

Challenges and Uncertainties in Collaborative Forecasting

Madhavendra Saxena
Poornima University
India

Chinmoyee S. Deshpande
Fremont, CA, U.S.A

Abstract

Accurately forecasting the fluctuated demand in the volatile market is a joint responsibility for supply chain members. Collaborative Forecasting (CF) as a common practice has been used by these members for better predictions of demand. However, their conflicts of interest on information sharing and demand forecasting prohibit them to establish long-term relationships and to generate accurate forecasts in CF. The paper presents the results of detailed literature research, a conceptual framework and initial propositions underpinned by primary data collected through an interview with a supply chain manager. Initial results indicate that partners' integration, judgmental adjustments and planning and scheduling skills are the leading determinants that improve CF performance by influencing its' duration and accuracy. In addition, Flexner (2008) identified other challenges such as the lack of trust in sharing sensitive information; the lack of internal forecast. This paper proposes a conceptual framework to forecast supply chain demand in a collaborative manner and ultimately to coordinate and integrate various supply chain partner management activities including purchasing, production planning and inventory replenishment. This paper explains the collaborative forecasting concept and framework, identifies benefits that can be achieved using collaborative supply chain forecasting, and identifies potential obstacles to implementation.

Keywords

Collaboration Forecasting, Fragmented Information, Sharing Standard