## ANALYSIS OF THE EFFECTIVENESS OF PROBABILISTIC ECONOMIC ORDER QUANTITY (EOQ) METHOD USING MODEL (q,r) IN MEDICATION INDUSTRY (CASE STUDY: APOTEK GRIYA MEDIKA MALANG)

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## ABSTRACT

In this article discussed the application of probabilistic EOQ method using model (q,r) on the control and inventory of anti-pain medication. In this study used data request with the assumption of normal distribution with the aim to determine the reorder point and EOQ to minimize the total cost using the model (q,r) of anti-pain medication Apotek Griya Medika Malang in January to December 2017. After obtaining each the minimum cost of both theoretical and simulated using the original data and the generated data, then the two costs are compared to see which model can obtain the total cost savings by using model (q,r). This method is able to determine the amount of goods to be ordered, the time for effective ordering, and save the total of inventory cost.

Keywords: probabilistic EOQ, model (q,r), Apotek Griya Medika Malang, inventory