

# Evaluasi Pemodelan Sistem Kanban dalam ERP

## Proses Produksi Steel Wheel Rim di PT. Inkoasku

### ***ABSTRACT***

*PT. Inkoasku was steel wheel rim manufacturer, which has done ERP implementation for their manufacturing process. Kanban card scan system has used, and it was a merging result between Work In Process module and kanban, production management method. There were manual interventions in kanban scan activity, which impacts scan system process time bigger than 15 seconds. And there were a manual kanban monitoring report. These issues were the background of thesis “Evaluation of Kanban System Modelling In Production Process ERP On Steel Wheel Rim Product At PT. Inkoasku”. 5 fase from DMAIC model have used to solve these. Define phase, to identify the issue based on data collection. Measure phase, to measure the current system performance. Analyze phase, to analyze and to find some improvement chances. Control phase, to implement improvement chances. The improvement which have done were kanban card improvement, process flow kanban system improvement, and pseudocode improvement for scan kanban form. Significance value have been measured, and the improvement have impacted significantly to kanban system. The Test of Homogeneity of Variances significance value's 0.00232. The ANOVA significance value's 0.03785 (<0.05).*

***Key word : ERP, Manufacture, Kanban, Improvement***

### ***ABSTRAK***

PT. Inkoasku adalah perusahaan manufaktur *steel wheel rim*, yang melakukan implementasi ERP untuk proses produksinya. ERP menggunakan sistem *scan* hasil penggabungan *module Work In Process* dengan *kanban*, metode

manajemen produksi. Dalam penggunaannya, masih ada kontrol manual oleh *user*, sehingga waktu sistem *scan* tiap lini lebih dari 15 detik. Laporan *monitoring* kanban masih manual. Ini melatarbelakangi tesis berjudul "Evaluasi Pemodelan Sistem Kanban Dalam ERP Proses Produksi *Steel Wheel Rim* Di PT. Inkoasku". Evaluasi menggunakan model DMAIC dari Six Sigma, yang terdiri dari 5 fase. Fase *Define*, fase menentukan masalah berdasarkan data. Fase *Measure*, fase mengukur kinerja sistem yang sedang berjalan. Fase *Analyze*, fase menganalisa dan menemukan peluang *improvement* yang bisa dilakukan. Fase *Improve*, fase melakukan cara *improvement*. Fase *Control*, fase pengendalian terhadap hasil *improvement*. *Improvement* yang telah dilakukan adalah *improvement* kode kartu kanban, *improvement* alur proses sistem kanban, dan *improvement* alur program *form scan* kanban. Pengukuran nilai signifikan dengan F-test menunjukkan upaya improvement berpengaruh signifikan pada kecepatan waktu proses kanban. Nilai signifikan *Test of Homogeneity of Variances* adalah 0.00232 (<0.05). Nilai signifikan ANOVA adalah 0.03785 (< 0.05).

**Kata kunci:** ERP, Manufaktur, Kanban, *Improvement*