

## Ranking of Inventory Policies Using Distance Based Approach Method

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**Abstract :** Globalization is putting enormous pressure on the business organizations specially manufacturing one to rethink the supply chain in innovative manners. Inventory consumes major portion of total sale revenue. Effective and efficient inventory management plays a vital role for the successful functioning of any organization. Selection of inventory policy is one of the important purchasing activities. This paper focuses on selection and ranking of alternative inventory policies. A deterministic quantitative model-based on Distance Based Approach (DBA) method has been developed for evaluation and ranking of inventory policies. We have employed this concept first time for this type of the selection problem. Four inventory policies Economic Order Quantity (EOQ), Just in Time (JIT), Vendor Managed Inventory (VMI) and monthly policy are considered. Improper selection could affect a company's competitiveness in terms of the productivity of its facilities and quality of its products. The ranking of inventory policies is a multi-criteria problem. There is a need to first identify the selection criteria and then processes the information with reference to relative importance of attributes for comparison. Criteria values for each inventory policy can be obtained either analytically or by using a simulation technique or they are linguistic subjective judgments defined by fuzzy sets, like, for example, the values of criteria. A methodology is developed and applied to rank the inventory policies.

**Keywords :** inventory policy, ranking, DBA, selection criteria

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