Perancangan Sistem Pengontrol Suhu Dan Kelembaban Ruang Penyimpanan Cerutu Menggunakan Metode Fuzzy Melalui Website (Design of Temperature and Humidity Control System for Cigar Storage Room Using Fuzzy Method Through Website) Dibimbing oleh: Adi Heru Utomo, S.Kom, M.Kom

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ABSTRACT

The storage room is an important place in the cigar cigarette production process. However, improperly controlled storage can cause damage to stored cigars. This damage to cigar cigarettes also has an impact on the losses obtained by producers because stored cigarettes cannot be distributed. The ideal storage temperature in the storage room is 22°C-25°C and 45-55% humidity. Fuzzy logic is a branch of the field of soft computing using liguistic variables (words) to replace calculations with numbers. The use of words in Fuzzy Logic is not as precise as numbers, but much closer to human intuition. In fuzzy logic all decisions cannot be explained by 1 or 0, but there is a condition between the two which is called fuzzy or fuzzy. At the IoT accuracy testing stage, the accuracy values are 97.31% and 98,1%. So that the IoT tool runs quite accurately. The results from the sensor readings are then processed using fuzzy logic so that it issues an output value to give orders to the actuator in making corrections to the condition of the cigar storage room. NodeMCU ESP8266 is used to send data to the website and the system on the website manages to get sensor and actuator reading data using fuzzy logic to maintain ideal cigar storage room conditions.

Keyword: Suhu, Kelembaban, IoT, Fuzzy