Supply Chain Resilience Analysis at Electronic Manufacturing Company Work-In-Process Warehouse Using SCOR Method and Importance Performance Analysis = Analisis Ketahanan Rantai Pasok pada Gudang Work-In-Process Perusahaan Manufaktur Elektronik Menggunakan Metode SCOR dan Importance Performance Analysis

Fadel Mahaputra Santoso, author

Abstrak

Gudang memiliki peran penghubung yang penting dalam rantai pasokan dan dapat memperkaya keunggulan kompetitif bagi perusahaan. Agar selalu dapat memberikan pelayanan yang terbaik maka perlu diketahui kondisi gudang saat ini melalui penilaian kinerja dan perbaikan pada aspek-aspek yang mempunyai nilai rendah. Penelitian ini untuk mengukur kinerja dan memberikan rekomendasi gudang Work-in-Process dari perusahaan manufaktur elektronik pada tahun 2023 dengan menggunakan metode SCOR dan AHP. Terdapat 26 indikator kinerja yang akan dijadikan acuan untuk menentukan kinerja gudang. Hasil yang diperoleh adalah kinerja gudang berada pada kategori Sedang menurut Traffic Light System dengan nilai sebesar 58,16%. Indikator prioritas juga diidentifikasi menggunakan metode Importance Performance Analysis untuk mengidentifikasi indikator yang mempunyai nilai rendah namun mempunyai bobot kepentingan tinggi. Diperoleh 5 indikator yang merupakan prioritas yaitu Total Order Lead Time, Supplier Product Defect Rate, Raw Material Usage Accuracy, MTTR from Disruption, and Rate of Return. Rekomendasi yang diberikan untuk meningkatkan kelima indikator kinerja tersebut adalah Computer-aided Visual for Inspection, Vehicle Routing Problem, Digital Twin for Resilience, dan Just In Time (JIT) System in Warehousing Process.

.....The warehouse has an important linking role in the supply chain and can enrich the competitive advantage for the company. In order to always be able to provide the best service, it is necessary to know the current condition of the warehouse through performance assessment and improvement on aspects that have low scores. This research is to measure the performance and provide recommendations for the Work-in-Process warehouse of an electronics manufacturing company in 2023 using the SCOR and AHP methods. There are 26 performance indicators that will be used as a reference to determine warehouse performance. The results obtained are that the warehouse performance is in the Average category according to the Traffic Light System with a value of 58.16%. Priority indicators are also identified using the Importance Performance Analysis method to identify indicators that have low scores but have high importance weights. Five prioritized indicators were obtained, namely Total Order Lead Time, Supplier Product Defect Rate, Raw Material Usage Accuracy, MTTR from Disruption, and Rate of Return. The recommendations given to improve the five performance indicators are Computer-aided Visual for Inspection, Vehicle Routing Problem, Digital Twin for Resilience, and Just In Time (JIT) System in Warehousing Process.