

ABSTRACT

Cattle are livestock that are quite interested by the people of Indonesia. Cow are livestock that are kept primarily to produce meat and milk as human food. Carcass is part of livestock after slaughter consisting of meat and bones, without head, legs, skin and offal. Nowadays, on broiler farms in conducting of cow carcasses using conventional tools. Knowing the weight of cow carcass can be done by multiplying the weight of the cow's life against the percentage of carcass that has been determined. The weight of a cow's life can be determined by conventional weighing, a visual estimate by humans, and calculations using a predefined formula.

Rapid and efficient Technology and Information Development can be designed a digital image processing system to determine the weight of cow carcass. The system is designed to require input in the form of cow image side view and produce the output of carcass weight and cow's classification based on the weight of carcass obtained. The system design technique in this Android-based carcass weighting application program using fractal method and K-Nearest Neighbor (K-NN) classification can work by classifying objects. Calculation of cow carcass weight using Schoorl formula.

Application program implemented to estimate carcass weight of beef carcass, designed based on Android. Collaboration of the fractal and K-Nearest Neighbor classification method can produce a system that has an accuracy of cattle weight estimation of 90.84% with computation time of 10.63 seconds.

Keyword : *Carcass , fraktal, K-Nearest Neighbor, android*

