Pengolahan Citra Digital untuk Menduga Bobot Karkas Sapi Berbasis Android<br>Digital Image Processing for Estimating Cattle Carcass Weight Based on Android<br>Syahdan Fiman Huda<br>Study Program of Informatics Engineering<br>Majoring of Information Technology<br>Program Studi Teknik Informatika<br>Jurusan Teknologi Informasi


#### Abstract

Indonesia is a country with a tropical climate and has a large land area. The tropical climate is suitable for building a livestock business. Livestock is one sector that plays an important role in economic development. In raising cattle, the maintenance mechanism must be considered before the cattle is taken for beef in order to increase the weight. In the production process, the weight of the cattle is directly proportional to the selling price of the cattle. The heavier the weight of the cattle, the higher the selling price of the cattle. Generally, live cattle weight can be measured using two tools, namely conventional scales and measuring tape. Conventional scales provide the most accurate measurement results but are quite expensive. Measurement with a tape measure is limited by the knowledge of the farmer. Thus, farmers tend to choose the interpretation of weight through the visual appearance of the cow. If the measurement results or estimates of live cattle weight are not accurate, it will cause the process of buying and selling cattle to be detrimental to farmers. Researchers tried to create a Digital Image Processing system for Estimating Cattle Carcass Weight Based on Android with four namely body length, hip height, shoulder height, chest length which aims to optimize the calculation of cattle carcass weight. The simulation results of the Digital Image Processing system for Estimating Cattle Carcass Weight Based on Android, obtained an accuracy value of $68 \%$ the average value obtained for the system being developed.


Key words: Raising Cattle, Cow, Android, Carcass Weight, Multiple Linear Regression

