THE IMPLEMENTATION OF EXTREME LEARNING MACHINE METHOD FOR DEMAND FORECASTING

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Abstract

Customer’s demand which always changes force industrial player to be able to make production planning precisely. Planning production activity include determining the number of products that will be produced, raw materials needed, and price of the product. The precise production plan helps a company expected to get low inventory level and able to respond customer demand faster.

Effective and efficient plan must be supported by accurate forecasting system. Thus, this final year project manage to built demand forecasting system by applying extreme learning machine (ELM) method. ELM is one of new learning method from artificial neural network.

The experiment result of this final year project shows that ELM has better accuracy level than conventional method such as Moving Average or Exponential Smoothing. By implementing ELM method for demand forecasting, it is expected to be able to help industrial player in deciding demand level more accurately and effectively.

Keyword : Customer’s demand, Forecasting, Artificial Neural Network, Extreme learning Machine.