

Thesis Title	Analysis of Practices in Calculating Labor Cost and Labor Efficiency Indicators Based on Data of High-Rise Building Construction Projects
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Candidate	Mr. Planchai Rungruangyangyuen
Thesis Advisor	Asst. Prof. Dr. Pitch Sutheerawatthana
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#### Abstract

The high-rise building construction industry involves high investment and competition. During construction, labor expense is one of the most important costs. Many companies overlook the importance of measuring labor efficiency indicators. The efficiency of labor is an important factor enabling contractors to reduce working time and make more profits. This research aimed to analyze practices in calculating labor cost and labor efficiency indicators adopted in 10 high-rise (more-than-20-story) building construction projects. The research data were collected from the three main activities of structural work: formwork installation, reinforced-bar installation and concrete pouring. The data were collected with photography, video recording, interviews, and actual records at the sites of the projects. The collected data were used to seek the way to calculate the efficiency of labor of the projects. The results showed that information available at the sites could be used to calculate labor efficiency in 2 ways. First, the available data could be calculated to determine the labor efficiency indicators in two forms: (1) the unit of labor efficiency indicator was ‘Baht per person’ and (2) the unit of labor efficiency indicator was ‘Baht per quantity.’ Second, it was found that the labor efficiency indicator was used to monitor the labor performance, and the unit of this labor efficiency indicator was ‘work quantity per day or per work-hour.’ The researcher expects that the outputs of this research will help entrepreneurs or contractors understand the importance of collecting data on the efficiency of labor for labor planning and management in next projects.

Keywords: High-rise Building / Labor Cost / Labor Efficiency