30	Testing The Appearance Criteria	▪ Select the criteria you want to view ▪ Press View
31	Testing Of Appearance Complaints	▪ Select the complaints that will be viewed ▪ Press View

5. CLOSING

Based on the results of testing and discussion that has been made it can be concluded that the CRM information system has been helping consumers in providing branches with the cheapest postage and make a priority process of handling complaints.

This system can be developed by integrating shop transactions with online transactions, so that in the distribution process does not need to be separated again between the stock ordering for direct sales in the store and stock ordering online, then for customers to be more interactive with the company in complaint, complaint handling can be developed messenger chat conversations should be.

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