應用粒子群演算法於物流中心揀貨系統之訂單批次設計

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摘要

Order picking operation is the principal activity in warehouses and cause the main cost. Thus, improving effeciency of the order picking operation will increase the quality of service and decrease the operation costs. This paper proposes a heuristic algorithm via employing Particle Swarm Optimization to solve order batching problem is named PSOBM. It compares with those of the past researches by simulation. It's found that the PSOBM algorithm actually provided the better performance for the order batching problem, but it spent more CPU running time. It's hoped that the result of this study could enhance the performance of the order picking system for the enterprises in the future.

關鍵字:Order Picking、Order Batching、Particle Swarm Optimization、Genetic Algorithm