Development of Smart Broiler Weight Monitoring System Based on Loadcell Sensor Supervised by Fendik Eko Purnomo, S.Pd., M.T.

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ABSTRACK

Broiler chicken farming in Indonesia has great economic potential. To achieve optimal production, various factors such as DOC, feed, medicines, labor, and cages must be considered. Manual monitoring of chicken weight can cause stress and reduce quality. This study aims to develop a smart broiler weight monitoring system that uses a load cell sensor and ESP32 Microcontroller to measure chicken weight automatically. Data is sent to Google Spreadsheet and can be monitored in realtime via smartphone. The results of the study show that this system is able to measure broiler chicken weight with high accuracy, with measurement errors between 0.44% and 4.32%. Data transmission takes an average of 3.1 seconds, making it reliable for real-time monitoring. Data can also be presented in Google Spreadsheet

Keywords: Weigher, Broiler Chicken, Smart Monitoring, Loadcell, ESP32, IoT.