

ABSTRAK

Peningkatan efisiensi departemen *assembling* di PT. Cipta Oggi Furindo menggunakan pendekatan *Data Envelopment Analysis* orientasi *input* dengan model *Charnes Cooper Rhodes* asumsi *Constant Return to Scale* menggunakan *Banxia Software Frontier Analyst Version 4.0*. Variabel *input* pada penelitian yaitu jumlah operator, waktu tunggu, dan waktu siklus, sedangkan variabel *output* yaitu hasil produksi dan utilisasi operator. Hasil penelitian pada DMU 1 dengan efisiensi 100% yaitu DMU 1.4, DMU 1.6, DMU 1.8, dan DMU 1.12, sedangkan DMU yang inefisiensi yaitu DMU 1.1, DMU 1.2, DMU 1.3, DMU 1.5, DMU 1.7, DMU 1.9, DMU 1.10, dan DMU 1.11. Efisiensi DMU 2 dengan efisiensi 100% yaitu DMU 2.3, DMU 2.4, DMU 2.5, DMU 2.8, dan DMU 2.9, sedangkan DMU yang inefisiensi yaitu DMU 2.1, DMU 2.2, DMU 2.6, DMU 2.7, DMU 2.10, DMU 2.11, dan DMU 2.12. Penyebab ketidakefisiensian pada DMU 1 dan DMU 2 disebabkan karena warna material *fisher*, *stacking* komponen, ukuran material *single face* dan kaca tidak sesuai *shop drawing*, proses menunggu material terlalu lama, material kaca mengalami retak/pecah/tergores, serta lama waktu siklus kerja kurang tepat. Perbaikan dilakukan dengan menerapkan metode *stratification management* dan *set in order*, menggunakan *form checklist* inspeksi kerja, menggunakan *form checklist* proses kerja *material handling*, membuat panduan etika penggunaan *forklift*, serta menambah kelonggaran operator.

Kata Kunci: Efisiensi, Produktivitas, *Data Envelopment Analysis*, *Decision Making Unit*.

ABSTRACT

Increasing the efficiency of the assembling department at PT. Cipta Oggi Furindo uses the input-oriented Data Envelopment Analysis approach with the Charnes Cooper Rhodes model with the assumption of Constant Return to Scale using Banxia Software Frontier Analyst Version 4.0. The input variables in this study are the number of operators, waiting time, and cycle time, while the output variables are the results of operator production and utilization. The results of the research on DMU 1 with 100% efficiency were DMU 1.4, DMU 1.6, DMU 1.8, and DMU 1.12, while DMUs with inefficiency were DMU 1.1, DMU 1.2, DMU 1.3, DMU 1.5, DMU 1.7, DMU 1.9, DMU 1.10, and DMU 1.11. Efficiency DMU 2 with 100% efficiency are DMU 2.3, DMU 2.4, DMU 2.5, DMU 2.8, and DMU 2.9, while DMUs with inefficiency are DMU 2.1, DMU 2.2, DMU 2.6, DMU 2.7, DMU 2.10, DMU 2.11, and DMU 2.12. The causes of inefficiency in DMU 1 and DMU 2 are due to the color of the fisher material, component stacking, the size of the single face material and the glass does not match the shop drawings, the waiting process for the material is too long, the glass material is cracked/broken/scratched, and the length of the work cycle is not quite right. Improvements were made by applying the stratification management and set in order methods, using the work inspection checklist form, using the material handling work process checklist form, making forklift use ethical guidelines, and adding operator allowances.

Keywords: *Efficiency, Productivity, Data Envelopment Analysis, Decision Making Unit.*