Abstract

Today, Sales forecasting plays a key role for each business in this competitive environment. The forecasting of sales data in automobile industry has become a primary concern to predict the accuracy in future sales. This work addresses the problem of monthly sales forecasting in automobile industry (maruti car). The data set is based on monthly sales (past 5 year data from 2008 to 2012). Primarily, we used two forecasting methods namely Moving Average and Exponential smoothing to forecast the past data set and then we use these forecasted values as a input for ANFIS (Adaptive Neuro Fuzzy Inference System). Here, MA and ES forecasted values used as input variable for ANFIS to obtain the final accurate sales forecast. Finally we compare our model with two other forecasting models: ANN (Artificial Neural Network) and Linear Regression. Empirical results demonstrate that the ANFIS model gives better results out than other two models.
A Business Intelligence Technique for Forecasting the Automobile Sales using Adaptive Intelligent Systems (ANFIS and ANN)

Index Terms

Computer Science
Artificial Intelligence

Keywords

Sales Forecasting  ES  MA  Adaptive Neuro Fuzzy Inference System  ANN
Linear Regression.