

ABSTRACT

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PENGEMBANGAN PROGRAM LOB UNTUK PROYEK PERUMAHAN YANG REPETITIF

(xiii+ 103 halaman: 48 gambar; 3 tabel; 4 lampiran)

Due to an increasingly competitive environment, construction companies are becoming more sophisticated, narrowing their focus and becomes specialists in certain types of construction. This specialization requires more focused scheduling tools that prove to be better for certain type of project. Linear scheduling technique such as Line of Balance (LOB) method is known to be the most suitable method for projects that are composed of activities of a linear and repetitive nature. Such projects include highways, airfields, pipelines, multiple housing units, and high-rise buildings.

The objective of this thesis is to develop a computerized LOB scheduling program that overcomes the problems of existing program. The developed program is using Microsoft Visual Basic 6.0. The challenges associated with LOB scheduling include developing an optimal strategy to reduce project's delay duration by increasing the rate of production of selected units in activities, allowing parallel activities and improving the visual presentation of LOB graphic.

Case study result shows that the developed LOB program is very effective due to reduce project's delay duration that cause directly to reducing project's total duration. However the parallel activities in multiple housing units' project create visual presentation of LOB graphic becomes too crowded.

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