



Application of Web Communication Relationship Management in Small and Medium Enterprises

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Abstract. Small and Medium Enterprises (UKM) in Indonesia are still managed traditionally since the touch of information technology is not optimal. On the other hand, the number of customers or transactions made by UKM may no longer be of small value. One modern business approach is to pay attention to customer factors, not only before the transaction but also after the transaction. Applications in the field of information technology in this domain are called Customer Relationship Management (CRM). This research tries to develop a CRM model adapted to the community's culture and the SME business model in Indonesia and considers the penetration of information technology in general. The approach used is to use the Prototype model in which the system creation process is structured and has several stages that must be passed so that the information system becomes better and easier. The results show the small and medium businesses can make CRM simpler and more generic.

1. Introduction

CRM as a concept emerged after 1990 to develop customer relationships with information technology and emerging software solutions [1]. The utilization of IT Information technology in marketing is well established, and many of the benefits of attention from research and marketing practitioners. The concept of database marketing has been around since the 1960s and is growing rapidly. CRM is a strategy that enables organizations to use personality account information and develop relationships with every valuable customer to provide exceptional customer service [2]. CRM's goal is to improve probability, revenue, and customer satisfaction [3,4]. Understanding customer needs and offering value-added services is recognized as a factor that determines the company's success. Therefore, CRM plays a major role because it consists of organizational procedures and strategies to understand its clients better and use it for the production and marketing of services [5,6]. We tried through this study to approach CRM concepts and customer culture. Our goal is to study the nature of the relationships that may exist between them. To do this, we support the formulation of two research proposals that analyze the nature of these relationships CRM / customer culture [7]. Based on a literature review of customer relationship management's concepts and principles, it can be said that

customer, employees, leadership, organizational culture, strategies, and structures are the main factors treated to implement CRM [8].

2. Method

This research was carried out in the form of making web-based software applications. The stages that have been carried out in this research are as follows:

1. Data analysis and collection

It is the first step in determining the analysis of system needs. This analysis is carried out to ensure that the system is developed according to the user's needs. This analysis consists of an analysis of functional needs and non-functional needs. This stage of analysis is preceded by data collection [9] to support precise and accurate analysis.

2. Design

Several system components are designed at the system's design stage (design): data design and interface design (interface). The design is expected to make it easier for system makers to translate user needs into visual form. The creation of this design is considered the user-friendly aspect for ease of use, so even users who are technically capable of beginners can use this system correctly and adequately [10-12].

3. Implementation

The results of the design at the design stage are implying through web-based technology and mobile android. At this stage of implementation, an open-source web framework was be placed on a server. At the end of this implementation is installing the system on the webserver and the setting of several things for system security.

4. Evaluation and Trial system.

It is a step to ensure the system developed and installed has run properly. These tests and evaluations will be conducted in two activity groups: the developer's first internal testing. At the same time, the second activity is open testing by several representatives of UKM businesses.

3. Results and Discussion

In this study, 50 samples were taken, all of which often travel on tourism. On average, respondents stated that the online ticket booking application (Traveloka) helped them travel with all the application features. They are accommodating because they can plan to book tickets or hotels online instead of coming directly to the place. The application makes it very easy for people who will travel on tourism. The questionnaire that the respondents have filled in is shown in Table 2.

3.1. The design of Usecase Diagram

Figure 1 explains the customer function process of the information system in web-based UKM.

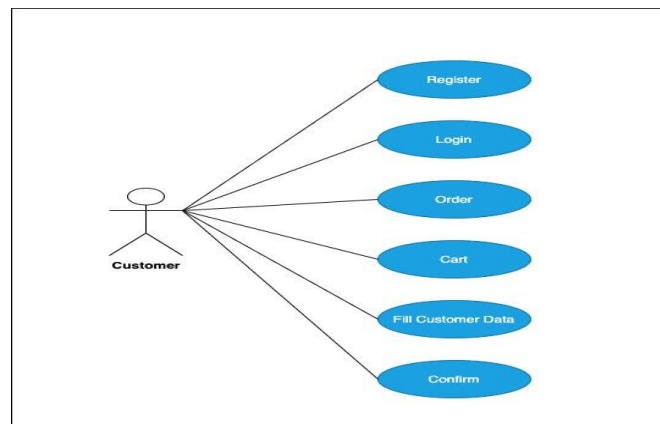


Figure 1. Use Case Diagram

3.2. The Design of User Interface System

The customer's design aims to be used to see the goods that want to be purchased.

3.2.1. User Interface for Student

Figure 2 is the log-in section. Before the customer enters the main web to see the goods sold, they must be logged in first. If the user does not have an account, then the customer can register first and immediately log-in.

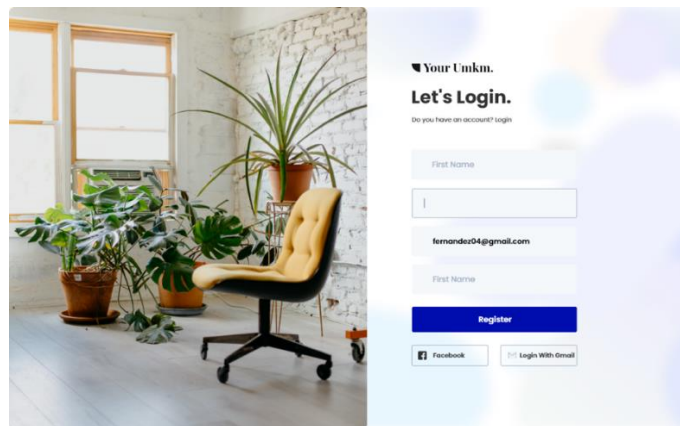


Figure 2. Web Register

Figure 3 is the web log-in of an online sales application, and the first step that must be taken before entering this application is to fill in the registration of personal data on this first page to make it safer, and the data is verified.

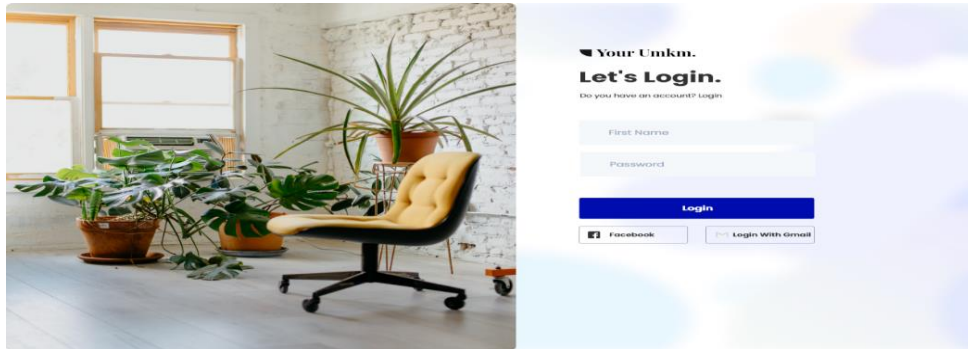


Figure 3. Web Log-in

The next stage will be found in the log-in process to strengthen personal data security as on the previous page. With this page, the user only needs to enter their name and id (Figure 4).

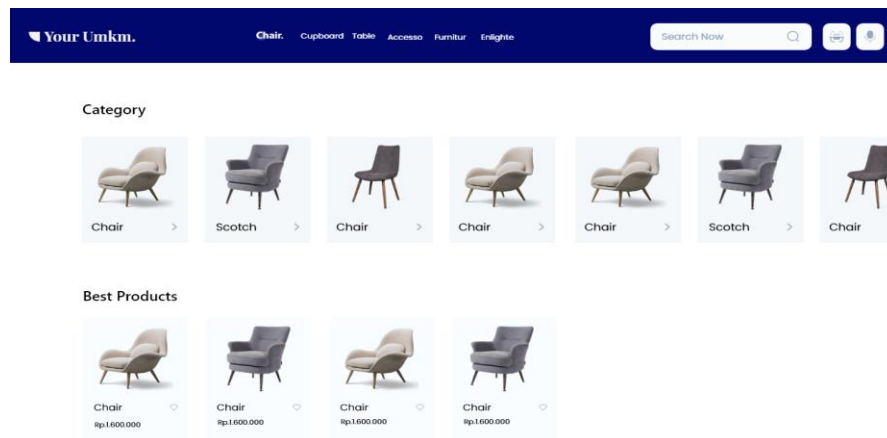


Figure 4. Web Home

The next step is Figure 4; there are home or several product options in this application so that users can choose and sort according to their wishes (Figure 5).

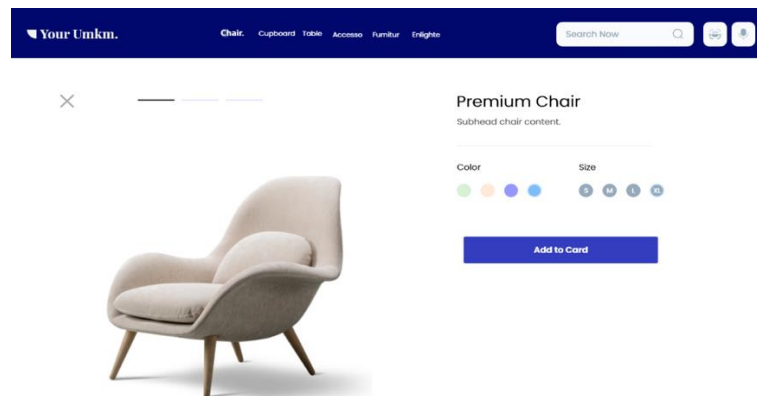


Figure 5. Web Product

After choosing the product, users can see how and what type of goods they want, and they can immediately make transactions. Finally, in Figure 6, the transaction and the amount to be paid are displayed on this page. Therefore, there will be a notification that the item selected with the nominal to be paid certain cannot be canceled after making a payment.

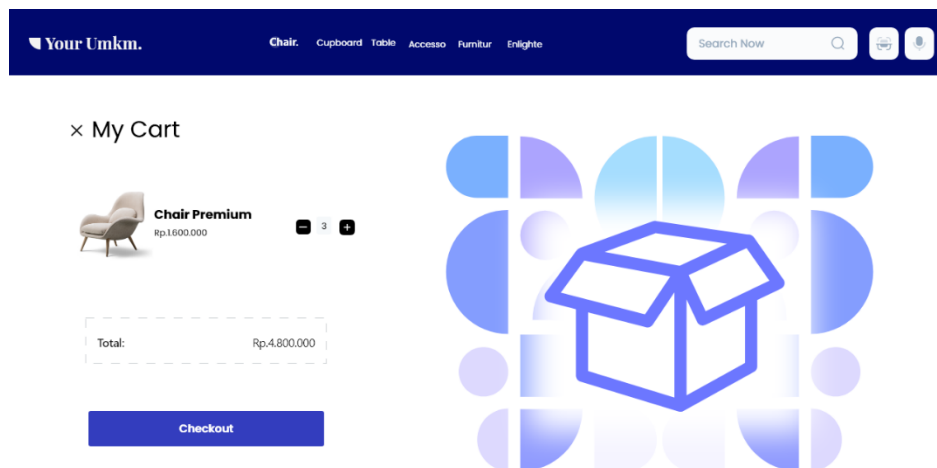


Figure 6. Web Order

It concurs with the results of (11) research, which states that a product marketing strategy with the Customer Relationship Management (CRM) model helps in marketing its products for UKM.

4. Conclusion

Customer Relationship Management (CRM) is needed in a company. Not only for companies of scale large-scale companies, small and medium enterprises (UKM) also need to pay attention to this problem. Given the current competitive era, brands' role in a product is very important as the product's identity to be a differentiator with competing products. From the research results, it can be concluded that small and medium (UKM) enterprises can also create a simpler and more general CRM.

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