

ABSTRAK

PT. ABC merupakan perusahaan yang bergerak di bidang Industrial Supplies, dimana perusahaan tersebut mendistribusikan maintenance, repair and operating (MRO) products ke seluruh dunia. PT. ABC memiliki stock center yang lengkap di UK dengan jaringan distribusi di berbagai negara lain yang didukung dengan dealer dan stokis yang berlokasi di masing-masing area. Di Indonesia sendiri, PT. ABC memiliki kantor pusat yang juga berperan sebagai warehouse yang berlokasi di Jakarta Timur dengan stock awal ± 9.000 produk dengan berbagai macam karakteristik. Warehouse PT. ABC memiliki luas 786 m² dengan menggunakan fasilitas racking 2 lantai, serta dilengkapi dengan pallet selfing untuk menyimpan barang barang yang memiliki volume besar dan berat seperti drawer, dongkrak dan ragum. Dengan sistem marketing B2B online ordering, PT. ABC menyediakan layanan same-day services, dimana dealer dapat mengambil produk pesanan mereka di hari yang sama, dengan catatan, produk pesanan mereka statusnya ready stock di warehouse pada saat proses pemesanan. Berdasarkan pada kondisi PT. ABC yang menyediakan layanan same-day services tersebut, maka permasalahan order picking harus menjadi perhatian khusus. Banyaknya dealer yang melakukan purchase order dengan jumlah items yang tidak sedikit perlu diperhatikan manajemen order picking-nya oleh manajemen di warehouse. Berdasarkan summary hasil perhitungan jarak tempuh dengan menggunakan software interactive warehouse tersebut, dapat dilihat bahwa metode yang menghasilkan jarak tempuh terkecil adalah Metode Routing Optimal. Sementara untuk jarak tempuh terbesar dihasilkan secara variatif antara Metode Routing Return, Metode Largest Gap, dan Metode Routing Aisle-by-aisle. Dari hasil penelitian yang dilakukan terhadap 10 Picking List, diketahui bahwa tingkat keberhasilan Metode Routing Optimal dalam menghasilkan jarak tempuh terpendek sebesar 100%. Dari Hasil Persentase di atas menunjukkan banyaknya penghematan yang diberikan metode optimal, yakni sebanyak 100%. Namun dari hasil wawancara yang dilakukan langsung dengan beberapa Picker, diketahui bahwa meskipun Metode Optimal merupakan Metode Routing paling efisien dalam mengurangi jarak tempuh, para Picker masih mengalami kesulitan dalam mengingat pattern pada saat praktek langsung di lapangan. Metode routing ini secara khas terlihat seperti perpaduan antara metode S-Shape dan Largest Gap.

Kata kunci: Metode Routing, Routing Methods, Metode Routing Return, Metode Routing Optimal, Metode Routing S-Shape, Metode Routing Combined, Metode Routing Largest Gap, Metode Routing Aisle-by-aisle, Metode Combined+

ABSTRACT

PT. ABC is a company engaged in Industrial Supplies, where the company distributes maintenance, repair and operating (MRO) products to the world. PT. ABC has a complete stock center in the UK with distribution networks in various other countries supported by dealers and stockists located in each area. In Indonesia itself, PT. ABC has a head office that also serves as a warehouse located in East Jakarta with an initial stock of ± 9,000 products with various characteristics. Warehouse PT. ABC has an area of 786 m² with 2 floors racking facilities, and equipped with self-pallet to store goods that have large volume and weight such as drawer, jack and ragum. With B2B online ordering marketing system, PT. ABC provides the same-day services service, where dealers can take their order products on the same day, with a note that their order products are ready stock in the warehouse at the time of ordering. Based on the condition of PT. ABC that provides same-day services services, then the issue of picking order should be a special concern. The number of dealers who make purchase orders with the number of items that are not a little to note the management of his picking order by the management in the warehouse. Based on the summary of the calculation of distance traveled using the interactive warehouse software, it can be seen that the method that produces the smallest mileage is the Optimal Routing Method. While for the largest mileage is generated variably between Routing Return Method, Largest Gap Method, and Aisle-by-aisle Routing Method. From the results of research conducted on 10 Picking List, note that the success rate of Optimal Routing Method in producing the shortest distance of 100%. From Results The above percentage shows the number of savings given the optimal method, ie as much as 100%. But from the results of interviews conducted directly with some Picker, it is known that although the Optimal Method is the most efficient method of Routing in reducing mileage, the Picker still have difficulty in remembering the pattern at the time of practice directly in the field. This routing method typically looks like a mix of S-Shape and Largest Gap methods.

Keywords: Metode Routing, Routing Methods, Metode Routing Return, Metode Routing Optimal, Metode Routing S-Shape, Metode Routing Combined, Metode Routing Largest Gap, Metode Routing Aisle-by-aisle, Metode Combined+