

# THE DEVELOPMENT OF E-CRM FOR THE SERVICE IMPROVEMENT AT THE UNIVERSITIES

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## ABSTRACT

Public Universities and Private Universities are recently contesting each other to improve their qualities and facilities in order to attract new students to come in. The high quality and the number of facilities belonging to universities are not a guarantee to get prospective students as they are targeting. This phenomenon occurs due to many factors. One of the factors causing the matter is that the way in delivering information to the prospective students and their parents is not right and not compatible with their needs so that the prospective students and their parents do not know the quality, the educational programs, the facilities, and another information which belong to the universities. It also occurs in IBI Darmajaya, one of the top private universities in Lampung. According to the obtained data of this research, the number of the new students who joined generally decline compared with the previous year; while, the number of students who did not finish their study was high enough. One of the solutions to overcome these problems was by providing information through the exact media which provided the needs of the prospective students and their parents. By using this way, it was expected to convince the prospective students to join and to finish their study.

In order to provide the information which was compatible with the needs of the prospective students and their parents, the E-CRM system equipped by the data mining was developed. The database which was provided in IBI

Darmajaya was processed by the data mining in order to be used as an input for the E-CRM system. This system provided the information for the relevant unit about what the informational media which had to be used were and what information which should be given to the prospective students and their parents was. To find out the successfulness of the implementation of this system, the Critical Success Factor (CSF) was carried out. The result of the CSF was used for the improvement of the system and the expansion of the system of the E-CRM.

*Key Words: E-CRM, Zachman, CSF*

## 1. INTRODUCTION

Public Universities and the Private Universities are contesting each other to improve their qualities and facilities in order to attract new students to come in. This has been a demand for the universities to face competition both nationally and internationally. The high quality and variety of the provided qualities are not a guarantee for the universities to be able to continue to stand and to have a lot of the students based on the capacity of the universities until the students finish their study. According to the accreditation instrument data of IBI Darmajaya in 2014, it was stated that the number of students who came out and did not finish their study from 2009 to 2013 was 21.21%; while, the number of the new students who joined was not stable (having up and down).

There were many factors which could be the cause why it could happen. One of the most possibilities why it happens was that the prospective students and their parents did not get the right information. The prospective students and their parents did not get the right information due to the use of the informational media which had not right and the provided information was not compatible with the needs of the students and their parents. One of the solutions to handle this matter was by developing E-CRM system to improve the service for the prospective students and their parents on the information in accordance with their needs. The previous research which was related to this research was about [1] the implementation of CRM in educational institutions; [2] Moreover, another previous research was also corresponding with the implementation of CRM which was aimed at finding out the customers' satisfaction and the level of the service of a university; Besides, [3] another related research was also about building E-Carrer as an effort to improve the services for the alumni of a university. In addition, associated with the customers'

loyalty, CRM could also be applied to improve the customers' loyalty [4] [6].

With this system, the selection of the informational media and the information which was used to be delivered were compatible with the needs of the prospective students and thier parents.

## 2. RESEARCH METHOD

The method used in this research referred to the Zachman method. Zachman identified a framework with the architecture level ranging from the conceptual level to the detail of the design and the construction of a system. Zachman did not specify where the activity development proceeded. Moreover, in the CRM model, it could be done by using the rows of Zachman whchi crossed the columns of Zachman in order to get a good standard. The good standard was described from the scope, the business model, the model information system, the technology model, and the detailed model.

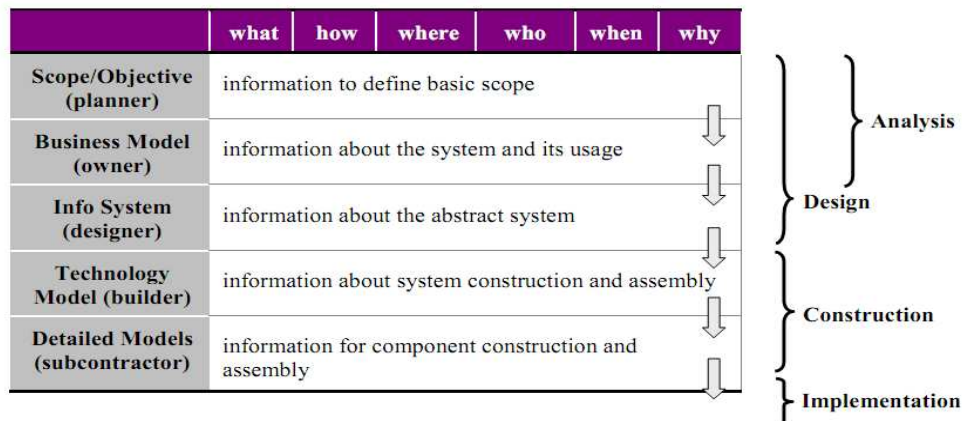


Figure 1. Zachman Framework for Information System

### 2.1. Phases of the Research

This research was focused on the development of the E-CRM to improve the service for the prospective students with the data of the prospective students who are from

Bandar Lampung City in 2015. This data was considered as a reference to measure to the great extent of the role of the information system used by the prospective students.

#### 2.1.1. Analysis Phase

In this phase, there were two main things to do. They were:

d. Literary research: journals, proceedings, academic guidelines, articles, books, and websites related to the CRM service.

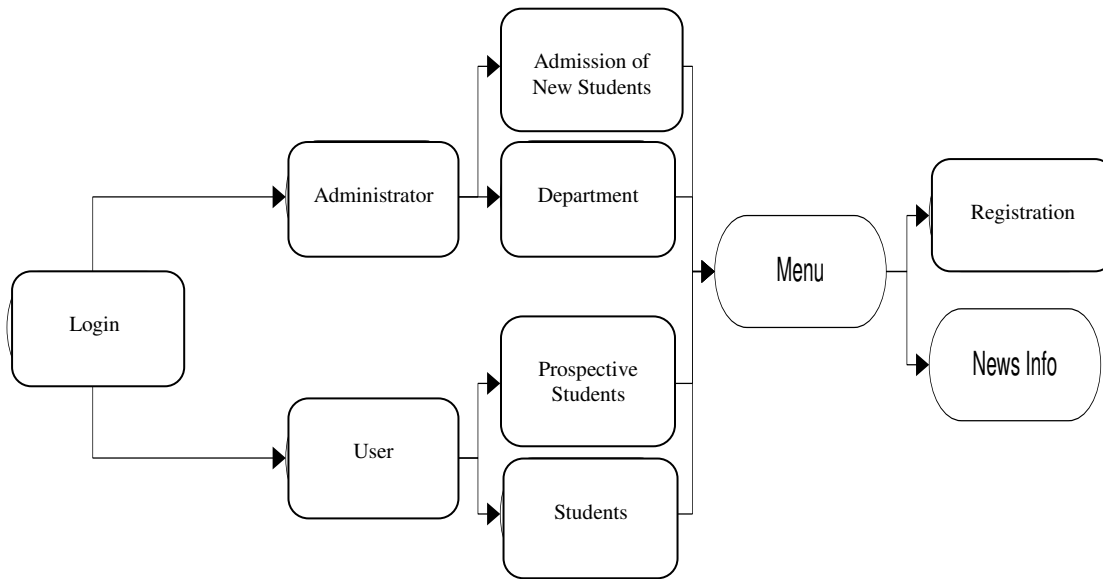


Figure 2. HIPO CRM Diagram

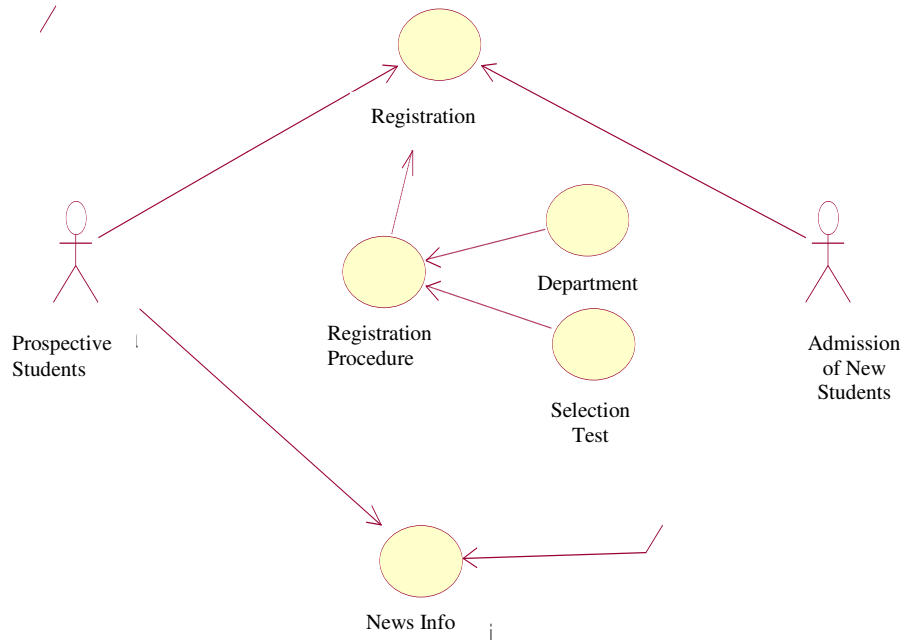


Figure 3. CRM Model

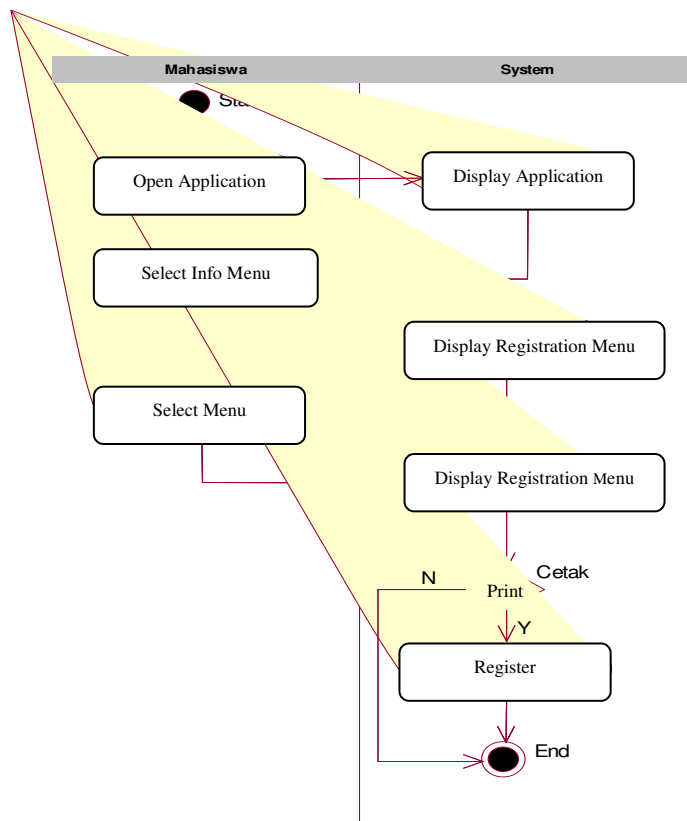


Figure 4. Activity Diagram

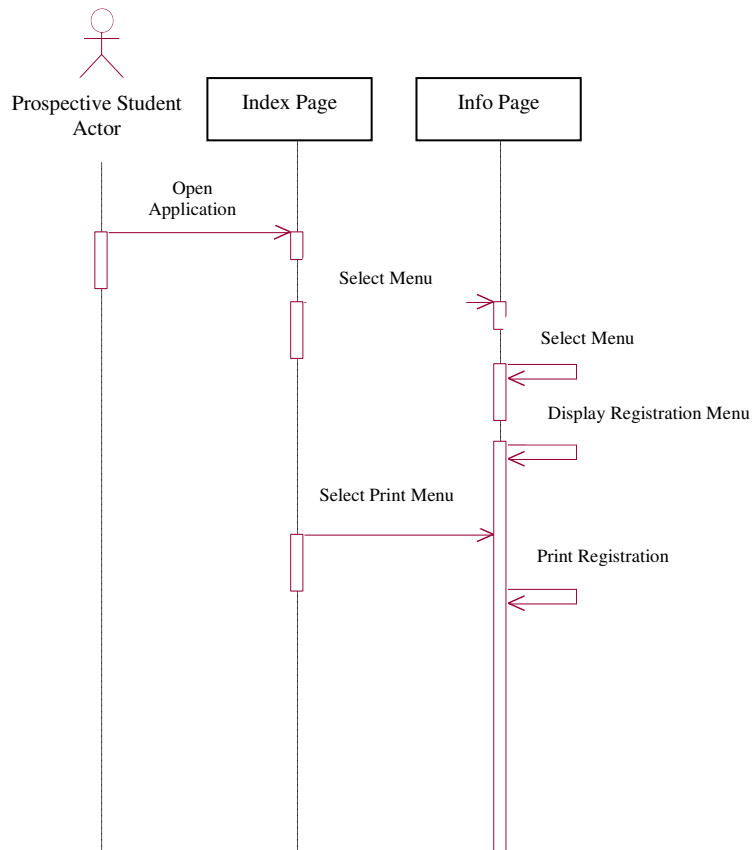


Figure 5. Sequence Diagram

The result of the analysis and of the design was in the form of the E-CRM used for the system of the admission of the prospective students. The admission of the prospective students by using the the web-based interface was regarded as as the facility at the university in (2) providing the service to the prospective students and their parents and in meeting the needs as the consumers of the

iversity by doing the registration or by inquiring directly on the registration division so that the university could search the prospective student data which were as the augment of the information of the students' identity. The prospective students and their parents at the end showed the loyalty of the university to the customers by retrieving information from the E-CRM.

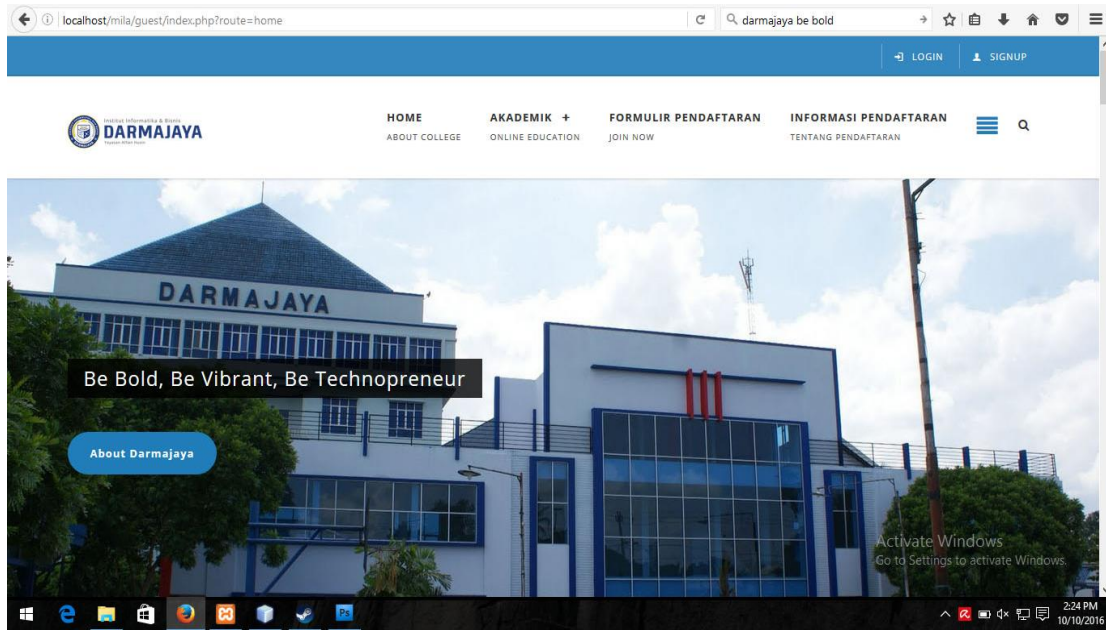


Figure 6 Home E-CRM Display

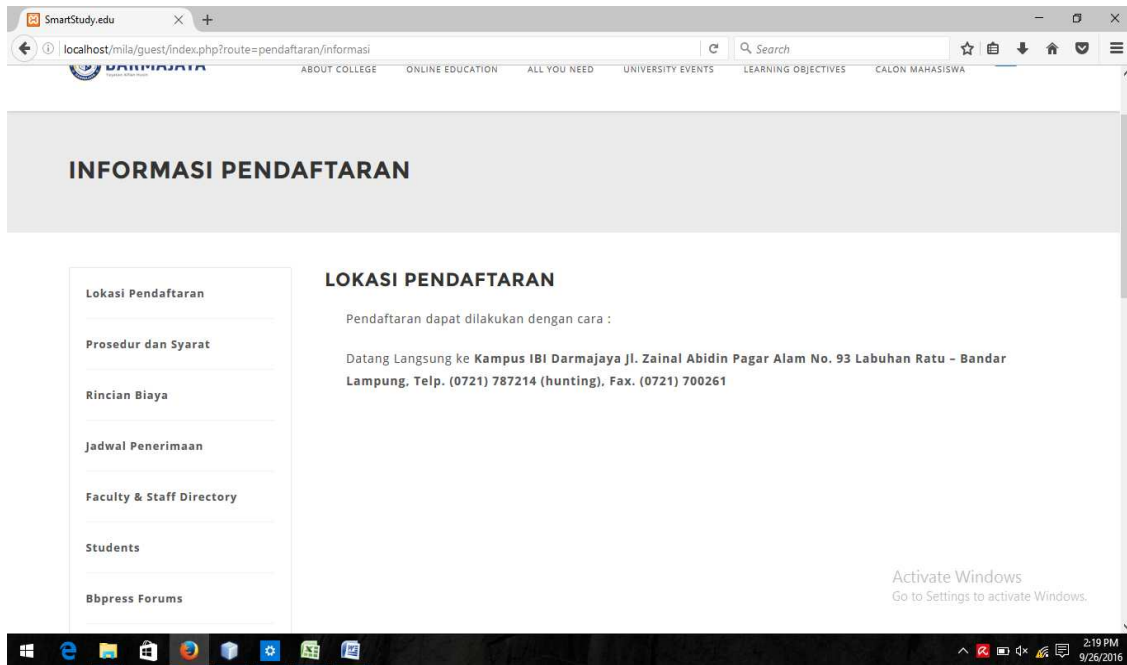


Figure 7 Registration Information

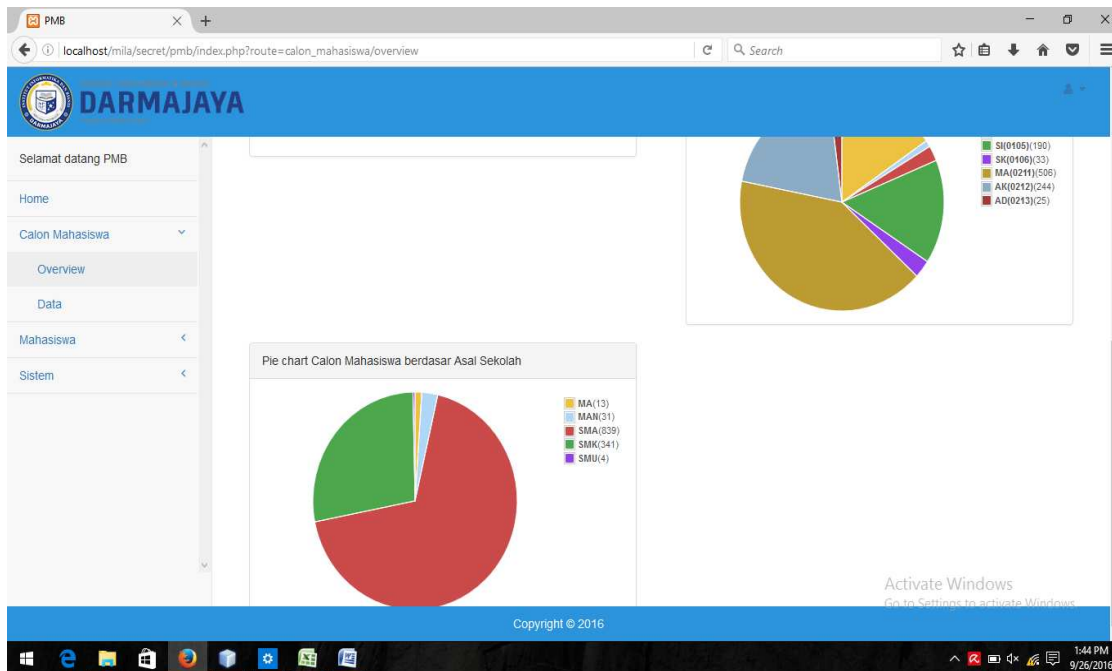


Figure 8. CRM Overview of Prospective Students

The overview of the prospective students provided the information of the result of the maximum service facility related to the networking on the prospective students, the search of the prospective students data, and the students' data so that the information was accurate related to the needs of the prospective students such as the information needed by the students and their parents, the way how to choose the department, the way how to change the department, the number of students who come in and drop out ,

#### 4. CONCLUSIONS

According to the result of this research, there were several conclusions that could be drawn. They were:

1. The E-CRM system facilitated the prospective students and the staffs of the Admission of New Students and the department in getting the right information.
2. The E-CRM facilitated the administrators of the university in managing the customers' data (the

prospective students, the new students, and the parents) and could know the needs of the customers.

3. The E-CRM was used as a media campaign to attract the prospective customers through online communication and interaction.
4. The E-CRM helped the the management division of the univeristy to tackle the existing problems on the students.

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