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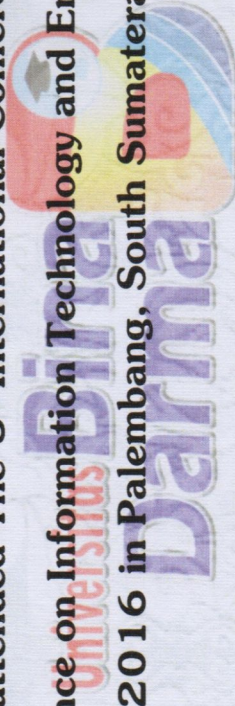


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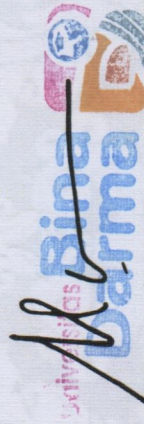
**Yesi Novaria Kunang**

has attended The 5<sup>th</sup> International Conference

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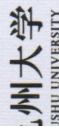
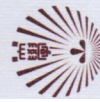
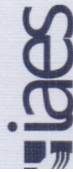
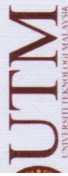


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# **MODELING ANALYSIS OF ENTERPRISE ARCHITECTURE SUPPORT FOR ACADEMIC INFORMATION SYSTEM WITH TCSD (Case Study: SITI STIK KHADIJAH PALEMBANG)**

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**Abstract.** *Data architecture describes the various types of data called data entities used in business enterprises. Application architecture illustrates the main application needed to manage the data and support the business functions of the company. Enterprise architecture illustrates the operational model of enterprise that includes aspects of business planning, business operations, automation up to the supporting information technology infrastructure. Methods Task Centered System Design (TCSD) is a method used to identify user needs and the needs of the task. TCSD method includes four stages of activity, namely identification, User-Centered Requirements Analysis, design as scenario, and walkthrough Evaluate. Excess use of this method is the design of the system and the program code generated properly - in strict accordance with user needs. Analysis modeling enterprise architecture to support academic information systems at STIK Siti Khadijah Palembang aimed at optimizing the performance of academic information system, reducing barriers between work units, reduce duplication of data, reducing operational costs, improving productivity and performance of employees in information sharing and cooperation between work units to improve quality academic services.*

*Results of this research is the design of the enterprise architecture model of academic information systems.*

**Keywords:** *Enterprise Architecture, Task Centered System Design, Academic Information System*

## **1 Introduction**

Today nearly all agencies of government-owned universities or private companies continuously improve the quality of academic services are available, ranging from improving human resource capacity to implement the use of information technology to support all the activities of academic services and data processing. This was done as an effort to sustain and improve the quality of higher education, especially higher education sector swasta. College of Health Sciences (STIK) Siti Khadijah Palembang is a private university located in the neighborhood Kopertis region II, which has 5 (five) Program ie S1 Nursing, Pharmacy S1, D3 of Nursing, Midwifery and Professional nurses D3. In the context of services as an advantage, the support of information technology becomes a

necessity hereinafter in 2012 STIK Siti Khadijah began to build and implement and information system gradually to all work units.

Development of information systems starting from building a website portal, e-learning, e-paper and library information systems followed by building academic information system (SIMAK) and financial information systems (SIMKEU) that all process data processing integrated and centralized of all work units to in a database stored in a computer server. Until the present time is the process of construction and development of systems and information technology in STIK Siti Khadijah is still underway, especially in the academic information system (SIMAK) still prevalent shortcomings and weaknesses, as seen from the implementation process modules SIMAK on work units STIK Siti Khadijah has not completely suit user and some parts of the system modules have not been able to generate the report output data processing academic desired.

Some of the above problems cause academic information system (SIMAK) STIK Siti Khadijah can not be used optimally and the pattern of employee work as a single system user can not be completely switched from the conventional way to computerization. For that needed improvement and enterprise architecture modeling of the overall system of academic information on all system modules that ada. After see and read various references authors find the appropriate method for modeling enterprise architecture academic information system is the method Task Centered System Design (TCSD).

## **2 Theoretical Basis**

### **Enterprise Architecture**

Enterprise architecture is defined as a way to describe the operational model of enterprise that includes aspects of business planning, business operations, automation to information infrastructure teknologi supporters. Enterprise is used as a term describing a business or business unit, division or part of an organization that involves all

## **3 Research methodology**

The method used in this research is the method of action research (action research). This method is a method of research that aims to develop new skills or new approaches and ways to solve problems with direct application in the workplace or other actual world. Furthermore, in the process of enterprise architecture modeling academic information system is used method Task Centered System Design (TCSD).

TCSD method is a method used to identify user needs and the needs of the task. (Lewis and Reiman, 233). Development interface Academic Information System (SIA) focused on adding content and appearance of the information presented. TCSD method includes 4 stages: Identification, User-Centered Requirements Analysis, Design as scenario, and Walkthrough Evaluate.

## 4 Results

After modeling the enterprise architecture information system have new design and content module system consisting of:

### A. Module SIPENSIMARU (with the concept of one-day service)

1. Information & Forms PMB Online
2. Registration
3. Computer-based Academic Potential Test
4. Health Tests
5. Test Result Announcement

### B. Module Registration and Finance

1. Registration of New Students
2. Current Student Registration
3. Input Master Data Initial SIPENSIMARU & Finance:
  - └ Registration Number Registration SIPENSIMARU
  - └ Solved Exam Question and Answer Key landfill
  - └ Number Beginning NPM New Student
  - └ Nominal Total Liabilities Student Fee per semester
  - └ Code and Name Program
4. Report of the Money Registration
5. Report of the Money Registration Students
6. Report Number of Delinquent Students
7. Sharing Information & Announcements

### C. Academic Administration Module

1. Students Data
2. Lecturer Data
3. Subjects Data
4. KRS, Lectures and KPU Student Card Data
5. Absent Class and Lecturers Data
6. Value, KHS and Student Transcript Data
7. Export Academic txt format. Feeder for Higher Education Applications
8. Sharing Information & Announcements

### D. Student Module

1. Student Profile
2. Entry and Print Study Plan Card (KRS) & Card Class (\* This content is active if it has been re-registration)
3. Access Value Card Study Results (KHS), and transcripts While
4. Access Student Financial History
5. Access to Information and Announcements

### E. Module Program

1. Access All Students Data
2. Current Student Data Access
3. Access Lecturer Data
4. Access Courses Data

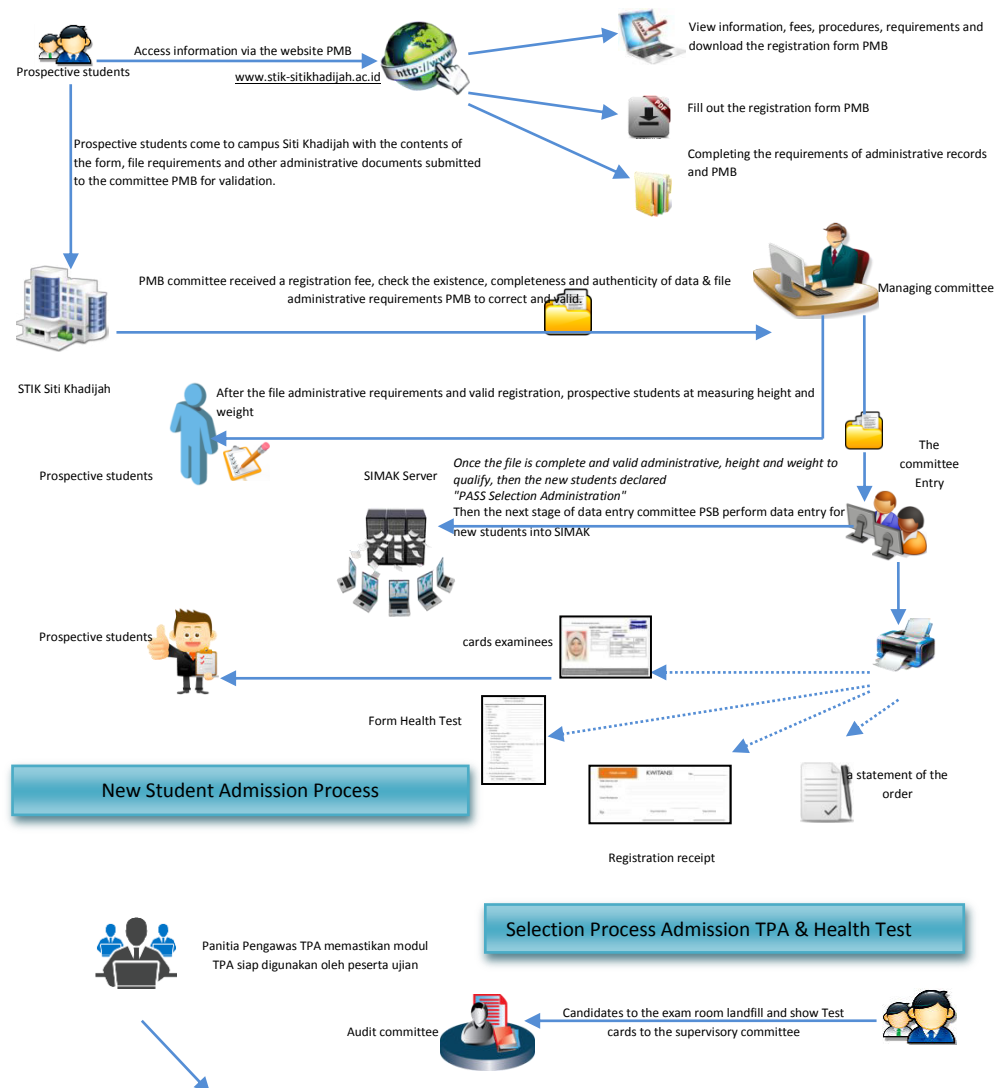
5. Access KRS data, Absent, Value and Transcript While
6. Sharing Information & Announcements

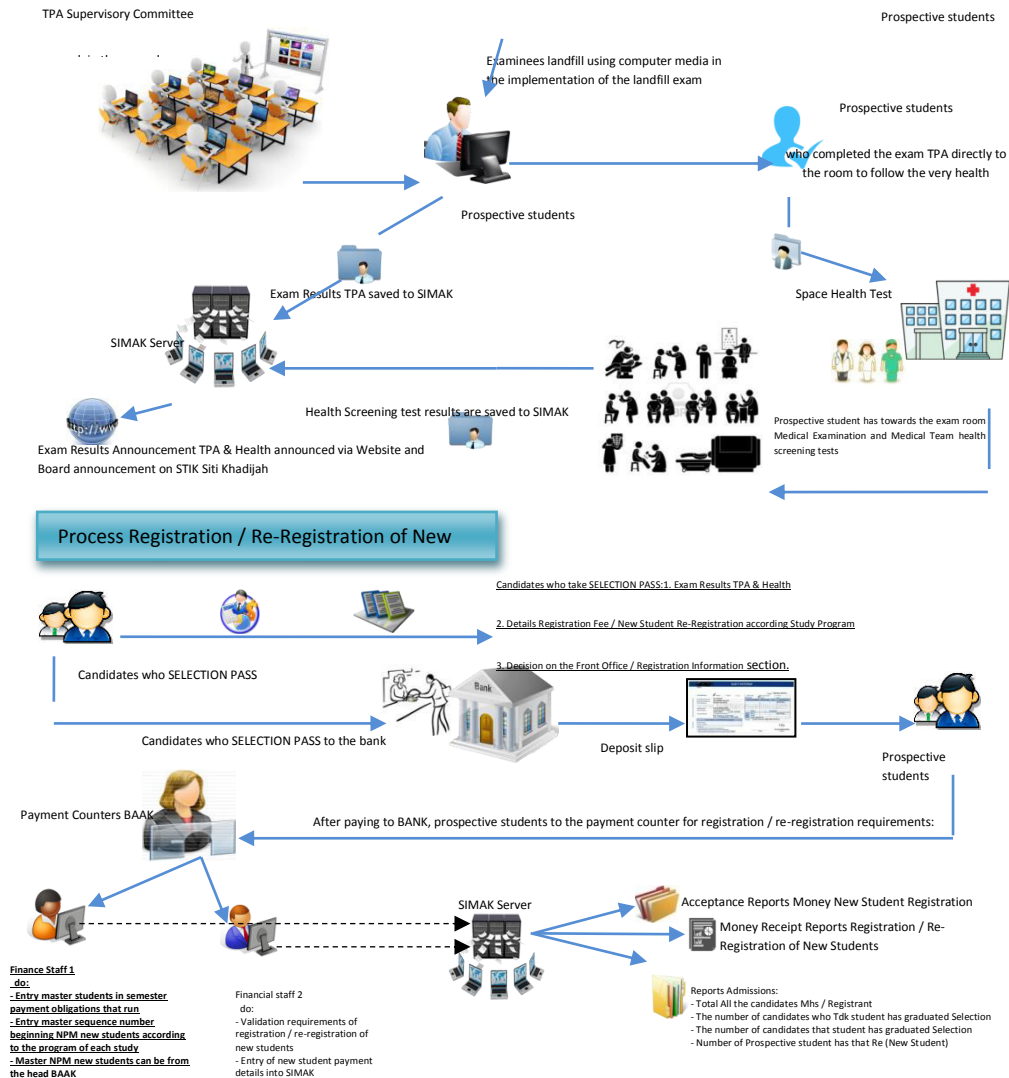
#### F. Module Library

#### G. Reports Module

1. Activities SIPENSIMARU (Registration - Test Login - Register)
2. Acceptance Finance & Student Registration
3. Active Data & Disabled Students
4. Lecturer data, Subject, and Value Students
5. Book Library Data
6. Sharing Information & Announcements

### Enterprise Architecture Modeling System Academic Information STIK Siti Khadijah





After doing Registration / Re-Registration of new students saw the announcement of the schedule of the PKK and subsequent inaugural lecture for new students take the classes take KRS, Lecture Schedule and Class Card for the 1st semester at the RAAK - Education

Pictured above is an Enterprise Architecture Admissions are explained from the start PMB prospective students to access information via the website, registering PMB and malakukan admission exams, and re-registration for students who have passed the landfill and Health.

## 5 Conclusions

Analysis of enterprise architecture modeling academic system by using Task Centered System Design (TCSD) capable of resolving the existing problems in the academic system STIK Siti Khadijah Palembang. By generating module SIPENSIMARU (with the concept of one-day service), Module Registration and Finance, Administration Module Academic, Student Module, Module Studies, the Library module, and the module Reports

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