

The Distribution Free Newsboy Problem: Review and Extensions

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ABSTRACT

We present here a new, very compact proof of the optimality of Scarf's ordering rule for the newsboy problem where only the mean and the variance of the demand are known. We then extend the analysis to the recourse case, where there is a second purchasing opportunity; to the fixed ordering cost case, where a fixed cost is charged for placing an order; to the case of random yields; and to the multi-item case, where multiple items compete for a scarce resource.