Title: Collaborative forecasting model in supply chain

Elias Maroun (Macquarie University, Sydney, Australia)

Jay Daniel (University of Derby, Derby, UK)

Abstract

Organizations may utilize a variety of tools to improve their overall forecasting accuracy in their supply chain, acknowledging the inherent uncertainty associated with historical data. The most of these tools rely on quantitative methods, using the organization's historical sales data to recognize demand patterns and forecast future demand. Yet, given that historical data may not precisely mirror future events in the demand and supply chain forecasting, it becomes essential to introduce collaborative forecasting model (CFM) in supply chain. The CFM provides a tool that allows users to input and reconcile forecast information which enables the process of collecting and reconciling forecasts in the supply chain. Our analysis of a manufacturing supply chain forecasting revealed that the forecast accuracy and decision-making process was insufficiently robust and systematic. To address this problem, we propose a novel collaborative forecasting model that provides practitioners with a robust and accurate forecasting model in supply chain.

Keywords: Collaborative, Forecasting, Supply chain