

ABSTRACT

Queue system when the customers pay things what they want to buy on supermarket is one of solution to make the transaction more regular. The customers predict the cashier where have faster service.

Based on that problems so this final project which the title is "Analyzing Customer Total Estimated System in Supermarket Queue Based on Digital Image Processing" has been made to research customers estimation. with take image sample when the customers have queued at the cashier. In this research has been done customers detection. After the customers have been detected, so the customers who queue at the cashier calculation result could be gotten. The method which be used in this research is Non Parametric Optimal Thresholding.

The result has been gotten in this final project is this system has gives information about customers estimation with the best accuration is 100% for cashier number 2 with image had be taken from left behind of the cashier and cashier number 3 with image had be taken from right front of the cashier. Beside that, this system gives information to the customers, the cashier where has minimum queue.

Keywords : *image, Non Parametric Optimal Thresholding*