ABSTRACT

Today, the demand for beef products in Indonesia continues to increase, especially on beef cattle demand. The weight of cow is the most important indicator to determine the successfully of maintenance and growth. Breeders generally viewed the live weight of cattle in determining cow's price at field market. Various ways in which to decide the cow weight, one with a balance of cattle, but the situation is lack of facilities in the field. So the farmer should conduct a subjective interpretation of body weight. It is inefficient because it will harm the prospective buyer of beef.

The right solution to this problem in the field Information and Communication Technology could be applied by using image processing to determine the physical size of the cattle's body (chest width and length of the body). Image processing performed with the image segmentation process by ignoring the background and the objects that exist around cows which are disturbing (noise), after identification process will be conducted to get the size of body length and width. This scription is to determine the weight of cow carcass, the author will use capitalize image processing. The technique on cattle segmentation by a method Discrete Wavelet Transform (DWT) and the process of classification using Support Vector Machine (SVM).

Cattle weight designed using Matlab application. DWT method and SVM classification could be produce an application program system that has an estimation accuracy of 86.1% an classification accuracy of 85% with computing time in 6.6175s.

Keywords: *Discrete Wavelet Transform, Support Vector Machine, a cow carcass*