

**A STUDY TO IDENTIFY AN EFFICIENT
TRANSPORTATION SYSTEM AT THE
LOWEST COST**

**A GRADUATION EXERCISE SUBMITTED
AS PARTIAL FULFILMENT OF THE
ADVANCE DIPLOMA IN BUSINESS ADMINISTRATION
(TRANSPORT)**

BY

ROSHIDA BTE AHMAD

**ADVANCE DIPLOMA IN BUSINESS ADMINISTRATION
(TRANSPORT)**

SCHOOL OF BUSINESS AND MANAGEMENT

MARA INSTITUTE OF TECHNOLOGY

SHAH ALAM

MAY 1991

ACKNOWLEDGEMENT

I would like to express my utmost gratitude to my advisor Cik Norminsham Bte Abdul Karim for her guidance during this exercise. Her helpful comments, advise and constructive criticisms and fine suggestion are very much appreciated.

I owe a million thanks to the management of Harpers Trading (M) Sdn. Bhd. for providing me a place to do my six months practical training and particular to my supervisor, Mr. Risha Rajadhurai who has been a great help in not only my graduation exercise but also on the aspects of work of the department of Distribution and Warehouse. His concern and patience is very much appreciated.

I also would like to express my gratitude to Mr. Yap Hon Kong, Harpers Warehouse and Transportation manager, who has help me a lot in giving me with all the information that I needed, either printed or not.

This graduation exercise would not have been possible without the encouragement and inspiration from both my beloved father and mother, my brothers and sisters and also my friends, special thanks goes to Rahimah Idris for all the helps and encouragement.

ABSTRACT

Transportation costs is the major cost item in total physical distribution costs. Transportation costs play about 16 to 24 percent of total distribution costs in most of the countries.

Transportation costs has a direct line with fuel , labour and warehouse system. This make control of the system difficult. In today modern world, they are many systems and approaches that have been suggested in handling and managing transportation system.

It is the aim of this study to identify an efficient transportation system at the lowest cost. Efficiency have been valued in terms of cost-effectiveness. This study also discusses comparison between own transport and contract hire service.

TABLE OF CONTENT

PAGE

Confidentiality	
Acknowledgement	
Abstract	
List Of Figures And Graphs	

CHAPTER 1 : INTRODUCTION

1.1 Introduction	1
1.1 (A) Philosophy Of Harpers Trading (M) Sdn. Bhd.	2
1.1 (B) Objectives Of Harpers Trading (M) Sdn. Bhd.	2
1.2 Problem Statement	3
1.3 Objectives Of Study	5
1.4 Hypothesis	6
1.5 Literature Review	6
1.6 Scope And Limitation	12
1.7 Methodology	13

CHAPTER 2 : TRANSPORTATION COSTS

2.1 Introduction	16
2.2 Transportation Costs	16
2.2.1 Own Fleet Costs	16
2.2.2 Contact Fleet Costs	19
2.3 Factors Affecting Transportation Costs	19
2.3.1 Policy And Objective Of a Company	20
2.3.2 Characteristics Of Products Handled	20
2.3.3 Customer Location And Size Of Order	22
2.3.4 Routeing And Scheduling Of Vehicles	23

2.4 Advantages Of Road Freighting	24
2.5 Own Fleet	25
2.5.1 Advantages Of Using Own Fleet	25
2.5.2 Disadvantages Of Using Own Fleet	26
2.6 Contract Hire Fleet	26
2.6.1 Advantages Of Using Contract Hire Vehicles	27
2.6.2 Disadvantages Of Using Contract Hire Vehicles	28

CHAPTER 3 : OVERVIEW OF THE PRESENT SYSTEM

3.1 Introduction	31
3.2 Present Distribution System	31
3.3 Order Processing	35
3.4 Vehicle Routing	37
3.5 Scheduling Of Vehicles	37
3.6 Loading And Unloading Of Goods	38
3.6.1 Loading Of Goods	38
3.6.2 Unloading Of Goods	39
3.7 Transportation	40

CHAPTER 4 : TRANSPORTATION COSTS ANALYSIS

4.1 Introduction	43
------------------	----

CHAPTER 5 : RECOMMENDATION

5.1 Identification Of Product Demand Areas	57
5.2 Order Size Restraint	58
5.3 Speedy Loading And Unloading Process	59