

# **THE DOCTORAL RESEARCH**

## **ABSTRACTS**

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**Name :** Zolidah Bt Kasiran

**Title :** Customer's Satisfaction Measurement using Cognitive and Emotion Judgment Survey: A Case Study of INTEC

**Faculty :** Computer & Mathematical Sciences

**Supervisor :** Prof. Dr. Saadiah Yahya (MS)

Customer satisfaction is very important to organization in order to keep the customer loyal to the company. The research of customer satisfaction have been focusing on the cognitive judgment theory where the feedback collected from the customer was rely on the recalling the experiences. This method of cognitive judgment in measuring customer satisfaction have a problem that customers tend to rate customer satisfaction survey highly, as the cognitive judgment theory rely on remembering of the experience. The objective of this study is to propose a model to produce a clean input dataset for neural network classifier, to propose customer satisfaction model that combining the cognitive judgment and emotion judgment theories to balance the customer satisfaction rate. Another objective is to construct and conduct the satisfaction model based on the case study done at INTEC and to verify and confirm the reliability of the customer satisfaction model. The experiment was conducted by using paper-based

survey to collect cognitive judgment feedback and facial expression recognition analysis for the emotion judgment feedback. The data were acquired during the student's registration to measure their satisfaction on the registration process using emotion judgment via facial expression and cognitive judgment using paper-based survey. The clean input datasets were run into neural network classifier and the classifier had produce output of facial expression classification in binary. The hypotheses was tested using statistical tools and it found that there is no relationship between emotion and cognitive judgment survey. The gap of the two type of measurements have been evaluated and it is found that emotion judgment via facial expression recognition survey could be used as a complement to conventional cognitive judgment using paper-based survey. The research concludes that more and thorough study of facial expression recognition model as customers' satisfaction measurement tools should be explored. The proposed customer's satisfaction model has added to the body of knowledge in quality service field.