

# **CUSTOMER RELATIONSHIP MANAGEMENT APPLICATION SERVICES (CRM) FOR STUDENT ACTIVITY INFORMATION ON UNIVERSITIES (Case study : IBI DARMAJAYA)**

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## **ABSTRACT**

Information services application for students, is one of the form of loyalty from Universities to the students to be active and not left behind in existing information. Student information services previously informed through wall magazine, banner or brochures, this has not been delivered properly and didn't have any activities data either extracurricular activities or intracurricular activities. Regarding to all interested parties in IBI Darmajaya especially give best service to the student hence the importance of a Customer Relationship Management (CRM) Application to increase the flow of information needed by students, increasing student interest in every activity, having a database of the most interested activities and to accommodate IBI Darmajaya's interest. The data used in this research is all the activities information in the student affair, processed through Rational Unified Process (RUP) method with four phases done in sequence and iterative where each iteration can be used to fix iteration with visual programming language, hence resulting a well produced CRM application for information services.

***Keywords : CRM Application, Information, and SDLC.***

### **1. Introduction**

A well prepared plan is urgently needed by IBI Darmajaya to face future challenges and provide students optimal services. Accommodate IBI Darmajaya's interest and be able to identify every aspect of information required by students. Hopefully the students will get the satisfaction of service and IBI Darmajaya has a database of information that will increase the interest of students in the activities held by University, knowing the most demanded activities by students [4].

Currently, the information on IBI Darmajaya has been distributed or submitted through wall magazine, brochures in the campus environment and also showed in a large banner containing academic calendar information. While campus

activities not only in terms of academic but can also be student organizational activities, training schedule or soft skills, scholarship information, student achievement information both in the academic field and non academic. This way of delivering information is less effective, seemed brief because the information will be submitted will only be known when students read wall magazine or brochures. Another obstacle is that there are still students who are not paying attention to the information, not even reading information banners. Another problem is there is no information service in the form of special applications for activities that can be followed by students at IBI Darmajaya. To solve the problem, an information service CRM application is required in the IBI Darmajaya environment, which contains all related information in

academic and non academic fields. With this CRM application becomes a medium of information service in every corner of student activity in the campus environment.

Previous research to find out customer satisfaction and service level from University, building e\_career as an effort to improve alumni service to fulfill business requirement hence why CRM is implemented [3]. Customer relationship management (CRM) is a customer service approach that focuses on long-term development and sustainable customer relationships that can add value to customers and companies. The goal is to use the data better for the customer relationship management [6]. Hopefully with this CRM application students will not be left behind or late to get information on campus activities and then increasing student's interest in each activity, providing database of information and achievement of activities done by students. Automatically Customer relationship management (CRM) applications for information services will form bond and improve relationships between institutions and students

## **2. Research Method**

The Data that used and needed for problem solving in this research is academic and non academic information data of year 2016 which conveyed to student. As for the location of research is at the student affair of IBI Darmajaya Bandar Lampung. Data collection in this research is with direct observation and categorizing types of extracurricular or intracurricular information serves to build the application of information services based on Customer Relationship

Management (CRM) The type of data to be used in this study consists of :

### **1. Primary Data**

That is the data in the form of data information activities of student organizations in 2016, the data related to students extracurricular activities and intra-curricular students activities. In addition, also conducted several interviews on other parts of IBI Darmajaya related to problems such as: business processes, data flow, information flow is an interview on the Public Relations at IBI Darmajaya.

### **2. Secondary Data**

Represents available data that can be used as a support in the information services CRM application ie data management information, such as information service quality procedures. This secondary data is also obtained through literature studies, journals, proceedings, articles, books and websites related to Customer Relationship Management (CRM) -based service in the management of academic or non academic information services within IBI Darmajaya.

## **Research Tools**

Information services CRM application in the management of academic or non academic information for students can be use as a tool to monitor information that will or have been informed or displayed. While testing the applications use computer aids with operating system Windows 7, Visual Basic, MySQL for

database design and visual programming language. This research is to create an application that can be implemented into information system services in the student affair. Therefore, it is necessary that the RUP system development steps to have four successive and iterative phases in which each iteration can be used to correct the next iteration [5]. Stages of RUP to be used in the system development:

**a) Inception**

At this stage business processes modeling that is required and defining the needs of the user created the student affairs and students.

**b) Elaboration**

This stage is more focused on planning the system architecture, and detecting whether the desired architecture is desired, as well as detecting possible risks from the created architecture. This stage is more on system analysis and design as well as system implementation that focus on prototype system.

**c) Construction**

At this stage the development of components and system features is done. This stage is more on the implementation and testing of systems that focus on the implementation of software in the program code.

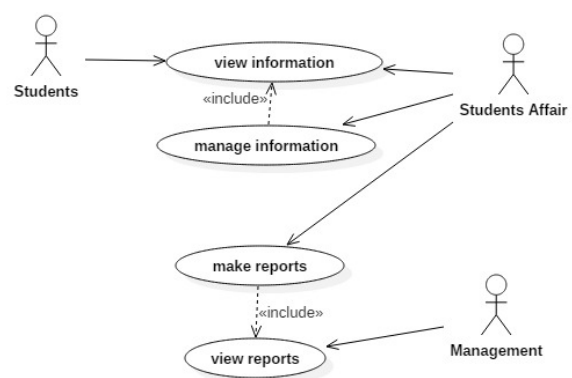
**d) Transition**

At this stage deployment or installation of the system for the application can be understood by the user (student) is done, and testing whether the system has met the expectations of users. with architectural levels starting from the

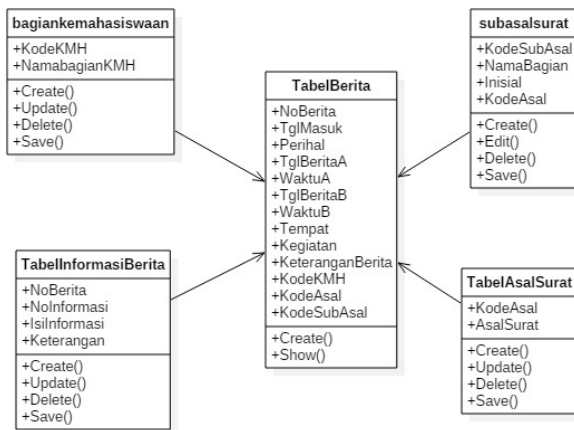
conceptual level to the design details of inputs, outputs and reports.

**3. Discussion**

CRM applications produced from planning to the design of the system through the stages of the process of preparation of detailed specifications for applications to run as needed. Information may represent the part of the student in conveying information. Scheduled student activities and all students can access automatically to attract students to participate in activities and the data is well recorded. The necessary system outputs, including information content, schedule information, participatory procedures, and frequency of reports and documents and also organized system and file inputs.



**Figure. 1 Use Case CRM application to convey Information on student affairs**



**Figure 2. Class Diagram CRM application**

Initially the information service is done conventionally with letters and announcement through department's wall magazine or other announcement board, the data has not been stored well and there are still many students who left behind the activities information. But with the CRM application the student information service in particular has an information interface and has an integrated news database. And students will not be left behind the information activities - campus activities. All activities are organized and the number of participants in each activity. The CRM-based Application information services as follows.

The home page of CRM applications for information services is the main menu view of the information service which consists of several sub menu of files, news and announcements, news info, setup and exit, can be seen in Figure 3 below :



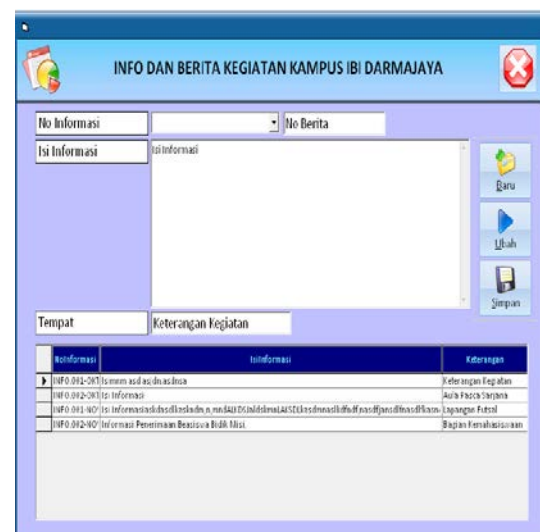
**Figure 3. CRM application Interface**

The information submitted is accurate and scheduled submitted by the student affairs admin.



**Figure 4. News Entry Interface**

Here is the display of information and campus activities at IBI Darmajaya.



**Figure 5. News Information Interface**

#### 4. Conclusion

In accordance with the research that has been done, CRM applications for information services is a new alternative in developing information systems news that will be submitted to students in the student affairs so that every activity can be followed by students so that the activity increases and student achievement increases in academic and non academic. The availability of up to date information services and has an integrated database between sections, especially in the student affairs section.

#### Suggestion

This research is not perfect yet still require a lot of input so that application of service CRM can be online analytic process, hence for subsequent research expected database integrated with other parts which are in college environment especially IBI Darmajaya, so all activity that can involve student can be conveyed better and increasing interest in student activities.

#### Bibliographies

- [1] Adi Nugroho, 2008, Rational Rose untuk Pemodel Berorientasi Objek, Informatika.
- [2] Dini Hamidin, 2008, "Model *Customer Relationship Manajemen (CRM)* di Institusi Pendidikan
- [3] Maria Sri Wulandari, 2010, Upaya Meningkatkan Layanan Alumni Stmik Jakarta Sti&K Dengan Fasilitas Career Center ( E-Career )
- [4] Sri Karnila dkk, 2012, Model *Customer Relationship Management (CRM)* untuk *Career Centre* pada Perguruan Tinggi dengan *Framework Zachman*.
- [5] Rosa A.S. dan M. Shalahuddin,2013, Rekayasa Perangkat Lunak Terstruktur dan Berorientasi Objek
- [6] Turban, E., Jay, E.A., dan Liang, T.P., 2005, *Decision Support Sistem and Intellegent Sistem 7<sup>th</sup> Ed (Sistem Pendukung Keputusan dan Sistem Cerdas Jilid 1)*, Dwi Prabantini, Andi Offset, Yogyakarta.