

Chapter 1



INTRODUCTION

1.1 Background

1.1.1 The Case Company

The case company was a state enterprise oil company, which was owned by the Ministry of Finance, The Petroleum Authority of Thailand, and general investors. The first operation started on 1985 by taking over the 40 years-old state own oil refinery from the Ministry of Defense. The case company is engaged in the petroleum business at every level ranging from importing crude oil and petroleum products, refining, and transporting and distributing oil and petroleum products, accounting for approximately 20% of total domestic demand. The company sells products to direct consumers such as transportation companies, airlines, ocean-liner operators, construction companies, industrial consumers, service stations, major and minor oil trading companies, and other retail consumers.

The company is 1 of the 6 oil companies in the country that has its own oil refinery with the production capacity of 120,000 barrels per day located by the Chao Phraya River, East of Bangkok.

The company's main income is from the sale of oil-based products with supplemental income from transportation of oil products and rental of berthing facilities/ pipes/ tanks, etc.

Features of the Products

Products of the company can be divided into 2 types as follows:

1. Fuel Type Products

1.1 LPG

LPG is a hydrocarbon compound of propane and butane gases filled in a metal container under high pressure in liquid form. LPG is mostly used for household cooking but can also be used in industrial activities, e.g. refrigerator paint finishing, tobacco curing, glass cutting, metal work such as soldering, iron sheet cutting, etc. in addition, the gas can also be used as fuel for gasoline engines.

1.2 Gasoline

Gasoline is for gasoline engines. Types of gasoline can be divided by octane levels indicate combustion ability (anti-knock) of gasoline. Gasoline distribute in Thailand can be divided into the following:

Type	Octane Level
SUPER GREEN	95
POWER GREEN	91
ISO GREEN	87

Table 1-1 Gasoline Types

1.3 Kerosene

Kerosene is used to light lamp in remote rural areas without electricity. It is also used in certain industries that require clean combustion of fuel such as the ceramic tile industry, etc.

1.4 Jet Fuel

The quality of jet fuel by commercial aircraft is more restricted than that used by the other kinds of engines. The fuel must be clean, pure and not solidify at a low temperature. In addition, it should have a specified lever of specific gravity and caloric value, and be stable while being burned.

1.5 Diesel Oil

This fuel is for diesel-engine vehicles, e.g. car, trucks, finishing vessels, ships, and tractors, etc. It is commonly known as 'solar oil'.

1.6 Fuel Oil

This oil product is refined from the fraction of crude oil with a high boiling point. It is mostly used in industrial plants, transportation businesses, and in electricity generation. In general, fuel oil is used in 2 different ways:

A. As fuel for boilers to generate steam for:

- Power generation by which steam is used to drive turbines for ocean liners, power plants, sugar mills, etc.
- venting off heat in various production processes of the cloth, curing, dying, paper treating industries and others.

B. As Direct Fuel in the following industrials

- ore melting
- metal melting
- metal processing inline and sheet forms

- metal processing for hard chroming
- burning in ceramic furnaces and brick making
- glass making
- making cement, white cement and paint
- powering ocean liners

There are 4 grades of fuel oil with different qualities for different types of engine as follows:

TYPE	Viscosity Cst.
A	600
C	1500
D	2500
FOVS	<600

Table 1-2 Fuel Oil Types

From the past to 1999, around 75% of the fuel oil production volume is sold to Electrical Generator Authority Of Thailand (EGAT) in order to use in their power plants and the rests of the products are sold to the Non-EGAT market. These Non-EGAT market are the factories in following groups of industrials; textile, beers, steel, foods, cement and other refineries which have cracking unit. Unfortunately in year 2000, EGAT will switch from fuel oil to natural gas (NG) due to their environmental concern policy and these will almost completely on the ended of year 2001. So the effects from the EGAT causes BCP to develop the Non-EGAT segment as the company target market

from present sell portion 20% of total production volume up to 60% of total production volume. The Non-EGAT market is like and dislikes other consumer markets. There are a lot of suppliers sold the same products but each major supplier such as ESSO, Shell, PTT are all has their fixed or long relationship buyers or long-term contracts on hands.

In order to achieving the goal of the company, industrial marketing division (IMD) is created their marketing strategies to deal with those missions. The strategies are the price penetrating and this would be a suitable approach for the company on this economic crisis era. However, the company still needs to gain some profit from its products sold and IMD must also do the fuel oil marketing to achieving the profit too. Normally, profit could be come from the two ways; firstly, the company must rise up their price of goods sold. Secondly, the company should control and reduce their cost.

From those two methods, the best method for this time is cost control and cost reduction. And before controlling or reducing any cost, the company is better to clarify which cost was occur in what purposes and by whom. More over The methodology to exploring the cost from its purposes are the Activity Based Cost (ABC), this ABC are better than the traditional cost due to its exploring to the root of cost which occurred on the organization activity. Further more the activity base cost could be use as a management tools to control and to measure the performance of the marketing, production, etc.

1.2 Statement of Problems

The industrial sectors of Thailand nowadays are not in a good condition like five years ago due to the country economics problems. The industrial sectors are the main customer of the case company Fuel oil products. Addition to the situation the company can not sell fuel oil product at high price level to gain profit due to the previous reason and also under a company's mission of build up volume and numbers of customers. So that the studies will emphasis on analyze the cost items. Ordinary, The case company uses traditional cost systems as its cost management. But for this study will develop Activity Based Costing as cost management system instead. Addition to the cost structure of fuel oil, the structure also consists of refinery cost and marketing cost. Almost of refinery cost is the cost of crude oil, it's about 75% of refinery cost and the rest is the operating cost. The cost of crude oil is uncontrollable items due to it's rely on OPEC and Foreign exchange rate. For the marketing cost, there are consist of cost of getting order, cost of sale operation, and cost of after sale service.

ABC is a tool for cost management. Activity Based Management seeks to portray a company as a series of activities, which are related to customer desires and cost. Activity based cost is a process for measuring the cost of activities of an organization. Activities within an organization are identified then an average cost is

associated with each activity. The total cost of product is the sum of the costs of activities required to bring forth, sustain, and retire the product. And Turney (1989) notes that:

'ABC is the assumption that activities consume resource and products consume activities. Activities include establishing vendor relations, purchasing, receiving, disbursing, machine setting up, running the machine, reorganizing the product flow, and taking a customer order. The performance of these activities triggers the consumption of resources that are recorded as cost in account.'

1.3 Objective of the Study

The objectives of this study are as follows:

1. To develop Activity Based Management used in Industrial Marketing Division (IMD).
2. To explore and analyze in efficiency and non-valued activities for cost reduction objective.

1.4 Scope and Limitation of the Study

The scope and limitation of the study are as follows:

1. The cost driver analysis and activity analysis is creating from the information and data of the activity of industrial marketing division of the case company.
2. The data use in this study was only permission for education only not a real data
3. The activities in this study are only the activity of industrial marketing division.

1.5 Expected Result

The expectation of this study should be that the appropriate and correctable result of the Activity Based Cost system and their cost drivers also with an explainable of each activity and cost driver use in the value chain. Further more expectations from this study are to clarify what activity management should supported or improve and which activity should also be terminated from the series of IMD activities.

The result of this study would be express that Activity Base Cost system could be the pilot study of the company on using Activity Based Cost and further Develop to Activity Base management.

1.6 Step of the Study

The step of the study could be arranged as:

1. The Literature Surveys
2. Define the requirement area and problems
3. Study the environment and processes of fuel oil marketing
4. Analyze the activity and collect the data of its cost
5. Create the cost drivers for activities
7. Analyze the cost generated from activities
8. Define for the non-efficiency activities
9. Conclusion and Recommendation for the further development
10. Write up dissertation and submit.