ABSTRACT

In the context of accelerating poverty reduction and developing policies in the field of social protection, since 2007, the Indonesian government issued the Hope Family Program (PKH). There are 8 criteria that have been determined by the government for prospective participants who are entitled to receive PKH assistance in which at least there must be one criterion that the candidate participant has as a condition to get PKH assistance. This study designs a classification system for determining the recipients of PKH funds using the K-Nearest Neighbor method to compare the value of accuracy produced by the system with the original data. From this study, a trial was conducted using data as much as 300 data divided by different percentages to be used as training data and test data. This experiment is carried out in 5 (five) times with different percentage values using neighbor values = 3. The results of the first experiment with 80% training data (240 data) and 20% test data (60 data) is 100% accuracy value, the second experiment with training data 60% (180 data) and test data 40% (120 data) results values accuracy of 95.83%, third trial with 50% training data (150 data) and test data 50% (150 data) results an accuracy value of 96.67%, fourth experiment with training data 40% (120 data) and test data 60% (180 data) results an accuracy value of 95.56%, and the last experiment with training data of 20% (60 data) and test data 80% (240 data) results an accuracy value of 96.67%. From this experiment, it can be concluded that the more training data compared to the test data, the higher the value of accuracy, especially if it is only done for testing with one test data. Thus, this system can help classify PKH funds for each participant.

Keywords: PKH, K-Nearest Neighbor, Classification, Web.