

## ABSTRACT

This research project sprang from the realization by a company of a mismatch between its forecast of customer orders, high level of excess inventory, high capital investment of inventory cost, and low customer service level. The aim of this research study is to propose a new planning mechanism under the concept of 'incentive commitment'.

Incentive commitment refers to the process of sharing costs, risks, and benefits among the participating members (Simatupang and Sridharan, 2002). This scheme motivates the partners to realize the benefits of strong relationships toward achieving common goals and mutual objectives, in which desired behavior between collaborative partners can be motivated by bonuses in terms of discounts, and penalties, by levying fee charges and excess inventory charges.

The purpose of this research study is to provide the company with an effective decision making tool for planning and forecasting customer orders, enabling the company to provide strong commitment and achieve whatever is promised, gain the benefits of credibility and good performance ratings in terms of improving the customer service level, and lastly, benefits in terms of inventory level and cost reduction.

The research findings show positive improvements in what the study is expected to achieve. The variance between forecast and customer orders has tremendously decreased to 5.34%. The opportunity profit shows an increase of \$28,622.1 from the planned forecast, and the excess inventory level/cost shows only 16 units or \$ 3,387.2. Finally, the company can achieve a 100% customer service level.