

**DEMAND FORECAST ADJUSTMENTS IN THE SRI
LANKAN FMCG INDUSTRY: A FIELD EXPERIMENT.**

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Declaration

I declare that this is my own work and this thesis/dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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The above candidate has carried out research for the Masters Dissertation under my supervision.

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ABSTRACT

In FMCG industries, demand forecasting is a vital element of the planning process in supply chain. The most widely used approach of forecasting demand is to generate preliminary forecasts using historical data, trends, growth and seasonal patterns in these businesses. Afterwards, company's demand planners make subjective adjustments for these forecasts, which account for unpredictable events anticipated throughout the planning horizon. Applying these adjustments require substantial human hours and work. However, do they enhance accuracy, what types of adjustments can be found? and what forms of adjustments more productive than others? To study this, we gathered data from FMCG company using field experiment and outcomes were analyzed by statistical software. The findings showed that judgmental adjustments improved accuracy in generally. Nevertheless, a thorough examination showed that although the larger adjustments often resulted in lower average accuracy and the smaller adjustments frequently increase accuracy. Furthermore, there is no correlation of accuracy among negative adjustments and positive adjustments, which involved for forecast upward direction. However, forecasters tend to adjust forecasts in an upward direction (positive adjustments) rather than downward direction (negative adjustments) as per the data found from our examination. This research study examines strategies designed to increase the effectiveness of judgmental adjustments, involving statistical analysis, contextual factor observation and forecasting method evaluation.

Key Words: Demand Forecast, Forecast Adjustments, Forecast Accuracy, Supply Chain Management, Judgmental Forecasting, Contextual Factors, FMCG industry

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List of Abbreviations

FMCG	Fast-Moving Consumer Goods
SKU	Stock Keeping Unit
ARIMA	Auto-Regressive Integrated Moving Average
MAPE	Mean Absolute Percentage Error
sMAPE	Symmetric Mean Absolute Percentage Error
FVA	Forecast Value Addition
ANOVA	Analysis of Variance
SD	Standard Deviation
FCIMP	Forecast Improvement
FSS	Forecast Support System
SPSS	Statistical Package for the Social Sciences