

FINAL YEAR PROJECT REPORT
ADVANCE DIPLOMA IN CIVIL ENGINEERING
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SHAH ALAM

**THE DETERMINATION OF
PRODUCTIVITY INDEX IN
CONSTRUCTION PROCESS**

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SYNOPSIS

Labor productivity is defined as the input divided by the output, and is calculated for a finite time interval the following way:

$$\text{Labor Productivity} = \text{Manhours/Units of Work}$$

It is commonly called the unit rate.

The need for a standardized approach for measuring construction task-level labor productivity has long been recognized. Furthermore it is known that before the factors affecting productivity can be studied, there needs to be a large data base containing information from many projects constructed under a variety of conditions. This information must be uniformly collected from each project.

The objective of this project is to describe a task-level labor productivity measurement and performance evaluation system that can be used by owners, contractors, and subcontractors who presently do not have a formalized effort.

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CHAPTER 1

INTRODUCTION

Productivity is one of the most frequently discussed topics in the construction industry. The reason is that productivity translates directly most project, productivity is the most difficult costs component to estimate. Is also the most difficult on to control. Indeed, productivity can be affected by many things, both major and minor. Some factors are within the control of the contractor, and others are not. In some cases, the contractor may be unaware and ultimately into contractor profits made or lost on the job. Indeed, productivity can be affected by many things, both major and minor. Some factors are within the control of the contractor, and others are not. In some cases, the contractor may be unaware that adverse factors are present.

Considering the important of construction productivity to project cost and schedule control, one would expect to find a large body of well-codified known, sure-to-be-successful remedies. In reality, little such information exists on what affects productivity and, more importantly, by how much. The range of opinions on factors is extensive. some blame global issues such as the economy, union politics, or government regulations. Others argue that the work ethic is the problem. However, a growing majority of those closely associated with