



Development Of Credit Shopping Application To Support Synergy Between Sharia Cooperatives

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ABSTRACT

The background for the development of the shopping system on credit stems shopping from a long study of distribution channels from producers to consumers as well as the proliferation of mini-markets and online shoops, causing several problems faced by traders and small producers. The system developed in this study aims to support synergies between sharia cooperatives, small traders, and small producers in transactions with consumers. There are three things that are produced in this research, namely: 1) The concept of a murabahah shopping system which is designed to involve sharia cooperatives, traders, producers and consumers, 2) Synergy design between sharia cooperatives, traders, producers and consumers so that economic interaction occurs to work together filling and completing deficiencies so that they can produce optimum economic activity, and 3) Application of the murabahah shopping system to support synergies between sharia cooperatives, producers, traders and consumers. The murabahah shopping system application consists of five sub-systems, namely the merchant sub-system, the producer sub-system, the consumer sub-system, the cooperative sub-system, and the system management sub-system. This research was conducted in a descriptive qualitative manner with literature review methodology and observations related to the title of this study. Programming in this study uses object-oriented programming methods, and is done with PHP software based on windows and web and the data base used is MySQL. The results of the analysis and design that have been compiled are written in the form of architectural designs, use case diagrams, activity diagrams, procedures and menu structures that are used as guidelines in programming implementation. The programming of this murabahah shopping system application has been completed which is then ready to be implemented in traders, producers, cooperatives and their members.

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1. Introduction

We often find cooperative, community and food stall relationships running separately, even though maybe the shop owner is also a member of the cooperative. Cooperatives are just a place for savings and loans. Stalls selling their wares are waiting for buyers to come, there is no effort from the stalls to carry out promotions. Some people shop at stalls, some shop through online shops, and many shop at minimarkets. On the other hand, the long distribution channels from producers to consumers and the proliferation of mini-markets and online shoops have created several problems faced by small business actors. So far, the access of small traders to producers / industries is very weak. Stalls obtain goods through a fairly long chain, which results in a significant difference in price between the production price and the purchase price of the stall at the wholesaler, especially when compared to the selling price of the stall to the end consumer. Seeing the length of this chain, plus the marketing costs incurred by producers, there is a fairly large difference or percentage between production costs and consumer prices.

According to Sindi Alwiyah (2018) the rampant establishment of minimarkets has changed the shopping culture of the surrounding community, namely the transition from shopping at stalls to minimarkets, so this has led to a decline in the number of small business consumers and stalls. Shopping at minimarkets has better services, you can choose your own items, the place is clean, the items are more complete and for many items the price is cheaper. Yoga Tantular Rachman (2014) concluded that the traditional stalls are increasingly experiencing setbacks. This is due to the emergence of a modern market



which retail businesses consider quite potential. One of the modern retailers that is experiencing rapid growth in Indonesia today is a minimarket with a franchise concept, which has a bad impact on existing stalls, namely reducing sales turnover.

To overcome the above problems, it is seen that a synergy system can be developed between cooperatives, producers, traders and consumers with the support of information technology. Based on this background, the authors compile an article entitled "Development of Credit Shopping Applications To Support Synergy Between Sharia Cooperatives"

2. Research Methodology

This research was conducted in a descriptive qualitative manner with literature review and observation methodology. The literature studied is related either directly or indirectly to the concept of design and application according to the title of this study. While observations are made by observing the things done by cooperatives, traders, producers and consumers related to the title of this study. Whereas in developing the application using object-oriented programming methods. The stages of activities in this study include:

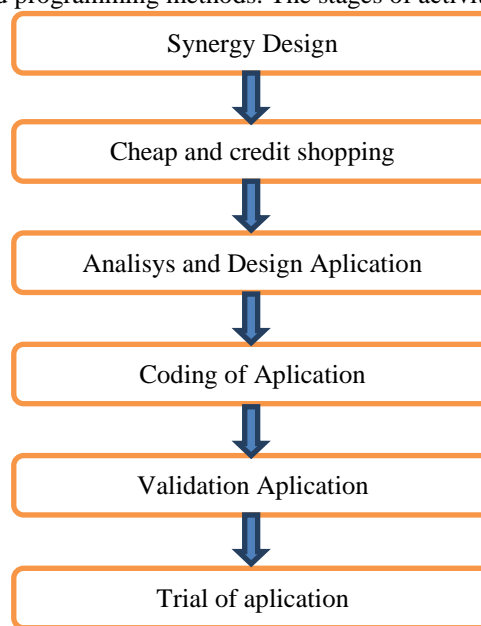


Fig 1. Application Development Stages

3. Literature Review

3.1 Business Synergy Design

Sjamsuridjal (2019) in the process of the Mosque Scientific Seminar entitled "Design of Business Synergy between Mosque Congregations to Increase Business Competitiveness", concluded that the economic potential of mosque congregations is seen as able to overcome the problem of competitiveness of micro and small economic actors (MSEs), if done synergy among mosque congregations until the synergy reaches economies of scale. The synergy system between mosque congregations is a concept that is one way to generate the economic potential of mosque congregations and to empower nearby shops. To increase competitiveness, stalls or grocery stores need to increase their bargaining position, improve services equivalent to minimarkets, set low selling prices, increase promotions, increase product completeness, provide opportunities to choose products for consumers, apply information technology, and have loyal consumers. To do it all is too hard if it is done by a shop alone, therefore one option for a stall is to work together among other stalls, one of which is to cooperate with other cooperatives. Within the environment there are various economic actors, from cooperatives, traders, producers, to consumers, which if synergized are sufficient to achieve economies of scale. The synergy in question is that the cooperatives and their members form a process or economic interaction to work together to complement and complement deficiencies so as to produce optimum economic activity. The design has been carried out by Sjamsuridjal (2019) that cooperatives become product managers. Products are still sold in stalls around the cooperative's working environment, so that the cooperative does not compete with the stalls.

In this designed synergy, each cooperative chooses one daily necessity product to be managed in the system; the selected product must not be the same as other manager choices. One cooperative becomes a distributor of one product, so that cooperatives do not compete in product management. Each cooperative records and captures the number of consumers and the number of stalls / traders / UKM (small and micro enterprises) that are easily accessible by the cooperative. This data and network is then synergized with other cooperatives to reach a sufficient volume to become a distributor, because in this synergy system design the cooperative acts as a distributor. Products are still sold in a number of stalls that are cooperative networks. With this synergy, there will be an increase in volume, both in terms of product items, the number of stalls and the number of consumers. The number of product items circulating in the synergy system is as many as the number of cooperatives netted in the synergy. Stalls that sell their products are all existing stalls that are netted by all cooperatives. Consumers who will buy their products are all members of the cooperative network.

3.2 Credit System in Shopping

The method of payment by credit with collateral and with interest is common, and almost all financial institutions have done it, it has even become the core business of all conventional financial institutions. Banks in collaboration with Visa or MasterCard have issued credit cards that are very popular with the public. On this credit card, customers are given a certain ceiling to be able to shop at the store or merchandise in collaboration with just swiping their credit card, and customers can pick up groceries as desired. Furthermore, the customer pays in installments every month with a certain relatively high interest. With the various credit models above, the customer is always in a weak position, that is, if the loan collateral is non-performing, the customer's collateral is confiscated by the financial institution. Likewise for credit without collateral, if it is bad, almost every day the customer is terrorized by debt collectors. Conversely, if the credit is paid off, the interest paid by the customer is quite a drain on the customer's finances.

One of the fair choices in this credit transaction is to do it by way of sharia. One of the most practiced sharia transactions in sharia financial institutions, such as sharia banks, sharia cooperatives / BMTs, and sharia financing institutions is murabahah, even the proportion reaches more than 60%. On the website of Bank Muamalat, it is stated that murabaha is a sale and purchase agreement where the price and profit are agreed upon between the seller and the buyer. The types and quantities of goods are described in detail. The goods are delivered after the sale and purchase agreement and the payment can be made in installments or all at once. Murabahah is a favorite transaction in Islamic financial institutions, because in a murabahah transaction it is confirmed from the beginning the acquisition price and profit margin to the buyer. Profits are obtained on agreement between the seller and the buyer. In Islamic financial institutions such as Islamic banks and Islamic cooperatives / BMT, murabahah transactions are applied to distribution and (lending) products. Islamic banks as sellers while customers as buyers. Because Islamic banks are not trading companies that provide inventory, usually new goods are provided when there is an order from a customer. While the payment is made in cash or by credit / credit. Murabahah transactions, which are on credit, are debt transactions that must be completed by the customer. This means that the settlement of accounts payable is not related to the customer's business condition, whether in profit or loss, so the risk is relatively low. It is different from the profit sharing which is relatively risky, because if there is a business loss, the loss will be shared.

Nurhayati (2016) writes that the concept of microcredit that has been well developed is the one developed by Muhammad Yunus who has developed the concept of microcredit, a small-scale loan model for the poor who cannot afford to borrow from commercial banks, because they do not have collateral. Yunus implemented this idea by establishing Grameen Bank which led him to become a banker for you poor. Grameen Bank comes with a new system, different from the habits adopted by traditional banks. According to Yunus, so far the requirements for bank credit can only be accessed by rich people, not poor people, for example: 1) Poor people cannot fulfill the collateral requirements (collateral) because they do not have them. 2) Poor people cannot fill out documents and forms, because most of them are illiterate. 3) for banks, credit big or small requires the same power. Even small credit is considered more risky. 4) The bank is concerned that the interest received will not cover the operational costs of the credit, because the cost of managing large and small loans is not much different.

In contrast to the above requirements, Grameen Bank has formulated credit principles as follows: (1) credit is extended without collateral or personal guarantees. (2) there is no legal sanction if there is credit arrears, and is exempted from the loan if the member dies. (3) members do not need to come to the office, on the other hand bank officers come to meet members. (4) credit procedures are kept as simple as possible by not using many forms that are not understood by members.

A credit without collateral may increase the risk higher, but Grameen Bank has a strategy to overcome it, namely:



- a. Forming small groups to build solidity, exchange ideas in determining the amount of credit and possibly even the management. Requirements: 5 people per group of equal economic level, formed by themselves, consisting of neighbors within a radius of 300 m², not from their own families, elected as a chairman and secretary for 1 (one) year, and must attend weekly meetings.
- b. Forming a meeting center, which is held regularly for 5-6 groups of 25-30 people in a disciplined manner.

3.3 Object Oriented Programming

Object-oriented programming is a programming technique that offers flexibility. Object-oriented programming (OOP - Object Oriented Programming) is a new way of thinking and logic in dealing with problems that will be solved with the help of computers, including in building information systems. OOP tries to see problems through real-world observations, where each object is a single entity that has a certain combination of data structures and functions.

Currently, there are quite a lot of object-oriented programming languages, some of which are Smalltalk, Eiffel, C ++, PHP, and Java. Researchers will choose the PHP programming language (Personal Home Page or Hyper Text Preprocessor), because it is more familiar with WEB-based programming, besides that the shopping system that has been designed can also transact via the internet. PHP is a server-side programming language that can be used to create dynamic Web pages. PHP is also an external application that can be used by a web server, so that the web server does not only provide HTML document services, but can also be a program that accepts external input and provides output from a data base or other data source into an HTML document. .

PHP can do basically everything a CGI (Common Gateway Interface) program can do, such as getting data from forms, generating dynamic web page content, and accepting cookies. PHP has been developed into a script programming language that can run on an operating system platform. PHP has become a programming language for creating complete applications for data processing and reporting. The report creation function provided is to generate reports in PDF, Excel, or other text file formats.

PHP's most reliable and significant feature is its support for multiple databases. It is very easy to create web pages that use data from a database. There are dozens of databases supported by PHP, some of which include: Adabas D, dBase, Empress, FrontBase, Oracle, MySQL, and others. In programming this information system, researchers chose to use the MySQL database. MySQL is a relational database management (RDBMS - Relational Database Management System) capable of working fast, robust, and easy to use. With databases it allows us to store, browse, sort, and retrieve data efficiently. MySQL server that will help perform this functionality.

4. Discussion of Results

4.1 Conceptual Design of Credit and Cheap Shopping System

Cooperatives usually carry out a savings and loan business for their members. Cooperative members save a certain amount of funds to the cooperative in the form of principal fees, mandatory fees and voluntary contributions. Members who have carried out their obligation to save these funds are usually given the opportunity to borrow funds from the cooperative, with monthly installments for a certain period. The amount of installments per month depends on the amount borrowed and the loan system. In conventional cooperatives, usually a certain interest is charged on loans, while in Islamic cooperatives the members are not charged interest, there is only a sincere infaq. Cooperatives can provide loans in the form of money or in kind.

The concept of shopping on credit and cheap to be developed is the concept of murabaha, but specifically it is only used for shopping for products / goods, the credit is not given in the form of money. Murabahah is a sale and purchase agreement where the price and profit are agreed upon between the seller and the buyer. The types and quantities of goods are described in detail. The goods are delivered after the sale and purchase agreement and the payment can be made in installments or all at once. In the murabahah concept that will be developed, Islamic cooperatives work together with stalls. Sharia cooperatives provide loans to their members in the form of goods that can be collected at stalls that cooperate with the cooperative. Details of goods or products can be selected directly by consumers at the shop along with the price of each item. The price of the item listed includes the margin / profit. Consumers can choose goods according to their needs and the payment is made on credit as long as the credit limit is sufficient. The contract is made when there is a transaction of handing over goods between the shop and the consumer.

Collaborating stalls are stalls that sell products from the cooperative. The cooperative invests in making 1 item of product in an amount in accordance with the number of members of all cooperatives in synergy, then distributes 1 item of the product to other cooperatives. So that each cooperative will give 1 product item

to other cooperatives, and receive a number of product items from a synergy of cooperatives. Then the products owned by the cooperative in sufficient numbers are entrusted to stalls within the scope of work of the cooperative with a certain margin on a consignment system.

The cooperative provides a credit ceiling without collateral to members for shopping at the shop, then with this ceiling the shopping member / consumer takes the products / goods needed to the shop, until the maximum credit limit runs out. The consumer then repays the loan to the cooperative without interest every month. The installments paid by consumers will increase their credit ceiling again. The credit limit is only given to consumers who are members of the cooperative because it is risky if it is given to those who are not members of the cooperative. Cooperatives and their members already have the usual mechanisms for borrowing and borrowing, including collecting debts for members who do not pay their debt installments. Cooperatives in procuring their products directly to producers, this is done to cut distribution channels, so that consumer prices will be relatively cheaper than usual retail prices, or at least the same even though they are sold on credit. Thus consumers will be helped, namely shopping by credit but the price is cheaper or the same as the retail price.

4.2 Synergy Design between Cooperatives, Merchant, Industry and Consumers

To carry out this synergy, traders, home industry and their customers in one environment (around 2-4 Rukun Warga) are advised to form economic institutions in the form of cooperatives. This environmental-based cooperative then collaborates and synergizes with other cooperatives in the cooperative network. This synergy of cooperatives will have great potential. The economic potential that is meant is that in the cooperative member community there is an economic capacity that can still be developed for the better. The synergy in question is that the cooperative and its members form a process or economic interaction to work together to complement and complement shortages so as to produce optimum economic activity.

One cooperative member, if combined with other cooperative members, will be quite large in number and can be conditioned to become a captive market. These large numbers can achieve economies of scale for both distributors of goods and producers. Because it is necessary to design a model or system that can condition traders, producers (home industry), and consumers who are members of a cooperative network to work together.

In the designed network, the cooperative acts as a distributor. The choice of the role of cooperatives as distributors so that cooperative institutions do not become competitors for stalls in the cooperative environment, so that by acting as cooperative distributors can synergize with stalls, thus existing stalls can continue to exist and even be helped by the presence of distributors who are the location is close.

The existence of stalls (most of which are small traders) also needs to be raised. This is because along with the development of time, the traditional stalls are increasingly experiencing decline due to the rapid growth of minimarkets in residential areas, which has a negative impact on existing stalls. The existence of this minimarket has killed the stalls in residential areas. The situation above can actually be overcome, if people can divert their shopping to the nearest stalls, and the home industry can promote it to the community. However, to divert people to be loyal to shopping at the stalls again and the public can buy home industry products, the stalls and home industrial producers must be willing to transform and synergize in cooperative networks.

In this designed synergy, each cooperative becomes a product manager. The product manager chooses two products to be managed, consisting of one daily necessity product and one home industry product made by home industry players who are members of the cooperative. The product selected must not be the same as other cooperative choices. In this way one cooperative with another cooperative does not compete in product management.

Products are still sold in a number of stalls that are members of the cooperative, so that the existing stalls continue to exist and can increase their sales. Two products managed by one cooperative will have a market share of all netted cooperative members, which is sufficient for the cooperative to become a distributor of the two products, and a sufficient amount to buy directly from producers at producer prices. This method will cut distribution channels, so that consumer prices are low and consumers become loyal.

Thus, there will be a transformation of the roles of cooperatives, communities, home industry players and shops from before the synergy and after synergizing and giving benefits to each party after the synergy. Before the synergy, people buy from other people's shops / stalls / minimarkets, after synergizing, the community as a cooperative member can buy cheaper than usual and will get a profit contribution because there is cooperative involvement in the synergy. Before synergizing, the cooperative may only manage member savings and loans, after synergizing the cooperative has a business unit to become a product distributor that can improve the welfare of its members. Before the synergy, the stall stands alone waiting for the buyer, after synergizing the shop sells goods / products owned by the cooperative that can buy at a lower



price and can have loyal customers who are members of the cooperative and can provide online purchasing services.

Investments to procure these two products can be taken from contributions from cooperative members, or BUMN and / or cooperative CSR funds can borrow from existing financial institutions. This synergy between cooperatives needs to be supported by information technology so that management is easier and cooperatives and stalls can provide services to consumers on-line and in the future can be developed into an e-commerce.

Each cooperative records and captures the number of members and the number of stalls / traders that are covered by the cooperative. This data and network is then shared with other cooperatives until the number reaches a sufficient volume to become a distributor, because in this cooperative network design, the cooperative is played as a distributor. The community has a dual role, namely as the owner of the cooperative as well as as a consumer or customer. It is hoped that with this dual role, the community as members of the cooperative will become loyal consumers. Goods / products are still sold in a number of stalls that are members of the cooperative network so that the stalls can still operate because they have loyal customers. With this synergy, there will be an increase in volume, both in terms of product items, the number of stalls and the number of consumers. There are as many product items circulating in the cooperative network as the number of cooperatives netted in synergy. Stalls that sell their products are all existing stalls that are netted by all cooperatives. Consumers who will buy their products are all consumers or members of all cooperatives.

Through this cooperative network, the cooperative will become a business entity that is active in carrying out its business in a sustainable manner managing procurement, distribution and monitoring of product stocks managed by the cooperative. The purchase of products by cooperatives to producers means that they will cut distribution channels, which in turn lowers consumer prices, so that in terms of prices, stalls can compete with existing minimarkets. The warung will also be happy, because it will get goods in an easy and cheaper way, and can have loyal customers. Customers will not only enjoy lower consumer prices, but will also enjoy the profits from their business management because they are members of the cooperative. In addition, in transactions between consumers and stalls, consumers can design their choice of items to be purchased at the shop via cellphone and perform online transaction services, as are services provided by minimarkets, even because of the proximity to the stalls, they can provide services to consumers' homes free.

4.3 Shopping System Application on Credit

a. Analysis of Shopping System Application on Credit

In order for cooperative networks to provide services on-line, the system must be supported by information technology. In general, business transactions in cooperative networks with the support of information technology have been designed by Sjamsuridjal (2019). The business process in the cooperative network is based on the design of transactions between producers - cooperatives - cooperatives - traders - consumers as illustrated in Fig 1, can be explained as follows:

- 1) A cooperative based on a contractual purchases goods from the producer, then the goods are sent by the producer to the cooperative's warehouse and payment is made in cash by the cooperative to the producer.
- 2) Goods are recorded on the network by the cooperative and the prices are set.
- 3) The cooperative distributes its products to other cooperatives and scans the QR code, distribution can be carried out by the cooperative using a motorbike. The cooperative also distributes products along with merchandise from other cooperatives to traders and performs QR Code Scanning to merchants. Distribution to traders is also done by motorbike.
- 4) SmartPhone Traders automatically synchronize to the network server to record transactions and stock items
- 5) Merchants Scan QRCode to consumers when making a purchase transaction
- 6) Consumer SmartPhone automatically synchronizes to a network server to record transactions and stock items.

The shopping application system on credit is a complex system that involves certain software and databases. In order for the development of the system to be carried out quickly, it is planned that the development is carried out by OOADPS (Object Oriented Analysis, Design and Programming System), which is carried out through the stages of System Analysis, System Design and Programming which are all object-oriented. Based on the business processes and synergies described above, the system can be described globally in the system architecture diagram as follows:

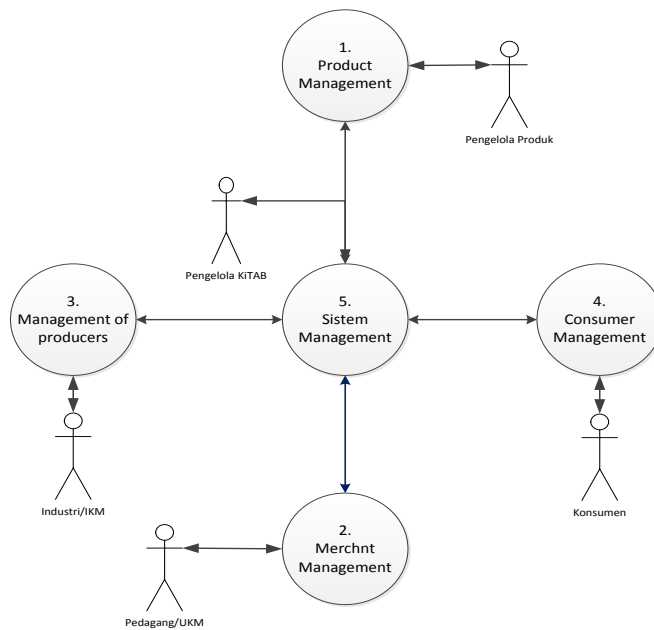


Fig 2. Diagram of the Shopping System Architecture Design

In the system application that has been designed, each consumer is given a certain credit limit. When shopping, consumers have two choices in buying products / goods, namely coming directly to the shop or making a purchase order from their home. When they come to the shop, the consumer chooses the product to be purchased from his cellphone then takes the products purchased at the shop and takes the goods home. If consumers order via cellphone from their home, the application system will look for the nearest shop to deliver goods to consumers assisted by the closest cooperative. For consumers, a reward and punishment system applies, loyal consumers (often shopping and diligently paying installments) will be given rewards in the form of promos and prizes as well as an increase in the credit ceiling. Meanwhile, consumers who are not loyal are given "sanctions" by being reminded to pay credit or spending with credit temporarily suspended

b. Designing a Credit Shopping System Application

This design uses object-oriented procedures using UML as a tool in documenting and visualizing a system to be built. The design consists of use case diagrams and activity diagrams.

1) Use Case Diagram

This use case diagram describes the application to be built, how a person or actor will use and take advantage of the system. This use case modeling goal defines the functional and operational requirements of the system by defining the scenario of the system to be built. This definition includes identification of actors, identification of use cases and scenarios. This use case diagram modeling leads and focuses on the application (frontend), while the backend is only modeling to describe how information reaches the application.

The use case diagram for this system consists of four actors, namely Admin, Producer, Merchant and Consumer. The use case image is not included in this article. Based on the design of the use case diagram, a scenario is made of each process in the use case diagram, as follows:

Table 1.

Use case definitions and descriptions

No	Use case	Description
1.	Login	As an initial entry for users to be able to access features on the system..
2.	Managing Manufacturers	System admin can manage the List of producers
3.	Managing Traders	Admin and Producers manage the list of merchants who use the system
4.	Managing Customers	Admin and Merchants manage the Consumer List that uses the system in their respective regions.
5.	Manage Balances	Manage balances and Top-up balances performed by the admin.
6.	Managing Goods	It is a list of merchandise that is in every producer and trader.
7.	Check Balance	Consumers can see the balance of each merchant who will take goods.



No	Use case	Description
8.	Choosing Producers	Traders can choose producers to buy their merchandise.
9.	Seeing Goods	Consumers see the merchandise to be bought
10	Buying Goods	Consumers buy goods through the system.

2) **Activity Diagram**

Activity diagrams that have been compiled include: Activity Login, Activity Managing Producers, Activity Managing Merchants, Activity Managing Consumers, Activity Managing Balance, Activity Managing Goods, Checking Trader Balance Aktiviti, Selecting Producers and Viewing Goods, and Buying Goods Activities. Details of the activity diagram are not included in this paper.

c. **Programming the Shopping System Application on Credit**

Shopping system application programming is done by object-oriented programming method. Programming is done with PHP software based on windows and web, while the data base used is MySQL. System applications resulting from programming are web-based applications that can be run on cellphones or laptops / computers. The application that has been produced, hereinafter referred to as the Shopping System Application, is then ready to be implemented in traders and small industries, especially for use in a number of business actors who have synergized.

1) **Credit Shopping System Application Structure**

To make it easier for users to know the menus in this system, a software menu structure is created. The application menu consists of:

- a) Home,
- b) Cooperatives,
- c) Industry / IKM,
- d) Traders / SMEs,
- e) System Manager

In addition, a user interface has also been created that describes program routines that will be run by a computer system to explain the interaction between the user and the application being made. The complete user interface can be seen in the shopping system application that can be run on a cellphone or laptop. First, the shopping system application must be installed on HP or Laptop owned by merchants, producers and consumers who are netted in the shopping system. This will greatly facilitate traders, producers and consumers in conducting transactions and recording the results of the transactions. Consumers can order goods to be purchased through the shopping system application on the cellphone / laptop from home and choose the payment method in cash or credit, then the consumer takes the goods to the shop or asks to be delivered by the shop by paying according to the goods ordered . If you choose cash, the payment can be paid directly to the shop. Meanwhile, if you choose credit, the down payment is paid to the shop and the rest is paid on credit to the bank or the place designated by the shopping system. Transactions that have been carried out have been recorded and recapitulated by the system application, so that traders and producers do not need to record again. This application can also be used as a marketing medium for traders and producers.

4. Conclusion

Based on the background, literature review, and description of the analysis of the results that have been carried out, it can be concluded that the following are:

- a. The concept of an inexpensive credit spending system is designed to involve traders, industry and consumers and system managers who in launching credit are similar to the murabahah credit that has been administered by Islamic banking. In this murabahah shopping system, the cooperative provides a credit ceiling without collateral to members for shopping at the shop, then with this ceiling the shopping member / consumer takes the products / goods needed to the shop, until the maximum credit limit runs out. The consumer then repays the loan to the cooperative without interest every month. The installments paid by consumers will increase their credit ceiling again. In order to shorten the distribution channel, cooperatives procure products directly to producers so that consumer prices are relatively cheap.
- b. Traders, producers and customers are advised to form economic institutions in the form of cooperatives. This environmental-based cooperative then collaborates and synergizes with other cooperatives in the cooperative network. The synergy in question is that the cooperative and its members form a process or economic interaction to work together to complement and complement shortages so as to produce optimum economic activity. In the synergy designed, the cooperative is acted as a distributor so as not to become a competitor for the existing stalls. Each cooperative is a product manager. The product

manager chooses two different products to be managed, consisting of one daily necessity product and one product by home industry players. Products are still sold in a number of stalls that are members of the cooperative. Two products managed by one cooperative will have market share for all netted cooperative members. This synergy between cooperatives needs to be supported by information technology so that management is easier, cooperatives and stalls can provide services to consumers on-line and in the future can be developed into an e-commerce.

- c. The shopping system application that has been developed is a web-based application that can be run on cellphones and laptops. The shopping system application consists of five sub-systems, namely the SME (traders) sub-system, the IKM (industry) sub-system, the consumer sub-system, the product management sub-system (cooperatives), and the shopping management sub-system. This application will make it very easy for traders, producers and consumers to make transactions and record the results of the transactions. Consumers can order goods to be purchased through the shopping system application on the HP / Laptop from home and choose the payment method in cash or credit. Every transaction made by traders, producers and consumers will be recorded and immediately calculated. This application can also be used as a marketing medium for traders and producers.

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