Abstract

This study discusses research on the comparison of service quality between Noise Detection for Public Place (NDPP) technology with Sound Meter applications using Gronroos modeling theory in its application to health care waiting rooms. NDPP is an Arduino-based tool for detecting noise levels in public facilities. While the Sound Meter application is an android-based application that has the same functionality as NDPP. There are several variables used in this study, namely Technical Quality, Functional Quality, Corporate Image. The data collection methods used were questionnaires and interviews, as well as the validation test method measured by the Pearson Product-Moment Correlation technique, and the reliability test was measured using the Cronbach's alpha formula. The two product services show that the average value of the comparison of the Technical Quality and Functional Quality variables from the first service is smaller than the second service, and in the Corporate Image variable the average value of the first service is greater than the second service. Descriptively shows the difference in service quality. And the results of the Paired Sample T-Test show that the significance of the three test variables is less than the probability of 0.05. The results of this study indicate that there are differences between NDPP and Sound Meter applications in Technical Quality, Functional Quality, and Corporate Image.

Keywords—noise, gronroos model, noise detection, cronbach's alpha.