

ABSTRACT

Optical Character Recognition (OCR) is a computer system used to identify a series of characters that come from the typewriter, printing or handwriting in digital format. OCR enables to replace the current water meter reading method that is less efficient, in which officers record the water meter one by one from customers and also transferred one by one by typing it manually into the computer. In other words, the OCR can facilitate the process of recording, by reading the water meter image into text files without retyping. In addition, OCR water meter imagery recording method can handle the fraud happens in the field so as to raise the level of customer satisfaction.

This Final Project developed an application to read numbers contained in water meter that is taken from a digital camera image formatted in jpg. The process of identifying numbers in this system consist of positioning the numbers in water meter, image processing to improve the quality and simplify the image, segmenting the numbers image by character and after obtaining the traits of water meter image, it will be stored as a reference feature for numbers determining and reading.

Tests conducted on 90 water meter images by reading 4 – 5 first digits that is used as a determinant of costumer water usage. Overall, the accuracy of this system for reading the character of numbers is 96.4% with an average recognition time 0.213505 seconds per meter of water.

Keywords: *Optical Character Recognition, meter air, capture, training, jpg*