IMPLEMENTATION OF AN ARTIFICIAL NEURAL NETWORK SYSTEM AS A RECOMMENDATION FOR SELECTING ELIGIBILITY FOR THE HOPE FAMILY ASSISTANCE PROGRAM (Case Study: Kampung Karang Makmur)

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ABSTRACT

Program Keluarga Harapan (PKH) is a conditional social assistance program organized by the government for people who meet the requirements as PKH beneficiaries. Currently, the distribution of social assistance in Karang Makmur Village, especially in the PKH program, often in reality in the distribution of PKH assistance is not on target based on observations in the field. To overcome this problem, this research aims to develop a website-based classification system that can carry out classification based on predetermined criteria input data. The method used in this classification system is an Artificial Neural Network, namely the Perceptron model. The dataset used is 124 data with a division of 80% training data and 20% test data. The system being developed will allow users to enter 13 predetermined PKH criteria features as input, then modeling is carried out in the system then the model will be saved and the system will carry out the classification process. The results of the tests carried out have an accuracy rate of 92%, can carry out a classification process and have classification results in the form of 'Eligible = 1' or 'Not Eligible = 0' as PKH beneficiaries according to the data entered. It is hoped that the system can help recommend potential beneficiary criteria properly and appropriately.

Keywords: Social Assistance, Family Hope Program, Artificial Neural Network, Perceptron, Classification