

## THE DEVELOPMENT OF FINAL EXAM REGISTRATION INFORMATION SYSTEM (SIPUAN) AS THE IDEA OF ENTREPRENEURIAL INFORMATION TECHNOLOGY

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### ABSTRACT

*Institutions of higher education in particular have a responsibility in producing graduates who are qualified in the various fields of science. College doing curriculum development as the basis for the student/i in the educated, in a curriculum there are plans of study that will be evolved by the student/i. State where students will come/i undertake final project/Thesis that begins with the submission of the proposal for the appointment of the supervisor, then to carry out the test of the final project/Thesis to the examiners. By doing business in the field of ideas pengembangann TI in particular the development of Final Exam Registration Information System (SIPUAN) with a way to combine multiple components of information systems to build the basic idea of the IT business and meets the specific needs of customers is expected to enhance the potential of the IT product/service in the market and by understanding their needs, then it can fulfill value is customers and with it so will encourage them to continue to purchase products that have been produced.*

**Keywords:** Information Systems, Final Exam Registration, The Basic Idea Of The IT Business

### INTRODUCTION

The development of information technology that rapidly affect many areas of both the world of business, services, education and more. No exception education especially higher education was one area that was heavily influenced by the development of information technology. Globalization demanding education colleges to be able to manage the information properly, so that the information needs of each stakeholder can be fulfilled quickly and precisely (Choldun, 2006). College of information technology do not develop properly will be increasingly left behind.

Final project/Thesis is written reports the results of research conducted by the student with the guidance of a lecturer and maintained before the Board of examiners. Final project/Thesis is also used as one of the conditions for obtaining the degree of Bachelor. Faculty of computer science of the University of Pembangunan Nasional "Veteran" East Java in managing thesis still use the manual way, so will spend much time and effort. It can enlarge the opportunities of the occurrence of an error in the delivery of information, ultimately information becomes inaccurate. Application of oral exam registration information systems at the Faculty of computer science of

the University of Pembangunan Nasional "Veteran" East Java will provide a solution so that the implementation of the new directives will be more service maximum. (Jogiyanto, 2005) in his book entitled information systems Design and Analysis suggests that information system is a system in an organization to meet the needs of daily transaction processing, supporting operations, managerial and kegiatanstrategi nature of an organization and provides a certain outside parties with reports – laporanyang is required. Things – it is possible as the answer to the problems occurred with regard to the registration of final exam.

The system that already exists in the Department of computer science University of Pembangunan Nasional "Veteran" East Java specifically in Engineering Informatics Courses, can be developed and look for the flaws of the system that has been running sub, where the system is already at this time or called by Student Guidance information system (SIBIMA) as the answer to the problems occurred with regards to the final task of guidance and practice of Fieldwork , starting from the title selection, scheduling, Supervising Lecturer determination test, and jugapenentuan the schedule of activities in accordance with the guidance of Lecturers and students/i, from the existing system, then the system needs to be developed is how to make a system that can help in the oral exam registration can be named Final Exam Registration information system (SIPUAN).

### **INFORMATION SYSTEMS**

The design of the system before the system developed for real, then the first rangangan created from the design of the system, namely the global picture of the system to be developed further. The purpose of the system design are generally gives an overview to the user about the system to be built. Components of the information system will be built, among others, are:

- a. Model sistem
- b. Input sistem
- c. Output sistem.
- d. Database.

From most representations of the above components will not be able to give you details to the user about the system to be built. The methodology used to provide to the user the depiction, among others, data flow diagrams, design of interfaces, table structure, and table relationships.(Teguh Cahyono, 2013)

(T. Cornford & M. Shaikh, 2013) Information systems can improve organizational management in operating and help ease the work. This is achieved by collecting, storing, and processing and sharing data and information. The statement pointed out that the study of the information system requires four different purposes but are interrelated, are as follows:

1. Computer-based digital technology, used to handle information.
2. The user becomes part of the information system.
3. Complete the tasks that are expected for the needs and specific requirements.
4. Build the system.

There are two approaches in defining the system, namely the emphasis on procedure and emphasis on components or elements to it. Systems approach that put more emphasis on the procedure defines a system as follows: "a system is a network of procedures which are interconnected, gathered together to perform an activity or to complete a certain goal". A systems approach is the work of the procedure more emphasis the operation in the system.

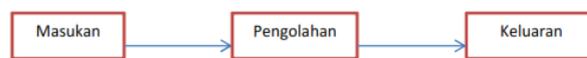
A system approach to a greater emphasis on elements or components defining a system as follows: "the system is a collection of elements that interact to accomplish a particular purpose". A systems approach is a set of elements or components or subsystems-subsystem definition is wider and more accepted because it is in fact a system composed of several subsitem or system-system parts. Components or subsystems in a system-subsystem cannot stand on its own,

everything is interconnected and interacting to form a single entity so that the target system can be achieved.

Information is data that is processed into a form that is more useful and more meaningful to who receives it, whereas the data is a source of information describing an event (the facts). Information system, according to Leitel and Davis in his book "Accounting Information System" defines that: "information system is a system in an organization that meet the needs of daily transaction processing, supporting the operation, activities and strategies of the managerial nature of an organization and provides a certain outside parties with the necessary reports".

A common definition, information system is defined as a system in an organization who process data into a form that is more useful to achieve a goal. (Jogiyanto, 2005)

Scott (1996) says that the system composed of the elements – elements such as input, processing, and output as shown in Figure 1. According to (Jogiyanto, 2005) in his book entitled information systems analysis and design explained that: "the system is the network of procedures which are interconnected, gathered together to do an activity to complete certain suatusasaran"



**Figure 1. Block Of Information Systems (Scott, 1996)**

According to Kenneth c. Laudon and Jane p. Laudon (2008), the information system is a set of interconnected components, assembled (or get), process, store, and distribute information to support decision-making and supervision in an organization.

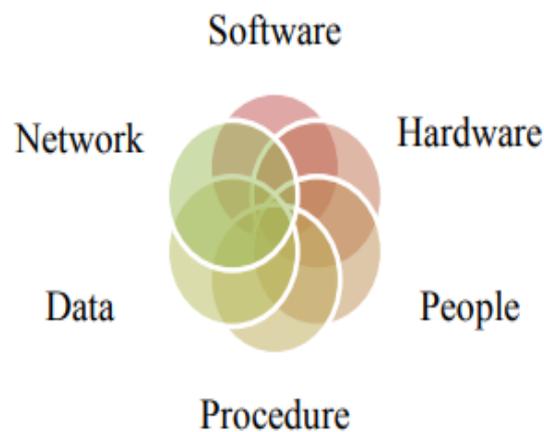
Al Fatta (2007) suggests that the components that make up an information system consisting of:

- the hardware, namely hardware components to complement the activities incorporate the data, processing data, and output data.
- software, namely programs and instructions given to a computer.
- Database, i.e. a collection of data and information that is organized so that it is easily accessible sedemikaian users of information systems.
- telecommunications, namely communication system between users connecting with computer systems together into a network of effective work.
- men, the personnel of information systems, including admin, analysts, programmers and operators.

In a study conducted by (William Kurniawan, Adian Fatchur Rochim, & r. Rizal Isnanto, 2011) in the era of information technology today, where all activities are performed quickly, easily, effectively and efficiently, so that the College should be able to provide a wide range of information relating to the study of the student body. One of the kinds of information is provide information about seminars and final assignment so that students can find out the title of the final project that already exists or can create new final assignment title. With this application it is expected a favorable information about the title of the final assignment which is beneficial for students who will craft a final project and College.

### **THE CONCEPT OF DEVELOPMENT**

The concept of development of the IT business ideas by using the six components of the information technology and industrial classification. Six information technology component of the Study is to develop the basic idea of the six components of the IT business IT: hardware, people, data, network, software, and procedures.



**Figure 2. Six Components Of Information Technology (Sumber Anthony Kirby Garcia) (Wibisono, 2014)**

Hardware is any artifact in the form of information technology hardware that stores data. People are the ones who use the artifact information technology to solve their problems. People can be a collection of individuals working independently and may also be an individual in a group. The data is the basic format of all forms of information, whether structured or unstructured, stored in hardware. The data can be a bit of information, files or folders. Network is any hardware device that bridges the data transfer between the hardware. The software is any software or hardware that is running the network. While the procedure is any business process that runs in the top of the software. (Wibisono, 2014)

#### **UNDERSTANDING CUSTOMER VALUE**

According to b. Fieg, quoted by Scott Robinette and Claire Brand (2001:27), "Value is determined on the customer's terms in the context of his or her unique needs." According to this definition, each customer has its own terminology regarding a bid value, where the value can meet the specific needs of the customers. By understanding their needs, then the company can meet the value is customers and with it so will encourage them to continue to make purchases against the company's products.

Kotler (2005:68), stating that "Customer value is the difference between the evaluation of the prospects for all benefits and all the costs of a particular bid and other alternatives that are well thought out." The definition indicates that Kotler disclosed customer value concerning the benefits and tradeoffs, where the customer will compare the earnings from benefits and sacrifices made. When the perceived benefits greater than the sacrifice then most likely he will choose the value of the offer, and so any contrast when the perceived benefits less of a sacrifice that is done then the customers will leave the offer of the company.

#### **RESEARCH METHODS**

As for the methodology used in the peneltian working on this research are:

##### **1. A Survey Of The Field.**

At this stage to preserve a survey to get the data – data administration of partners who are willing to become a place of case study research and data mining.

##### **2. Study of Literature**

At this stage the collected documents, references, books, Ebook from the internet, or other sources that are required to design, build, test, validate, and document applications.

##### **3. Analysis and design of the application**

From the results of the study of literature and lapangan will survey results be made public a description of system design, system architecture, as well as performed needs analysis system, additionally also done preliminary design applications to be created, so that will be generated and the interface design process that is ready to be implemented.

**4. Development The Application.**

At this stage are the most numerous takes because models and design that have been made are implemented to build the application. Application development dilaksanakan collectively and then integrated gradually.

**5. Test and evaluation application.**

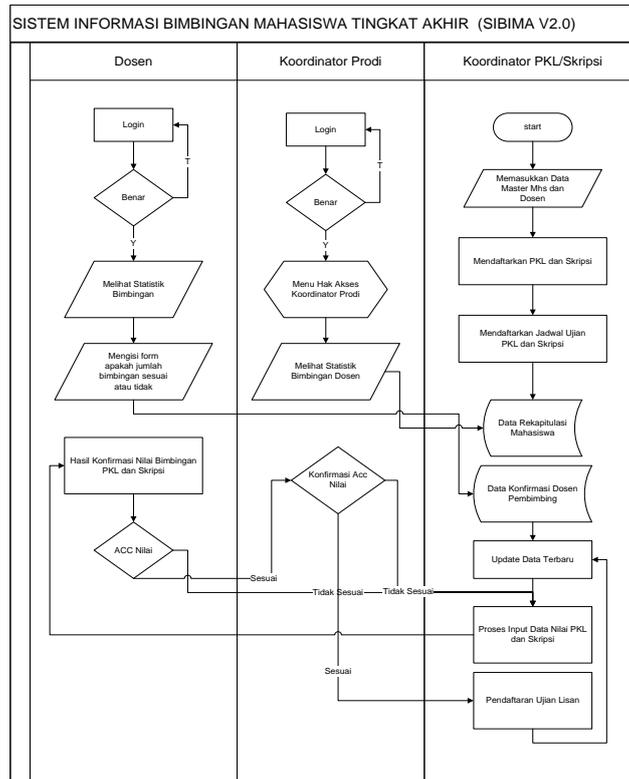
At this stage, the application of which has been completed is going through some scenario trials and trial results will be evaluated to determine whether the application Worth released or need maintenance more.

**6. The Preparation Of A Book Report.**

At this stage is the last stage of research. Next drafted a report that can describe the whole process of research. From the preparation of the report is expected to make it easier for readers who want to refine and develop this application further in subsequent studies.

**DISCUSSION**

**Flowchart SIPUAN**



**Figure 3. Flow SIPUAN**

On the context diagram Figure 3 above, explain that there are 3 users who are involved in the system, such as:

**Lecture**

At this lecturer, user can do see statistics guidance as well as being able to do the approval of ACC value.

**a.Progdi Coordinator**

This Progdi Coordinator in user can do see statistics guidance and could see the confirmation value Practice and thesis.

**b.PKL/Skripsi Coordinator**

This **PKL/Skripsi Coordinator** in user This, could do a master data input activities of students and professors, as well as be able to register the PKL/Thesis and exam schedules can register PKL/ Thesis.

**CONCLUSION**

With business in the field of ideas pengembangann TI with a way to combine multiple components of information systems to build the basic idea of the IT business can increase the potential of the IT products/services on the market. But there are some disadvantages of this model, namely the emergence of the need to train users of the product if the product/service that is generated is completely new. The weakness of the other if the product is really new is the vagueness of the market because of the ignorance of the market will be the IT business products/services such.

**REFERENCES**

- Al Fatta, H. (2007). Analisis dan Perancangan Sistem Informasi untuk Keunggulan Organisasi Perusahaan dan Organisasi Modern. Ed 1. Yogyakarta: Penerbit ANDI
- Choldun, Muh. Ibnu.(2006). Perancangan Sistem Informasi Akademik dengan Mengimplementasikan ERP.Prosiding Konferensi Nasional Teknologi Informasi & Komunikasi untuk Indonesia ITB.
- Jogiyanto. (2005). *Sistem teknologi informasi*. Yogyakarta: Andi Yogyakarta.
- Laudon.Kenneth C. & Laudon, Jane P. (2008) Sistem Informasi Manajemen. Palgrave: Basingstoke.
- Rifki Kurniawan, Adian Fatchur Rochim, & R. Rizal Isnanto. (2011). *Perancangan Sistem Informasi Seminar Dan Tugas Akhir Jurusan Teknik Elektro Universitas Diponegoro* . Semarang: Universitas Diponegoro.
- Scott, George M. (1996). Principles of Management Information System. Cetakan Ketiga. Penerbit PT Raja Grafindo Persada. Jakarta.
- T. Cornford, & M. Shaikh. (2013). *Introduction to information systems*. London: University Of London.
- Teguh Cahyono. (2013). *Perancangan Sistem Informasi Penjadwalan Seminar Ujian Akhir Dan Kerja Praktek ( Studi Kasus Prodi Teknik Informatika Jurusan Teknik Universitas Jenderal Soedirman )*. Yogyakarta: Teknik Informatika Uad Yogyakarta.
- Wibisono, A. (2014). Mengembangkan Ide Kewirausahaan Teknologi Informasi Di Jurusan Sistem Informasi Its. *Seminar Nasional Sistem Informasi Indonesia*, (Pp. 1-5)