

# THE FEASIBILTTY ANALYSIS OF A DECORATIVE GANDLE TRADING BUSINESS 

 byMs. Wantana Kitisopakul

A Final Report of the Six-Credit Course CE 6998-CE 6999 Project

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& \text { Submitted in Partial Fulfillment } \\
& \text { of the Requirements for the Degree of } \\
& \text { Master of Science } \\
& \text { in Computer and Engineering Management } \\
& \text { Assumption University } \\
& \text { July } 2002
\end{aligned}
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# THE FEASIBILITY ANALYSIS OF A DECORATIVE CANDLE TRADING BUSINESS 



July 2002

Project Title $\quad$| The Feasibility Analysis of a Decorative Candle Trading |
| :--- |
| Business |

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Academic Year
July 2002

The Graduate School of Assumption University has approved this final report of the sixcredit course, CE 6998 - CE 6999 PROJECT, submitted in partial fulfillment of the requirements for the degree of Master of Science in Computer and Engineering Management.

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#### Abstract

This project is a feasibility analysis of a decorative candle trading business, because this business is very popular at this moment for the new players to be the business owner with a small amount of capital budget. This project has to be studied in the feasibility to support the investors' decision making for their investment.

This project feasibility consists of three plans included the marketing plan, the operation plan and the financial plan. The marketing plan started from the marketing analysis including studying the business background, analyzing market trend, target market, demand behavior, forecasting the future trend and completion. After studying the analysis, we can find that the demand of Thai decorative candle products increase every year and the target markets are U.S.A., Japan, U. Kingdom, Italy, France, Singapore, Canada, Australia, Switzerland and Taiwan. Our company has a strong marketing strategy with five years for the clear operation plan which can lead the business successfully. From the financial analysis, our sales revenue at the fifth year is 7,640,010 Bahts with 423,725 Bahts in the total investment cost. The net present value is 398,341 Bahts and 40.99 percent of the internal rate of return which are very high positive, including two years eight months for the payback period, to prove that there is the feasibility for establishing this project.

The feasibility analysis is still only a guideline or reference for supporting the investor decision. There are the other factors that the investors have to be involved before making decision.


## ACKNOWLEDGEMENTS

I am indebted to the following people and organizations. Without them, this project would not have been possible.

I wish to express sincere gratitude to my advisor and chairman of the Advisory Committee, Dr. Chamnong Jungthirapanich. His patient assistance, guidance, and constant encouragement has led me from the research inception to the research completion. I would like to express appreciation to my Advisory Committee members: Prof.Dr. Srisakdi Charmonman and Assoc.Prof. Somchai Thayarnyong for their constructive comments and advice throughout the research.

I would like to thank Khun Imjit Phongjit, Manager of All Light Candle Co., Ltd., the analyst at Thai Farmers Research Center Co., Ltd., Khun Alisa Lersvidhaya, Account Executive at Thai Portal Co., Ltd., Khun Jarucha Panasatit, General Manager at Seika Sangyo (Thailand) Co., Ltd. and Khun Porntipa Jiracharoen, Asst. Finance \& Accounting Manager at Seika Sangyo (Thailand) Co., Ltd. for their help in with the information and suggestions to this study.

Special appreciation is due to my family for their fervent and continuous encouragement. Above all, I am forever grateful to my parents whose willingness to invest in my future has enabled me to achieve my educational goal.

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## I. INTRODUCTION

### 1.1 Significance of Project Feasibility Study

During the economic crisis, the problem of unemployment is increasing every day. Employees are forced to quit their jobs because their companies lose and cannot survive any further. Employees feel insecure and unstable because they don't know about their future. This is a main reason that influences the increasing of new investors. Another reason is the problem of unfavorable organization regulations, most employees are bored about their organization's regulations and strict rules. The best way to solve the above problems is to start their own business that enables them to enjoy freedom and not worry about the organization changes further. Although it is so easy that anyone can be an entrepreneur if he only has money, it is very difficult to keep on that business until success. There are many companies established in Thailand, but only a few of them could survive because a lot of investment is wasted through lack of experiences, many competitors, highly competitive products and so on. These are the main reasons that the investors should know before initiation. That is why the feasibility study needs to exist and help the investors eliminate those risks by supporting their decision making.

The importance of this feasibility study is help the investors who want to start their business, but do not know whether they should invest and keep on. When the investors decide to invest in a kind of business, the feasibility study will be a good consultant that identifies the essential methods to support the investors' decision making. Another importance of this study is that it may be the choice of idea selection for the new investors who do not make a decision to invest in which kind of business yet.

A feasibility analysis of decorative candle trading business, a project which is studied for the feasibility in establishing a decorative candle trading company, whether it should be invested following the studies of the business plan which are included in the marketing analysis, marketing plan, production plan, project management plan and financial plan. To establish a decorative candle trading business, feasibility has to be studied for the confidence of the investors and the reduction of the investment risks. This decorative candle trading company is a small trading company which acts as a wholesaler or exporter who buys products from the manufacturers or producers and sells to foreign countries directly or through the dealers. The decorative candle products include scented candles, jelly candles, fancy candles and floating candles.

However, the feasibility study is not enough to be a strong indicator to indicate that this project should be invested ; although, the result of this study is positive, because there are other factors which influence and cannot be controlled from both internal and external environment. So, the feasibility study is a guideline which can support the investors in decision making whether their project should be invested or not.

### 1.2 The Location Problem

In establishing any business, almost all investors who desire to have their own business, always find out the reasons whether they should invest in that kind of business and how to start that business successfully. So, the method to gain confidence of the investors is Project Feasibility Analysis. By studying many plans for the investors' guidance, it mostly starts with the business plan, overview of business, conduct marketing and competition analysis, effective marketing plan, production plan, project management plan, financial plan and evaluation. This study is quite easy to understand and follow for a new investor. For a decorative candle trading business, we have to
study the feasibility of this project before deciding to establish in year 2003 as a guidance.

### 1.3 Project Objectives

To study the feasibility of a Thai decorative candle trading business, is one which collects and analyzes all the information to support the investors decision making. The kind of business which this feasibility study is a Thai decorative candle trading business including :- scented candle, jelly Candle, fancy candle, and floating Candle. The size and type of business which this study is mainly a small business.

This project started from the study of a Thai decorative candle business structure by collecting the concerned information including using secondary data of the government publication, the commercial data, the competitor's web sites, and interviewing the suppliers and surveying the markets in Bangkok. After that, we have to analyze and determine the plans which are necessary for establishing a decorative candle trading business such as marketing, production, project management and financial plan. Then the collected information is applied to be simplified to conclude in a result to make the investors understand clearly and support their startup decision making effectively. This study targets a beginner who does not have any experiences in his own business before as a prime reader.

## II. MARKETING PLAN

Thai Candle is divided into two groups as Basic or General Candle and Decorative Candle. Entrepreneurs are both manufacturers and traders. The study of this project is focused on the decorative candle trading business only and the purpose of selling is mainly for export rather than domestic sales because the foreign demand is more than domestic demand. By observing from the percentage of export it is 70 percent when compare to the percentage of domestic sale that is only 30 percent (Department of Industrial Promotion). The characteristic of Decorative Candle export is 50 percent exported through the agents and another 50 percent are directing exported by the manufacturers (Department of Industrial Promotion). Therefore, we need to study trading business for export market. In studying the current Thai Decorative Candle Products market, we have to collect a lot of information which can support us for making the decision in setting up business. So we have to realize the business background for understanding well about Thai Decorative Candle Products. Then we continue to analyze the current demand by analyzing from the current export values annually in order to analyze the business trend and forecast the future finally. After that, we will analyze the target market by classifying it as Four Major Partner Countries and the other seven countries from Top-Twenty Countries which are the main targets of Thailand Exports according to Department of Business Economy. Because of lack of the current demand of Thai Decorative Candle, we have to use the current demand data of Whole Thai Candle Products to calculate the value of Thai Decorative Candle Product in analyzing current demand and target market, because the export values of Thai Decorative Candle Products are 40 percent of the export values of Whole Thai Candle Products according to the report of Department of Industrial Promotion. After
that we continue to analyze the competition of this business by using the Five Forces analysis and SWOT analysis. The results of these analyses will support us and other investors whether we should invest in this business by increasing the level of confidence. Besides, we can use this information as guideline for determining the target market according to the analysis.

Finally, the evaluation of each plan and conclusion with recommendation are the concluded information to support the investors decision making.

All of these plans are very important for the feasibility study because these will affect directly to the business successfully.

### 2.1 Thai Decorative Candle Business Background

Nature of demand, it is used for giving the light or doing several ceremonies. But at the moment, the demands are for the daily use and decoration at the same time, and including giving candles as a present on several occasions. So, Candles are divided into two main groups as follows:
(1) Basic or General Candle
(2) Decorative Candle is divided into three categories as follows:
(a) Scented Candles

Candles with fragrance of perfume when candles are lighted. Selecting the fragrance of candles depends on the utilization such as using the fragrance of Citronella to drive the insects, the fragrance of lavender or flower to refresh anywhere and so on.
(b) Jelly Candles

Candles with a transparent appearance. The most popular jelly candles are poured in beautiful glasses.
(c) Fancy Candles

Candles with various shapes or styles such as cylinder, angle, including fruits, flowers, animals and so on.
(d) Floating Candles

Candles are made for floating specifically. Most floating candles are made as various kinds of flowers and used for decorating by putting in any beautiful ware such as a glass bowl or earthenware.

Accordingly the various styles of products provide the chance for a new player to invest in this market. $80 \%$ of the domestic market demand in Thailand are crowded in Bangkok and around its perimeter, and $20 \%$ is distributed to main cities of other provinces where there are the famous tourists attractions and people have more purchasing power such as Chiang Mai, Puket and so on. Decorative Candle seems to be luxury products for Thai people. These candles are not much in favor of Thai people when compared to Americans and Europeans. Generally, both Thai and foreign consumers purchase the decorative candles for daily use, home decoration, special gift and ceremony.

The exported value of Decorative candle market is $40 \%$ of total Candles market value. $70 \%$ of Decorative Candles is produced for the export sale and $30 \%$ for the domestic sale. For the domestic market, $80 \%$ are selling through agents and $20 \%$ are direct sale at the supermarket or weekend market and so on. For the export market, $50 \%$ are exported through agents and $50 \%$ are direct export by the entrepreneurs.

The production of Decorative Candles according to the report of the former Ministry of Commerce; $80 \%$ of materials are imported from foreign countries and $20 \%$ are from Thailand. The capital structure of raw materials used for production are divided into two groups as follows:

Figure 2.1. Total Candle Market.

## Imported Raw Material:

Paraffin Wax \begin{tabular}{l}
$65 \%$

 

the main composition for the production. <br>
Micro Wax <br>
$5 \%$

 

the qualification is to make the body of candles <br>
smooth and clean.
\end{tabular}

PE Wax
Perfume

Domestic Raw Material:
Cotton String $\quad 15 \%$
Decorative Material 5\% including the ware and model
China is a main source of imported raw material such as Paraffin Wax, Micro Wax and PE Wax. The perfume is imported from America and Europe.

Now, the production of Decorative Candles are mixed in both Science and Art. So, the designed concept of producer is very important as a unique selling point. (Department of Industrial Promotion, www.dip.go.th)

### 2.2. Market Trend Analysis

The study of the current exports of Thai Decorative Candle Products will present the probability of investment as the trend. If the trend of export values are increasing every year, it will show that there are the probability to invest in this business. If the trend is decreasing, we cannot conclude that this business should be invested before we find out the cause of decreasing trend.

### 2.2.1 Export Values of Thai Decorative Candle Products during 1997-2001

As the export values of Thai Decorative Candle Products are 40 percent of the export values of Whole Thai Candle Products as in Figure 2.1, so, in analyzing the trend of export values of Thai Decorative Candle Products will be based on 40 percent of the export values of Whole Thai Candle Products data.
Table 2.1. Exports of Thai Decorative Candle Products during 1997-2001

| Description | 1997 |  | 1998 |  | 1999 |  | 2000 |  | 2001 |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Value (Baht) | \% Change | Value (Baht) | \% Change | Value (Baht) | \% Change | Value (Baht) | \% Change | Value (Baht) | \% Change |
| Whole Thai Candle Market | $186,494,873$ | 318.29 | $386,410,565$ | 107.20 | $651,850,428$ | 68.69 | $812,026,021$ | 24.57 | $656,322,428$ | -19.17 |
| Decorative Candle Market | $74,597,949$ | 318.29 | $154,564,226$ | 107.20 | $260,740,171$ | 68.69 | $324,810,408$ | 24.57 | $262,528,971$ | -19.17 |


Figure 2.2. Exports of Thai Decorative Candle Products during 1997-2001

From Table 2.1 and Figure 2.2 analysis, we can find that the export values of Thai Candle products has an increasing trend while the percentage changes has the decreasing trend continuously during the year 1997 to 2000. In 1997, the export values are $74,597,949$ Bahts and 318.29 percent changing from 1996. In 1998, the export values are $154,564,226$ Bahts and 107.20 percent changing from 1997. In 1999, the export values are $260,740,171$ Bahts and 68.69 percent changing from 1998. In 2000, the export values are $324,810,408$ Bahts and 24.57 percent changing from 1999. In 2001, the export values are $262,528,971$ Bahts and -19.17 percent changing from 2000.

From the above, during 1997 to 2000, we can find that the export values trend continues to increase at the same time the percent changing trend continues to decrease. The export values trend represents the demand growth. That means there still is the demand in the world market and the percentage changing trend represents the percentage of demand growth. As the percentage changing trend is decreasing, it's means the demand growth rate of Thai Candle products are slowly increasing when compared to the first two years 1997 and 1998. The product life cycle, during 1997 to 2000, Thai Candle Products seem to be in the growth stage. This shows that there is probability for a new investor to enter the market.

Unfortunately, we also find that the export values are decreasing in 2001 when compared to 2000 about $62,281,437$ Bahts. Now, we cannot conclude that there is probability to establish this business until we have analyzed an unexpected event. So, we have to continue to analyze the cause and effect of this decreasing values.

### 2.2.2 The Cause and Effect of the Export Values in 2001

This analysis is to study the cause and effect that influenced the decreasing trend of export values. We do the analysis by considering both the export quantities and

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Table 2.2. Monthly Exports of Thai Decorative Candle Products during 2000-2001

| Month | $\mathbf{2 0 0 0}$ |  | $\mathbf{2 0 0 1}$ |  | \% Change |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Quantity | Value | Quantity | Value | Quantity | Value |
| January | 307,269 | $26,987,496$ | 138,927 | $14,116,792$ | -54.79 | -47.69 |
| February | 320,745 | $28,692,082$ | 218,616 | $21,585,626$ | -31.84 | -24.77 |
| March | 416,640 | $35,134,119$ | 229,428 | $23,191,778$ | -44.93 | -33.99 |
| April | 220,039 | $18,763,972$ | 180,885 | $18,367,604$ | -17.79 | -2.11 |
| May | 360,182 | $28,616,131$ | 292,324 | $27,047,745$ | -18.84 | -5.48 |
| June | 351,740 | $26,372,968$ | 223,036 | $22,323,380$ | -36.59 | -15.35 |
| July | 422,142 | $30,594,493$ | 285,516 | $32,757,907$ | -32.36 | 7.07 |
| August | 406,944 | $39,460,376$ | 196,002 | $25,444,168$ | -51.83 | -35.52 |
| September | 354,785 | $30,561,677$ | 157,140 | $17,121,020$ | -55.71 | -43.98 |
| October | 183,634 | $18,196,114$ | 134,940 | $14,305,515$ | -26.52 | -21.38 |
| November | 181,369 | $18,298,044$ | 152,792 | $22,338,848$ | -15.76 | 22.08 |
| December | 235,003 | $23,132,937$ | 220,572 | $23,928,588$ | -6.14 | 3.44 |


export values data during January to December in 2001 and compare to 2000. Furthermore, this information can support us to forecast the future trend.

From Tables 2.2, Figure 2.3 and 2.4, we can find that the export values in 2001 during January to October are almost decreasing, except in July. The export values are increasing again in November to December when compared to 2000. To consider monthly data in 2001, the export values are decreasing by $12,870,704$ Bahts and -47.69 percent change in January, 7,106,456 Bahts and -24.77 percent change in February, $11,942,341$ Bahts and -33.99 percent change in March, 396,368 Bahts and -2.11 percent change in April, 1,568,386 Bahts and -5.48 percent change in May, 4,049,588 Bahts and -15.35 percent change in June, $21,634,414$ Bahts and 7.07 percent change in July, $14,016,208$ Bahts and -35.52 percent change in August, 13,440,657 Bahts and 43.98 percent change in September, $3,890,599$ Bahts and -21.38 percent change in October, $4,040,804$ Bahts and 22.08 percent change in November, and 795,651 Bahts and 3.44 percent change in December.

In the analysis of export quantities data, we also find that the export quantities are decreasing through the year 2001 when compared to 2000 as shown in the following data: in January, decreasing $168,342 \mathrm{Kg}$. and -54.79 percent change, $102,129 \mathrm{Kg}$. and 31.84 percent change in February, $187,212 \mathrm{Kg}$. and -44.93 percent change in March, $39,154 \mathrm{Kg}$. and -17.79 percent change in April, $67,858 \mathrm{Kg}$. and -18.84 percent change in May, $128,704 \mathrm{Kg}$. and -36.59 percent change in June, $136,626 \mathrm{Kg}$. and -32.36 percent change in July, $210,942 \mathrm{Kg}$. and -51.83 percent change in August, $197,645 \mathrm{Kg}$. and -55.71 percent change in September, $48,694 \mathrm{Kg}$. and -26.52 percent change in October, $28,577 \mathrm{Kg}$. and -15.76 percent change in November, and $14,431 \mathrm{Kg}$. and 6.14 percent in December.

From the analysis of both export quantities and values as above, both data continue decreasing and is very serious on September due to the highest negative percent changing. After that, both data increase again. So, we can identify that the decreasing trend in the year 2001 is an unusual event exactly when compared to the last four years.

As the report from Department of Business Economy shows, the situation of World Economy has slowed down, effected by the economic situation of International Trade in 2001 during January to September, especially, in the export sector. During January to November in 2001, Exports of Thai products are in crisis because the export values are decreasing by about $60,222.7$ Million dollar(\$) with -5.8 percent change when compared to 2000. In addition to the four major partner countries of Thai export products are decreasing with -5.9 percent change when compared to 2000 as follows: the percent change of U.S.A. is -10.8 percent, ASEAN is -5.5 percent, EU is -3.0 percent and Japan is -2.3 percent. (Department of Business Economy www.moc.go.th) Regarding the slow down of economic situation, World Trade and the target markets of Thailand exports such as America, Europe and Japan affect strongly to Thailand economic situation in both Import and Export sectors at the end of 2000 and continue to 2001. The importers hold on import products from Thailand because they have the inventory on hand which cannot be sold out in 2000. So, it's unnecessary to import from exporters at this time, in addition to the strong competition of the world market in various products, especially, the pricing competition with ASEAN. This caused the price reduction of Thai export products so, the export values also decreased. Furthermore, the poor situation of sabotage in America affects directly to Thailand's import and export sector. These are the causes and effects which affect directly to Thailand in both sector. After we have completed the unexpected trend analysis, we find

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that Thai Candle Business is growing very fast during 1997 to 2000 and slowing down in 2001 during January to September due to the economic crisis.

In analyzing the probability to establish Thai Decorative Candle Trading Business, we can find that the decreasing trend in 2001 showed that this business should not be invested in at this moment. But normally, the economic situation problems affect almost all business areas. However, this is caused by the unexpected situation in the short run. there is probability for the investor, if the investor has a good strategy to survive under this situation.

After this analysis is completed, we continue to analyze the target markets. Under this situation, the target markets analysis is very important for the investor to find out the real target markets and their purchasing power situation.

### 2.3 Target Markets Analysis in Four Major Partner Countries

The exports of Thai Candle Products are classified by Four Major Partner Countries according to The Customs Department. The analysis of the target markets of Thai Decorative Candle Products will be focused on Four Major Partners Countries including ASEAN, EU, Japan and U.S.A. according to The Customs Department. Besides, the analysis will be focus on other seven countries whose export values are in the Top-Twenty level. They are Canada, Australia, Switzerland, Taiwan, Hong Kong, U. Arab Emirates and South Africa.

Table 2.3 and Figure 2.5 shows, the export values analysis of Four Major Partner Countries during 1997 to 2001. We find that the total values of U.S.A. are the first priority country about $859,402,026$ Bahts with 79.78 percent of market share. The second country is EU about $100,897,527$ Bahts with 9.37 percent of market share. The third is Japan about $12,018,948$ Bahts with 1.12 percent of market share and the fourth
Table 2.3. Exports of Thai Decorative Candle Products Classified by Commodities during 1997-2001

| Year |  | 1997 |  | 1998 |  | 1999 |  | 2000 |  | 20001 |  | $\begin{gathered} \hline \text { Total Value } \\ \text { (Baht) } \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { Total \% Share } \\ (\%) \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Country | Value (Baht) | \%Share | Value (Baht) | \%Share | Value (Baht) | \%Share | Value (Baht) | \%Share | Value (Baht) | \%Share |  |  |
|  | World | 74,597,949 | 100.00 | 154,564,226 | 100.00 | 260,740,171 | 100.00 | 324,810,408 | 100.00 | 262,528,971 | 100.00 | 1,077,241,726 | 100.00 |
| 1 | Asean | 1,164,054 | 1.56 | 1,231,851 | 0.80 | 2,101,655 | 0.81 | 1,828,434 | 0.56 | 1,613,246 | 0.61 | 7,939,240 | 0.74 |
| 2 | EU | 3,826,848 | 5.13 | 9,414,587 | 6.09 | 28,600,269 | 10.97 | 27,027,209 | 8.32 | 32,028,614 | 12.20 | 100,897,527 | 9.37 |
| 3 | Japan | 1,370,839 | 1.84 | 1,616,908 | 1.05 | 1,606,616 | 0.62 | 3,147,666 | 0.97 | 4,276,919 | 1.63 | 12,018,948 | 1.12 |
| 4 | U.S.A. | 65,156,813 | 87.34 | 129,290,765 | 83.65 | 201,007,503 | 77.09 | 258,204,950 | 79.49 | 205,741,996 | 78.37 | 859,402,026 | 79.78 |
| 5 | Others | 3,079,396 | 4.13 | 13,010,115 | 8.42 | 27,424,128 | 10.52 | 34,602,149 | 10.65 | 18,868,197 | 7.19 | 96,983,985 | 9.00 |


is ASEAN about 7,939,240 Bahts with 0.74 percent of market share. For countries other than four major partner group is 96,983985 Bahts with 9 percent of market share.

After this analysis, we can arrange the priority partner as U.S.A, EU, Japan and ASEAN. Then, we will continue to analyze each partner by focusing on the export values and selling prices of each country. From the above analysis, we can identify that U.S.A and Japan are the target markets so, there are two partners, EU and ASEAN that we need to analyze by each country because we don't know how many countries in these groups. After that we will analyze the other seven countries, that have export values in the Top-Twenty level.

### 2.3.1 Target Markets in EU

Regarding to EU as the second priority of Four Major Partner Countries which imports the candles from Thailand, we have to go on analyzing the countries of EU in order to know which countries are our targets. There are Germany, United Kingdom, Netherlands, France, Belgium, Italy, Spain, Sweden, Denmark, Finland, Austria, Portugal, Greece, Luxembourg and Ireland.

We divide the groups of country according to the export values of each year. From Table 2.4 and Figure 2.6, we can find that there are two groups of countries. The first group is the countries that have the export values more than $1,500,000$ Bahts, which includes U. Kingdom, Italy, Germany, France, Netherlands, Spain and Ireland. The second group is the countries that have the export values less than $1,500,000$ Bahts, which includes Belgium, Spain, Sweden, Denmark, Finland, Austria, Portugal, Greece and Luxembourg. So, the target group of our business is the first group. Then we continue to analyze the estimated selling price per unit of each country, the three groups of countries can be divided following the estimated selling price per unit according to Table 2.5 and Figure 2.7. The first group is the countries that have estimated selling
Table 2.4. Export Values of Thai Candle Products Classified by EU during 1997-2001.

| COUNTRY YEAR | 1997 | 1998 | 1999 | 2000 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GERMANY | 641,348 | 1,695,106 | - 4,181,654 | 3,890,640 | 2,427,309 |
| U. KINGDOM | 1,346,302 | * 2,430,938 | 13,371,126 | 10,074,671 | 12,832,730 |
| NETHERLANDS | 0 | 163,854 | 2,010,060 | 164,470 | 520,332 |
| FRANCE | 506,494 | 517,648 | 3,572,726 | 3,955,563 | 3,488,366 |
| BELGIUM | 24,459 | 8,818 | 84,904 | - 23,620 | 40,658 |
| ITALY | 69,515 | 424,906 | 2,432,412 | $\bigcirc 5,446,265$ | 4,813,080 |
| SPAIN | 11,324 | -792,367 | 1,525,214 | 1,861,971 | 1,075,222 |
| SWEDEN | 266,612 | 1,510 | 83,502 | - 819,129 | 551,951 |
| DENMARK | De) 0 | 1,278,473 | 279,647 | 180,134 | 1,248,336 |
| FINLAND | 0 | 979,204 | 792 | 0 | 552 |
| AUSTRIA | 90 | 28,103 | 159,048 | 1 123,124 | 635,422 |
| PORTUGAL | 960,794 | 1,093,660 | 898,868 | 107,539 | 58,016 |
| GREECE | 0 | 0 | 37 | 154,268 | 294,555 |
| LUXEMBOURG | 0 | 0 | 0 | 0 | 2,780 |
| IRELAND | 0 | - $/ 1-0$ | - 280 | 225,816 | 4,039,306 |

Exports of Thai Decorative Candle Products Classified by EU

Figure 2.6. Export Values of Thai Candle Products Classified by EU During 1997-2001
Table 2.5. Estimated Selling Price per Unit of Thai Candle Products Classified by EU during 1997-2001.

| COUNTRY YEAR | 1997 | 1998 | 1999 | 2000 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GERMANY | 214.58 | $\bigcirc 126.14$ | / P 142.39 | 236.76 | 200.07 |
| U. KINGDOM | 165.72 | * 133.19 | 132.48 | 167.65 | 200.58 |
| NETHERLANDS | 0 | 425.82 | 93.85 | 167.7 | 144.62 |
| FRANCE | 120.14 | 114.56 | 144.49 | 163.29 | 182.07 |
| BELGIUM | 63.5 | 76.82 | 231.22 | 96.45 | 141.37 |
| ITALY | 124.76 | 177.37 | 156.74 | 117.69 | 155.22 |
| SPAIN | 398.72 | 120.47 | 114.09 | 114.81 | 126.02 |
| SWEDEN | 184.63 | 75.5 | 134.94 | 131.79 | 139.27 |
| DENMARK | 0) 0 | 116.03 | 150.32 | 745.04 | 111.24 |
| FINLAND | 2) 0 | 116.22 | 99 | 0 | 40.59 |
| AUSTRIA | 92 | 240.61 | 102.64 | Y 117.24 | 112.16 |
| PORTUGAL | 146.06 | 184.93 | 116.44 | 264.23 | 184.76 |
| GREECE | 0 | 0 | 92 | 179.45 | 327.57 |
| LUXEMBOURG | 0 | 0 | 0 | 0 | 0 |
| IRELAND | 0 | - $/ 1-0$ | H-233.33 | 0 | 234.13 |

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Figure 2.7. Estimated Selling Price per Unit of Thai Candle Products Classified by EU during 1997-2001
price per unit less than 150 Bahts, including Finland and Luxembourg. The second group is the countries that have estimated selling price per unit over 150 Bahts but not over 200 Bahts, including France, Italy and Sweden. The third group is the countries that have estimated selling price per unit more than 200 Bahts, including U. Kingdom, Germany, Netherlands, Belgium, Spain, Denmark, Austria, Portugal, Greece and Ireland. From the estimated selling price analysis, our target is the second group. From both analysis, we can find that the export values of Germany, Netherlands, Spain and Ireland are more than $1,500,000$ Bahts but the estimated selling price per unit through five years are highly elastic so, it's very difficult for us to control and plan our business strategy. So, we can conclude that our targets are three countries, U. Kingdom, Italy and France. The export values of U. Kingdom are very high and still increasing in this economic situation, although it decreased a little in 2000. In Italy and France, the export values have the increasing trends during 1997 to 2000 and become decreasing in 2001 due to the economic situation problem. However, there still has a chance to invest in Italy and France because the export values in 2000 are very high when compared to others. In addition the estimated selling price per unit of three countries are not too different when compared through the five years. That's easy for our business planning. However, we should keep considering the others for the future plan.

### 2.3.2 Target Markets in ASEAN

After we analyze EU partner, we continue to analyze ASEAN partner which is the fourth priority which includes Singapore, Malaysia, Indonesia, Philippines, Vietnam, Myanmar, Brunei, Laos and Kampuchea.

From Table 2.6 and Figure 2.8, we can find that there are two groups of countries which are divided by the export values. The first group is the countries that have the export values over 500,000 Bahts, including Singapore and Laos. The second group is
Table 2.6. Export Values of Thai Decorative Candle Products Classified by ASEAN during 1997-2001.

| COUNTRY YEAR | 1997 | $1998$ | $1999$ | 2000 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SINGAPORE | 54,817 | - 437,874 | 1,527,253 | 1,237,604 | 923,723 |
| MALYSIA | 107,632 | 123,192 | 99,384 | 336,890 | 301,940 |
| INDONESIA | - | - 102,439 | - | 634 | 1,301 |
| PHILIPPINES | 4,680 | - - | - | 85,308 | 184,556 |
| VIETNAM | 5 - | 2,226 | - | $\square$ - | 5,284 |
| MYANMAR | 87,638 | 157,960 | 11,768 | 10,324 | 28,631 |
| BRUNEI | (0) 6,844 | 6,248 | - | $\bigcirc 656$ | 10,408 |
| LAOS | 899,322 | 401,912 | 463,250 | 146,501 | 105,806 |
| KUMPUCHEA | 3,120 | - $\quad$ - | - | - 10,517 | 51,596 |

Exports of Thai Decorative Candle Products Classified by ASEAN

Figure 2.8. Export Values of Thai Decorative Candle Products Classified by ASEAN during 1997-2001
Table 2.7. Estimated Selling Price per Unit of Thai Decorative Candle Products Classified by ASEAN during 1997-2001.

| YEAR | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| COUNTRY |  |  |  |  |  |
| MALYSIA | 127.01 | 118.47 | 143.99 | 141.76 | 149.89 |
| INDONESIA | 25.71 | 21.3 | 231.13 | 82 | 104.41 |
| PHILIPPINES | - | 16.01 | 0 | 198.13 | 87.89 |
| VIETNAM | 585.05 | 0 | 0 | 93.91 | 73.12 |
| MYANMAR | - | 222.56 | 0 | 0 | 13.28 |
| BRUNEI | 43.71 | 39.77 | 43.65 | 109.36 | 146.08 |
| LAOS | 134.73 | 47.33 | 0 | 45.56 | 62.55 |
| KUMPUCHEA | 46.06 | 36.27 | 58.9 | 51.24 | 43.45 |



Figure 2.9. Estimated Selling Price per Unit of Thai Decorative Candle Products Classified by ASEAN during 1997-2001.
the countries that have the export value less than 500,000 Bahts, including Indonesia, Philippines, Malaysia, Vietnam, Myanmar, Brunei and Kampuchea. So, our target is the first group. From the analysis of estimated selling price per unit in Table 2.7 and Figure 2.9 , there are three groups of countries. The first group is the estimated selling per unit is less than 100 Bahts, that includes Laos. The second group is the estimated selling price per unit is over 100 Bahts but not over than 150 Bahts, including Singapore, Myanmar and Brunei. The third group is the estimated selling price per unit is over 150 Bahts, including Malaysia, Indonesia, Philippines, Vietnam and Kampuchea. So, our target is the second group. From the above analysis, Singapore is main target because the export values during 1997 to 2000 are highest, although the export values in 2000 will decrease a little. Besides, the estimated selling price per unit during 1999 to 2001 seem to be standard prices when compared to others. So, we can conclude that ASEAN target is Singapore. However, the others will be considered for the next plan.

### 2.3.3 Target Markets in Other Regions

We have to analyze these countries because they have the export values in the Top-Twenty level, although they are out of Four Major Partners. There are seven countries including Canada, Australia, Switzerland, Taiwan, Hong Kong, U. Arab Emirates and South Africa.

From Table 2.8 and Figure 2.10, we find that there are two groups of countries that can be divided by the amount of export values. The first group is the countries that have the export values over 1,000,000 Bahts, including Canada, Australia, Switzerland, Taiwan and Hong Kong. The second group is the countries that have the export values less than $1,000,000$ Bahts, including U. Arab Emirates and South Africa. Our target is the first group. From the analysis in Table 2.9 and Figure 2.11, there are two groups of countries which are divided by estimated selling price per unit. The first group is the
Table 2.8. Export Values of Thai Decorative Candle Products Classified by Other Regions during 1997-2001.

| COUNTRY | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| CANADA |  |  |  |  |  |
| AUSTRALIA | $1,794,266$ | $7,300,953$ | $14,555,391$ | $20,658,422$ | $3,907,550$ |
| SWITZERLAND | 315,480 | $1,153,858$ | $2,940,100$ | $2,841,868$ | $3,772,503$ |
| TAIWAN | 20,958 | 561,496 | $1,966,220$ | $2,572,484$ | $2,147,580$ |
| HONG KONG | 508,771 | 17,370 | 101,091 | $2,144,058$ | $3,132,038$ |
| U. ARAB EMIRATES | 308,442 | 419,952 | $2,079,608$ | 887,760 | $2,209,904$ |
| SOUTH AFRICA | 227 | 248 | 63,875 | 804,330 | 635,842 |

Exports of Thai Decorative Candle Products Classified by Other Regions

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Figure 2.10. Export Values of Thai Decorative Candle Products Classified by Other Regions during 1997-2001.
Table 2.9. Estimated Selling Price per Unit of Thai Decorative Candle Products Classified by Other Regions during 1997-2001.

| COUNTRY | YEAR | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| CANADA | 120.04 | 142.11 | 105.42 | 117.31 | 181.63 |
| AUSTRALIA | 66.95 | 138.33 | 120.22 | 126.67 | 134.21 |
| SWITZERLAND | 59.81 | 147.95 | 110.98 | 121.36 | 146.68 |
| TAIWAN | 123.91 | 106.7 | 169.27 | 132.37 | 169.08 |
| HONG KONG | 35.91 | 56.5 | 102.83 | 214.25 | 160.94 |
| U. ARAB EMIRATES | 94.5 | 9.84 | 119.35 | 131.04 | 162.49 |
| SOUTH AFRICA | 0 | 109.48 | 168.62 | 160.43 | 184.70 |



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estimated selling price per unit is less than 200 Bahts, including Canada, Australia, Switzerland, Taiwan, U. Arab Emirates and South Africa. The second group is the estimated selling price per unit is over 200 Bahts, there is only Hong Kong. So, our target is the first group. After we analyze in detail, the export values of Canada and Switzerland during 1997 to 2000 have increasing trends and decreasing in 2001, caused by the economic situation. However, the export values of Canada and Switzerland are still high at $3,907,550$ Bahts and $2,147,580$ Bahts. Australia, the export values trend during 1997 to 2000 seem to increase, only in 2000 and decreased by a little amount by 1999. However, the export values in 2001 are increasing from 2000. Taiwan, the export values in 1998 decreased but in 1999 to 2000 is increased. Focusing on the percentage change of Australia and Taiwan are 32.75 percent and 46.08 percent, this means that they still have the purchasing power and the opportunity in market growth. In addition the estimated selling per unit of four countries during 1997 to 2001 are not much different. Hong Kong, regarding the export value and estimated selling price per unit is unsteady so, we do not consider it because it's difficult for our business plan, although the export values and the percent changing are increasing in 2001. Therefore, our target should be Canada, Australia, Switzerland and Taiwan. However, we will consider the other countries for future target market.

From the information we get from the analysis of market trend and target market, the candle markets are booming and continue growing if no economic crisis. Normally, almost all countries are effected from the economic recession in 2001. However, they still have some purchasing powers in some countries according to the analysis. The chance of the investor to penetrate this market depends on the investor's strategies. The target market analysis from Four Major Partner Countries, the main target is U.S.A. due to highest market share in the global decorative candle market, although, they are most
suffered strongest from the economic recession. Japan is also our main target because the export values continue increasing even in 2001, that means the candle market in Japan has not suffered from the economic crisis. Regarding the EU partner, the main targets are U. Kingdom, Italy and France. The export values analysis shows that the economic problem has not influenced the decorative candle market in U. Kingdom because the export values are increasing in 2001. Italy and France are not much effected from the economic recession because their export values decreased very little. ASEAN partner, Singapore is our target because both export values and selling price analysis seem to steady except in 2001 due to the economic problem. The last target market we consider is in the other regions, Canada, Australia, Switzerland and Taiwan are our targets because these countries are in the Top-Twenty level of the biggest importer list according to the Customs Department's statistic. Besides, the export values of these countries are still high in this situation when compared to others. However, the other countries should be considered for future plans.

From all the information, we can apply it to estimate the feasibility of establishing the decorative candle business, although, this information shows that the candle market in each country is affected by the economic problem. To make sure in entering this business, we have to find out other information to support the feasibility study of this business by studying others.

### 2.4 Demand Behavior Analysis

In this analysis, we will analyze the demand behavior of our target markets by observing from the time period that they import Thai decorative candle products from Thailand. This study can support the investors in the market planning.

The economic slow down and the sabotage event in America on September 2001, caused the unusual export trend. So, we are afraid that it may cause the incorrect
demand behavior analysis. We decide to use the export quantity data of Thai decorative candle products during January to December, 2000 for analysis.

Initially, we start to study the demand behavior of the global markets and our target markets by dividing the time period into four quarters and determining which quarter and which months in each quarter have highest export quantities of Thai decorative candle products.

### 2.4.1 Global Market Demand Behavior

From Table 2.10 and Figure 2.12, we can find that the demand of export quantities of Thai decorative candle products in the first quarter are $1,044,654 \mathrm{Kg}$. and the highest exports are in March. The second quarter are $931,961 \mathrm{Kg}$., the highest exports are in May. The third quarter are $1,183,871 \mathrm{Kg}$., the highest exports are in July. The fourth quarter are $600,006 \mathrm{Kg}$., the highest exports are in December. This information can be arranged in order of the highest percent of the total export quantities as: the third quarter is 31 percent, the second quarter is 28 percent, the second quarter is 25 percent and the fourth quarter 10 percent.

### 2.4.2 Target Market Demand Behavior

From Table 2.11 and Figure 2.13, we can find that there are $1,021,166 \mathrm{Kg}$. in the first quarter and the highest exports are in March, $908,061 \mathrm{Kg}$. in the second quarter and the highest exports are in May, $1,151,258 \mathrm{Kg}$. in the third quarter and the highest exports are in July, and $576,133 \mathrm{Kg}$. in the fourth quarter and the highest exports are in December. This information can be arranged in order of the highest percent of the total export quantities as follows: 31 percent in the third quarter, 28 percent in the second quarter, 25 percent in the second quarter and 10 percent in the fourth quarter.

From this analysis, we can see that the demand behavior of our target markets are similar to the global markets. This shows that the export demand trend of our target
Table 2.10. Export Quantities of Thai Decorative Candle Products Classified by Global Markets during January - December 2000.

| January | February | March | April | May | June | July | August | September | October | November | December |
| :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 307,269 | 320,745 | 416,640 | 220,039 | 360,182 | 351,740 | 422,142 | 406,944 | 354,785 | 183,634 | 181,369 | 235,003 |


Figure 2.12. Export Quantities of Thai Decorative Candle Products Classified by Global Markets during January - December 2000.
Table 2.11. Export Quantities of Thai Decorative Candle Products Classified by Target Markets during January - December 2000

| January | February | March | April | May | June | July | August | September | October | November | December |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3 0 4 , 2 1 5}$ | 313,374 | 403,577 | 209,697 | 350,648 | 347,716 | 408,938 | 394,909 | 347,411 | 170,282 | 174,671 | 231,180 |


Figure 2.13. Export Quantities of Thai Decorative Candle Products Classified by Target Markets during January - December 2000.
markets are dependent on the global markets demand. That means if the global markets slow down, it will affect our target markets. This information can support us in arranging and setting the marketing plan which are suitable for each quarter.

### 2.5 Market Demand Forecasting

From the statistic of export values of Thai decorative candle products, it can prove that Thai candle products are very popular in the global market and the economic problem is the major factor that influenced this business. After we have known the past information, we have to forecast the market demand trend of this business in order to know the future trend. The investor can apply this information to support the decision to establish the decorative candle trading business in order to reduce the risk. So, we conduct the linear regression method by using the export values of Thai decorative candle products data from the last five years to forecast the market demand trend in next six years.

In this part, we will do the forecasting of both global markets and our target markets by forecasting on both export values and quantities. This information will support our marketing planning.
2.5.1 Global Market Trend Forecasting

Table 2.12. Export Values of the Global Market during 1997-2001.

| Year | Value (Baht) |
| :---: | :---: |
| 1997 | $74,597,949$ |
| 1998 | $154,564,226$ |
| 1999 | $260,740,171$ |
| 2000 | $324,810,408$ |
| 2001 | $262,528,971$ |

Table 2.13. The Calculation of Export Values of Global Market Forecasting.

| Year | $\mathbf{x}$ | $\mathbf{x}^{2}$ | Value (Baht) (y) | $\mathbf{x y}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1997 | 1 | 1 | $74,597,949$ | $74,597,949$ |
| 1998 | 2 | 4 | $154,564,226$ | $309,128,452$ |
| 1999 | 3 | 9 | $260,740,171$ | $782,220,513$ |
| 2000 | 4 | 16 | $324,810,408$ | $1,299,241,632$ |
| 2001 | 5 | 25 | $262,528,971$ | $1,312,644,855$ |
| Total | $\mathbf{1 5}$ | $\mathbf{5 5}$ | $\mathbf{1 , 0 7 7 , 2 4 1 , 7 2 5}$ | $\mathbf{3 , 7 7 7 , 8 3 3 , 4 0 1}$ |

$\overline{\mathrm{x}}=3$
$\overline{\mathrm{y}}=215,448,345$

$$
\begin{aligned}
& \mathrm{b}=\frac{\sum \mathrm{xy}-\mathrm{nxy}}{\sum \mathrm{x}^{2}-\mathrm{n} \overline{x^{2}}}=54,610,823 \\
& \mathrm{a}=\frac{\sum \mathrm{y}-\mathrm{b} \Sigma \mathrm{x}}{\mathrm{n}}=51,615,876 \\
& \mathrm{y}=\mathrm{a}+\mathrm{bx}=51,615,876+54,610,823 \mathrm{x}
\end{aligned}
$$

To obtain the forecast values for year 2002, 2003, 2004, 2005, 2006 and 2007, substituting x with $6,7,8,9,10$ and 11 as results in:

| y | $=\mathrm{a}+\mathrm{bx} ;$ | $51,615,876+54,610,823(6)=$ | $379,280,814$ |
| :--- | :--- | :--- | :--- |
| y | $=\mathrm{a}+\mathrm{bx} ;$ | $51,615,876+54,610,823(7)=$ | $433,891,637$ |
| y | $=\mathrm{a}+\mathrm{bx} ;$ | $51,615,876+54,610,823(8)=$ | $488,502,460$ |
| y | $=\mathrm{a}+\mathrm{bx} ;$ | $51,615,876+54,610,823(9)=$ | $543,113,283$ |
| y | $=\mathrm{a}+\mathrm{bx} ;$ | $51,615,876+54,610,823(10)=$ | $597,724,106$ |
| y | $=\mathrm{a}+\mathrm{bx;}$ | $51,615,876+54,610,823(11)=$ | $652,334,929$ |

Table 2.14. Forecasted Export Values of Global Market during 2002-2007.

| Year | SIN 1969 Value (Baht) |
| :---: | :---: |
| 2002 | $379,280,814$ |
| 2003 | $433,891,637$ |
| 2004 | $488,502,460$ |
| 2005 | $543,113,283$ |
| 2006 | $597,724,106$ |
| 2007 | $652,334,929$ |

Table 2.15. Export Quantities of Global Market during 1997-2001.

| Year | Quantity (Kg) |
| :---: | :---: |
| 1997 | $1,013,406$ |
| 1998 | $1,953,733$ |
| 1999 | $3,470,701$ |
| 2000 | $3,760,492$ |
| 2001 | $2,430,180$ |

Table 2.16. The Calculation of Export Quantities of Global Market Forecasting.

| Year | $\mathbf{x}$ | $\mathbf{x}^{2}$ | Quantity (Kg) (y) | $\mathbf{x y}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1997 | 1 | 1 | $1,013,406$ | $1,013,406$ |
| 1998 | 2 | 4 | $1,953,733$ | $3,907,466$ |
| 1999 | 3 | 9 | $3,470,701$ | $10,412,103$ |
| 2000 | 4 | 16 | $3,760,492$ | $15,041,968$ |
| 2001 | 5 | 25 | $2,430,180$ | $12,150,900$ |
| Total | $\mathbf{1 5}$ | $\mathbf{5 5}$ | $\mathbf{1 2 , 6 2 8 , 5 1 2}$ | $\mathbf{4 2 , 5 2 5 , 8 4 3}$ |

$$
\begin{aligned}
\overline{\mathrm{x}} & =3 \\
\bar{y} & =2,525,702 \\
\mathrm{~b} & =\frac{\sum \mathrm{xy}-\mathrm{n} \overline{\mathrm{y}}}{}=\frac{\sum \mathrm{x}^{2}-\mathrm{n} \overline{\mathrm{x}}^{2}}{}= \\
\mathrm{a} & =\frac{\sum y-\mathrm{b} \Sigma \mathrm{x}}{\mathrm{n}}=1,133,609
\end{aligned}
$$

$\mathrm{y}=\mathrm{a}+\mathrm{bx}=1,133,609+464,031 \mathrm{x}$
To obtain the forecast quantities for year 2002, 2003, 2004, 2005, 2006 and 2007, substituting x with $6,7,8,9,10$ and 11 as results in:
$y=a+b x$;
$1,133,609+464,031$
(6) $=3,917,795$
$\mathrm{y}=\mathrm{a}+\mathrm{bx} ; \quad 1,133,609+464,031(7)=4,381,826$
$\mathrm{y}=\mathrm{a}+\mathrm{bx} ; \quad 1,133,609+464,031(8)=4,845,857$
$\mathrm{y}=\mathrm{a}+\mathrm{bx} ; \quad 1,133,609+464,031(9) \quad=\quad 5,309,888$
$\mathrm{y}=\mathrm{a}+\mathrm{bx} ; \quad 1,133,609+464,031(10) \quad=\quad 5,773,919$
$\mathrm{y}=\mathrm{a}+\mathrm{bx} ; \quad 1,133,609+464,031(11) \quad=\quad 6,237,950$

Table 2.17. Forecasted Export Quantities of Global Market during 2002-2007.

| Year | Quantity (Kg) |
| :---: | :---: |
| 2002 | $3,917,795$ |
| 2003 | $4,381,826$ |
| 2004 | $4,845,857$ |
| 2005 | $5,309,888$ |
| 2006 | $5,9,773,919$ |
| 2007 | $6,237,950$ |

2.5.2 Target Market Trend Forecasting

Table 2.18. Export Values of the Target Market during 1997-2001.

| Year | Value (Baht) |
| :---: | :---: |
| 1997 | $71,144,256$ |
| 1998 | $143,752,717$ |
| 1999 | $243,080,436$ |
| 2000 | $310,283,551$ |
| 2001 | $245,036,484$ |

Table 2.19. The Calculation of Export Values of Target Market Forecasting.

| Year | $\mathbf{x}$ | $\mathbf{x}^{\mathbf{2}}$ | Value (Baht) (y) | $\mathbf{x y}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1997 | 1 | 1 | $71,144,256$ | $71,144,256$ |
| 1998 | 2 | 4 | $143,752,717$ | $287,505,434$ |
| 1999 | 3 | 9 | $243,080,436$ | $729,241,308$ |
| 2000 | 4 | 216 | $310,283,551$ | $1,241,134,204$ |
| 2001 | 5 | 25 | $245,036,484$ | $1,225,182,420$ |
| Total | $\mathbf{1 5}$ | $\mathbf{5 5}$ | $\mathbf{1 , 0 1 3 , 2 9 7 , 4 4 4}$ | $\mathbf{3 , 5 5 4 , 2 0 7 , 6 2 2}$ |

$$
\begin{aligned}
& \overline{\mathrm{x}}=3 \\
& \overline{\mathrm{y}}=\frac{202,659,489}{\mathrm{~b}}=\frac{\sum \mathrm{xy}-\mathrm{n} \overline{\mathrm{xy}}}{\sum \mathrm{x}^{2}-\mathrm{n} \overline{\mathrm{x}}^{2}}=51,431,529
\end{aligned}
$$

$\mathrm{a}=\frac{\sum \mathrm{y}-\mathrm{b} \Sigma \mathrm{x}}{\mathrm{n}}=48,364,902$
$\mathrm{y}=\mathrm{a}+\mathrm{bx}=48,364,902+51,431,529 \mathrm{x}$
To obtain the forecast values for year 2002, 2003, 2004, 2005, 2006 and 2007, substituting x with $6,7,8,9,10$ and 11 as results in:

| y | $=$ | $\mathrm{a}+\mathrm{bx} ;$ | $48,364,902+51,431,529(6)=$ | $356,954,076$ |
| :--- | :--- | :--- | :--- | :--- |
| y | $=$ | $\mathrm{a}+\mathrm{bx} ;$ | $48,364,902+51,431,529(7)=$ | $408,385,605$ |
| y | $=$ | $\mathrm{a}+\mathrm{bx} ;$ | $48,364,902+51,431,529(8)=$ | $459,817,134$ |
| y | $=$ | $\mathrm{a}+\mathrm{bx} ;$ | $48,364,902+51,431,529(9)=$ | $511,248,663$ |
| y | $=$ | $\mathrm{a}+\mathrm{bx} ;$ | $48,364,902+51,431,529(10)=$ | $562,680,192$ |
| y | $=\mathrm{a}+\mathrm{bx} ;$ | $48,364,902+51,431,529(11)=$ | $614,111,721$ |  |

Table 2.20. Forecasted Export Values of Target Market during 2002-2007

| Year | Value (Baht) |
| :---: | :---: |
| 2002 | $356,954,076$ |
| 2003 | $408,385,605$ |
| 2004 | $459,817,134$ |
| 2005 | $511,248,663$ |
| 2006 | $562,680,192$ |
| 2007 | $614,111,721$ |

Table 2.21. Export Quantities of Target Market during 1997-2001.

| Year | Quantity (Kg) |
| :---: | :---: |
| 1997 | 966,275 |
| 1998 | $1,840,902$ |
| 1999 | $3,319,772$ |
| 2000 | $3,656,618$ |
| 2001 | $2,314,791$ |

Table 2.22. The Calculation of Export Quantities of Target Market Forecasting.

| Year | $\mathbf{x}$ | $\mathbf{x}^{\mathbf{2}}$ | Quantity (Kg) (y) | $\mathbf{x y}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1997 | 1 | 1 | 966,275 | 966,275 |
| 1998 | 2 | 4 | $1,840,902$ | $3,681,804$ |
| 1999 | 3 | 9 | $3,319,772$ | $9,959,316$ |
| 2000 | 4 | 16 | $3,656,618$ | $14,626,472$ |
| 2001 | 5 | 25 | $2,314,791$ | $11,573,955$ |
| Total | $\mathbf{1 5}$ | $\mathbf{5 5}$ | NE12,098,358 | $\mathbf{4 0 , 8 0 7 , 8 2 2}$ |

```
x}=
\overline{y}}==2,419,67
b = 汶-n\overline{xy}
a = \Sigmay-b\Sigmax = 1,065,850
\[
\mathrm{y}=\mathrm{a}+\mathrm{bx}=1,065,850+451,274 \mathrm{x}
\]

To obtain the forecast quantities for year 2002, 2003, 2004, 2005, 2006 and 2007, substituting x with \(6,7,8,9,10\) and 11 as results in:
\begin{tabular}{|c|c|c|c|c|c|}
\hline y & \(=\) & \(a+b x ;\) & 1,065,850 + 451,274 (6) & \(=\) & 3,773,494 \\
\hline y & \(=\) & \(a+b x\); & 1,065,850 + 451,274 (7) & \(=\) & 4,224,768 \\
\hline y & \(=\) & \(a+b x\); & 1,065,850 + 451,274 (8) & \(=\) & 4,676,042 \\
\hline y & \(=\) & \(a+b x\); & \[
1,065,850+451,274(9)
\] & \(=\) & 5,127,316 \\
\hline y & \(=\) & \(a+b x\) & \(1,065,850+451,274(10)\) & & 5,578,590 \\
\hline y & \(=\) & \(a+b x\); & \(1,065,850+451,274\) (11) & & 6,029,864 \\
\hline
\end{tabular}

Table 2.23. Forecasted Export Quantities of Target Market during 2002-2007.
\begin{tabular}{|c|c|}
\hline Year & Quantity (Kg) \\
\hline 2002 & \(3,773,494\) \\
\hline 2003 & \(4,224,768\) \\
\hline 2004 & \(4,676,042\) \\
\hline 2005 & \(5,127,316\) \\
\hline 2006 & \(5,578,590\) \\
\hline 2007 & \(6,029,864\) \\
\hline
\end{tabular}

The above analysis shows that the forecasting of both export values and quantities of Thai Decorative Candle Products are in increasing trend of both the global markets and the target markets each year. We can conclude that it is possible for new investor to
Forecasted Export Quantities of Thai Decorative Candle Products

Figure 2.14. Forecasted Export Quantities of Thai Decorative Candle Products during 2002-2007.

Figure 2.15. Forecasted Export Values of Thai Decorative Candle Products during 2002-2007.
establish the decorative candle trading business at present because the market demands increase every years.

\subsection*{2.6 Competition}

According to the information of Department of Industrial Promotion, Department of Export Promotion, the Ministry of Commerce and the name list of gift and decoration membership shows that there are a total 60 entrepreneurs in the year 2001. Most entrepreneurs are Thai people, 25 entrepreneurs are located in Bangkok due to the convenience of running business process such as procurement, transportation and so on. The 17 entrepreneurs are located in the perimeter and 18 entrepreneurs are located in other provinces. The main competitor is a Chinese who is the leader of candle export market. Because China has the main source of raw materials and the labor cost is lower than Thailand.(Department of Industrial Promotion, www. dip.go.th)

For the competition analysis, we have to analyze any threat and opportunity that affects our business before setting up by using the five forces analysis and SWOT analysis.

\subsection*{2.6.1 Five Forces Analysis}

Today, Thai Decorative Candle market has strong competition so, we have to study the five forces that affect to our sale volumes and profits as follows:
(a) Threat of intense segment rivalry

At this moment, there are strong competition in Thai Decorative Candle market. However, it depends on each company's strategies to capture demands in this market because candle is not only a shopping good but also a necessary good for some countries. The intent in doing business online of this type of business are very few so, there is a chance for our company to use it as a tool to pull the demands.
(b) Threat of new entrants

This type of business requires a small amount of investment so, it is easy for a new player to enter. However, it is difficult to run the business successfully if a player lacks experiences in management, marketing, financing and so on. In addition the risk occurred from the unstability of economy is a factor that a new player has to pay more consideration before entering this business.
(c) Threat of substitute products

Normally, a candle is used for giving light and warmth. A decorative candle not only is used for lighting but for decoration and mood creation with relaxation by adding scent and design. So, it depends on the buying objectives of buyers, if they need to buy for decoration and mood creation, there are substitute products such as incense sticks, incense cones, dry flowers and so on. If they need the light and decoration at the same time, they have to buy decorative candles. JJ weekend market, a popular place for all people including foreigners go to shop at Thai Handicraft Product including decorative candles.
(d) Threat of buyers' growing bargaining power

Even if there are strong competition in this market the buyers' bargaining power will be reduced if the company can offer the quality of product as standard, feature and value-added capabilities for differentiating product from competitors.
(e) Threat of suppliers' growing bargaining power

The suppliers' bargaining power is an important factor for the trading company because the price and quantity of supplies from suppliers affect
the trading company's cost, product price, market demand and so on. So, our company decides to use many suppliers and try to build good relations with them to overcome this problem.

\subsection*{2.6.2 SWOT Analysis}

Our company has to analyze our Strength, Weakness, Opportunity and Threat before creating the marketing plan because this information are useful when doing the marketing plan and marketing mix to succeed in the competitive market.
(a) Strength

There are high competition for Thai decorative candle product in Thai market because this product is very popular for new investors now due to low capital of investment. However, our marketing strategies such as minimum order setting, product offering, the competitive price with high quality of product, promotion discount including service, give the company confidence. Furthermore, the excellent distribution channel, E-Commerce or Online channel through the gateway of Thailand.com/Meet World Trade web site, a professional Web-tools of International Trade which provides us a professional marketing strategy and service to reach the global market. These are our strengths that have an advantage over competitors.
(b) Weakness

Our company is newly established and lack experience in management, distribution and marketing. We face the difficulty in dealing with both suppliers and dealers to supply and distribute our product as a newcomer. The limited capital for doing promotion and holding the inventory to create brand awareness and maximize sale volumes, is another point of our company's weakness due to the uncertainty of economic
situation. We have to save costs of running business. To start any business at the introduction stage usually faces many risks because we are a newcomer, and do not have any experience in that business before.
(c) Opportunity

From the current export market analysis, Thai Decorative Candle Product is started to boom in 1997 and continue growing if there are no problems of economy. At this moment, Thai Decorative Candle Product has passed the introduction stage and is going to the growth stage in Product Life Cycle due to the fact that everyone is aware about it and high competition between suppliers. However, there are more demands in the global market because the candle is a necessary product for the foreigners to use as daily use due to their weather and culture. At this time, we can see that foreigners need various styles and scents for home decoration and mood creation including relaxation. So, we can use these factors to penetrate the market as our opportunity. That means we create the demand by differentiating our product design and value-added from competitors. All of these reasons will create the opportunity for the company to stay in this type of business.
(d) Threat

The demand of Thai Decorative Candle Product decreased due to the effect of economic recession. So, the unstability of global economy is the highest risk in running business. In the economic crisis situation, if there are less customers' purchasing power, products could not be sold even with high demand. The economic problem not only affects this market but to almost all business sectors. The above risk we cannot control. Another
threat is the risk of dealing business online or E-Commerce due to no support of E-Commerce law. Our company must take more consideration about customers' credits verification because we don't know their status well. The above reasons can be risks for us to run business.

\subsection*{2.7 Marketing Strategy}

Our business type is a trading company that buys the manufacturer's products and sell them to our target markets. Our mission is to be a leading Thai decorative candle trading company and provide the quality products and attaining customer satisfaction. Our expected market is mainly export market. To enter the export market, we decide to enter by direct and indirect exporting. We will sell 70 percent of our products directly from our company through our web site and exclusive shop, and 30 percent through the local dealers. In the first startup, we need to gain some market share in the export market. To maximize market share and create the brand awareness are our marketing objectives, as we can observe from customers' inquiries and sales volume. Moreover, we will create brand preference by offering new innovative designs over competitors with quality and reasonable price to satisfy customer requirement, as we can observe from the increasing of sales volume and repeated customers. From the target market analysis as the part of analysis, we segment our target by geography following Four Major Partner Countries and other Top-Twenty Countries; these are U.S.A., Japan, U. Kingdom, Italy, France, Singapore, Canada, Australia, Switzerland and Taiwan. Our main customers' business types are importers who are wholesalers, distributors and retailers. In selecting target segments, we decide to use the product specialization strategy in the first startup because we need to specialize in our product by offering only Thai decorative candle products to several segments in order to study their feedback or requirements. Then we adapt our products to satisfy their requirements or keep it as a
record for launching new products in the future. In addition, we differentiate our market offering from competitors' offerings to achieve competitive advantage such as offering the differentiation of product, service, personnel, channel and image. For our marketing strategy in the first launching or in the introduction stage, we decide to use the slow penetration strategy because the export market of Thai decorative candle products is large and also highly aware of the product including the price sensitivity according to the analysis. However, there are opportunities for new player due to the price sensitivity of the product, we can use this point to penetrate this market by launching our product at equal or lower price than competitors when compared to the quality, service including the various product offerings. As we are a small business and had just startup; we do not pay more attention for doing the promotion because the market is aware of this product for a long time. We may need some channels or tools which can reach the global market with low cost to create our brand awareness and inform our quality and new design such as creating web site, sending direct-email and so on.
(a) Marketing Objectives
(1) To create brand awareness of our decorative candle products by introducing our quality products with competitive prices to markets.
(2) To create brand preference of our products by offering an innovative design to satisfy customers' requirements.
(3) To gain the decorative candle market share at 0.25 percent from total forecasted decorative candle sales volume of our target markets in 2003 by 70 percent direct exporting and 30 percent exporting through local dealers.
(4) To gain the decorative candle market share at 0.25 percent from total forecasted decorative candle sales volume of our target markets in

2004 by 70 percent direct exporting and 30 percent exporting through local dealers.
(5) To gain the decorative candle market share at 0.3 percent from total forecasted decorative candle sales volume of our target markets in 2005 by 70 percent direct exporting and 30 percent exporting through local dealers.
(6) To gain the decorative candle market share at 0.3 percent from total forecasted decorative candle sales volume of our target markets in 2006 by 70 percent direct exporting and 30 percent exporting through local dealers.
(7) To gain the decorative candle market share at 0.35 percent from total forecasted decorative candle sales volume of our target markets in 2007 by 70 percent direct exporting and 30 percent exporting through local dealers.
(b) Sales Forecasting

Form the part of Market Demand Forecasting, we can mention the total forecasted decorative candle sales volume of our target markets as follows:
(1) Sales volume forecasting in year 2003 are \(4,224,768 \mathrm{Kg}\).
(2) Sales volume forecasting in year 2004 are \(4,676,042 \mathrm{Kg}\).
(3) Sales volume forecasting in year 2005 are \(5,127,316 \mathrm{Kg}\).
(4) Sales volume forecasting in year 2006 are \(5,578,590 \mathrm{Kg}\).
(5) Sales volume forecasting in year 2007 are \(6,029,864 \mathrm{Kg}\).

So, we can calculate our sales volume forecasting in order to achieve our marketing objectives as follows:
(1) Sales volume forecasting in year 2003 are \(10,562 \mathrm{Kg}\). or 52,810 units.
\begin{tabular}{lll} 
Direct exporting & 36,967 & units \\
Indirect exporting- through dealers & 15,843 & units
\end{tabular}
(2) Sales volume forecasting in year 2004 are \(11,690 \mathrm{Kg}\).or 58,450 units.
\begin{tabular}{lcc} 
Direct exporting & 40,915 & units \\
Indirect exporting- through dealers & 17,535 & units
\end{tabular}
(3) Sales volume forecasting in year 2005 are \(15,382 \mathrm{Kg}\).or 76,910 units.
\begin{tabular}{lll} 
Direct exporting & 53,837 & units \\
Indirect exporting- through dealers & 23,073 & units
\end{tabular}
(4) Sales volume forecasting in year 2006 are \(16,736 \mathrm{Kg}\).or 83,680 units.
\begin{tabular}{lll} 
Direct exporting & 58,576 & units \\
Indirect exporting- through dealers & 25,104 & units
\end{tabular}
(5) Sales volume forecasting in year 2007 are \(21,105 \mathrm{Kg}\).or 105,525 units.
Direct exporting GABREL 73,868 units

Indirect exporting- through dealers 31,658 units
Remarks: Computed at an average weight 0.2 Kg . or 200 g. per 1 unit from Table 2.26.

\subsection*{2.7.1 Marketing Mix}

After analyzing the marketing analysis, we will have more information to create a strong marketing plan that will help the company to sell the products successfully. We use Marketing Mix to explain how we plan to sell to our market.
(a) Product

Regarding Decorative Candle is one of the shopping goods classification which are goods that the customer, in the process of selection and purchase, characteristically compares on such bases as suitability,
quality, price, style and design. So, our products should be offered to the markets to satisfy the customers' needs.

Normally, there are two groups of end users in the market. The first group is a buyer who buys a decorative candle for the daily use. Another group is a buyer who buys a decorative candle for the occasion as gifts.

For our product planning for both local and export markets, we need to serve both groups of end users so, we must attend to the quality of product and product offering. In offering products to satisfy and delight customers, we decide to use a product mix because we can offer wide varieties of products to meet different customer requirements. Besides, using a product mix can support us in managing and planning smoothly because we can know the sales and profits of each item in each line clearly when doing the product line analysis. Furthermore, a product mix can support us the information for launching new products or adapting current product to suit the market.
(1) Product Objectives
(a) To create brand awareness and brand preference over the other brands by offering the quality products with competitive prices in the market.
(b) To emphasize on the quality product.
(c) To introduce a new and innovative design that is different to serve the user requirements.
Table 2.24. Product Mix.
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|l|}{Product Mix} \\
\hline Item No. & Scented Candle & Jelly Candle & Fancy Candle & Floating Candle \\
\hline 1 & Pillar shape & Four hearts & Engine & Lotus \\
\hline 2 & Box shape & Two hearts & Bulp & Lotus in coconut shell \\
\hline 3 & Triangle shape & Heart circle & Animals & Two flower candles \\
\hline 4 & Cone shape & Flower & Sparking Stick & Rose \\
\hline 5 & Pyra-mid shape & Colorful glass & Stand & Four floating candles \\
\hline 6 & Circle shape & Starfish & Hens & Mix set \\
\hline 7 & Heart shape & Squre & Herricane & Rose with Incense set \\
\hline 8 & Octagon shape & Tub & Cupid & Ten flower candles \\
\hline 9 & Hexagon & Sink & Coconut with basket & Flower candle with silk box \\
\hline 10 & Spiral shape & Messure glass & Bamboo & Flower candle with sapaper box \\
\hline
\end{tabular}

\section*{(2) Product Positioning}

Our product positioning is to create the superior image by offering high quality products with the competitive prices over the others.

In the first startup, our company's product mix consists of four strong product lines: Scented Candle, Jelly Candle, Fancy Candle, Floating Candle as Table 2.24 .

From the above, there are four product lines with ten length of each line. Not only that, there are the depth of each line by size, color, and scent.

Regarding the time preparing for customers' ordering, suppliers' producing, and shipping. We have to plan the product planning in advance. For our product planning, we plan to launch 10 new designs of each line every three months by launching at January, April, July and October as Table 2.25 .

Table 2.25. Product Planning.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Jan. & Feb. & Mar. & Apr. & May. & Jun. & Jul. & Aug. & Sep. & Oct. & Nov. & Dec. \\
\hline \multicolumn{2}{c|}{ Summer Design } & Free Style Design & New Year Design & \multicolumn{2}{c|}{ Valentine Design } \\
\hline
\end{tabular}

In addition to offering various styles of primary package to attract customers, we believe that well-designed packages can create the promotional value of product and differentiate from others to create
company's image. Not only that, we offer special sets of products and accessories such as ceramic tray, wood or bamboo tray, glass tray, etc.

In the future plan, we have to plan to expand product line by introducing new product lines which are related to our decorative candles such as the accessory line, these are candlestick, stand, tray including refilled candles for some designs.

According to the market competition, we decide to sell products under our own brand name because brands can create comparison among sellers. We need to use a brand to differentiate our product from others and contribute our product quality to customers. At the startup period, we use "Blanket family name" strategy to manage our brand name policy because we need to run our business step by step by starting to create only one brand name to represent our product quality until it becomes a strong brand name. All product lines using the same brand name have less development cost to create brand name recognition and easy to introduce a new product if we succeed in building this brand name. However, the policy can be changed according to the market expansion.

Furthermore, labeling is very important to promote our company's image and product brand name. We have two labels, a label describes the product such as how it is to be used, how to use it safely, when it is made, what it contains and who are the distributor. Another is the brand name label to create brand awareness. These two labels are made by the suppliers as suppliers' service. However, the policy of labeling can be changed depending on the customer requirements.

Although our products are direct export and export through dealer, our market is export market. So, our company uses the same product policy for both markets.
(b) Price

In setting the price of our product, the company has to know the pricing objective, market demand, company's costs, competitors' prices and other factors which affect price changing so that the company can set the smart price. So, our company must first select the pricing objective because it can help the company ease to set the price.
(1) Price objective

As our company's marketing objective is to maximize the market share so, our pricing objective must correspond with it. That means our pricing objective is to maximize the market share because we cannot expect to maximize profit in the first startup. So, to create brand awareness and gain some market share in the decorative candle target markets is our company's first success as mentioned:
(a) To set the price that can cover the company's total costs.
(b) To offer the most reasonable price that match product's quality.
(2) Pricing Strategy and Tactic

In the first startup, our company decided to use the markup pricing strategy by adding a few markup for profit and cover our costs. However, our price should be equal price or a little cheaper than competitors when compared to the quality, design, package and service. We use this strategy because we need to create brand awareness and maximize market share. However, our competitive
price must cover our costs and should not be too low because it will affect our product and company image.

After our customers know our brand name and have trust in our product quality, we will charge a little higher markup into a new product launching, including the season period in order to create brand image and the return on investment.

Here are the major factors that influenced the price setting:
(a) Demand Factor

Normally, demand and price are inversely related, the higher price, the lower demand. To study the price sensitivity of customers and the price elasticity of demand, our company believes that our product quality and unique value added can reduce the level of price sensitivity and elastic demand of them.
(b) Estimating Costs

We must concern about our company's costs before setting the price of product. There are two forms, fixed and variable. As we are a trading company, we buy the completed products including label, company brand name, primary and second package from suppliers. So, all fixed and variable cost are the cost of sale and management. Our company's fixed cost is rental fee, salaries, employee's social security, utility supplies, loan's interest and so on. The variable cost is transportation, marketing costs, communication, and so on. All of these costs will be mentioned in detail in the financial plan.
(c) Competitors' Costs and Prices

As our company is a newcomer and lacks experiences in running this type of business, it is difficult for us to manage the costs effectively when compared to competitors. That means if we need to set the equal price or less than competitors, we may possibly lose because competitors may dump their price down to compete with us. This is the major barrier in setting our product pricing.
(3) Price Set-Up Method

As there are various products and prices, we have to find an average price and weight for setting up our selling price and estimating sales volume. From Table 2.26, we can find an average price as follows:

Mean of Price \(=\) Sum of the price values
Total number of product items
\(=(55+50+30+30+35+40+30+60+25+25+25+35+20+20+25+15+40\)
\(+40+45+35+75+75+95+95+100+100+65+60+60+45+65+75+85)\)
33
\(=1,675.00 / 33\)
\(=\quad 50.75\) Bahts \(/\) unit
Mean of Weight \(=\) Sum of the weight values
Total number of product items

Table 2.26. Initial Cost and Weight of Products.
\begin{tabular}{|c|c|c|c|}
\hline Variety & Size & Weight (g.) & Price/ Unit (Baht) \\
\hline \multicolumn{4}{|l|}{Jelly Candles :} \\
\hline Four Hearts & - & 105 & 55.00 \\
\hline Two Hearts & - & 85 & 50.00 \\
\hline Heart Circle & - & 50 & 30.00 \\
\hline Flower & - & 50 & 30.00 \\
\hline Colorful Jelly & - & 90 & 35.00 \\
\hline Starfish & - & 120 & 40.00 \\
\hline Squre & - & 85 & 30.00 \\
\hline Tub & - & 120 & 60.00 \\
\hline Golden Sink & - & 30 & 25.00 \\
\hline Messure Glass & - & 30 & 25.00 \\
\hline \multicolumn{4}{|l|}{Fancy Candles:} \\
\hline Engine & - & 260 & 25.00 \\
\hline Bulp & & 40 & 35.00 \\
\hline Animals & - & 78 & 20.00 \\
\hline Sparking Stick & - & 36 & 20.00 \\
\hline Stand & - & 120 & 25.00 \\
\hline Hens & - & 40 & 15.00 \\
\hline Herricane & - & 70 & 40.00 \\
\hline Cupid \(\longrightarrow\) & - & 140 & 40.00 \\
\hline Coconut with basket & - & 170 & 45.00 \\
\hline Bamboo & - & 70 & 35.00 \\
\hline \multicolumn{4}{|l|}{Floating Candles :} \\
\hline Lotus & - & 270 & 75.00 \\
\hline Lotus in Coconut Shell & - & 400 & 75.00 \\
\hline Two flower candles & - & 420 & 95.00 \\
\hline Rose SINCE1969 & - & 390 & 95.00 \\
\hline Four Floating Candles & - & 370 & 100.00 \\
\hline Mix Set サยาลยํ & - & 570 & 100.00 \\
\hline Rose with Incense set & - & 250 & 65.00 \\
\hline Ten Flower Candles & - & 200 & 60.00 \\
\hline Flower Candle with Silk Box & - & 170 & 60.00 \\
\hline Flower Candle with Sapaper Box & - & 170 & 45.00 \\
\hline \multicolumn{4}{|l|}{Scented Candles :} \\
\hline Pilar, Box, Triangle, Cone, Pyra-Mid, & S & 390 & 65.00 \\
\hline Circle, Heart, Octagon, Hexagon, & M & 450 & 75.00 \\
\hline and Spiral shape & L & 750 & 85.00 \\
\hline \multicolumn{4}{|l|}{Remarks:} \\
\hline \begin{tabular}{l}
-There are Ten shapes and each shape has three sizes. \\
-There are the same price of each shape and size.
\end{tabular} & & & \\
\hline & Total & 6,589 & 1,675.00 \\
\hline
\end{tabular}
\[
\begin{aligned}
= & (105+85+50+50+90+120+85+120+30+30+260+40+78+36+120 \\
& +40+70+140+170+70+270+400+420+390+370+570+250+200 \\
& +170+170+390+450+750)
\end{aligned}
\]

33
\(=6,589 / 33\)
\(=\quad 200 \mathrm{~g}\). or 0.2 Kg .
Our Decorative Candle Trading business has the following costs and sales expectations:

Expected unit sales (in the first year)
Estimated Fixed Operation Costs:
\begin{tabular}{lll} 
Salary & \(480,000.00\) & Bahts \\
Social Security & \(12,600.00\) & Bahts
\end{tabular}
(Computed at 3\% of Salary)
\begin{tabular}{lrl} 
Utilities (water \& electricity) & \(36,000.00\) & Bahts \\
Office rental & \(96,000.00\) & Bahts
\end{tabular}
\begin{tabular}{lll} 
Web site fee & * & \(48,000.00\) \\
Bahts \\
Internet fee \(\operatorname{HCE} 1969\) & \(12,000.00\) & Bahts \\
Miscellaneous & & \\
Depreciation & \(36,000.00\) & Bahts \\
& \(\underline{84,745.00}\) & Bahts
\end{tabular}

Total \(8 \underline{05,345.00}\) Bahts
Estimated Variable Costs:
Initial cost of product \(2,680,108.00\) Bahts
(Computed at an average price 50.75 Bahts/unit)
\begin{tabular}{lll} 
Telephone & \(38,234.00\) & Bahts \\
Transportation & \(52,810.00\) & Bahts
\end{tabular}

So, we can find the variable cost per unit by:
\[
\begin{aligned}
\text { Variable cost/unit } & =\frac{\text { Total estimated variable costs }}{\text { Expected sale units }} \\
& =2,828,504 / 52,810 \\
& =54 \text { Bahts / unit }
\end{aligned}
\]

Our Decorative Candle Trading business's unit cost is given by:
Unit cost \(=\quad\) variable cost + fixed costs
Unit sales
\[
=\quad 53+\frac{805,345}{52,810}
\]
\(=69\) Bahts per unit
We divide the percent mark up by 5 percent mark up for our direct exporting customers and 3 percent mark up for selling through dealers. Our markup price is given by:

Markup price
ทยาลัยอัส
( 1 - desired return on sales)
Selling price for direct export customers:
\(=\)
69
(1-0.05)
\(=73\) Bahts per unit

Selling price for dealers:
\[
\begin{aligned}
& =\frac{69}{(1-0.03)} \\
& =71 \text { Bahts per unit }
\end{aligned}
\]

So, our selling price is 73 Bahts per unit for direct export customers and make a profit of 4 Bahts per unit, and dealers' selling price is 71 Bahts per unit with 2 Bahts per unit for profit. These selling prices are prices at minimum order and exclude the shipping cost. The product's selling price will be used to analyze the financial projection plan for five years.

For our pricing policy, we can not charge high percent mark up for high profit due to the competitive price in this market. In addition our objective is to penetrate this market by maximizing market share so, our selling price should be equal or cheaper than competitors. Our company decide to set a few different selling price for local and export markets to avoid price dumping and preventing mark-up too high from dealers, including to protect the company image. For the five years planning, we try to sell more volumes with these same prices through the five years analysis.
(c) Distribution
(1) Distribution Objectives
(a) To distribute products covering our target markets with lowest costs but highest efficiency.
(b) To distribute products covering around Bangkok area within the first year of operation.
(c) To expand the distribution covering all travel cities in Thailand within the next five years.

In the first year of distribution planning, we would like to test the market acceptance of Thai Decorative Candle product in our target markets. In addition to our limited capital, so we have to select the best distribution channel that can reach our target customers with the lowest cost. From our survey there are two distribution channels where can reach foreigners' demands. The first channel is to open a shop at JJ market, a favorite shopping place for foreigners. The second channel is to open a shop on web site or doing E-Commerce. The percentages of Internet users are increasing rapidly with more benefits of Internet such as no limitation of time and place, reducing administration expenses and so on. For doing web site, we have to decide that we will create our web site by our company or rent the space from the professional web server. Before making the decision we have to consider the cost of each distribution channel as Table 2.27.

From the cost of each channel as above, we decide to do business online with Thailand.com/Meet World Trade because of cheapest investment with highest benefits. Thailand.com/Meet World Trade is web gateway of exporter and enables Thai exporters to promote the products rapidly and effectively. It provides one-stop source for information and services such as Enterprise storefront, Negotiation platform, Training, Customer service and E-trade services integration as Appendix A.

As our company is a new player in this market, it is very important that the company should find the potential dealers to carry our products. This can help the company easily penetrate the market. So, we plan to sell
Table 2.27. Distribution Channel Consideration.
\begin{tabular}{|l|c|c|c|}
\hline \multicolumn{1}{|c|}{ Description } & A & B & C \\
\hline Place & To open shop at JJ Market & \begin{tabular}{c} 
To create own web site \\
by hiring others
\end{tabular} & \begin{tabular}{c} 
To open shop by create own web site \\
at Thailand.com/Meet World Trade
\end{tabular} \\
\hline Rental Fee & \begin{tabular}{c}
\(15,000-20,000\) Bahts \\
(for the good location)
\end{tabular} & As mention below & \begin{tabular}{c}
4,000 Bahts \\
(for 5 product displays)
\end{tabular} \\
\hline Domain Name Registration & No & \(750-800\) Bahts / year & Free \\
\hline Web Hosting & No & \begin{tabular}{c}
\(600-1,500\) Bahts / month \\
(depend on the space requirement)
\end{tabular} & Free \\
\hline Web Design & No & Free \\
\hline Web site Promotion & No & \begin{tabular}{c} 
2,000 - 2,500 Bahts / page \\
Submittion on both Thai and Oversea)
\end{tabular} & Free \\
\hline
\end{tabular}
Remarks: This price is excluded VAT 7\%
our product through the potential dealers who can help the company reach our targets.

For selecting the target dealers in the first year planning, we specify an area in Bangkok only due to the limited budget and the lose control protection. Moreover, we would like to test the market acceptance. By the nature of product, is shopping good, we select the department stores and the souvenir shops, located in the hotels as our target dealers by observing from their customers' nationalities and location as significance. Here are our target dealers as follows:
(a) Department Stores:
(1) Central Department Store : Branches: Ladprao, Chit Lom, Zen, Rama III
(2) Siam Discovery: Pathumwan Rd
(3) Sogo: Pern Jit Rd.
(4) Tokyu: Pathumwan Rd.
(5) Emporium: Sukumvit Rd.
(b) Hotels:
(1) Hotels which are located at the business roads such as Pechaburi Rd., Sukumvit Rd, Rama IV Rd, Silom Rd, Sathorn Rd., Charoen Kung Rd, Pathumwan Rd., etc.

In the third year planning, our company plans to open our exclusive shop at JJ market or other markets which can reach our targets in order to serve the wholesale customers. The main reason for opening a shop is, to be our product showroom, to survey the competitors' progresses, the trend of product and market changing.

In the future expansion, we would like to expand the business to major up-countries which offer main tourism, after the company has achieved target sales volume from the dealers in Bangkok area. We plan to distribute our products by setting up a distributor in each region. The distributors will distribute our products to the potential dealers. Here are the regions where we plan to expand our products during the third year as follows:
(1) Northern region: Chaing Mai
(2) North-East region: Nakorn Rajchasima
(3) Middle region: Karnchanaburi
(4) Eastern region: Rayong
(5) Southern region: Puket

However, in some region the prices of decorative candle products are very competitive because there are cheaper costs of production such as Chaing Mai so, we have to consider our price, product and promotion strategy in order to deal with the current market.

For the distribution channel, although our target market is mainly export market, it is necessary to have local dealers to push our product to those markets. So, we decide to use two distribution channels to reach our target markets. They are web site or E-commerce as the export distribution channel and local dealers at the department store and hotel souvenir shops in Bangkok and up-countries areas, including opening a shop as the local distribution channel.
(d) Promotion
(1) Promotion Objectives
(a) To create brand awareness of our decorative candle products to our target markets by introducing the quality products with competitive prices.
(b) To create the demand for our products by 0.5 percent from total forecasted decorative candle sales volume of our target markets in the first year.
(c) To motivate the dealers to push our products to the customers.

In the first year planning, our company focuses on online selling because we open a shop at the professional web server, Thailand.com/Meet World Trade which is already doing marketing and advertising, in addition to using the direct e-mail sending and catalog online as tools to introduce our company and products to our target markets to both local and export markets due to the limited capital.

Moreover, our company offers pricing discount for more volume purchases and off-season buying as our sale promotion for importers and local dealers as follows:
(1) Importers
(a) 5\% discount for ordering 5,000 pieces per style ( 100 pieces : color : size : scent).
(2) Local Dealers
(a) 5\% discount for ordering 500 pieces per style ( 50 pieces : color : size : scent).

Normally, our buying condition for importers is 1,000 pieces per style as minimum order with \(30 \%\) deposit when placing order and pay the rest when receiving completed products. For local dealers, 100 pieces per style as minimum order \(30 \%\) deposit when placing order and 30 days credit term for the rest payment.

In the future expansion during the fourth and fifth year, we have a plan to do both local and oversea trade show exhibits with the Department of Export Promotion as follows:
(1) Thailand International Trade Fair Programs
(a) Bangkok International Furniture Fair (BIG ) on April.
(b) ASEAN Trade Fair ( ATF ) on October.
(2) Oversea Trade Fair Programs
(a) NY International Gift Fair on January at New York, U.S.A.
(b) Maison \& Objet on September at Paris, France.
(d) Service Policies

Our company uses these service policies for both local and export customers to protect unexpected situation.
(1) Damaged/ Incorrect Products or Incomplete Orders policy

At our company, we are focused on pleasing customers. If customers have received a damaged or incorrect item or missing some part of order, we will be happy to replace any damaged items, or a comparable replacement is available, or provide customers with a full refund, including all shipping costs, before two weeks or fourteen days after the products had shipped. Our customers must sent us a
claim letter from customers indicating their name, order number, and address provide as much detail as possible about the situation.
(2) Canceling an order policy

Once customers have placed an order, the request is promptly sent to our suppliers. Therefore, it is generally not possible to cancel an order once it has been submitted. However, if their order has not yet been shipped and they need to cancel it, we will determine if it will be possible to half the fulfillment of the order. Please note that no order may be canceled once it has been shipped. In those cases, customers may follow the aforementioned return instructions if they decide not to keep the product after having received it.

\section*{III. OPERATION PLAN}

\subsection*{3.1 Production Plan}

Production plan included the demand and capacity management, the inventory management, the location selection, the purchasing process, the control system and standard quality product.

\subsection*{3.1.1 Buying Decision}

Normally, most trading companies are buyers, not makers. Our company is a buyer who buy the products from the manufacturers or producers for selling. We decide to be a buyer rather than a maker because we are a small business and a new startup. So, buying is a cheaper way for our limited capital. Buying can make us flexible for ordering in case of low season or high season. It is not a request for more skills and experiences including reducing the risk for long term investment.
3.1.2 Management's Policies for Buying

\section*{(1) Demand}

As our product is a handicraft product offer various styles, sizes and color, we will order products according to customers' orders. So, "Back Orders" is suitable for our company to manage the demand because we do not need to hold the inventory. The production lead time depends on the quantity and designs of products.
(2) Capacity

Our company uses many suppliers to supply products because we will have wide product varieties and can get the best condition of price, quality and service from them. Besides, we can know the market price of suppliers. We select suppliers by focusing on the product quality, minimum order
required, maximum productive capacity, company location, services provided and credit terms as follows:
(a) The product quality

In selecting the suppliers, their product quality must be up to the export product standard. We will ask them to send us the product sample to test. Moreover, the details of product are also important because a decorative candle is a handmade product.
(b) The minimum order requirement

Because we are a new startup company, the minimum order requirement is important to help us in the order flexibility.
(c) The maximum productive capacity

This factor can ensure that there is low risk of shortage problem.
(d) The supplier location

Our suppliers should have the offices or factories located in the Bangkok area because we need the convenience for the connection and transportation such as a urgency case. Besides, we can reduce occurring costs.
(e) The production specialization

Normally, all suppliers can make all kinds of decorative candles. But all of them must specialize in some kind by observing from their high sales volume. It can ensure us that there is no product quality and packing problem of that kind of decorative candle.
(f) Price

There is a wide range of product selling prices due to the design and material used. However, using many suppliers can help us to find the cheapest product.
(g) Term payment

This is very important to increase the company's liquidity. As the nature of this business is only cash selling by paying the deposit when placing an order, and paying the rest when that order is completed. So, we have to consider the minimum deposit amount in order to extend our liquidity of cash payment.
(h) Services

The services of suppliers are also important in our consideration. Because we need the completed products with label, package and packing.

At this moment, our company has the connection with five suppliers as Table 3.1. From the above, our company selects the suppliers whose product is up to standard and their companies are located in Bangkok area as preferable. At our investigation, actually, all of them can do all kinds of decorative candles so, our orders are flexible to all of them based on their price offering and minimum order requirement.

\subsection*{3.1.3 Inventory Management}

Our demand management policy is "Back Orders" or "Made to Order", because this product is made under the customers' requirement, and the requirement of each customer is different. In addition the company policy is need to save the cost of inventory holding and avoid the dead stock. So there is no inventory in our company.
Table 3.1. Suppliers' Details.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \begin{tabular}{l}
Description \\
Suppliers
\end{tabular} & A & B & C & D & E \\
\hline Product Quality & Standard & Ptandard & Standard & Standard & Standard \\
\hline Location & Bangkok & Bangkok & Bangkok & Bangkok & Bangkok \\
\hline Product Capacity per month (pieces) & 50,000 & 30,000 & 20,000 & 30,000 & 30,000 \\
\hline Average minimum order (pieces) & \(100 \bar{z}\) & 100 & 100 & 100 & 100 \\
\hline Production Lead Time & De 0 & Depe & on the quantity & & \\
\hline Production Specialization & Scented Candle & Scented Candle & Floating Candle & Jelly Candle & Fancy Candle \\
\hline Price Ranking & Low & Average & High & Average & High \\
\hline Term of Payment & \multicolumn{5}{|l|}{\(30 \%\) deposit when placing order, \(70 \%\) when receiving completed products} \\
\hline
\end{tabular}

\subsection*{3.1.4 The Selection of Location}

In selecting the company location, it should be the center area between all supplier and transportation. In case of exporting, normally, this product is exported by sea. So, the company location should be located at the center of suppliers and seaport in order to reduce the transportation costs. In this project, we use a shareholder house which is located at Sathupadit Road to be an office.

\subsection*{3.1.5 Purchasing Process}

Our purchasing condition is 30 percent deposit when placing an order and 70 percent for the rest payment when completed order. The minimum order for direct customers are 1,000 pieces per style ( 100 pieces / color / size / scent), and 100 pieces per style ( 50 pieces / color / size / scent) for local dealers. The purchasing process is shown as a summary in Figure 3.1.
(1) Receipt of a purchase requisition

We have to understand the details to put in a purchase requisition before placing a purchase requisition to suppliers, when we receive a purchase order with 30 percent deposit payment from customers. A purchase requisition should be a simplified format and cover all details such as date of order, payment condition, product volume, product code, product description, price per unit, total payment, receiving date, name of order maker, signer of manager and so on. Finally, we should make a duplicate document for our reference.
(a) Selecting suppliers and issuance of a purchase order

Then we investigate and select suppliers from the above Table and prepare and issue a purchase order and pay 30 percent deposit to that supplier.

Figure 3.1. The Purchasing Process.
(b) Follow-up of a purchase order

This process is made to make sure that our order will be completed on time.
(c) Verification of receipt products

After we receive products, we have to inspect whether the products are completed as our purchase order. The suppliers will send the completed products with packing slip and invoice. We can verify products by comparing the supplier's packing slip to our purchase order. If the products are not correct, we must inform the supplier by letter as fast as possible.
(d) Completing the order

After the order is completed, we pay \(70 \%\) for the rest payment according to the suppliers' invoices. Then we confirm the delivery date and issue our invoice, packing slip to customers in order to collect the rest of payment.

In case of direct exporting, we will do the export process by 5 10 percent service charge from the freight agent's invoice.

\subsection*{3.1.6 Control System}

Before we make the transaction with our suppliers, we need to make an agreement about unexpected problems such as the damaged products, the delay of delivery and so on. We must commit our requirements clearly in our orders. Besides, we have to build a good relationship with our suppliers for working smoothly and better controlling including long term benefits such as bargaining power, good service provided and so on. To control the standard of product quality, we request suppliers a sample of product
for testing by lighting after we have placed an order. Then we make a final checking after an order is completed before sending to our customer.
(1) Quality Product Requirement

The surface of candle must be glinted, bright color and no bubble. A candle must have a good scented oil and is packed completely to protect the scent evaporation and candle. A candle must have low smoke, no low dripping and slow burning while it is lighting. A good candle can be lit for long hours. We show an example of our product quality standard for scented candles as Table 3.2.

Table 3.2. Company Quality Product Requirement.


\subsection*{3.2 Project Management Plan}

The project management plan should be conformed to the operation plan of our Decorative Candle Trading Business which has ten years operation plan. The purpose of this project management plan is to determine the managing business activities and costs which are important for establishing the company.

\section*{St. Gabriel's Library, Au}

\subsection*{3.2.1 Managing Business}

For the part of managing business, it's very important that every company should have the organization structure to indicate the flow of communications and the delegation of responsibilities, and use the job description to describe each employee's job and the duties assigned. It can eliminate the problem of repetitive tasks.

Although, the study of Decorative Candle Trading business is a small business, a simple organization structure is also very important to help a small businessman arrange his employees suitable position and easy to monitor and control them.

For our business, we see human resources as very important. Without them, our business cannot run successfully in the present situation. Because our trading business is a small business, we need to design our organizational structure to suit the size of business and budget in order to manage easily as follows:

\section*{(a) Organization Structure}

\section*{Manager}

Normally, the owner of a small business is the manager who sets the policy and do all functions of management including planning, organizing, staffing, directing and controlling.

\section*{Finance \& Accounting Section}

A Finance \& Accounting Officer works as an assistant of the manager to assist in the finance and account processes such as setting financial planning, controlling income and outcome account, contacting Revenue Department, making finance and account documents and reports, including making payroll and administrative works.

\section*{Marketing Section}

A Marketing Officer works as an assistant of the manager to assist in sale and marketing process such as contacting customers, suppliers and freight forwarders, doing sale and marketing document and report including inspecting product before shipping.

\section*{(b) Criteria of Recruiting}

\section*{Finance \& Accounting Officer}
(1) Bachelor's degree in Accounting or Finance.
(2) Thai national, Female, age between 25-30 years.
(3) Mature \& self-motivated with strong analytical \& problem solving skills.
(4) Experience in either accounting, cost controlling or finance will be an - advantage.
(5) Fair command of written and spoken English.
(6) Good knowledge of PC usage:- MS Office.

\section*{Sales \& Marketing Officer}
(1) Bachelor's degree in Marketing.
(2) Thai national, Male or Female, age between 22-25 years.
(3) Working experience is not necessary.
(4) Good command in both written and spoken English.
(5) Good knowledge of PC usage: MS Office, Internet.
(6) Responsible, initiative and enthusiastic.
(7) Strong interpersonal skills.

\section*{(c) Human Resource Allocation}

The human resource allocation of our business consists of 1 Manager, 1 Finance \& Account Officer and 1 Marketing Officer as the Table 3.3.

\section*{Table 3.3. Description of Human Resource Allocation.}


40,000 Bahts per month or 480,000 Bahts per year for employees' salaries. This value will be used in the financial analysis.

In the future expansion, our company will employ a new sales \& marketing officer to support our business expansion, and increase salaries with positions for the current employees as Tables 3.4, 3.5. However, the salary increasing policy depended on the sales revenue of company.

Table 3.4. Description of Human Resource Allocation for the Future Expansion.
\begin{tabular}{|c|c|c|}
\hline Position & Number of Staff & Salary (Baht/Month) \\
\hline 1. Sales \& Marketing Officer & 1 & 10,000 \\
\hline \multicolumn{3}{|r|}{ Total } \\
\hline
\end{tabular}

Table 3.5. The Description of Salary Increasing Policy.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline No. & Description & 2003 & 2004 &  & 2006 & 2007 \\
\hline 1 & Manager & & \(5 \%\) & \[
10 \%
\] & \[
10 \%
\] & 15 \% \\
\hline 2 & \begin{tabular}{l}
Asst. Finance \& \\
Accounting Manager
\end{tabular} & - & \[
5 \%
\] & \[
10 \%
\] & \[
10 \%
\] & \(15 \%\) \\
\hline 3 & \begin{tabular}{l}
Asst. Sales \& \\
Marketing Manager
\end{tabular} & OMmia & \[
595 \%
\] & \[
10 \%
\] & 10 \% & 15 \% \\
\hline 4 & \begin{tabular}{l}
Sales \& Marketing \\
Officer
\end{tabular} & าลยย & \[
616
\] & - & 10\% & 15\% \\
\hline
\end{tabular}

From the above information will be calculated in the financial plan.

\section*{(d) Equipment and Office Automation Procurement}

Regarding the Decorative Candle Trading business set up and work by three officers, there are a few number of equipment and office automation
requirement which are necessary for the operation only. This can help an investor to save cost of investment. So, the equipment and office automation should be the telephone, facsimile, computer, copier, etc.

Table 3.6. Description of Equipment and Office Automation.


The above information is the fixed cost of investment which will be used to compute in the financial analysis with 20 percent depreciation per year for five years.
(e) Pre-Operation Expenditures

Not only the above that we should consider for planning the project management plan of establishing the company, we should not over look the expenditures of activities which are occurred before establishing or pre-
operation expenditures. Almost one year of pre-operation activities including studying the project feasibility, selecting the site for the company location, company registration, searching the shareholder, earning the capital from shareholder and loan, recruiting human resources, and providing the operation equipment. We can summarize the costs and estimated times of pre-operation activities as Tables 3.7 and 3.8.

Table 3.7. The Pre-Operation Cost.
\begin{tabular}{|c|c|}
\hline Activity & Cost (Baht) \\
\hline 1. The Project Feasibility Study & \[
30,000
\] \\
\hline 2. Company Registration & \[
20,000
\] \\
\hline 3. Personnel Recruitment \(\square\) & 50,000 \\
\hline 4. Other Expenses & \[
20,000
\] \\
\hline 5. Pre-Operation Loan Interest & 28,125 \\
\hline 2/97ว SINCE 1969 Total & 148,125 \\
\hline
\end{tabular}

Our purpose is to study this business as a small business that suits for investors who are unemployed or need to have own business with limited capital budgets. The investors can use their resources to reduce the cost of investment by using their house to be an office. In this project, we need 40 60 square meters for our office so, we decide to use own house to be an office by paying monthly rental fee. So, we include the cost of site selection,
shareholder selection and capital concentration in other expenses part to a very small amount.

These expenditures which have the total of 148,125 Bahts will be analyzed at the part of financial plan with 20 percent depreciation per year for five years.

Table 3.8. The Operation Time of Pre-Operation Activities.
\begin{tabular}{|l|c|}
\hline \multicolumn{1}{|c|}{ Activity } & Time (day) \\
\hline 1. The Project Feasibility Study & 120 \\
\hline 2. Site Selection & 15 \\
\hline 3. Shareholder Selection & 30 \\
\hline 4. Capital Concentration ( Shareholder \& Loan ) & 30 \\
\hline 5. Company Registration & 30 \\
\hline 6. The Office Equipment Providing & 30 \\
\hline 7. Personnel Recruitment & 60 \\
\hline
\end{tabular}

From the above information, we can show the activities and time of each activity during the pre-operation period in the form of Gantt chart which is easy for monitoring and controlling as Figure 3.2.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Activity & \[
\begin{aligned}
& \text { Time } \\
& \text { (day) }
\end{aligned}
\] & Dec.'01 & Jan.'02 & Feb.'02 & Mar. '02 & Apr.'02 & May.'02 & Jun.'02 & Jul. 02 & Aug. 02 & Sep.-Dec. 02 \\
\hline 1.The Project Feasibility Study & 120 & & & & & & 1 & & & & \\
\hline 2 . Site Selection & 15 & - & & & & & & & & & \\
\hline 3 Shareholder Selection & 30 & & ш & & & & & & & & \\
\hline 4 Company Registration & 30 & & \(\sim\) & & & & \% & \(\cdots\) & & & \\
\hline 5 . Capital Concentration & 30 & & & & & & & & & & \\
\hline 6.The Office Equipment Preparation & 30 & ก & & & & & & T & & & \\
\hline 7 . Personnel Recruitment & 60 & & & & & & & - & & & \\
\hline
\end{tabular}
Figure 3.2. Gantt Chart Shown the Pre-Operation Activities with Estimated Time

\section*{IV. FINANCIAL PLAN}

Our financial analysis include revenue analysis from our expected sales volume, expenditure analysis. Finally, we have to analyze the net present value (NPV) the internal rate of return (IRR), and the payback period, to ensure whether this business is feasible to.

\subsection*{4.1 The Sales Revenue Analysis}

Our company revenue is analyzed from our sales volume forecasting during 2003 to 2007 . We divide our expected sales volume by 70 percent for direct exporting customers with 73 Bahts selling price per unit and 30 percent selling through dealers with 71 Bahts selling per unit. The description of expected sales volume, selling price and total revenue as shown in Table 4.1.

\subsection*{4.2 The Expenditure Analysis}

Our company expenses are consisted as fixed investment cost, pre-operation expenditure, operation expenditure and other expenses.

\section*{(a) Fixed Investment Cost}

Most fixed investment costs are the equipment and office automation expenses which includes:
\begin{tabular}{llrl} 
(1) & A set of computer & 3 & sets \\
(2) & Facsimile & 1 & 105,000 \\
unit & 7,000 & Bahts \\
(3) & Copier & 1 & unit \\
(4) & Air conditioner & 1 & unit \\
(5) & Furniture \& Equipment & & 40,000 \\
(6) & Telephone & 40,000 & Bahts \\
& 3 units & 80,000 & Bahts \\
& Total fixed investment cost & \(\underline{3,600}\) & Bahts \\
& & \(\underline{\underline{\mathbf{2 7 5 , 6 0 0}}}\) & Bahts
\end{tabular}

The description of total investment cost is shown in Table 4.4.

\section*{(b) Pre-Operation Expenditure}

Our pre-operation expenditure is set for the pre-operation estimated one year as including:
(1) Study the project feasibility

30,000 Bahts
(2) Company registration

20,000 Bahts
(3) Personnel recruitment

50,000 Bahts
(4) Other expenses

20,000
Bahts
(5) Pre-operation interest

28,125
Bahts
Total pre-operation expenditure
\(\underline{148,125}\)
Bahts
The description of pre-operation expenditure is shown in Table 4.5.
(c) Operation Expenditure
- All operation expenditures include the administration costs and marketing costs.
(1) Salary

Our salary expenditures are computed according to the company policy. Our salary expenditure is shown in Table 4.2.
(2) Social Security

Social Security is computed at \(3 \%\) of salary as follows:
Salary is not more than 15,000 Bahts per month, is computed at \(3 \%\) of salary.

Salary is equal or more than 15,000 Bahts per month is computed at 450 Bahts per month as the maximum rate.

The social security expenditure is shown in Table 4.3.
(3) Office Rental
\begin{tabular}{lll} 
(a) In the first and second year & 96,000 & Bahts \\
(b) In the three and forth year & 216,000 & Bahts \\
(c) In the fifth year & 240,000 & Bahts
\end{tabular}
(4) Web site fee
\begin{tabular}{llll} 
& (a) this price for five products display & 48,000 & Bahts \\
(5) & Internet fee & 12,000 & Bahts \\
(6) Utility Supply (Water and Electricity) & 36,000 & Bahts
\end{tabular}
(7) Telephone
(a) Telephone is computed at \(1 \%\) of Sales revenue
68,231 Bahts
(8) Transportation
(a) Transportation is computed at 1 Baht for a unit.
(9) Miscellaneous
(a) Miscellaneous is set for administration equipment such as stationery. 36,000 Bahts
(10) Marketing Cost
(a) In the first three years, marketing cost is computed at \(1.5 \%\) of Sales revenue.
(b) In the fourth year, marketing cost is computed at \(2 \%\) of Sales revenue.
(c) In the fifth year, marketing cost is computed at \(3 \%\) of Sales revenue.

The description of operation expenditures are shown in Table 4.8.

\subsection*{4.3 Depreciation}

The depreciation of office automation and pre-operation expenditures would be computed at \(20 \%\) per year for five years life.
\begin{tabular}{lllll} 
(1) & A set of computer & 3 & sets & 21,000 \\
(2) & Facsimile & 1 unit & 1,400 & Bahts \\
(3) & Copier & 1 unit & 8,000 & Bahts \\
(4) & Air conditioner & 1 unit & 8,000 & Bahts
\end{tabular}
(5) Furniture \& Equipment \(\sim\) 16,000 Bahts
(6) Telephone 3 units 720 Bahts
(7) Pre-Operation expenditure \(\underline{29,625}\) Bahts Total annual depreciation

84,745
Bahts
The description of annual depreciation is shown in Table 4.7.

\subsection*{4.4 Source of Fund}

This project is registered at \(1,000,000\) Bahts as the capital registration. Debt / Equity ratio of this project is determined by \(1: 1\). The capital paid up at 250,000 Bahts from shareholder and 250,000 Bahts from short-term loan. The interest of short-term loan is computed at MRR \(+2 \%\). For this project, we use the maximum rate \(11.25 \%\) ranging from \(9.75 \%\) to \(11.25 \%\) due to avoid changing of MRR.

\subsection*{4.5 Dividend Payment}

The dividend payment policy is payment at \(10 \%\) of profit after tax.

\subsection*{4.6 Working Capital}

As this project is a trading business, the selling and buying policy are deposit when order is placed and pay the rest when order is completed. So, the process of selling and buying are made by cash only.

\subsection*{4.7 Income Tax}

The income tax of this project is \(30 \%\).

Table 4.1. Total Sales Revenue during 2003-2007.
\begin{tabular}{|c|c|c|c|c|}
\hline Year & Description & \begin{tabular}{l}
Quantity \\
(unit)
\end{tabular} & \begin{tabular}{l}
Price/Unit \\
(Baht)
\end{tabular} & Total (Baht) \\
\hline \multirow{3}{*}{N్స్} & Direct Export & 36,967 & 73.00 & 2,698,591 \\
\hline & Indirect Export - Selling through dearlers & 15,843 & 71.00 & 1,124,853 \\
\hline & \begin{tabular}{l}
Total Expected Unit Sales \\
Total Annual Sales Revenue 2003
\end{tabular} & \[
52,810
\] & & 3,823,444 \\
\hline \multirow{3}{*}{N} & Direct Export & 40,915 & 73.00 & 2,986,795 \\
\hline & Indirect Export - Selling through dearlers & 17,535 & 71.00 & 1,244,985 \\
\hline & \begin{tabular}{l}
Total Expected Unit Sales \\
Total Annual Sales Revenue 2004
\end{tabular} & 58,450 & \[
5
\] & 4,231,780 \\
\hline \multirow{3}{*}{\[
\stackrel{\substack{\mathrm{N}}}{ }
\]} & Direct Export & 53,837 & 73.00 & 3,930,101 \\
\hline & Indirect Export - Selling through dearlers & 23,073 & 71.00 & 1,638,183 \\
\hline & \begin{tabular}{l}
Total Expected Unit Sales \\
Total Annual Sales Revenue 2005
\end{tabular} & 76,910 & - & 5,568,284 \\
\hline \multirow{3}{*}{ষ্Nి} & Direct Export & 58,576 & 73.00 & 4,276,048 \\
\hline & Indirect Export - Selling through dearlers & 25,104 & 71.00 & 1,782,384 \\
\hline & \begin{tabular}{l}
Total Expected Unit Sales \\
Total Annual Sales Revenue 2006
\end{tabular} & 83,680 & & 6,058,432 \\
\hline \multirow{3}{*}{Nì} & Direct Export & 73,868 & 73.00 & 5,392,328 \\
\hline & Indirect Export - Selling through dearlers & 31,658 & 71.00 & 2,247,683 \\
\hline & \begin{tabular}{l}
Total Expected Unit Sales \\
Total Annual Sales Revenue 2007
\end{tabular} & 105,525 & & 7,640,010 \\
\hline
\end{tabular}
Table 4.2. Total Annual Salary Payment.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{\[
\begin{array}{|c|}
\hline \text { Emplyee } \\
\text { No. } \\
\hline
\end{array}
\]} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Description}} & \multicolumn{5}{|l|}{Period} \\
\hline & & & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline 1 & \multicolumn{2}{|l|}{Manager} & -20,000 & 21,000 & 23,100 & 25,410 & 29,221.50 \\
\hline 2 & \multicolumn{2}{|l|}{Finance \& Accounting Officer} & 10,000 & 10,500 & 11,550 & 12,705 & 14,611 \\
\hline 3 & \multicolumn{2}{|l|}{Sales \& Marketing Officer} & 10,000 & 10,500 & 11,550 & 12,705 & 14,611 \\
\hline 4 & \multicolumn{2}{|l|}{Sales \& Marketing Officer} & & & 10,000 & 11,000 & 12,650 \\
\hline \multicolumn{2}{|l|}{Total Monthly Salary Payment} & 100 & 40,000 & 42,000 & 56,200 & 61,820 & 71,093 \\
\hline \multicolumn{2}{|l|}{Total Annual Salary Payment} & 9) & 480,000 & 504,000 & 674,400 & 741,840 & 853,116 \\
\hline
\end{tabular}
Table 4.3. Total Annual Social Security Payment.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Emplyee \\
No.
\end{tabular}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Description}} & \multicolumn{5}{|l|}{Period} \\
\hline & & & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline 1 & Manager & & 450 & 450 & 450 & 450 & 450 \\
\hline 2 & Finance \& Accounting Officer & & 300 & 315 & 347 & 381 & 438 \\
\hline 3 & Sales \& Marketing Officer & 50 & 300 & 315 & - 347 & 381 & 438 \\
\hline 4 & Sales \& Marketing Officer & ) & & - & 300 & 330 & 380 \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
Total Monthly Social Security Payment \\
Total Annual Social Security Payment
\end{tabular}}} & 1,050 & 1,080 & 1,443 & 1,542 & 1,706 \\
\hline & & & 12,600 & 12,960 & 17,316 & 18,508 & 20,474 \\
\hline
\end{tabular}
Table 4.4. Total Fixed Investment Cost

Table 4.5. Total Pre-Operation Expenditures
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{Construction
\[
2002
\]} & \multicolumn{5}{|l|}{Period} \\
\hline & & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline Study the project feasibility & 30,000 & , & & - & - & - \\
\hline Company registration & 20,000 & & - & & - & - \\
\hline Personnel recruitment & 50,000 & > - & & & - & - \\
\hline Other expenses & 20,000 & - & - & & - & - \\
\hline Total pre-operation expenditure & 120,000 & & & & - & - \\
\hline &  & & & 1 & & \\
\hline Pre-operation interest & \[
28,125
\] & - & & & - & - \\
\hline Total & 148,125 & - & - & - & - & - \\
\hline
\end{tabular}
Table 4.6. Total Investment Cost

Table 4.7. Total Annual Project Depreciation.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{Construction 2002} & \multicolumn{5}{|l|}{Period} \\
\hline & & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline Computer & 105,000 & 21,000 & 21,000 & 21,000 & 21,000 & 21,000 \\
\hline Telephone & 3,600 & 720 & 720 & 720 & 720 & 720 \\
\hline Facsimile & 7,000 & 1,400 & 1,400 & 1,400 & 1,400 & 1,400 \\
\hline Air condition & -40,000 & 8,000 & 8,000 & 8,000 & 8,000 & 8,000 \\
\hline Furniture \& Equipment & 10, 80,000 & 16,000 & 16,000 & 16,000 & 16,000 & 16,000 \\
\hline Copier & 2) 40,000 & 8,000 & 8,000 & 8,000 & 8,000 & 8,000 \\
\hline Pre-Operation Expenditure & 148,125 & 29,625 & 29,625 & 29,625 & 29,625 & 29,625 \\
\hline & 423,725 & 84,745 & 84,745 & 84,745 & 84,745 & 84,745 \\
\hline
\end{tabular}
Table 4.8. Total Annual Costs of Products Sold.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multicolumn{5}{|l|}{Period} \\
\hline & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline Initial product & 2,680,108 & 2,966,338 & 3,903,183 & 4,246,760 & 5,355,394 \\
\hline Cost of Initial Product & 2,680,108 & 2,966,338 & 3,903,183 & 4,246,760 & 5,355,394 \\
\hline Salary & \& 480,000 & 504,000 & 674,400 & 747,840 & 860,016 \\
\hline Social Security ( 3\%) & 12,600 & 12,960 & 17,316 & 18,688 & 20,681 \\
\hline Office Rental & 96,000 & 96,000 & 216,000 & 216,000 & 240,000 \\
\hline Web site fee & \(\stackrel{48,000}{ }\) & 48,000 & 48,000 & 48,000 & 48,000 \\
\hline Internet fee & - 12,000 & 12,000 & 12,000 & 12,000 & 12,000 \\
\hline Utility supply ( Water \& Electricity ) & \(\square \quad 36,000\) & - 36,000 & 36,000 & 36,000 & 36,000 \\
\hline Telephone & - 38,234 & 42,318 & 55,683 & 60,584 & 76,400 \\
\hline Transportation & 52,810 & 58,450 & 76,910 & 83,680 & 105,525 \\
\hline Miscellaneous & 36,000 & 36,000 & 36,000 & 36,000 & 36,000 \\
\hline Depreciation & 84,745 & 84,745 & 84,745 & 84,745 & 84,745 \\
\hline Interest & * 14,063 & - & - & - & - \\
\hline Cost of Operation & 910,452 & 930,473 & 1,257,054 & 1,343,537 & 1,519,367 \\
\hline Marketing cost & 57,352 & 63,477 & 83,524 & 121,169 & 229,200 \\
\hline Cost of Selling & 57,352 & 63,477 & 83,524 & 121,169 & 229,200 \\
\hline Total Annual Cost of Products Sold & 3,647,911 & 3,960,287 & 5,243,761 & 5,711,466 & 7,103,961 \\
\hline
\end{tabular}
Table 4.9. Total Annual Variable Costs of Products Sold
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multicolumn{5}{|l|}{Period} \\
\hline & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline Initial product & 2,680,108 & 2,966,338 & 3,903,183 & 4,246,760 & 5,355,394 \\
\hline Cost of Initial Product & -2,680,108 & 2,966,338 & 3,903,183 & 4,246,760 & 5,355,394 \\
\hline Salary & \(\bigcirc\) & - - & & - & - \\
\hline Social Security (3\%) & 5 - & - & & - & - \\
\hline Office Rental & & - & - & - & - \\
\hline Web site fee & - - & - & & - & - \\
\hline Internet fee & - - & & & - & - \\
\hline Utility supply (Water \& Electricity) & & \(\square\) & & - & - \\
\hline Telephone (0) & 38,234 & -2 42,318 & 55,683 & 60,584 & 76,400 \\
\hline Transportation & 52,810 & 58,450 & 76,910 & 83,680 & 105,525 \\
\hline Miscellaneous & & - & & - & - \\
\hline Depreciation & & - & - & - & - \\
\hline Interest & & & & & \\
\hline Cost of Operation & 91,044 & 100,768 & 132,593 & 144,264 & 181,925 \\
\hline Marketing cost & 57,352 & 63,477 & 83,524 & 121,169 & 229,200 \\
\hline Cost of Selling & 57,352 & 63,477 & 83,524 & 121,169 & 229,200 \\
\hline Total Annual Variable Cost & 2,828,504 & 3,130,582 & 4,119,300 & 4,512,193 & 5,766,519 \\
\hline Variable Cost / Annual Products Sold & 54 & 54 & 54 & 54 & 55 \\
\hline
\end{tabular}
Table 4.10. Total Working Capital.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Construction } \\
2002 \\
\hline
\end{gathered}
\]} & \multicolumn{5}{|l|}{Period} \\
\hline & & 2003 & C 2004 & 2005 & 2006 & 2007 \\
\hline \begin{tabular}{l}
1. Account receivable \\
2. Cash in hand
\end{tabular} & \[
76,275
\] & \[
\text { \& } 149,049
\] & \[
298,839
\] &  & \[
891,368
\] & \[
1,313,824
\] \\
\hline Current Asset & 76,275 & 149,049 & 298,839 & 588,034 & 891,368 & 1,313,824 \\
\hline 3. Account payable & - & 1 & - & & - & - \\
\hline Current Liability & - & \(\cdots\) & - & - & - & - \\
\hline Total Working Capital Increase In Working Capital & \[
\begin{aligned}
& 76,275 \\
& 76,275
\end{aligned}
\] & \begin{tabular}{|r|r|}
\hline 149,049 \\
\hline & \(\mathbf{7 2 , 7 7 4}\) \\
\hline
\end{tabular} & \[
\begin{array}{r}
298,839 \\
149,790 \\
\hline
\end{array}
\] & \[
\begin{aligned}
& \mathbf{5 8 8}, 034 \\
& \mathbf{2 8 9 , 1 9 5}
\end{aligned}
\] & \[
\begin{array}{r}
\mathbf{8 9 1 , 3 6 8} \\
303,334 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
1,313,824 \\
422,456 \\
\hline
\end{array}
\] \\
\hline
\end{tabular}
Table 4.11. Total Debt Payment
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{Construction
\[
2002
\]} & \multicolumn{5}{|l|}{Period} & \multirow[t]{2}{*}{Total} \\
\hline & & 2003 & 2004 & 2005 & 2006 & 2007 & \\
\hline \multicolumn{8}{|l|}{Short-Term loan} \\
\hline Loans & 250,000 & - & - & & - & - & 250,000 \\
\hline Loan repayment & - & +125,000 & 125,000 & & & & 250,000 \\
\hline Retained liablility & 250,000 & O) 125,000 & - & - & , & - & \\
\hline Interest payment (11.25\%) & 28,125 & \(10 \sim 14,063\) & - & - & 2 - & - & 42,188 \\
\hline Total Loan & & ) & & & 17 & & \\
\hline Loans & 250,000 & - & - & - & - & - & 250,000 \\
\hline Loan repayment & - & 2) 125,000 & 125,000 & - & , & - & 250,000 \\
\hline Retained liablility & 250,000 & C 125,000 & & - & - & - & - \\
\hline Interest payment (11.25\%) & 28,125 & 14,063 & - & - & - & - & 42,188 \\
\hline
\end{tabular}
Table 4.12. Flow of Financial Resources.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{Fund} & \multirow[t]{2}{*}{Construction 2002} & \multicolumn{5}{|l|}{Period} \\
\hline & & & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline \begin{tabular}{l}
1.Shareholder Equity \\
Ordinary equity \\
2. Sort-Term Loan \\
Commercial bank loan
\end{tabular} & 250,000
250,000 & \[
250,000
\]
\[
250,000
\] & \[
125,000
\] & \[
125,000
\] &  & - & - \\
\hline Sort-Term Cash Flow & 500,000 & \({ }^{10} 500,000\) & 125,000 & 125,000 & & - & - \\
\hline Net Flow of Finance & 500,000 & 2) 500,000 & - 125,000 & - 125,000 & - & - & - \\
\hline
\end{tabular}
Table 4.13. Cash-flow for Financial Planning.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{Construction
\[
2002
\]} & \multicolumn{5}{|l|}{Period} \\
\hline & & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline Total Cash Inflow & 500,000 & 3,823,444 & 4,231,780 & 5,568,284 & 6,058,432 & 7,640,010 \\
\hline \begin{tabular}{l}
1.Source of finance \\
Equity \\
Short term loan \\
2. Operation income Sale revenue \\
3. Other revenue
\end{tabular} & \[
\begin{aligned}
& 250,000 \\
& 250,000
\end{aligned}
\] &  & 4,231,780 & \[
5,568,284
\] & 6,058,432 & 7,640,010 \\
\hline Total Cash Outflow & 423,725 & 3,835,415 & 4,166,735 & 5,363,834 & 5,839,843 & 7,302,299 \\
\hline \begin{tabular}{l}
4. Increase in fixed asset fixed capital Pre-operation expenditure (excluded tax) \\
5. Cost of operation \\
6. Marketing cost \\
7. Tax \\
8. Interest repayment \\
9. Loan repayment \\
10. Dividend
\end{tabular} & \[
\begin{array}{r}
275,600 \\
120,000
\end{array}
\]
\[
28,125
\] & \(3,590,559\)
57,352
48,441
14,063
125,000 & \[
\begin{array}{r}
3,896,810 \\
63,477 \\
81,448 \\
- \\
125,000
\end{array}
\] & \[
\begin{array}{r}
5,160,236 \\
83,524 \\
97,357 \\
- \\
- \\
22,717 \\
\hline
\end{array}
\] & \[
\begin{gathered}
5,590,297 \\
121,169 \\
104,090 \\
- \\
- \\
24,288 \\
\hline
\end{gathered}
\] & \[
\begin{array}{r}
6,874,761 \\
229,200 \\
160,815 \\
- \\
- \\
37,523 \\
\hline
\end{array}
\] \\
\hline Cash Flow for Financial Accumulated Flow of Finance & \[
\begin{aligned}
& 76,275 \\
& 76,275
\end{aligned}
\] & \[
\begin{aligned}
& 11,971 \\
& 64,304
\end{aligned}
\] & \[
\begin{array}{r}
65,045 \\
129,349
\end{array}
\] & \[
\begin{array}{r}
204,450 \\
333,799 \\
\hline
\end{array}
\] & \[
\begin{aligned}
& \mathbf{2 1 8 , 5 8 9} \\
& \mathbf{5 5 2 , 3 8 8}
\end{aligned}
\] & \[
\begin{aligned}
& 337,711 \\
& 890,099
\end{aligned}
\] \\
\hline
\end{tabular}
Table 4.14. Net Income Statement.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multicolumn{5}{|l|}{Period} \\
\hline & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline 1.Income & 3,823,444 & S 4,231,780 & - 5,568,284 & 6,058,432 & 7,640,010 \\
\hline Sale revenue & 3,823,444 & 4,231,780 & 5,568,284 & 6,058,432 & 7,640,010 \\
\hline 2. Variable cost subtracted & 2,828,504 & 3,130,582 & 4,119,300 & 4,512,193 & 5,766,519 \\
\hline Income after subtract variable cost & 994,940 & 1,101,198 & 1,448,984 & 1,546,239 & 1,873,491 \\
\hline (percent of total revenue) & ¢ 26.02 & 26.02 & 26.02 & 25.52 & 24.52 \\
\hline 3.Fixed cost subtracted & ¿ 819,408 & 829,705 & 1,124,461 & 1,199,273 & 1,337,442 \\
\hline Income after subtract operation cost & (175,533 & 271,493 & 324,523 & 346,966 & 536,049 \\
\hline (percent of total revenue) & \(\bigcirc \quad 4.59\) & - 6.42 & 5.83 & 5.73 & 7.02 \\
\hline 4.Financial cost subtracted & 14,063 & - & - & - & - \\
\hline Profit & 161,470 & 271,493 & 324,523 & 346,966 & 536,049 \\
\hline 5.Other cost subtracted & - & - & - & - & - \\
\hline Profit before tax & 161,470 & 271,493 & 324,523 & 346,966 & 536,049 \\
\hline 6.tax (30\%) & 48,441 & 81,448 & 97,357 & 104,090 & 160,815 \\
\hline Profit after tax & 113,029 & 190,045 & 227,166 & 242,877 & 375,234 \\
\hline 7.Dividend (10\%) & - & - & 22,717 & 24,288 & 37,523 \\
\hline Net Profit & 113,029 & 190,045 & 204,450 & 218,589 & 337,711 \\
\hline
\end{tabular}
Table 4.15. Project Balance Sheet.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{Construction 2002} & \multicolumn{5}{|l|}{Period} \\
\hline & & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline Total Asset & 500,000 & 488,029 & 553,074 & 757,524 & 976,113 & 1,313,824 \\
\hline 1. Current asset & 76,275 & -149,049 & 298,839 & 588,034 & 891,368 & 1,313,824 \\
\hline Cash in hand & 76,275 & 149,049 & 298,839 & 588,034 & 891,368 & 1,313,824 \\
\hline 2. Fixed asset (not of depreciation) & 423,725 & 338,980 & 254,235 & 169,490 & 84,745 & - \\
\hline Fixed capital & & 275,600 & 275,600 & 275,600 & 275,600 & 275,600 \\
\hline Construction in progress & 275,600 & & - & & - & - \\
\hline Pre-operation expenditure & 10148,125 & 148,125 & 148,125 & 148,125 & 148,125 & 148,125 \\
\hline Accumulated Depreciation subtracted & \(\bigcirc \quad-\) & 84,745 & 169,490 & 254,235 & 338,980 & 423,725 \\
\hline Total Liability & 500,000 & 488,029 & 553,074 & 757,524 & \(\mathbf{9 7 6 , 1 1 3}\) & 1,313,824 \\
\hline 3.Net current liability & D) \({ }^{\circ}\) & - & - & \(\bigcirc \square^{-}\) & - & - \\
\hline Account payable & & & & & & \\
\hline 4. Short term loan & 250,000 & 125,000 & - & - & - & - \\
\hline Bank commercial loan & 250,000 & 125,000 & & & - & - \\
\hline 5.Shareholder equity & 250,000 & 250,000 & 250,000 & 250,000 & 250,000 & 250,000 \\
\hline Ordinary equity & 250,000 & 250,000 & 250,000 & 250,000 & 250,000 & 250,000 \\
\hline 6.Reserved,retained profit Brought forwa & - & & 113,029 & 303,074 & 507,524 & 726,113 \\
\hline 7.Net profit after tax & - & 113,029 & 1190,045 & 227,166 & 242,877 & 375,234 \\
\hline Dividend & - & - & - & 22,717 & 24,288 & 37,523 \\
\hline Retained Profit & - & 113,029 & 190,045 & 204,450 & 218,589 & 337,711 \\
\hline
\end{tabular}

\section*{V. EVALUATION OF THE PROJECT PLAN}

\subsection*{5.1 Marketing Evaluation}

From the result of current market demand analysis, we can find that the export values and quantities are increasing every year, if there is no economic problem. However, the economic problem is the main factor that influenced all business areas After analyzing the target market, we can find that the economic problem did not effect the decorative candle product demands in some countries, including the increasing demand from the result of the future demand forecasting. Let us say that there are opportunities for new investors to invest in this business. In addition to the demand behavior analysis, it can support the investors in marketing strategy and inventory planning for each quarter. In market competition, the marketing strategy is very important to capture the market from the existing competitors.

Therefore the marketing analysis can support the feasibility analysis that we should invest in this decorative candle trading business.

\subsection*{5.2 Operation Evaluation}

The operation plan analysis includes the production plan and project management plan:
(1) Production plan analysis analyzed the demand and capacity management decision and processes including the standard quality product and control system.
(2) Project management plan analysis analyzed the task which the investor has to operate including managing business activities and costs which are necessarily operated for establishing the company
(3) Concerning the above evaluation, the operation plan analysis can support the investors in setting the approximate operations that lead the business successfully.

\subsection*{5.3 Financial Evaluation}

\subsection*{5.3.1 Financial Statement}

There are three important statements for planning and attracting start up or expansion capital, and help to form a business plan that will guide the company business. Those are the income statement, balance sheet and the cash-flow statement. From this analysis, we can calculate the net present value (NPV) of this project at 398,341 Bahts with 40.99 percent of the internal rate of return (IRR) which is a very high return as Table 5.1.
(a) The net present value (NPV)

TPV is the result of the project's expected annual cash inflow for the whole life subtracted by cash outflow. Regarding the net present value approach, the expected cash flow will be discounted by the cost of capital rate \((\mathrm{I}=12 \%\) when compared to the loan rate).


The net present value criteria that will assure the project feasibility is positive NPV or at least NPV \(=0\)

From the calculation Table 5.1, the project's NPV is 398,341 Baht therefore it is found that the project feasibility is very acceptable.
(b) The internal rate of return (IRR)

IRR is the discount that rate affects the net cash flow for the whole life of the project equals to zero or the cash inflow deducted by cash outflow equals to zero.
\[
\text { IO }=\sum_{t=1}^{n} \frac{\mathrm{ACF}_{t}}{(1+\mathrm{IRR})^{t}}
\]

From Table 5.1, the project's IRR for the five years of project life is 40.99 percent which is more than cost of capital so the project is possible to invest.

This project is a trading business in which the total fixed investment cost and operation expenditures are quite low when compared to the other businesses. These causes affect this project which has very high return.

\subsection*{5.3.2 Ratio Analysis}

Ratio analysis determine the stability of various financial aspects of the project operation, enabling the investors to judge their businesses' financial strength and weakness. In this project, the ratio analysis included Turnover ratio, Financial ratio and Efficiency ratio which can be calculated and analyzed as Tables 5.3, 5.4 and 5.5 .
(a) Turnover Ratio
(1) Fixed asset turnover or the ratio between net income and fixed asset which the value of this ratio increases every year. It means that this project income is at the high worth when compared to the fixed asset.
(2) Total asset turnover or the ratio between net income and total fixed asset in which the value of this ratio is positive. It means that this project income is at the accepted range when compared to total fixed asset.
(b) Efficiency Ratio
(1) Gross profit to sale ratio is more than 1.0 which means that the gross profit is very high when it is compared to the sale revenue
(2) Net profit to sale ration is over 1.0. It means that the net profit is still high when compared to sale revenue.
(3) Net profit to equity ration is very high for the five year plan. It means that the net profit makes high return to the shareholders when compared to their equity
(4) Net profit and interest to investment ratio is the ratio of gross profit behind subtracting tax and interest and total investment cost. The value of this ratio is very high. It means that high return can be made by low investment.
(c) Financial Ratio
(1) Equity/Liability is decreased every year because of less liability than equity.
(2) Debt/Net worth is zero less than 1.0. It means that no debt .
(3) Capitalization ratio or the ratio between loan and fixed investment cost is zero less than 1.0. It shows that no loan for this project.
(4) Debt/Equity is zero less than 1.0 . This shows that no debt when compared to the shareholder equity and low risk in this project.

In analyzing the five years financial plan of this project as above, this shows that this project should be invested because high positive value of the net present value (NPV) and the internal rate of return (IRR). In addition to the high return for investor, high net profit and low risk are identified from above ratios.

\subsection*{5.3.3 Breakeven Analysis}

Breakeven point is the point that total revenue is equal to total cost. So, the breakeven analysis of this project will let the investors know the level of sales volume which does not make them gain or loss as shown in Table 5.6. This is very important for the investor for the business planning.

The sales revenue at the breakeven point during the five years operation, we can calculate to find the sales volume for direct exporting 70 percent and selling through local dealers 30 percent as Table 5.7

Figure 5.1, can monitor that if the investors can sell more than the breakeven point, the investors will gain. Moreover, in case of the price is constant, but the fixed and variable cost are increasing, it shows that the increase of fixed cost and variable cost influenced the changing of breakeven point. From this analysis, the investor can apply to use their business.

\subsection*{5.3.4 Payback Period}

In this analysis, the investors must set the preferable payback period which cover their initial investment to measure with the result of analysis, From this project, the payback period is set for 3 years. The result of payback period of this project is 2 years 8 months as shown in Table 5.8. It shows that the payback period of this project is faster return than the expected period, so we can conclude that this project should be invested.
Table 5.1. Discounted Cash Flow-Total Capital Invested
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{Construction 2002} & \multicolumn{5}{|l|}{Period} \\
\hline & & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline Total Cash Inflow & - & 3,823,444 & 4,231,780 & 5,568,284 & 6,058,432 & 7,640,010 \\
\hline \begin{tabular}{l}
1. Operation income \\
Sale revenue \\
2. Other revenue
\end{tabular} & \(\begin{array}{r}8 \\ 8 \\ \hline\end{array}\) & \[
3,823,444
\] & 4,231,780 & \[
5,568,284
\] & \(6,058,432\)
- & 7,640,010 \\
\hline Total Cash Outflow & 395,600 & 3,696,352 & 4,041,735 & 5,341,118 & 5,815,555 & 7,264,776 \\
\hline \begin{tabular}{l}
3. Increase in fixed asset \\
fixed capital \\
Pre-operation expenditure \\
(excluded interest) \\
4. Cost of operation \\
5. Marketing and advertising cost \\
6. Tax
\end{tabular} & \[
\begin{array}{|cc|}
\hline \frac{0}{20} & \frac{0}{\bar{c}} \\
275,600 \\
120,000 \\
0 & 0 \\
2 & - \\
0 & - \\
\hline
\end{array}
\] & \[
\begin{array}{r}
3,590,559 \\
57,352 \\
48,441 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
3,896,810 \\
63,477 \\
81,448 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
5,160,236 \\
83,524 \\
97,357 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
5,590,297 \\
121,169 \\
104,090 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
6,874,761 \\
229,200 \\
160,815 \\
\hline
\end{array}
\] \\
\hline \begin{tabular}{l}
Net Cash Flow \\
Net Accumulated Cash Flow
\end{tabular} & \[
\begin{aligned}
& \hline 395,600 \\
& 395,600 \\
& \hline
\end{aligned}
\] & 127,092
268,508 & \(\begin{array}{r}190,045 \\ 78,463 \\ \hline\end{array}\) & 227,166
148,703 & \[
\begin{array}{r}
242,877 \\
391,580 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
375,234 \\
766,814 \\
\hline
\end{array}
\] \\
\hline Net Present Value (I=12\%) Accumulated Net Present Value & \[
\begin{array}{r}
395,600 \\
395,600 \\
\hline
\end{array}
\] & \[
\begin{aligned}
& 113,475 \\
& 282,125 \\
& \hline
\end{aligned}
\] & \[
\begin{array}{r}
151,503 \\
-\quad 130,622 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
161,693 \\
31,070 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
154,352 \\
185,423 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
212,918 \\
398,341 \\
\hline
\end{array}
\] \\
\hline NPV & 398,341 & & & & & \\
\hline Internal Rate of Return (IRR) & 40.99\% & & & & & \\
\hline
\end{tabular}
Table 5.2. Discounted Return on Equity Capital Invested
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{Construction 2002} & \multicolumn{5}{|l|}{Period} \\
\hline & & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline Total Cash Inflow & 76,275 & 11,971 & 65,045 & 227,166 & 242,877 & 375,234 \\
\hline \begin{tabular}{l}
1.Total cash flow of finance \\
2.Dividend
\end{tabular} & \(\begin{array}{r}76,275 \\ - \\ \hline\end{array}\) & - 11,971 & 65,045 & \[
\begin{array}{r}
204,450 \\
22,717 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
218,589 \\
24,288
\end{array}
\] & \[
\begin{array}{r}
337,711 \\
37,523
\end{array}
\] \\
\hline Total Cash Outflow & 250,000 & - - & - & - & - & - \\
\hline 3. Shareholder equity & 250,000 & - & - & \(\square\) & - & - \\
\hline \begin{tabular}{l}
Net Cash Flow \\
Net Accumulated Cash Flow
\end{tabular} & \(\begin{array}{r}173,725 \\ -\quad 173,725 \\ \hline\end{array}\) & \(\begin{array}{r}11,971 \\ 185,696 \\ \hline\end{array}\) & \(\begin{array}{r}65,045 \\ 120,651 \\ \hline\end{array}\) & 227,166
106,516 & \[
\begin{array}{r}
242,877 \\
349,392 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
375,234 \\
724,627 \\
\hline
\end{array}
\] \\
\hline Net Present Value ( \(\mathrm{I}=12 \%\) ) Accumulated Net Present Value & \[
\begin{array}{r}
173,725 \\
173,725 \\
\hline
\end{array}
\] & \[
\begin{array}{rr}
- & 10,688 \\
-\quad 184,413 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
51,854 \\
132,560 \\
\hline
\end{array}
\] & \[
\begin{array}{r}
161,693 \\
29,133 \\
\hline
\end{array}
\] & \[
\begin{aligned}
& 154,352 \\
& 183,485
\end{aligned}
\] & \[
\begin{aligned}
& 212,918 \\
& 396,403
\end{aligned}
\] \\
\hline NPV & 396,292 & \multicolumn{5}{|l|}{\multirow[t]{2}{*}{}} \\
\hline Return On Equity (ROE) & 52.70\% & & & & & \\
\hline
\end{tabular}
Table 5.3. Turnover Ratios.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multicolumn{5}{|l|}{Period} \\
\hline & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline Total cost of product & 57,352 & 63,477 & 83,524 & 121,169 & 229,200 \\
\hline Sales revenue & 3,823,444 & 4,231,780 & 5,568,284 & 6,058,432 & 7,640,010 \\
\hline Fixed asset & 3) 338,980 & 254,235 & 169,490 & 84,745 & - \\
\hline Total Asset & -488,029 & 553,074 & 757,524 & 976,113 & 1,313,824 \\
\hline Fixed Assets Turnover & - 11.28 & 16.65 & 32.85 & 71.49 & - \\
\hline Total Assets Turnover & ) 7.83 & 7.65 & 7.35 & 6.21 & 5.82 \\
\hline
\end{tabular}
Table 5.4. Efficiency Ratios.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multicolumn{5}{|l|}{Period} \\
\hline & 2003 & 2004 & 2005 & 2006 & 2007 \\
\hline Sales revenue & 3,823,444 & 4,231,780 & -5,568,284 & 6,058,432 & 7,640,010 \\
\hline Gross profit & -161,470 & 271,493 & 324,523 & 346,966 & 536,049 \\
\hline Net profit & - 113,029 & 190,045 & 227,166 & 242,877 & 375,234 \\
\hline Cost of interest & \(\bigcirc 14,063\) & - & & - & - \\
\hline Accumulated cost of capital & \(\cdots\) ¢ 224,400 & 297,174 & 446,964 & 736,159 & 1,039,493 \\
\hline Shareholder equity & De 250,000 & 250,000 & 250,000 & 250,000 & 250,000 \\
\hline Gross profit to sale ratio & D) 4.22 & 6.42 & 5.83 & 5.73 & 7.02 \\
\hline Net profit to sale ratio & R 2.96 & 4.49 & 4.08 & 4.01 & 4.91 \\
\hline Net profit to equity ratio & \(\bigcirc 45.21\) & 76.02 & 90.87 & 97.15 & 150.09 \\
\hline Net profit and interest to & 56.64 & 63.95 & 50.82 & 32.99 & 36.10 \\
\hline
\end{tabular}
Table 5.5. Financial Ratios.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multicolumn{5}{|l|}{Period} \\
\hline & 2003 & - 2004 & 2005 & 2006 & 2007 \\
\hline Shareholder equity & 250,000 & 250,000 & 250,000 & 250,000 & 250,000 \\
\hline retained profit & 8 113,029 & 190,045 & 204,450 & 218,589 & 337,711 \\
\hline Net worth & - 250,000 & 363,029 & 553,074 & 757,524 & 976,113 \\
\hline Long term loan & 3125,000 & - & & - & - \\
\hline Total debt & - 488,029 & 553,074 & 757,524 & 976,113 & 1,313,824 \\
\hline Equity/Liability & De? 0.51 & 0.45 & 0.33 & 0.26 & 0.19 \\
\hline Debt/Net worth & De 0.50 & - & & - & - \\
\hline Capitalization Ratio & 2e 0.33 & - & & - & - \\
\hline Debt/Equity & - 0.50 & & & - & \\
\hline
\end{tabular}
Table 5.6. Breakeven Analysis.


Table 5.7. Sales Volume at Breakeven Point during 2003-2007.
\begin{tabular}{|c|c|c|c|}
\hline Year & Description & \begin{tabular}{l}
Expected Sales \\
Volume (unit)
\end{tabular} & Breakeven Sales Volume (unit) \\
\hline \multirow{3}{*}{\[
\stackrel{N}{\mathbf{O}}
\]} & Direct Export & 36,967 & 30,195 \\
\hline & Indirect Export - Selling through dearlers & 15,843 & 13,305 \\
\hline & Total Unit Sales & 52,810 & 43,500 \\
\hline \multirow{3}{*}{ざ} & Direct Export & 40,915 & 30,574 \\
\hline & Indirect Export - Selling through dearlers & 17,535 & 13,472 \\
\hline & Total Unit Sales & 58,450 & 44,046 \\
\hline \multirow{3}{*}{Co} & Direct Export & 53,837 & 41,436 \\
\hline & Indirect Export - Selling through dearlers & 23,073 & 18,258 \\
\hline & Total Unit Sales & 76,910 & 59,694 \\
\hline \multirow{3}{*}{ిoig} & Direct Export & 58,576 & - 44,826 \\
\hline & Indirect Export - Selling through dearlers & 25,104 & 19,752 \\
\hline & Total Unit Sales & 83,680 & \(\square \quad \mathbf{6 4 , 5 7 8}\) \\
\hline \multirow{3}{*}{\[
\stackrel{\hat{N}}{\hat{N}}
\]} & Direct Export & 73,868 & \(\square 52,021\) \\
\hline & Indirect Export - Selling through dearlers & 31,658 & \(\square 22,923\) \\
\hline & Total Unit Sales & 105,526 & 74,944 \\
\hline
\end{tabular}

Figure 5.1. Breakeven Analysis during 2003-2007.
Table 5.8. Payback Period.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Construction } \\
2002 \\
\hline
\end{gathered}
\]} & \multicolumn{5}{|l|}{Period} \\
\hline & & 2003 & - 2004 & 2005 & 2006 & 2007 \\
\hline NPV ( \(\mathrm{I}=12 \%\) ) & 395,600 & 113,475 & 151,503 & 161,693 & 154,352 & 212,918 \\
\hline Accumulated NPV & 395,600 & 8028,125 & - 130,622 & 31,070 & 185,423 & 398,341 \\
\hline
\end{tabular}
Payback Period \(=2.8\) years

\section*{VI. CONCLUSIONS AND RECOMMENDATIONS}

At the conclusion and recommendation of this project, the feasibility analysis of a decorative candle trading business, can be divided to project summary and project recommendation.

\subsection*{6.1 Conclusions}

The feasibility analysis of the decorative candle trading business project which studied the feasibility with the marketing plan, the operation plan, the financial plan and the evaluation plan can be concluded as
\begin{tabular}{|c|c|}
\hline Project & A decorative candle trading business. \\
\hline Project revenue & 7,640,010 Bahts at the fifth year. \\
\hline , & 7,640, \\
\hline Initial investment & 423,725 Bahts can be divided into \\
\hline & \\
\hline \(\square\) & 275,000 Bahts as total fixed investment cost. \\
\hline & 148,125 Bahts as total pre-operation expenditure. \\
\hline & \\
\hline Number of officer & 4 officers at the fifth year. \\
\hline Project life & 5 years * \\
\hline Project starting yea & 2003196 \\
\hline & \\
\hline Project ending year & 2007 \\
\hline Commercial profita & \\
\hline NPV & 398,341 Bahts \\
\hline IRR & 40.99 percent \\
\hline Payback period & 2 years 8 months \\
\hline
\end{tabular}

\subsection*{6.2 Recommendations}

From all analysis in his project, we can conclude that it is feasible to establish a decorative candle trading business because of high positive NPV and IRR. In addition
to the result of ratio analysis and the early payback period are supported there are high return for investor, high net profit and low risk for the investment in this project. Starting a business with the low investment cost and good business plan, are a competitive advantage of trading business. So, we can recommend that it is feasible to establish a decorative candle trading business.

However, there are many factors that effect this trading business, and a decorative candle trader should be careful. Because this product is selling the design, so it is easy to make a copy from competitors. A decorative candle trader should provide a plan to prevent this problem. Suppliers are also important for the trading business because the trader must purchase products from them. So, the trader has to build a good relation with them to protect the problem of delayed products and uncompleted products due to handmade products. In addition to packing problem, this is very important to protect from damage products during transportation because these products are sensitive to high temperature. That means it is better if the trader can control the suppliers. Besides, there are unexpected problem from the economic changing problem such as increasing product price from suppliers, price cutting from competitors, increasing transportation cost, decreasing demand and so on. So, the investors should have plans to protect these unexpected problems. The management problem in the organization can cause the delayed jobs, the repetitive jobs and increasing cost of operation. The investors should have a clear management policy for the work efficiency.

The feasibility analysis of a decorative candle trading business is a guideline and consultant in increasing the confidence to the investors in deciding to establish a decorative candle trading business. Although the result of this project is quite good, there are a lot of factors, both internal and external factors in the real time operation that the investors have to consider such as the economic situation, the competitors, the
suppliers, the organization management and so on. So, the investors have to consider these factors involved with the feasibility study before deciding to invest in any project.


\section*{APPENDIX A}

THALLAND.COM / MEET WORLD TRADE THAILAND'S PREMIER E-MARKETPLACE FOR GLOBAL TRADE


St. Gabriel's Library, Au


ERI 1

RS
Housetulek with in
\(\therefore \quad\) Howsehotu with cable TV In_- Inemet users
4
Figure A.2. Adoption Curves for Media.
Worldwide Internet Usage

Figure A.3. Worldwide Internet Usage.
The 2004 e-commerce market

*
Figure A.4. The 2004 E-Commerce Market Value Forecast.
thailand.com EXPORT

Figure A.5./Thailand.com Export
thailand.com EXPORT

Figure A.5. Thailand.com Export. (continued)


\section*{Benefits to Thai Exporters}


thailand.com web statistic

Figure A.8. Thailand.com Web Statistic (Oct. - Dec. 2001).

\section*{We are the number 1 web gateway to Thailand}


Hux+cx+m:
Figure A.9. Top 10 Thai Websites (English Content).
Our Marketing Activities Our Marketing Activities
\[
\begin{gathered}
* \text { Offine Marketing } \\
* \\
* \text { Online Marketing }
\end{gathered}
\]
Figure A.10. Marketing Activities.

Figure A.11. Thailand.com Export Print Ad.
thailand.com EXPORT Print Ad

thailand.com EXPORT Filler Ad in
Nation Channel UBC 8
Themes z-minute interview with our clients to
promote their company and product with e-commerce
Apparel Aventer co. Ltad.
K. Katchal Jandeatornkeiat, Prestent
Sifm Tnter tood and drink con Litd.

13
****
童
The Perece Canming (1985) co. Ltd

Figure A.12. Thailand com Export Filler Ad in Nation Channel UBC 8.
Seminar: One-Stop Online Exporting

Figure A.13. Seminar: One-Stop Online Exporting.
Trade Fair

*
Figure A.14. Trade Fair.

Search Position in Search Engines

Figure A.16. Search Position in AOL Search Engines.

Search Position in Search Engines

Product and Service

Figure A.19. Product and Service.

Online Do-It-Yourself tool

Online Do-It-Yourself tool

Negotiation Platform (Exporter)

Negotiation Platform (Exporter)

a


Negotiation Platform (Exporter)




farara Resporad
Figure A. 22.
Negotiation Platform (Exporter)
Actept Offer
0




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\section*{St. Gabriel's Library, Aü}```

