

ABSTRACT

This project deals with a proposed alternative solution to the existing model, in order to prevent inventory cost due to obsolescence, which is currently a crucial problem for the firm.

Assemble-to-order refers to a supply chain strategy in which products are not assembled until a customer order arrives. It is delayed until the point of product differentiation. This strategy has two main dimensions, which are responsiveness and achievement level of scale economies. Responsiveness refers to the capability of fulfilling customer requirements, whereas the achievement of scale economies reflects the degree of operation efficiency.

Results indicate that the proposed adaptive strategy can improve the performance of the supply chain in terms of inventory performance, operation, lead time of production service level, and demand fill-rate. Assemble-to-order can be embodied in a variety of end products. Thus, assemble-to-order is one of the most beneficial strategic mechanisms to manage the risks associated with product variety and uncertain sales.