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# Use Of Customer Relationship Management Application for Credit Union

Samuel Manurung<sup>1</sup>, Mufria. J.Purba<sup>2</sup>

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## Abstract

Cooperatives are legal entities based on the principle of kinship, which consists of all members of natural or legal persons for the welfare of their members. When most people want to open a business, it has to have a lot of capital to keep the business from running or growing. Kabanjahe The majority of the population opens a shop to meet their daily needs. The existence of a savings and loan unit can help people in the Kabanjahe region to open a business to improve the economy of people in Kabanjahe. Therefore, we need a system that is very helpful in the cooperative's transaction process. The Customer Relationship Management (CRM) application can support the notification process and simplify the cooperative payment process. This research can help cooperatives and cooperative members conduct transactions and help members with notification of the funds spent and the date of the last payment of the paper.

## Keywords

Application, Cooperative, CRM, Notifications, transactions

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## 1. Introduction

In daily life, cooperation is very much needed as a unit to assist in meeting the needs of the general public especially small and simple communities. When people need funds in daily life, cooperatives are very suitable if something we want, we must be paid in cash, especially in opening a business in the Kabanjahe area. To ease the burden on the community in the Kabanjahe area, cooperatives are needed to overcome difficulties in using cooperatives and supporting information in cooperatives. In the process of lending, there is often a delay in the payment of cooperatives, making the value of arrears even greater because the people in the area have a busy life in the business and forget to make payments. Therefore, we need a system that can help people in the Kabanjahe area.

As technology has increasingly advanced until now, at least all existing fields have used the techniques of renewal from IT (Science Technology). That is because the development of IT is now widely used to help the activities of the community. How can making a job more cheap, right on target, and get a satisfying result for the community. The system builds the community by making it easier for the people in Kabanjahe to conduct transaction activities against CU. Where the surrounding community can receive payment notifications 3 days before making payments and the latest information that benefits the cooperative members.

The management of customer relationships conducted socially is part of the use of data

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**Corresponding Author:** Samuel Manurung<sup>1</sup>, (email:samuelvanbastenmanurung070189@gmail.com)

<sup>1</sup> Samuel Manurung, (email:samuelvanbastenmanurung070189@gmail.com)

<sup>2</sup> Mufria.J.Purba

following the tracking or the techniques carried out. In providing the information needed by the internet model of websites, bloggers, and sites that contain information for the development of a customer relationship management system that is automatically centric, which connects with clients[1].

## 2. Methodology

In the English dictionary, the word cooperative is cooperative or can also be called cooperative. Where from the word cooperative is concluded as a trait that works with each other, hand in hand, or can also be said to help each other in doing business. In other words, this Cooperative aims to improve the living standards of its members and surrounding communities, help the lives of members of the cooperative, especially in the economic field, assist the government in creating balanced and prosperous members or communities, and play a role as building a nationally economic system [2].

CRM using the linear regression model can help in the process of increasing reciprocal relationships between employees with organizational responses within an internal marketing agency. So the model can improve relations better by a manager and bank owner [3]. Customer relation management using the Scorecard can help in the process of measuring customer satisfaction in the FASILKOM UNSRI canteen. That the seller's performance perspective has a huge impact compared to the perspective of the process, customers, and infrastructure[4].

A large amount of data is needed an architecture in the marketing of paperwork. CRM can help in exploiting the latest data by introducing a CRM architecture that is a new Adaptation architecture [5]. In establishing relationships with customers in the Cloud environment a CRM salesforce is needed. As for this CRM, salesforce is used so that it can oversee how communication between customers and prospects, to find information that is identified. To help the CRM requires a team to collaborate in both remote and non-communication. CRM salesforce also collects experience from online networks, tracks important measurements, and conveys via email, telephone, social, and various channels to anticipate what customers want [6].

The analytical model on social CRM undertaken by the Malaysian Institute of Higher Education is how to show the problems that need to be resolved and the actions that must be taken immediately in determining customer satisfaction, loyalty, and good reputation. With customers more active they can maintain what is expected by the Malaysian Higher Education Institute [7]. A broad classification of services using CRM can help in the development of literature related to the topic and can also be used as a reference, evaluation, and problem-solving that has to do with Social CRM. CRM also has an impact on the industry in industrial integration and also in the field of education which results in a form of service that is in line with the wishes of the customer [8].

The characters and conditions in the device have great value in getting the desired results. authenticateAuthenticatesearching for files needed to have a good customer relationship management application. So customers can easily do a better search for the needs of customers [9]. Customer Relationship Management is a way of crossing relationships between members and companies to strengthen unity in the expected needs so that they become members. Customer Relationship Management (CRM) is a marketing strategy that builds a close relationship between a company and its members. The company can spoil the member and bind him in a friendship if he already knows the needs and expectations of the member [10]. CRM system that is made to do buying and selling activities that have been done every day in the business conducted [11].

### 3. Results and Discussion

#### 3.1 Initial Display

Fig 1 displays the main view when opening the system. Wherein this view is the view of the user who can only see notifications about the activities performed by CU. Glad that the main display can do our service to members. Where our services are conducted in the form of deposits, loans, special services, and service offices.



Fig 1. Initial Display

#### 3.2 The Administrator Dashboard

Fig 2 shows that the administrator must primarily enter the username and password to perform activities that can be performed by the administrator. Because in this system, the administrator has full access rights. The administrator can also change the password to a new password.

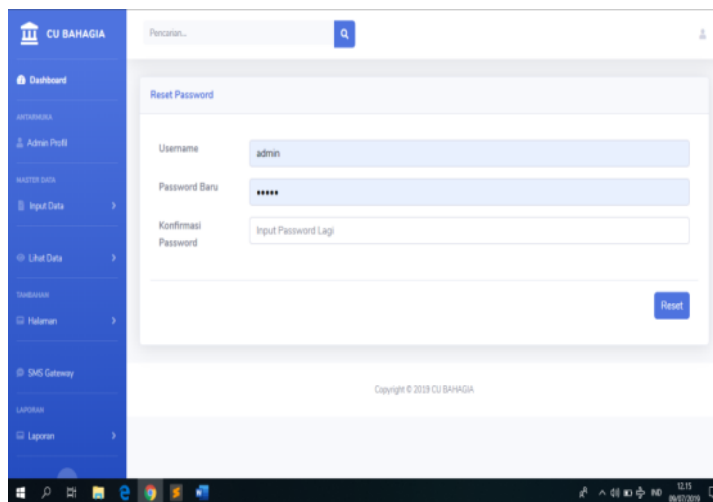


Fig 2. Admin Display

### 3.3 Customer Data Entry on The Admin Page

Fig 3 is a screen for entering data for new customers who wish to register as members. When registering, you must have a KTP because the KTP is the primary key in the created system.

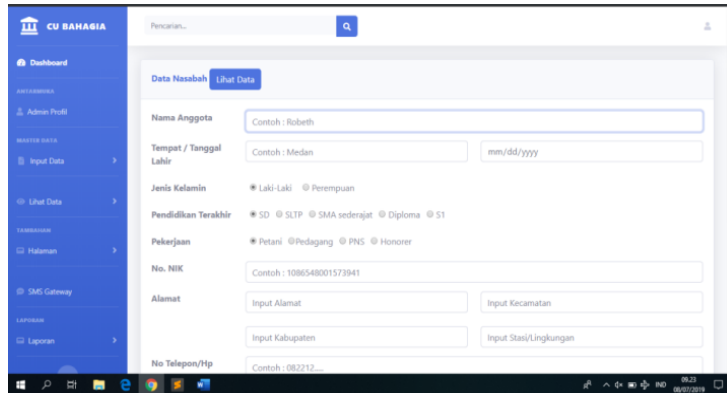


Fig 3. Customer Data Input To Admin

### 3.4 Entered Customer Data

Fig. 4 shows the entered customer data, where the data is book data or biodata summarized in the system.

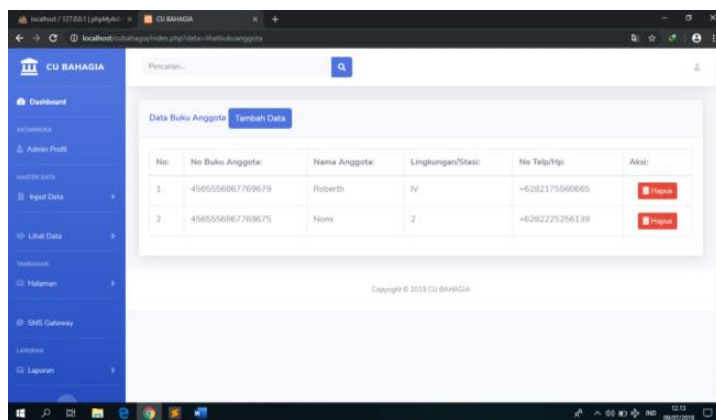


Fig 4. Entering customer data

### 3.5 Sending Message to The Administrator

Fig. 5 illustrates the location of sentences or entries that are sent to the customer to let the customer know which notifications are being sent to the customer. Notifications may take the form of a discussion on bills, CU scholarships, and other news articles that may support activities in the CU work program.

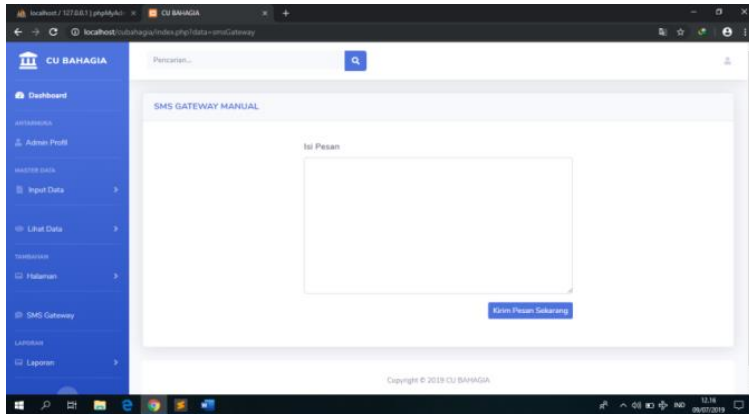


Fig 5. The location where the message should be filled out to the customer

### 3.6 Received From Customer Via the Handset

After completing what is sent to the customer, the mobile SMS is entered by the CU. Fig 6 shows a notification to members informing the notification that the bill payment is due on which date and the entire bill is being paid to the CU. Bahagia.



Fig 6. SMS received from the customer

### 3.7 Percentage of System Built

The percentage can be seen in the Fig below based on pie Charts of the CRM System.

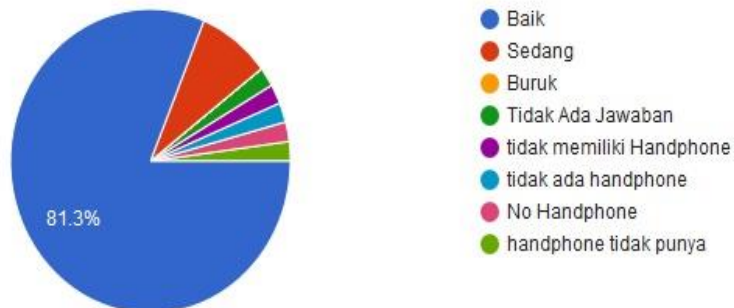


Fig 7. Pie Charts of the CRM System

Based on Fig. 7 can be seen how customer satisfaction with the CRM system (Customer Relationship Management) that has been built was built. The opinion received from cooperative customer members about the CRM system (Customer Relationship Management) was that 81.3% stated that the system that had been built was very well used by members of cooperative customers in the Kabajahe area because it made it easier to record in the bill payment process or, 8.3% stated that the system was not good because of the unattractive display design, 0% stated that the system had no problems or the system or. 2% said there was no problem with the system, and 8.4% stated that they did not have a cell phone so they could not find out how the shapes or images of the SMS received by customers to get the results of the CRM (Customer Relationship Management) system that was built.

## 4. Conclusion

From the above description, several conclusions can be drawn regarding the benefits of implementing a Customer Relationship Management (CRM) application. First, the CRM application significantly simplifies transaction processes between Credit Unions (CUs) and their customers by streamlining communication and automating tasks. This facilitates better service delivery and ensures smoother interactions, ultimately enhancing customer satisfaction and loyalty. Additionally, the observation that most customers in the targeted regions use non-Android mobile phones highlights the flexibility of the CRM system. By incorporating messaging and notification features compatible with a variety of devices, the application ensures that customers can receive important updates, alerts, or promotional events directly on their mobile phones. This approach effectively bridges technological gaps, ensuring inclusivity and accessibility for all customers, regardless of the platform they use.

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## References

- [1] N. Karna, I. Supriana, and U. Maulidevi, "Social CRM using web mining," in 2014 International Conference on Information Technology Systems and Innovation (ICITSI), Bandung, Indonesia, 2014, pp. 264–268.
- [2] C. F. Sitepu and H. Hasyim, "Development of cooperative economy in Indonesia," NIAGAWAN, vol. 7, no. 2, Jul. 2018.
- [3] C. Theresa, C. V. Banu, R. Gayathri, S. Gopalakrishnan, and S. Manikandan, "Linear regression model fit for internal marketing and customer relationship management," in 2017 International Conference on Intelligent Sustainable Systems (ICISS), Palladam, 2017, pp. 927–932.
- [4] A. Ibrahim, A. Pratiwi, D. I. Meytri, Madri, M. A. Kurniawan, and N. Yuniarti, "Measuring Customer Satisfaction Using CRM Scorecard in Canteen FASILKOM UNSRI," in 2018

- International Conference on Electrical Engineering and Computer Science (ICECOS) , Pangkal Pinang, 2018, pp. 403–408.
- [5] A. Daif, F. Eljamiy, M. Azzouazi, and A. Marzak, "Review current CRM architectures and introducing new adapted architecture to Big Data," in 2015 International Conference on Computing, Communication and Security (ICCCS), Pamplemousses , 2015, pp. 1–7.
  - [6] A. Manchar and A. Chouhan, "Salesforce CRM: A new way of managing customer relationships in a cloud environment," in 2017 Second International Conference on Electrical, Computer and Communication Technologies (ICECCT), Coimbatore, 2017, pp. 1–4.
  - [7] A. Hamid et al., "Social CRM Analytics Model on Malaysian Institutes of Higher Learning (IHLs)," in 2018 3rd Technology Innovation Management and Engineering Science International Conference (TIMES-iCON), Bangkok, Thailand, 2018, pp . 1–5.
  - [8] G. M. Barata, J. A. Viana, O. Reinhold, F. Lobato, and R. Alt, "Social CRM in Digital Marketing Agencies: An Extensive Classification of Services," in 2018 IEEE/WIC/ACM International Conference on Web Intelligence (WI), Santiago, 2018, pp. 750–753.
  - [9] A. Ibrahim, Ermatita, Saparudin, and Z. Adetya, "Analysis of weakness of data validation from social CRM," in 2017 International Conference on Data and Software Engineering (ICoDSE), Palembang, 2017, pp. 1–5.
  - [10] E. Siswanto and A. W. Katili, "Implementation of decision support system for campus promotion management using fuzzy multiple analytic decision making (FMADM) method (Case study: Multimedia Nusantara University)," in 2017 4th International Conference on New Media Studies (CONMEDIA), Yogyakarta, Indonesia, 2017, pp. 75–80.
  - [11] A. Fauzi and E. Harli, "Improving Service Quality Through CRM with the RAD Method," J. RESTI Sist Engineering. And Technol. Inf., vol. 1, no. 1, pp. 76–81, Aug. 2017.