**Abstract**

As a result to today's uncertain economy, companies are searching for alternative ways to stay competitive. In which, Company XYZ has been faced with an ineffective forecasting method that has lead to multiple product stock outs. The issue faced has caused sales loss as well as profit loss, which companies can not afford to lose if they want to stay competitive. This project goes through the process of analyzing the company's current forecasting model and recommending an inventory control model to help them solve their current issue. As a result, an Economic Order Quantity (EOQ) and a Reorder Point was recommended along with two forecasting techniques to help them reduce their product stock outs.

In addition, a cost estimate was done to compare both their current and the recommended models. As a result, Company XYZ would able to reduce their overall total cost from $13,654 to $5,366. This was a cost reduction of approximately 61%, which summed to a total saving of about $8,300 per quarter.

It is highly recommended that Company XYZ implements the inventory control model provided in order to reduce stock out and back orders. By doing so, the company could also reduce the total cost associated with their inventory. If the methods are used effectively, the company could remain competitive among their industry.