An Improved Neural Approaches for Forecasting Demand in Supply Chain Management

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 182
Number 50

Year of Publication: 2019

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10.5120/ijca2019918766

Abstract

Demand forecasting plays a pivotal role for supply chain management. It allows predicting and meeting future demands of the product and expectations of customers. Several forecasting techniques have been developed, each one has its particular benefits and limitations compared to other approaches. This motivates the development of artificial neural networks (ANNs) to make intelligent decisions while taking advantage of today’s processing power. Well, this paper deals with an improved algorithm for feedforward neural networks. Initially, the neural modelling process will be discussed. The approach adopted of neural modeling will be presented in a second time; this method is based on mono-network neural modeling and multi-network neural modeling. The results of simulation obtained will be illustrated by a simulated time series data.

References

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**Index Terms**

Computer Science  
Artificial Intelligence

**Keywords**

Neural Networks; Supply chain management; Demand Forecasting; Time series forecasting.