

## Predicting the Success of Bank Telemarketing Using Artificial Neural Network

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**Abstract :** The shift towards decision making (DM) based on artificial intelligence (AI) techniques will change the way in which consumer markets and our societies function. Through AI, predictive analytics is being used by businesses to identify these patterns and major trends with the objective to improve the DM and influence future business outcomes. This paper proposes an Artificial Neural Network (ANN) approach to predict the success of telemarketing calls for selling bank long-term deposits. To validate the proposed model, we use the bank marketing data of 41188 phone calls. The ANN attains 98.93% of accuracy which outperforms other conventional classifiers and confirms that it is credible and valuable approach for telemarketing campaign managers.

**Keywords :** bank telemarketing, prediction, decision making, artificial intelligence, artificial neural network

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