

Metaheuristic for Solving Maritime Inventory Routing Problem: A Literature Review

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Abstract

This study provides a literature review of the use of metaheuristic methods to solve the Maritime Inventory Routing Problem (mIRP). MIRP is a variation of the Inventory Routing Problem (IRP) which uses ships to distribute products. This study presents and maps the factors that are considered and the objectives to be achieved in the mIRP area. Algorithms and calculation results from each metaheuristic method used for certain mIRP problems are also described so that they can be used as reference material for selecting the metaheuristic method to solve the mIRP problem being developed. This research also shows that the use of metaheuristic methods to complete mIRP has a great opportunity to be developed.

Keywords

Inventory Routing, Maritime Transportation, Metaheuristics, and Literature Review.

Acknowledgement

The authors wish to acknowledge the funding of this research is from the Ministry of Education and Culture, Republic of Indonesia through the Doctor's Dissertation Research Scheme Grant No. 1264/PKS/ITS/2020.

Biography

Antono Adhi is a student of Doctoral Program in Industrial Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia. He works as a lecturer in Universitas Stikubank (UNISBANK), Semarang, Indonesia. He got his Diploma from Informatic Department Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia. He got Master degree from Industrial Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia and Management from Universitas Stikubank (UNISBANK), Semarang, Indonesia.

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