

ABSTRAK

Penelitian ini mengevaluasi tingkat efisiensi departemen produksi PT Sarana Karya Solusindo. Tujuan penelitian ini untuk mengukur tingkat efisiensi pada departemen produksi proses kerja *driver assembly* dan *LED assembly*, serta melakukan perbaikan terkait proses kerja yang inefisiensi dengan minimasi waktu menunggu untuk meningkatkan efisiensi kerja. Evaluasi berdasarkan pengukuran tingkat efisiensi dari DMU 1 *driver assembly* dan DMU 2 *LED assembly* menggunakan metode *Data Envelopment Analysis*, simulasi komputer *software LINGO Version 18.0*, *Fishbone* diagram, dan peta tangan kiri tangan kanan. Hasil pengukuran tingkat efisiensi diperoleh 5 DMU dengan tingkat efisiensi rendah berada pada *range red condition*. Hasil dari pengukuran tingkat efisiensi digunakan untuk mencari potensial *improvement* menggunakan *Fishbone* diagram. Hasil *Fishbone* diagram diperoleh sebab dan akibat dari potensial *improvement*, serta menjadi dasar untuk usulan perbaikan dari DMU yang inefisiensi. Perbaikan dilakukan dengan modifikasi meja kerja penambahan alat ukur disetiap meja operator, menggunakan *form checklist* inspeksi kerja, menggunakan *form checklist* proses kerja pemasangan *thermal*, menggunakan *form checklist* proses kerja pemasangan *LED plate*, menggunakan *form checklist* proses kerja pemasangan *thermal LED plate*, serta membuat penataan peletakan material baut. Hasil peta tangan kiri tangan kanan diperoleh perbandingan terukur dari proses kerja sebelum perbaikan dan setelah perbaikan.

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

ABSTRACT

This research evaluates the level of efficiency of the production department of PT Sarana Karya Solusindo. The aim of this research is to measure the level of efficiency in the production department of the driver assembly and LED assembly work processes, as well as make improvements related to inefficient work processes by minimizing waiting time to increase work efficiency. Evaluation based on measuring the efficiency level of the DMU 1 driver assembly and DMU 2 LED assembly using the Data Envelopment Analysis method, computer simulation software LINGO Version 18.0, Fishbone diagram, and left hand right hand map. The results of measuring the efficiency level were obtained by 5 DMUs with low efficiency levels in the red condition range. The results of measuring the level of efficiency are used to look for Potential improvements using a Fishbone diagram. The results of the Fishbone diagram show the causes and effects of Potential improvements, and become the basis for proposed improvements to DMU inefficiencies. Repairs were carried out by modifying the work table, adding measuring tools to each operator's table, using the work inspection checklist form, using the thermal installation work process checklist form, using the LED plate installation work process checklist form, using the thermal LED plate installation work process checklist form, and making placement arrangements bolt material. From the results of the left hand right hand map, a measurable comparison of the work process before repair and after repair is obtained.

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