

BUYING AND STOCKING UNDER UNCERTAINTY

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ABSTRACT

An inventory decision model is considered whereby the demand for the item, the stock in hand and the lead time period are considered to be random variables. The interrelationships of these three item characteristics are then studied in the framework of a scheme for deciding when to place an order for additional material. The effect of a Yule demand distribution is studied and the implications of such an assumption on the distribution of the mean lead time are examined.

Keywords and Phrases: Yule distribution; Pareto Distribution; Inventory model; reorder point system.