Abstract

Purpose – This paper aims investigation of the effectiveness of forecast accuracy in a case study of Unilever Thailand. The study investigates the relationship between the forecast accuracy and supply chain performance as represented by: customer service level, Inventory holding, stocks availability, and write-off cost. To increase understanding and promoting the effective use of forecast accuracy this has directly impact to supply chain performance. Forecasting must be addressed to better understand the managerial side of forecasting.

Design/methodology/approach – The quantitative study research approach was used for this study by using simulation for analyzing the impact of forecast accuracy that direct effect to supply chain performance. The correlation and regression was conducted with Home care category engaged in forecast accuracy with variables on supply chain performance. The results of the analysis indicate that the changes in forecast accuracy provide much larger savings which is typically related to metrics reflecting cost, tied-up capital or inventory and gain in customer service.

Findings – Statistical tests show that most of the supply chain variables (customer service level, Inventory holding, stocks availability, and write-off cost) exhibit strong positive serial correlation. As a result, Findings show that significant gains could be made by beginning to create more accurate forecasts. The better forecast accuracy, the greater efficiency of supply chain performance. The only significant difference in supply chain performance found between forecast accuracy with write off cost was related to the use of safety stock in finished goods inventory or inventory holding and operation process as well.

Research recommendations – The results of the regression model revealed the existence of the association between forecast accuracy, Inventory, stocks availability, customer service level. The study identified the positive result that contributing to the

accuracy of forecast by every 1% increase in forecast accuracy will increase 0.418% of customer service level. Not only has forecast accuracy an effect on customer service but also on others factors like operation process, the number of variables involved makes exact forecasting impossible. Every 1% of accuracy will effect equally at 0.418% in both customer service level and stocks availability as stocks availability is one factor for achieving the customer service target. On the other hand, every 1% increase of forecast bias will decrease 0.414% of Inventory holding as the opposite relation. However the probability of high inventory holding in the warehouse (DOH), may affects write-off cost.

Practical implications - The understanding of the performance impact of forecast accuracy. Forecast accuracy shows quality deficiencies on all variables, which indicates room for improvement.