International Seminar of Research Month
Science and Technology in Publication, Implementation and Commercialization
Volume 2017

NST PROCEEDINGS
OPEN ACCESS

Conference Paper

Implementation 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 in the educated, in a curriculum there are plans of study that will be evolved by the student. State where students will come 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 develope 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: Final exam registration, information systems, 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 UPN "Veteran" of 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

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How to cite this article: Idhom M, Ali R (2017) Implementation of Final Exam Registration Information System (SIPUAN) as the Idea of Entrepreneurial Information Technology. *International Seminar Research Month Science and Technology in Publication, Implementation and Commercialization*. NST Proceedings. pages 462-467.doi: 10.11594/nstp.2018.0170.

of oral exam registration information systems at the Faculty of computer science of the UPN "Veteran" of 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 natural strategy of an organization and provides a certain outside parties with reports 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 UPN "Veteran" of 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, the schedule of activities in accordance with the guidance of Lecturers and students, 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 stimuli 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 system
b. Input system
c. Output system.
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. (Cahyono, 2013)

Cornford & Shaikh (2013) stated that 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 subsystem 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 Laudon and 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: a. the hardware, namely hardware components to complement the activities incorporate the data, processing data, and output data. b. software, namely programs and instructions given to a computer. c. Database, i.e. a collection of data and information that is organized so that it is easily accessible users of information systems. d. telecommunications, namely communication system between users connecting with computer systems together into a network of effective work. e. men, the personnel of information systems, including admin, analysts, programmers and operators.

In a study conducted by (Kurniawan, et al., 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).

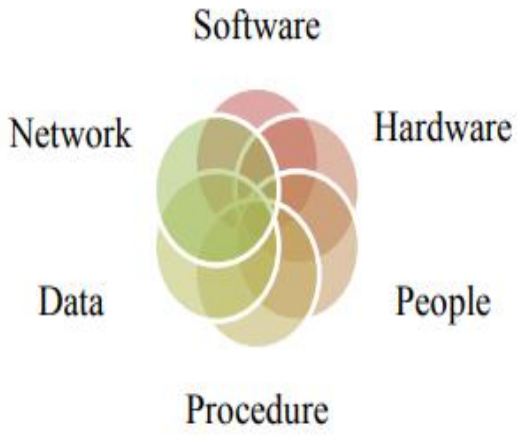

Figure 2. Six Components of Information Technology (Garcia in Wibisono, 2014)

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 Robinette and 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.

METHODS

As for the methodology used in the research 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. The 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 references and field 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 conduct 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.

RESULT AND DISCUSSION

Flowchart SIPUAN

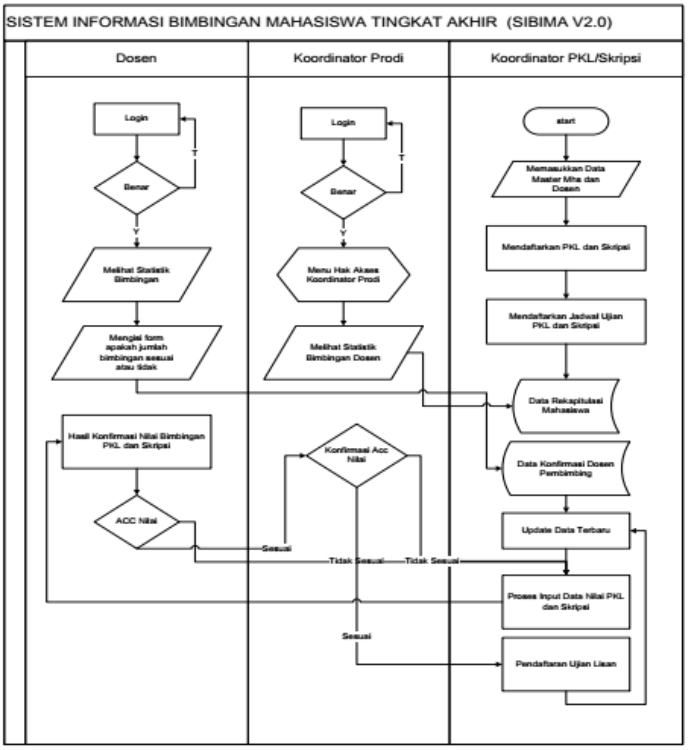

Figure 3. Flow SIPUAN

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

a. Lecture

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

b. Progdi Coordinator

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

c. Internship/bachelor thesis Coordinator

This Internship/bachelor thesis Coordinator in user This, could do master data input activities of students and professors, as well as be able to register the Internship/bachelor thesis and exam schedules can register Internship/bachelor thesis.

CONCLUSION

By doing business in the field of IT development ideas by combining several components of information systems to build the basic idea of IT business can increase the potential of IT products/services on the market. But there are some disadvantages of this model, namely the emergence of the need to train product users if the products/services produced are completely new. Another disadvantage if the product is completely new is the market uncertainty because market ignorance will be the product of the IT business/service of that kind.

ACKNOWLEDGEMENT

Thanks to UUPN "Veteran" of East Java, especially Lembaga Penelitian dan Pengabdian Kepada Masyarakat.

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