

# [Descriptive research vs analytical research economics essay](https://assignbuster.com/descriptive-research-vs-analytical-research-economics-essay/)

Malaysia began develop its construction industry since independence. More than half of capital formation consists of work in construction (Lewis, 1955). Hence, the expansion of capital is a function the rate at which the construction industry can be expanded. This can be seen in the initial economic plan (1956-1960) where it was basically a development expenditure plan. The primary concern was developing infrastructure during independence because of its inadequacy. In order for the nation’s economy to prosper, the construction industry has to be developed first for the economy to take a one step further (Abdul Razak Bin Ibrahim, 1999).

The Malaysian construction industry is generally separated into two areas:

General construction

It comprises residential construction, non-residential construction and civil engineering construction.

Special trade works

It comprises activities of metal works, electrical works, plumbing, sewerage and sanitary works, refrigeration and air-conditioning works, painting works, carpentry, tiling and flooring works, glass works and etc.

The construction industry makes up an important part of the Malaysian economy due to the amount of industry linked to it such as those for basic metal products and electrical machinery. Hence, the construction industry could be described as a substantial economic driver for Malaysia (Abdul Razak Bin Ibrahim, 1999).

According to Productivity Report 2011/2012, analysis of productivity growth over three year intervals (2007-2009 and 2009-2011) showed that Malaysia achieved higher productivity growth during the later period (2. 8%) as compared to the earlier period (1. 9%). However, over a five year period, the growth was 3. 2% as showed in Table 1. 1.

Figure 1. Gross Domestic Product (GDP), Employment and Productivity Growth, 2007-2011

Table 1. Productivity and GDP Growth, 2007-2011

Productivity growth of the construction sector grew by 3. 1% to RM 24, 635 in 2011 from RM 23, 898 in 2010 (Figure 1. 2). The implementation of Industrialised Building System (IBS) in major projects, residential and non-residential sub-sectors contributed to the productivity of the construction sector (Malaysia Productivity Corporation, 2012).

Figure 1. Productivity Level and Growth of the Construction Sector, 2007-2011

Through the Productivity Report 2011/2012, it reflects that the construction sector is in a rapid growth phase, having expanded by nearly 19% on an annual basis in the first half of 2012. According to the government’s figures, the sector will manage growth of 15. 5% in 2012 as a whole, up from 4. 6% in 2011. In 2013 it is forecast to grow by a further 11. 2%, a projection that is in line with Timetric’s forecasts (Richards, 2012).

Construction industry plays an important role in generating wealth and improving the quality of life for Malaysian through the translation of government’s socio-economic policies into social and economic infrastructure and buildings. The demand for property or housing is increasingly from times to times either due to increase in population, immigration or investment purpose. In order to fulfil the demand, supply of housing or other property has to be increased. Besides, after the announcement regarding “ My First Home Scheme” by the Government in Budget 2011, the desires of the youngsters to own a house are stronger.

As the demand is higher, the construction industry has to embark more projects such as residential development to meet the demand. The construction industry creates a multiplier effect to other industries, including manufacturing, financial services, and professional services. In order to run a project, human resources such as labours and the professionals like Quantity Surveyor, Architect, and Engineer are required.

Although there is increase in number of human resources, construction productivity is one of the issues to be concerned. Construction labour productivity is often influenced by variations in work conditions and management effectiveness. It is substantially important to understand the nature and extent to which individual parameters affect productivity.

## Rationale for the Research

The construction industry plays a significant role in all developed and developing countries. Due to its critical importance to the profitability of most construction projects, productivity is regarded as one of the most frequently discussed topics in the construction industry (Hancher DE, 1998).

Construction productivity is always related to how well, how quickly, and at what cost buildings and infrastructure can be constructed. It will directly affect prices for homes and consumer goods and the robustness of the national economy. Construction productivity will also affect the outcomes of national efforts resources; to develop high-performance “ green” buildings; and to remain competitive in the global market.

Construction productivity has been steadily on the decline over the last decade and construction labour efficiency has often been cited as poor (Stokes, 1980). The level of productivity in construction showed a decreasing rate compared to other sectors (Bernstein, 2007). Many studies have attempted to improve construction labour productivity via different ways for examples, studying the factors affecting construction labour productivity, measuring and evaluating labour productivity; modelling construction labour productivity; and comparing labour productivity based on economic considerations or costs.

Construction workers are not machines, always behaving the same way under the same conditions. Even under apparently identical work conditions, different productivity values might be obtained. The productivity for the same work item is not constant throughout the construction period, and varies at different stages of the production (Lam, 2001). Variability is shown to be a key factor in the behaviour of construction labour productivity (Thomas Hr, 1999). In addition, the effect of the factors on productivity may vary from task to task. Although some factors could have similar influences on the productivity of a number of tasks, their rate of impact on productivity may be different (Sonmez R, 1998).

Labour productivity is said as the factor affecting the construction productivity. In order to further improve construction productivity, continuous efforts have to be put in from times to times to identify the factors affect labour productivity, the effects of poor labour productivity and the ways to improve labour productivity.

Are labourers the main cause in affecting construction productivity? Are the factors caused by labourers themselves or their superiors or surrounding environments or other reasons? Have anyone do really put in their efforts to improve the construction labour productivity? How labour productivity affect the entire construction productivity?

Queries on construction labour productivity are appearing continuously. Throughout this research, readers should have a depth understanding on construction labour productivity.

## Aim and Objectives

In order to find out the answer of queries on construction labour productivity, the aim for this report is to study the issues on construction labour productivity in Malaysia. This can be achieved by study the objectives below:

To investigate the factors affect the construction labour productivity.

To identify the consequences caused by construction labour productivity.

To recommend ways for improvement on construction labour productivity.

## Scope and Limitation

This research is delimited to construction labour productivity and will focus on Malaysian construction industry. The data for this research will made up of general construction workers, site supervisors, contractors, quantity surveyors and developers mainly in Kuala Lumpur area. Respondents are expected to have varying levels of construction experience, training and knowledge so that a data that closely mirrored the current make-up of the construction workforce can be collected. 100 sets of survey forms will be distributed and 50 sets of survey forms expected to be completed.

## Chapter Outline

This report consists of 5 chapters. There are:

Chapter 1: Introduction

In this chapter, roles of construction industry towards economics and construction productivity will be described. Besides, in this chapter, aim and objectives will be discussed as well as overview of current construction labour productivity.

Chapter 2: Literature Review

The literature on the performance approach will be reviewed in this chapter. It will illustrate existing literature and research work related to construction labour productivity. Definition of labour productivity, factors affect labour productivity, its effects and solutions will be described.

Chapter 3: Research Methodology

In this chapter, introduction and definition of research, type of research, data collection methods, research design and data analysis method will be discussed in order to achieve the aim and objectives of this study.

Chapter 4: Findings and Discussions

Results from survey questionnaires will be analyzed and discussed in this chapter. The survey questionnaire is aimed to obtain labour, consultants, contractors and developers or clients’ view of opinion on construction labour productivity in Malaysian construction industry. In addition, personal interview will be conducted to obtain more information on construction labour productivity.

Chapter 5: Conclusions and Recommendations

This chapter will outline the research findings, summary of this study, and recommendations for future study.

## Literature Review

## Research Methodology

## Introduction

Based on Oxford Dictionaries, ‘ research’ is defined as a systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions (Oxford Dictionaries). The Advanced Learner’s Dictionary of Current English defines the meaning of research as “ a careful investigation or inquiry specially through search for new facts in any branch of knowledge” (The Advanced Learner’s Dictionary of Current English, 1952). Redman and Mory had defined research as “ a systematized effort to gain new knowledge” (Mory, 1923).

In this chapter, types of research, data collection methods, research design and data analysis will be discussed. The research method for this study to achieve the aim and objectives will be described in this chapter.

## Types of Research

Generally, the basic types of research are as follow:

Applied/ Action Research vs Fundamental Research

Descriptive Research vs Analytical Research

Quantitative Research vs Qualitative Research

Conceptual Research vs Empirical Research

## Applied/ Action Research vs Fundamental Research

Applied or action research is carried out to find solution to solve problems facing by a society or a business or industrial organisation. However, fundamental research which is also known as basic or pure research is mainly concern on gathering of knowledge for knowledge’s sake without any intention to apply it in practice.

## Descriptive Research vs Analytical Research

Descriptive research is a surveys and fact-finding investigation. It is aims to describe the characteristics of individual, situation or a group or the state of affairs as it exists at present. Researcher has no control over the variables and researcher has to report the actual conditions. On the other hand, analytical research is a critical evaluation based on information that is available and primarily concerned with testing hypothesis; specifying and interpreting relationships by analyze the facts or existing information.

## Quantitative Research vs Qualitative Research

Quantitative research is ‘ objective’ in nature. It is defined as an inquiry into a social or human problem, based on testing a hypothesis or a theory composed of variables, measured with numbers, and analysed with statistical procedures, in order to determine whether the hypothesis or the theory hold true (Creswell, 1994). Quantitative data are hard and reliable; they are measurements of tangible, countable, sensate features of the world (Bouma and Atkinson, 1995). In short, quantitative research is measuring the quantity or amount of particular phenomena by the use of statistical analysis. On the other hand, qualitative research is ‘ subjective’ in nature. It is a non-quantitative type of analysis which is aimed at finding out the quality of a particular phenomenon. It emphasises meanings, experiences, description and etc (Naoum, 1998).

## Conceptual Research vs Empirical Research

Conceptual research is related to some abstract ideas or theories. It is generally used by philosophers and thinkers to develop new concepts or to reinterpret existing ones, whereas, empirical research relies on experience or observation alone. Empirical research is aimed at coming up with conclusions without due regard for system and theory. Empirical research is appropriate when proof is sought that certain variables affect other variables in some way.

## Data Collection

Statistical tools are used to transform data into useful information. However, data must be available before the decision maker can use the statistical tools. Data are available from many sources, both within the company or site. There are several ways of collecting appropriate data which differ considerably in context of money costs, time and other resources at the disposal of the researcher. The sources of data collection can be categorized into primary data and secondary data.

Primary data refers to the raw data that collected through experiments or questionnaire surveys, where secondary data refers to the data obtained from site daily, progress report, progress payment, national productivity statistics. The major advantage of primary data is accuracy of data because it is collected by the researcher but it is costly and time consuming. Secondary data is quicker and cheaper as compared to primary data but the data may not meet the specific needs.

If the researcher conducts an experiment, he can observes some quantitative measurements or data with the help of the truth in hypothesis that has made earlier. However in the case of survey, data can be collected through observation, personal interview, telephone interview, survey questionnaire or case studies.

Observation is the simple way to gather data without interviewing respondents. The information obtained relates to current condition and is not complicated by either past behaviour or future intentions or attitudes of respondents. Undeniable, this method can obtain accurate information but it is time consuming, costly, and sometimes, people reluctant to cooperate.

During personal interview, interviewer follows a rigid procedure and seeks answers to a set of pre-conceived questions through personal interviews. The data obtained through personal interview is usually carried out in a structured way where output depends upon the ability of the interviewer to a large extent.

Telephone interview can obtain data rapidly with relatively low cost compared to others and do not require travelling for face-to-face contact. It can reach wide range of respondents. However, as this method is carried out through telephone, the respondents might not will to share opinions with strangers or they may tell lie. Thus, this is not suitable for long survey as respondents might feel annoying and difficult to prove the validity of survey.

Survey questionnaire can be posted to the respondents together with self-stamped answer sheets or via on-line survey. This method is widely used. This the cheapest way to obtain data and can reach respondents working outstation. The survey question can be set up to 5 pages. However, the cons are that the rate of response is low, answers may be biased and respondents take longer time to respond.

For case studies, cross comparison of cases have to be done in order to have fully understanding on client’s experiences in a program. It fully depicts client’s experience in program input, process and results. It is powerful means to portray program to outsiders. However, it is time consuming either to collect, organize or describe. It represents depth of information rather than breadth.

In short, there are different types of method to collect data with their own pros and cons. Time, cost and accuracy are the main constrains to choose an appropriate data collection method. Few data collection methods can be chosen at the same time to obtain maximum accuracy.

## Research Design

## Data Analysis

## Conclusion