

**Information System Design at SMK YAPIM Taruna Web-Based****¹Suti, ²Siddik Karo karo**^{1,2} Universitas Imelda Medan**ARTICLE INFO**

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ABSTRACT

Information technology is currently one of the technologies that is developing rapidly at this time, this technology is also used in the world of education. Information systems are used to make work easier, in this case for the world of education, it is used to deliver information online to display school profiles and to manage various academic activities, such as: new student registration, e-learning, extracurricular activities and other activities to attract candidates. students to enroll in a school. With an online system we can save time and space. So that information can be conveyed quickly and accurately. The formulation of the problem contained in this thesis is how to design and build an online learning to use web-based with the aim of making it easier for the online learning acceptance committee to carry out registration of prospective students and make it easier for prospective students to register at the school. The concept applied in the design stage of the web-based online learning Information System. While the programming language used is PHP.

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The rapid development of information technology is very influential on human life. With the existence of information technology, humans will be easier in obtaining the information needed and will be easier in completing work. Computer or laptop is a development of information technology that is being widely used by humans. Apart from being a medium of communication, a computer or laptop can also be used as a medium in obtaining information. A computer or laptop has a relatively medium size. So that computers or laptops become the main choice of the community as a medium to obtain information because it is easier to carry everywhere.

SMKS Yapim Taruna School is one of the government agencies located in North Padang Lawas, Sihopuk Baru, Halongonan, North Padang Lawas Regency, North Sumatra 22753. SMKS Yapim Taruna School still does the conventional way. The learning information system process is still carried out using Microsoft Word or Excel applications. By doing this way, there are still several problems, including learning information systems for students that are still manual and require a lot of time and energy. In addition, learning information system data can be lost or manipulated by irresponsible people.

Based on the above problems, the author wants to conduct a research by designing and building an online learning information system application that can be used for the process of delivering learning information to students and making it easier for students to obtain learning information quickly and easily.

METHOD

SMK Yapim Taruna is an institution established to promote general welfare, with the mission of educating students with careful preparation for a bright future. The loyalty of all teachers, employees is very promising. YAPIM Taruna was established in 2009 with majors in High School (SMK) Computer and Network Engineering (TKJ), Business and Management BM (Accounting) and Light Vehicle Engineering TKR SMK Yapim Taruna can promise your success. Over time technology is also increasingly fast development, people are required to be able to follow the development of the technology. Therefore, SMK YAPIM Taruna gives you a choice, so you don't make the wrong choice to determine where you go to school.

According to Rusdiana (2014: 71) data is a fact or part of a fact that contains meaning in connection with reality, symbols, images, numbers, letters or symbols that show an idea, object, condition or other

situation, obtained through an observation activity or data interpreted as information about something. According to Deni Darmawan and Kunkun Nur Fauzi (2013: 1) data is facts or the like that are used as input in producing information.

From the opinions expressed above, it can be concluded that data is the fact of something, events, activities and transactions that are recorded, classified and stored in the form of numbers, writing, images, sounds or figures but have not been organized in an understandable form. Basically, the use of data after being processed and analyzed is as an objective basis in the process of making decisions, policies in order to solve problems by making good decisions can only be obtained from objective decision making and based on good data. There are three data rankings, namely:

1. Raw data, results of collection.
2. Data from processing in the form of sums, averages, percentages.
3. The data from the analysis is in the form of conclusions. The latter has the highest rank because it can be directly used to formulate suggestions or proposals for decision-making policies.

RESULTS AND DISCUSSION

Result

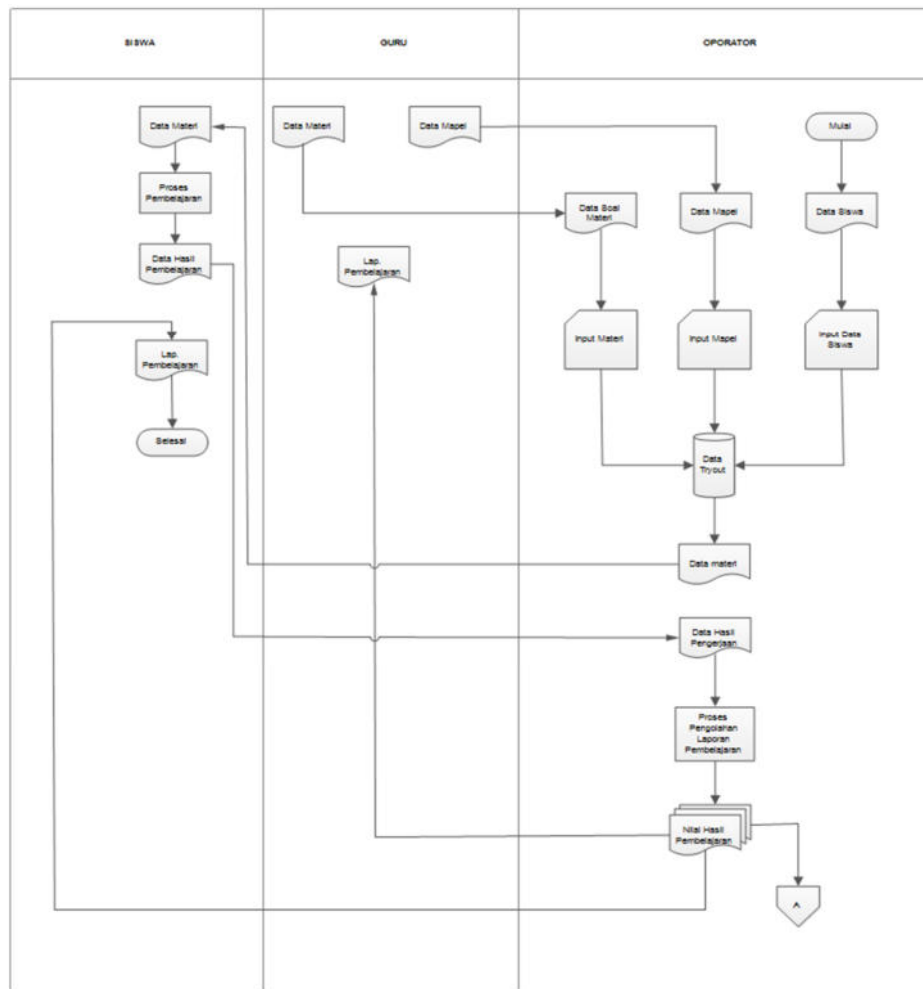
Data Processing Procedure

The following is the flow of learning system procedures that are currently running at SMK Yapim Taruna School as follows:

1. Students are passive recipients of information, where students receive knowledge from the teacher and knowledge is assumed as a body of information and skills possessed in accordance with standards.
2. Learn individually.
3. Learning is very abstract and theoretical.
4. Behavior is built on habits.
5. Truth is absolute and knowledge is final.
6. The teacher is the determinant of the course of the learning process.
7. Good behavior based on extrinsic motivation.
8. Interaction among students is lacking.
9. Teachers often act attentively to group processes that occur in study groups.

Flow Of Document

Based on the flow of the learning system procedures that are currently running at SMK Yapim Taruna School can be described using a Flowmap which can be seen at:



Input and Output Forms on a running system

Input and output forms are forms that will be presented by students in a document containing learning where students will learn manually

Learning Input Form

This is the learning process at SMK Yapim Taruna school where it is still manual.



Learning Output Form

This is the result of the learning process at SMK Yapim Taruna school where it is still manual:



Figure 3. Learning Outputs

Analysis of the Duration of Learning Inputs and Outputs

Learning Input and Output is very inefficient in doing learning and is easily manipulated by irresponsible people and data can be lost or scattered at any time.

Discussion**System Planning**

The definition of system design by (Jogiyanto, HM) is the drawing or sketching of several elements that are separated into a unified whole. According to (George M. Scoot,) the definition of system design is to determine how a system will complete what must be completed, this stage involves the configuration of the hardware and software components of a system so that the system will really match the design that has been applied by system analysis.

The purpose of system design is to meet the needs of *users* and provide programmers with a clear picture of complete chart design. The design of this system is divided into two parts, namely:

1. *General System Design* is a design that identifies the components of the design system in detail with the aim of making a detailed picture of *the user* and management of the proposed new system.
2. *Detailed System Design* is a design that identifies the components to be designed in detail and is a continuation of the general system that has been approved.

New System Proposal

Based on the problems and weaknesses contained in the learning system above, the author tries to help solve problems in the Yapim Taruna Vocational School by making these problems as material for the author of this thesis, and can work as expected in a computerized way.

Output Planning

The following is the Learning Data Output Design designed at SMK Yapim Taruna school

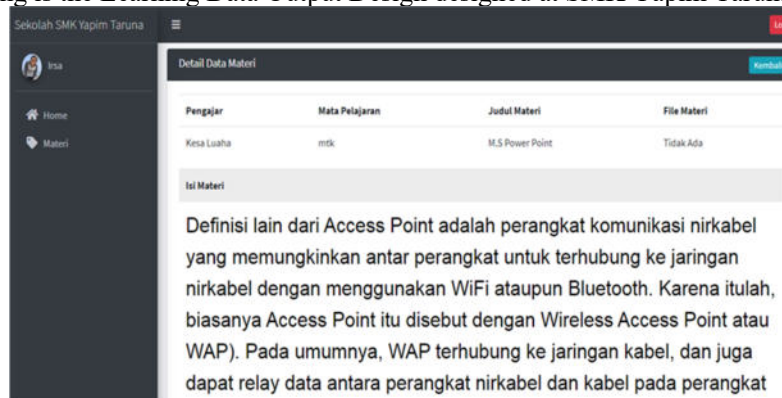


Figure 4. Output Planning

Input Planning

The following is the Learning Data Input Design designed at SMK Yapim Taruna school

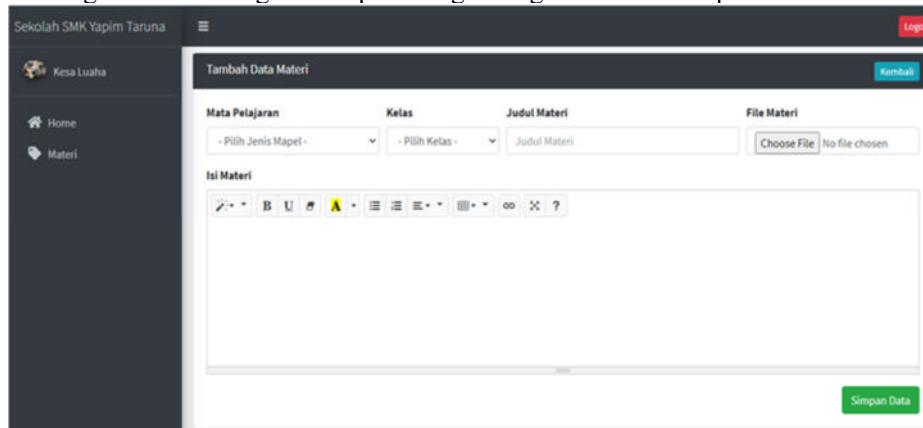


Figure 5. Input Planning

CONCLUSION

Learning Process System, this is designed with the aim of replacing the recording of learning data manually to computerized. Learning Process System, this can simplify and speed up time in processing data. With the computerized system, Learning is more disciplined in doing Learning

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