

ABSTRACTION

Information Technology (IT) is a study, design, development, implementation, support to management from information system based on computer. Now days, there are many development tools to support Information Technology. Some of them are website, SMS Gateway technology, and video streaming. The tools are familiar in the people, because give advantage to exchange information to the others and build some necessary information system. Information system is connection between component and working together to collecting, processing, saving, and distributing information to support decision maker process, coordination, and controlling. Information system can implement in many of type, one of them called *SCADA (Supervisory Control And Data Acquisition)*. *SCADA* is data acquisition system used to control some object. In the Industrial sector, *SCADA* system implemented in many of automation process. Therefore, we think need to build application system that can integrated between *Information And Communication Technology (ICT)* tools and *SCADA* system to automation production process purpose.

In this automation system design, problem solving defines in five steps; preliminary study, initialization, creating, testing and analyzing, and also conclusion and suggestion. Preliminary study is the existing problem identification step and object determination that will be reached in this research. In the initialization will be done literature and field study. The next step is creating. In this step, PLC (Programmable Logic Controller) program and HMI (Human Machine Interface) software will be created. To know are design result match with research target, after creating step will be done testing and analyzing. The final steps are conclusion and suggestion for the next research.

The result of this planning system are analyzed that divided into four phases. First, Planning System Result Analysis, it consists of programming analysis of controlling system and functioning analysis of each integrated component. Second, Analysis of hardware, it consists of all using components analysis. Third, analysis of software, it consists of programming analysis for each system component, configuration between the computer components and modem, and analysis of database making. Last phase, Analysis of strength and weakness's system, it consists of the strength of product that have been made and the weakness of system that have been integrated.

The conclusion that could be taken from this final building system is that *SCADA* system use *Information and Communication Technology (ICT)* in work station is already integrated, so give simple monitoring, recording, and reporting work station condition. And also with monitoring system that can be functioned as setting media of automation system, make system more flexible to environment changes.

Keywords : *Supervisory Control And Data Acquisition(SCADA), Information And Communication Technology (ICT), HMI, PLC*