

CHAPTER 5

ANALYTICAL TOOL

Another analytical tool that used in collected beneficial information is questionnaire. This valuable information from questionnaires is collected from surveying the entrepreneurs and experts in Thai jewelry industry society. Total questionnaires, which are sent to the target groups, are 82 sets in several types of survey such as face-to-face survey, telephone interviewing, postal and facsimile survey, and the questionnaires that sending and receiving through E-mail.

From the total sending 82 sets of questionnaire, we received 55 completed questionnaires or equal to 67 percent of total sending. By the way, for the right answers from the right target interviewees, the criteria of targeting samples has to be constructed as in next section.

5.1 Criteria of Target Questionnaires' Answers

In the procedure of surveying questionnaires, there are two target groups in this survey: entrepreneur group and expert group.

5.1.1 Entrepreneur Group

The criteria of targeted entrepreneurs, who answer the questionnaire, is:

- Must be the entrepreneurs in Thai jewelry industry such as suppliers, producers, retailers; and other related businesses for example producers of up-stream industry, exporters, contractors of trading jewelry fair, etc.
- Should have more than three years experience in this field.

5.1.2 Expert Group

The criteria of targeted experts, who answer the questionnaire, is:

- Must be the experts that have directly relationship with jewelry industry such as teachers, trainers; or the professors and researchers in jewelry industry and related

industries; or the staffs of both private or government organisations that have direct responsibility in promoting jewelry industry.

- Should have more than five years experience in jewelry field.

5.2 Summary of Received Information from Questionnaires

This section consists of the gathering and analysing of the information from the survey of Thai jewelry industry. The information comes from the 55 questionnaires. This questionnaire is divided into four parts as:

1. General information: Ask for the general information of the answerers such as type of the business, sales transaction, working experience, and number of employees in his/her organisation.
2. About our assumption of Thai jewelry industry: Ask for his/her agreements in the assumptions of strengths and weaknesses of Thai jewelry industry.
3. About the external factors that affect Thai jewelry industry: Ask for his/her agreements about the external factors that affect the export potential both opportunities and threats of Thai jewelry industry.
4. About the critical success factors: Ask for the importance of each factor to the success of Thai jewelry industry.

5.2.1 General Information

5.2.1.1 Type of the business

From 55 questionnaires, there are

- 23 interviewees or 42% are in the gem jewelry business
- 8 interviewees or 15% are in the gold jewelry business
- 9 interviewees or 16% are in the silver jewelry business
- 11 interviewees or 20% are in the education or institute aspect of jewelry industry
- And other 4 interviewees or 7% are in the artificial gemstone jewelry and fashion jewelry business

5.2.1.2 Sales transaction

From the 44 questionnaires, which exclude 11 interviewees that aren't in trading business, the average domestic sales are about 31% and average export sales are about 69%.

5.2.1.3 Working experience in this business

From 55 questionnaires, there are

- 18 interviewees or 33% have experience in this business more than 10 years
- 15 interviewees or 27% have experience in this business between 7-10 years
- 10 interviewees or 18% have experience in this business between 5-7 years
- 12 interviewees or 22% have experience in this business less than 3-5 years

5.2.1.4 Number of employees in the organisation

From 55 questionnaires, there are

- 3 interviewees or 5% are in the organisation that have more than 100 employees
- 20 interviewees or 36% are in the organisation that have employees between 51-100
- 22 interviewees or 40% are in the organisation that have employees between 20-50
- 10 interviewees or 18% are in the organisation that have less than 20 employees

5.2.2 About our Assumptions

There are 19 assumptions about the strengths and weaknesses of Thai jewelry industry. The agreements of the interviewees in each assumption are divided into three levels: not agreement, moderate agreement and highly agreement. The summary of number of agreements in each level of each assumption is shown in the table below.

Table 5.1: Summary of agreements in our assumptions about Thai jewelry industry.

Assumptions	<i>Not agree</i>	<i>Mod agree</i>	<i>Highly agree</i>	Points
Thailand is the centre of cutting colour stone of the world.	3	16	36	88
Thailand is the centre of cutting diamond of the world.	20	32	3	38
Heat treatment or COOK technique is the advantage of Thailand.	1	14	40	94
Thailand lacks of gemstone materials both in quantity and quality.	4	21	30	81
Thailand lacks of precious metal materials.	12	33	10	53
Thai gemstones have good image and be accepted worldwide.	15	25	15	55
Thai labours have skill and elaborate.	20	21	14	49
Thai labours have the development in skill and efficiency continuously.	15	31	9	49

Labour cost compared with skilled level of Thailand is lower than competitors.	29	13	13	39
Thai jewelry industry lacks of specific high skilled labour.	5	30	20	70
Thai jewelry industry lacks of qualify designer.	3	27	25	77
Thai jewelry industry lacks of gemmologist.	8	31	16	63
Thailand has strong relationship between industries. (Since cutting-moulding-assembling-until selling)	16	30	9	48
Thailand lacks of own developed technology. We need to import expensive machines and equipments from abroad.	10	32	13	58
Thai jewelry product doesn't have the creditable product standard.	11	30	14	58
Investment capital in jewelry industry is limited and not enough.	9	28	18	64
Import duty rate in raw material is so high.	7	26	22	70
Import duty rate in machine and equipment is so high.	11	29	15	59
The custom measures in import-export are not convenience, slow and not clear.	6	20	29	78

Source: From questionnaires

After gathering information, the analysis of the information is prepared. To find which assumption is the most accepted from the entrepreneurs and the specialists in jewelry industry, the weights of each level are introduced:

- Not agree has 0 point for each answer
- Moderate agree has 1 point for each answer
- Highly agree has 2 point for each answer

The agreed point of each assumption is show in the right column in Table 5.1. In conclusion, the top ten most agreed assumptions from the questionnaires are:

1. Heat treatment or COOK technique is the advantage of Thailand. (94)
2. Thailand is the centre of cutting colour stone of the world. (88)
3. Thailand lacks of gemstone materials both in quantity and quality. (81)
4. The custom measures in import-export are not convenience, slow and not clear. (78)
5. Thai jewelry industry lacks of qualify designer. (77)
6. Thai jewelry industry lacks of specific high skilled labour. (70)
7. Import duty rate in raw material is so high. (70)
8. Investment capital in jewelry industry is limited and not enough. (64)
9. Thai jewelry industry lacks of gemmologist. (63)
10. Import duty rate in machine and equipment is so high. (59)

5.2.3 About the External Factors

There are seven significant external factors that might affect to the export potential of Thai jewelry industry. These external factors have both the positive impact of the industry (opportunity) and negative impact (threat). The agreements of the interviewees in each external factor are divided into three levels: not affect, moderate affect and highly affect. The summary of number of agreements in each level of each external factor is shown in the table below.

Table 5.2: Summary of agreements in effects from external factors.

External Factors	<i>Not affect</i>	<i>Mod affect</i>	<i>Highly affect</i>	Points
<i>Factors that increase export potential</i>				
World economic has trend to be better	15	23	17	57
Devaluation of Thai baht currency	4	26	25	76
Thailand has joined several trade areas such as WTO, APEC, AFTA	18	25	12	49
<i>Factors that decrease export potential</i>				
Thailand has been cut GSP off in some product groups	12	30	13	56
The unite of trade area such as EU, NAFTA	13	34	8	50
Higher competition from China, India, and ASEAN	10	32	13	58
Higher trade barriers	11	29	15	59

Source: From questionnaires

As same as the analysis of assumption information, the weights of each level are implemented as:

- Not affect has 0 point for each answer
- Moderate affect has 1 point for each answer
- Highly affect has 2 point for each answer

The agreed point of each assumption is show in the right column in Table 5.2. In conclusion, the top five most agreed external effects from the questionnaires are:

1. Devaluation of Thai baht currency (76) will *increase* the export potential.
2. Higher trade barriers (59) will *decrease* the export potential.
3. Higher competition from China, India, and ASEAN (58) will *decrease* the export potential.
4. World economic has trend to be better (57) will *increase* the export potential.
5. Thailand has been cut GSP off in some product groups (56) will *decrease* the export potential of Thai jewelry industry.

5.2.4 About the Critical Success Factors

This section is about asking for the idea of the entrepreneurs and specialists about the importance of each factor to the success of Thai jewelry industry. We present 22 factors that might be critical to the success of industry. The agreements of the interviewees in each factor are divided into three levels: low importance, moderate importance and highly importance. The summary of number of agreements in each level of each critical success factor is shown in the table below.

Table 5.3: Summary of agreements in the importance of each critical success factor to Thai jewelry industry.

Critical Success factors	<i>Low important</i>	<i>Mod important</i>	<i>High important</i>	Points
Outsourcing raw material from abroad	2	21	32	140
Survey for new sources of raw material in domestic	11	24	20	119
Producing new specific skilled labour of education institute	13	32	10	107
Developing the skilled level of labours within the factory	10	35	10	110
Developing and producing qualify designer	13	20	22	119
Developing and producing gemmologist	22	23	10	98
Developing and producing researcher in production technology	11	29	15	114
Arrangement of jewelry fair and exhibition	5	22	28	133
Arrangement of product design contest	10	21	24	124
Supporting in financial by providing the loan	7	31	17	120
Export promotion policy	3	22	30	137
Tax policy in raw material	6	21	28	132
Tax policy in machine and equipment	9	31	15	116
Tax policy about value added tax (VAT)	13	33	9	106
Improvement of import and export operation	12	22	21	119
Supporting of the government to find the new market	7	19	29	132
Collecting and providing the trading information and marketing research	10	25	20	120
Internet and E-commerce to find the new market and provide the information	7	26	22	125
Having gemstones certificate	20	17	18	108
Having production standard certificate such as ISO 9000	27	10	18	101
Having own brand name of Thai producers	10	30	15	115
Marketing and management ability of the entrepreneurs	9	22	24	125

Source: From questionnaires

As same as the previous analysis, the weights of each level are implemented as:

- Low importance has 1 point for each answer
- Moderate importance has 2 point for each answer

➤ Highly importance has 3 point for each answer

The agreed point of each assumption is show in the right column in Table 5.3. The importance of each factor to the successful of Thai jewelry industry from the questionnaires are sorted from most important to the less as follows:

1. Outsourcing raw material from abroad (140)
2. Export promotion policy (137)
3. Arrangement of jewelry fair and exhibition (133)
4. Tax policy in raw material (132)
5. Supporting of the government to find the new market (132)
6. Internet and E-commerce to find the new market and provide the information (125)
7. Marketing and management ability of the entrepreneurs (125)
8. Arrangement of product design contest (124)
9. Supporting in financial by providing the loan (120)
10. Collecting and providing the trading information and marketing research (120)
11. Survey for new sources of raw material in domestic (119)
12. Developing and producing qualify designer (119)
13. Improvement of import and export operation (119)
14. Tax policy in machine and equipment (116)
15. Having own brand name of Thai producers (115)
16. Developing and producing researcher in production technology (114)
17. Developing the skill level of labours within the factory (110)
18. Having gemstones certificate (108)
19. Producing new specific skilled labour of education institute (107)
20. Tax policy about value added tax (VAT) (106)
21. Having production standard certificate such as ISO 9000 (101)
22. Developing and producing gemmologist (98)

5.3 Analysing Information (Survival or Growth?)

For the clearer scope of this research, this procedure is analysing the situation of Thai jewelry industry in the international market, especially in medium-end market, which is our target segment (see details in Chapter 3.7). At this time, there are two choices for us to select according to our understanding about the potential of Thai jewelry market and the international market situation. First, does Thailand have the potential to develop for growth in this global market situation? Second, does Thailand have the developing ability for survival in our medium-end market?

After we considered the results from the questionnaires, which are the thoughtfulness of many entrepreneurs and experts in this field, we think at this time Thai jewelry industry has potential merely to survive in our medium-end market. The reasons of our determination are as follows:

- Nowadays, it is very difficult to find the new sources of coloured stones in Thailand and there are much less rough gemstones both in quality and quantity in existing mines. Moreover, Thailand does not have other raw materials such as diamond, gold, etc.
- Although Thailand has high ability in cutting coloured stones, the cutting diamond industry in Thailand is not widespread and not acceptable in quality as cutting coloured stone industry.
- Thailand lacks of high skilled labours in specific branches, including the supporting human resources such as designer, gemmologist, etc.
- Labour costs in Thailand have increased continuously and they are much higher than the competitors' ones. So, we cannot compete with their prices in low-end market. Moreover, these new comers jewelry manufacturing countries may upgrade themselves to complete with us in medium-end market in the near future.
- Thai jewelry industry does not have own production technology. Therefore, it is very difficult to develop the product quality, including at this time there is no standard of our export products.
- Capital investment of Thai producers is limited. Some effects come from the economic crisis in Thailand in 1997 and the depreciated of Thai bath. The limited capital is the big obstacle for the growth of industry.
- Tax system and custom measures do not support the expansion of business.

Table 5.4: Supporting Information From Surveying.

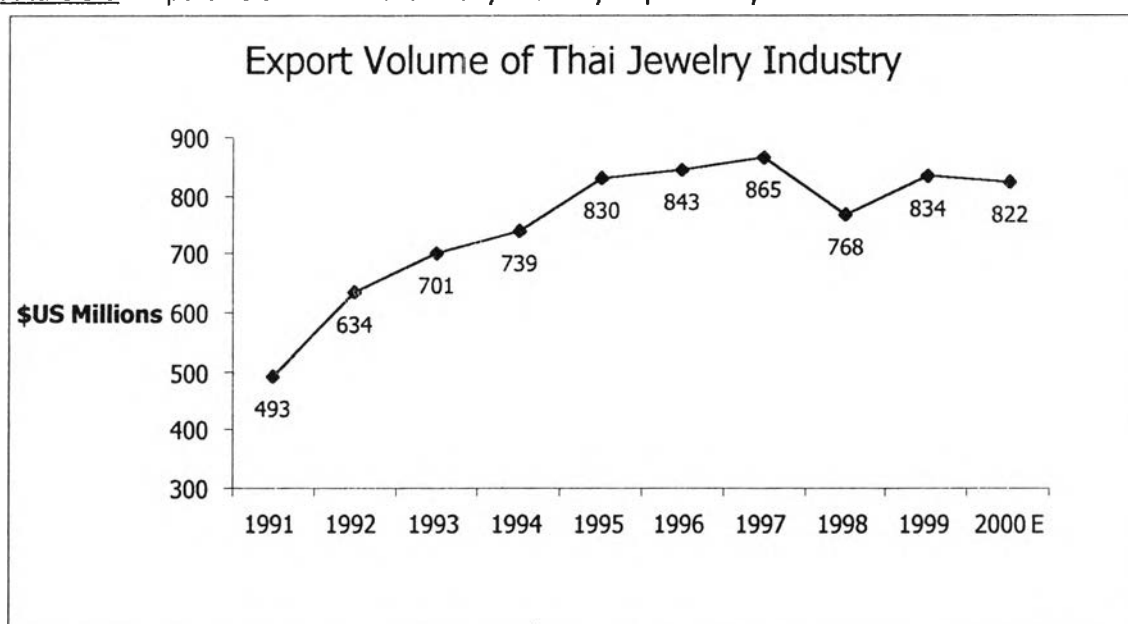
Supporting Information From Surveying Thai Entrepreneurs and Experts in Jewelry Industry
93 percent think Thailand lacks of gemstone materials both in quantity and quality.
78 percent think Thailand lacks of precious metal materials.
91 percent think Thai jewelry industry lacks of specific high skilled labour.
95 percent think Thai jewelry industry lacks of qualify designer.
85 percent think Thai jewelry industry lacks of gemmologist.
82 percent think Thai jewelry industry lacks of own developed technology. We need to import expensive machines and equipments from abroad.
84 percent think Investment capital in jewelry industry is limited and not enough.

Source: From questionnaires

Notes: See details in Appendix B.

- Additionally, Figure 5.1 shows that the export volume of Thai jewelry industry has declined trend. Since 1995 to 2000, export volume of Thai jewelry industry totally could not expand like in year 1991 to 1995. In some years, the export volume decreased such as in 1998 and 2000.

Figure 5.1: Export Volume of Thai Jewelry Industry in past ten years.

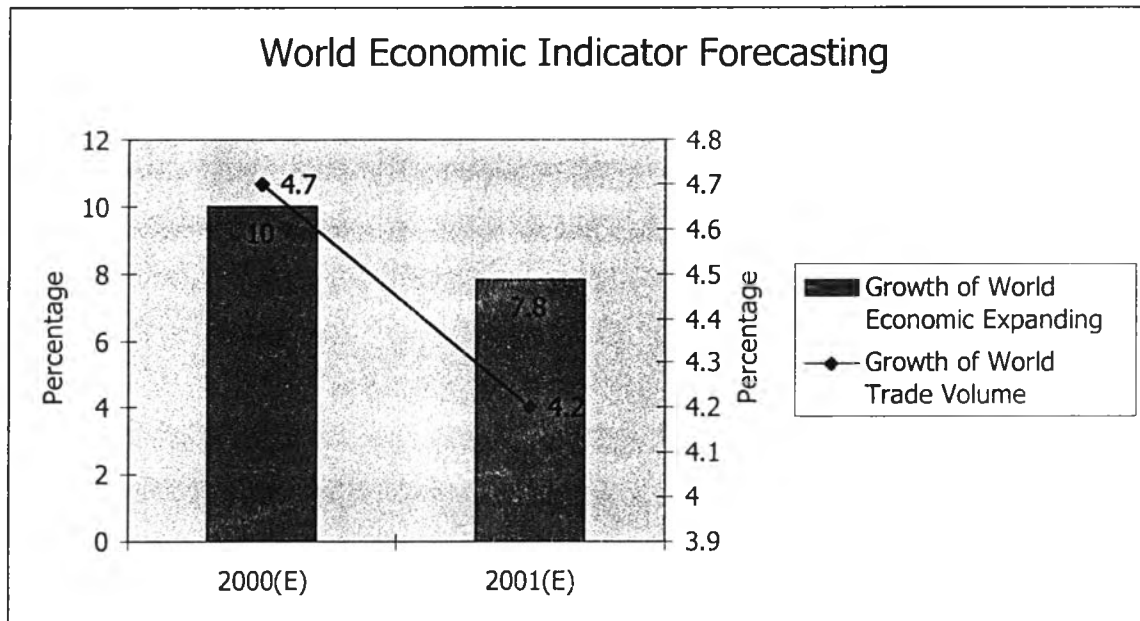


Source: Trade Statistic Centre, Department of Business Commerce

- The effects from the unite of trade area such as EU and NAFTA, including Thailand has been cut GSP off in several products.
- Lastly, one of the most forceful effects to Thai exporting jewelry is the decline of world economic indicators, especially economic landing of USA, which is the most important market of Thai jewelry.

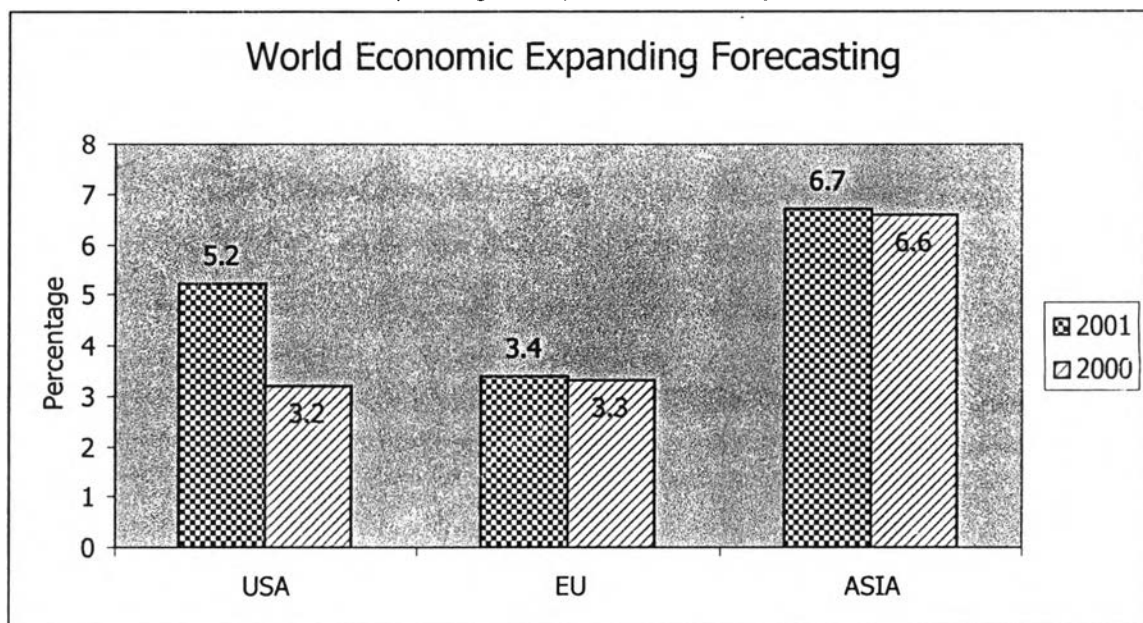
The forecasting from World Economic Outlook stated that in year 2001 both the world economic expanding and world trade volume would have smaller growth rate than in 2000 as shown in Figure 5.2.

Figure 5.2: World Economic Indicators Forecasting.



Source: World Economic Outlook, October 2000

Figure 5.3: Forecast Economic Expanding of Important Markets (USA, EU, and ASIA)



Source: World Economic Outlook, October 2000

In addition, after we focused on the important markets of Thai jewelry industry in Figure 5.3, we found that the economic expanding of all three main markets (USA,

EU, and Asia) in year 2001 are expected to reduce, especially USA would have much lower than in year 2000.

In conclusion, from the internal problems of Thai jewelry industry with the economic recession in this situation, we think it is not appropriate for us to plan a growth strategy.

Therefore, the vision of this thesis research is to identify the critical success factors and to propose the strategies for Thai jewelry industry *to have potential to survive in the medium-end market of jewelry business.*