IMPLEMENTATION OF INTERNET OF THINGS (IoT) SYSTEM ON SMART COFFEE DRY-HULLER MACHINE

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ABSTRACT

The world is currently in the Industrial Revolution 4.0 which has an impact on changes in all fields of human life. In the Industrial Revolution 4.0, various kinds of digital technology and physical capabilities are combined with artificial intelligence (Artificial Intelligent), then applied with the Internet of Things and various other types of technology so as to produce products that can help human activities, especially in the Industrial field. One industry that contributes a lot to the Indonesian economy is the agricultural industry. Indonesia is a coffee-producing country that is ranked 4th largest coffee producer in the world. Coffee farming in Indonesia is still dominated by traditional farming, with simple equipment. Smart Coffee Dry-Huller Machine is an innovative machine that can peel coffee skin and dry coffee automatically and environmentally friendly using solar power based on the Internet of Things (IoT). Implementation of a reliable control and monitoring system that is integrated with the internet so that it can be accessed in real time is required. The design stage of the control and monitoring system includes, the stage of making the working concept of the tool, literature study, wiring diagram, assembly stage, and trial. The implementation of the Internet of Things (IoT) system uses the main components of Wemos D1 R1, BTS7960, YL-69, 4 Channel Relay, LCD, 3-point switch, Push Button, DC to DC Stepdown, and Panel Box. The parameters controlled are motor speed of the huller machine, namely Low mode, Medium mode, High mode. The machine can be controlled and monitored online or offline.

Keywords: *Internet of Things, Iot, Control, Monitoring, Sensor.*