EVALUATION OF CONSTRUCTION EQUIPMENT ACQUISITION METHODS IN MALAYSIAN CONSTRUCTION INDUSTRY

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To, my lovely mother and great father, for your love, support and advices. Without you, I just could not have done this. THANK YOU

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ABSTRACT

Purchasing with cash, financing through a loan, renting and leasing are four most common ways for construction equipment acquiring. Each of these ways has its own advantages and disadvantages, both from financially and non-financially point of view. For having a best result in profit for a construction industry choosing a best alternative for obtaining a machine is one of the most important issues that should be considered. The optimum acquisition strategy come from accurate estimates of revenues and cost and also some non-financial factors that effect on choosing acquisition mode. The purpose of this report is to identify these factors classify them and make a decision making for obtaining a best alternative of acquisition mode through the case study.

ABSTRAK

Pembelian dengan wang tunai, pembiayaan melalui pinjaman, menyewa dan sewa guna merupakan empat cara yang paling umum untuk mendapatkan peralatan pembinaan. Setiap cara ini memiliki kelebihan dan kekurangan, baik dari kewangan dan bukan kewangan. Pemilihan alternatif yang terbaik mendapatkan sebuah mesin Merupakan salah satu isu yang paling penting yang hams dipertimbangkan bagi memiliki hasil terbaik dalam mendapatkan keuntungan di industry pembinaan. Strategi pengambilalihan yang optimum berasal dari anggaran tepat pendapatan dan kos beserta beberapa faktor bukan kewangan yang mempengaruhi terhadap cara pemilihan pengambilalihan. Tujuan dari laporan ini adalah untuk mengenalpasti faktor-faktor mengklasifikasikan mereka dan membuat keputusan keputusan untuk mendapatkan alternatif yang terbaik daripada cara pengambilalihan melalui kajian kes.

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LIST OF ABBREVIATIONS

EAM	-	Equipment Acquisition Method
GDB	-	Gross Domestic Product
AED	-	Associated Equipment Distributors
NPV	-	Net Present Value
NPW	-	Net Present Worth
PVs	-	Present Values
DCF	-	Discounted Cash Flow
MADM	-	Multiple Attribute Decision Making

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study:

The construction industry constitutes an important element of the Malaysian economy. Although it accounts for only 2.5% of the gross domestic product (GDP) in 2007, the industry is critical to national wealth creation as it acts as a catalyst for, and has multiplier effects to the economy and also enables other industries namely manufacturing, professional services, financial services, education and others. Recent years decline in the performance of the Malaysian construction industry has resulted in the urgent need for it to chart its direction towards strengthening its foundations to face current and future challenges. ((CIDB), 2007)

When commercial manufacturing of heavy construction equipment began, the primary way to acquire a new piece of equipment was outright purchase. Players in the construction industry typically were wealthy and filled all of the primary roles i.e. owner, designer, and contractor. Without credit and financing, heavy equipment purchase probably would be limited today, much like it was in the late 1800s. The proliferation of various equipment manufacturers around the world has spawned

great competition, not just for the purchase price of the equipment, but financing, terms of use, and method of payment. (GRANSBERG, POPESCU, & RYAN, 2006)

In the current construction marketplace, equipment manufacturers, used equipment brokers, and rental companies provide a means for a user with proper credentials and competence to acquire just about any heavy construction machine available on a temporary or permanent basis. There are numerous options to consider when deciding on heavy equipment acquisition and financing. Traditionally, the equipment purchase process was complete when the contractor selected a specific make and model of machine from a dealer. The buyer received financing with a down payment, often the trade-in of an older piece of equipment. This acquisition process today includes numerous financing options and scenarios that banks, finance companies, leasing agencies, and manufacturers offer. (GRANSBERG, POPESCU, & RYAN, 2006)

The major methods of acquisition can be classified as purchase, leasing and renting. (Edwards, F.C.Harris, & Caffer, 2003)

But in better classification, there are four primary methods used to finance the purchase of construction equipment: OUTRIGHT CASH PURCHASE, CONVENTIONAL FINANCING PURCHASE, LEASING, and RENTING (GRANSBERG, POPESCU, & RYAN, 2006)

1.2 Statement of the Problem:

One of the big problems in Construction Companies is that the company need construction equipment but doesn’t know whether to buy it rent it or lease it; in the

other word company doesn’t know how to acquire it. (Edwards, F.C.Harris, & Caffer, 2003)

There are different factors that a good manager should mention in acquiring the equipment some are financial and some are non-financial factors. (Edwards, F.C.Harris, & Caffer, 2003) (Day & Benjamin, 1991)

By putting these factors beside each other and evaluate them and choosing the optimum mode of acquisition decision making is possible.

1.3 Purpose of the Study:

Widely using of different equipment in construction companies makes the “choose of right method of acquisition of machine” one of the important issues in this industry.

The purpose of this study is to evaluate and analyze different ways of acquiring by considering different factors that should mention in this purpose.

1.4 Aim and objective of the Study:

Aim of this study is to facilitate the decision making for finding the best alternative between rent, lease and purchasing the construction machines.

The objectives of this study are:

i. To identify the methods of acquiring construction equipment
ii. To identify and classify the financial and non financial factors affecting on construction equipment acquisition methods.
iii. To determine the optimum technique of evaluating the modes of acquisition through the case study.

1.5 Significance of the Study:

Right decision making in construction industry lead to save money and increase the profitability and in construction industry the most important thing is making more profit.

1.6 Scope of the study:

The scope of the study focuses on a construction company in Malaysia and experts such as architects, engineers, contractors, consultants and etc who involve in equipment acquiring. Research will focus on Construction Company in Johor Bahru and Kuala Lumpur.

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