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APPENDICES

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APPENDIX A

STATISTIC TABLES

Table A-1: Jewelry and gem export volume of Thailand compared with total export

	Total Export	Jeweiry and Gem Industry							
Year		Export Volume	Proportion	Growth Rate					
	(US\$ million)	(US\$ million)	(Percent)	(Percent)					
1991	28,627.5	1,507.1	5.26	4.33					
<i>1992</i>	32,609.1	1,553.0	4.76	3.05					
<i>1993</i>	37,324.8	1,725.3	4.62	11.09					
1994	45,430.0	1,880.5	4.14	8.99					
<i>1995</i>	56,725.3	2,116.7	3.73	12.56					
<i>1996</i>	55,941.4	2,151.9	3.85	1.67					
<i>1997</i>	58,328.6	1,800.1	3.09	-16.35					
<i>1998</i>	54,490.1	1,386.7	2.54	-22.97					
<i>1999</i>	58,463.4	1,575.2	2.69	13.59					
2000 (Jan-Oct)	57,704.2	1,361.9	2.36	7.20					

Source: Trade Statistic Centre, Department of Business Economic

Table A-2: Export volume of each product of gem and jewelry of Thailand

		Export Volume									
			Unit: US\$ Millio								
	Section	1997	1998	1999	1999 (Jan-Oct)	2000 (Jan-Oct)					
1	Total	1,800.1	1,386.7	1,575.2	1,270.5	1,361.9					
2	Diamond	536.2	320.5	430.8	352.6	431.2					
3	Colour Stone and Pearl	318.9	223.7	239.5	197.9	203.6					
4	Jewelry	864.9	768.1	834.3	660.7	662.7					
5	Imitation Jewelry	62.3	62.1	55.8	46.8	51.5					
6	Synthetic Stone	17.7	12.3	14.8	12.5	12.8					

Source: Trade Statistic Centre, Department of Business Economic

Table A-3:Volume growth rate and product ratio of export gem and jewelry

		Volume Growth Rate				Ratio					
				Unit:	Percent				Unit: P	Percent	
	Section	1997	1998	1999	2000 -Oct	1997	1998	1999	1999 -Oct	2000 -Oct	
1	Total	-16.3	-23.0	13.6	7.2	100	100	100	100	100	
2	Diamond	-33.2	-40.2	34.4	22.3	29.8	23.1	27.3	27.8	31.7	
3	Colour Stone and Pearl	-23.4	-29.9	7.1	2.9	17.7	16.1	15.2	15.6	14.9	
4	Jewelry	2.6	-11.2	8.6	0.3	48.0	55.4	53.0	52.0	48.7	
5	Imitation Jewelry	-13.5	-0.3	-10.1	10.0	3.5	4.5	3.5	3.7	3.8	
6	Synthetic Stone	-1.1	-30.5	20.3	2.4	1.0	0.9	0.9	1.0	0.9	

			E	xport Volum	e					
			Unit: US\$ M							
	Country	1997	1998	1999	1999 (Jan-sep)	2000 (Jan-Sep)				
1	USA	437.2	407.9	481.5	335.2	351.3				
2	Israel	159.7	152.0	216.0	153.8	185.4				
3	Belgium	210.3	134.7	167.7	114.0	161.1				
4	Japan	202.0	129.3	145.1	104.7	88.2				
5	Germany	96.6	89.9	88.8	62.9	62.7				
6	Hong Kong	271.3	85.5	79.7	49.5	53.5				
7	UK	51.9	59.7	63.3	42.1	47.2				
8	Switzerland	87.9	75.5	72.1	57.2	44.5				
9	France	63.6	63.5	61.1	46.5	43.2				
10	Italy	18.7	18.1	23.5	15.3	22.3				
	Sum of 10 Countries	1,599.2	1,216.1	1,398.9	981.1	1,059.4				
	Others	201.0	170.6	176.3	118.0	140.7				
	Total	1,800.1	1,386.7	1,575.2	1,099.1	1,200.0				

Table A-4:Export volume and major markets of gem and jewelry product of
Thailand

Source: Trade Statistic Centre, Department of Business Economic

Table A-5:Volume growth rate and market ratio of export gem and jewelry
product of Thailand

_		Vo	lume Gr	owth R	ate			Ratio		
		Unit: Percent							Unit: P	ercent
	Country	97	98	99	2000 -Sep	97	98	99	99 -Sep	00 -Sep
1	USA	-6.2	-6.7	18.0	4.8	24.3	29.4	30.6	30.5	29.3
2	Israel	8.2	-4.8	42.1	20.5	8.9	11.0	13.7	14.0	15.5
3	Belgium	-15.0	-35.9	24.5	41.3	11.7	9.7	10.6	10.4	13.4
4	Japan	-38.4	-36.0	12.2	-15.8	11.2	9.3	9.2	9.5	7.4
5	Germany	-10.3	-6.9	-1.2	-0.3	5.4	6.5	5.6	5.7	5.2
6	Hong Kong	-31.8	-68.5	-6.8	8.1	15.1	6.2	5.1	4.5	4.5
7	UK	8.7	15.0	6.0	12.1	2.9	4.3	4.0	3.8	3.9
8	Switzerland	-11.5	-14.1	-4.5	-22.2	4.9	5.4	4.6	5.2	3.7
9	France	9.5	-0.2	-3.8	-7.1	3.5	4.6	3.9	4.2	3.6
10	Italy	2.2	-3.2	29.8	45.8	1.0	1.3	1.5	1.4	1.9
	Sum of 10									
	Countries	-16.4	-24.0	15.0	8.0	88.8	87.7	88.8	89.3	88.3
	Others	-16.0	-15.1	-3.3	19.2	11.2	12.3	11.2	10.7	11.7
	Total	-16.4	-23.0	13.6	9.2	100	100	100	100	100

•			E	xport Volum	е	1
					Unit	: US\$ Million
	Country	1997	1998	1999	1999 (Jan-sep)	2000 (Jan-Sep)
1	USA	284.6	289.0	367.5	247.1	258.3
2	Germany	83.2	76.2	79.0	55.5	56.0
3	UK	40.0	49.2	53.6	34.7	40.9
4	Japan	95.5	65.5	57.0	40.4	35.2
5	France	41.0	41.8	42.4	31.1	29.0
6	Switzerland	45.1	47.7	52.8	42.1	24.9
7	Israel	30.2	29.9	31.8	20.1	23.0
8	UAE	16.7	14.7	16.3	10.3	12.2
9	Hong Kong	109.9	38.3	19.6	13.0	11.8
10	Italy	8.8	9.9	13.8	7.9	11.7
	Sum of 10 Countries	754.9	662.2	733.8	502.2	503.1
	Others	110.0	105.9	100.6	65.5	70.2
	Total	864.9	768.1	834.3	567.7	573.2

 Table A-6:
 Export volume and major markets of jewelry product of Thailand

Source: Trade Statistic Centre, Department of Business Economic

Table A-7:	Volume growth rate and market ratio of export <i>jewelry</i> product of
	Thailand

		Vo	lume Gr	owth R	ate			Ratio		
		Unit: Percent							Unit: P	ercent
	Country	97	98	99	2000 -Sep	97	98	99	99 -Sep	00 -Sep
1	USA	-6.1	1.5	27.2	4.5	32.9	37.6	44.0	43.5	45.1
2	Germany	-1.9	-8.4	3.7	0.9	9.6	9.9	9.5	9.8	9.8
3	UK	19.2	23.0	8.9	17.9	4.6	6.4	6.4	6.1	7.1
4	Japan	-35.6	-31.4	-13.0	-12.9	11.0	8.5	6.8	7.1	6.1
5	France	-8.5	2.0	1.4	-6.8	4.7	5.4	5.1	5.5	5.1
6	Switzerland	2.2	5.8	10.7	-40.9	5.2	6.2	6.3	7.4	4.3
7	Israel	37.9	-1.0	6.4	14.4	3.5	3.9	3.8	3.5	4.0
8	UAE	328.1	-12.0	10.9	18.4	1.9	1.9	2.0	1.8	2.1
9	Hong Kong	1.0	-65.2	-48.8	-9.2	12.7	5.0	2.3	2.3	2.1
10	Italy	-15.8	12.5	39.4	48.1	1.0	1.3	1.7	1.4	2.0
	Sum of 10									
	Countries	2.8	-12.3	10.8	0.2	87.3	86.2	88.0	88.5	87.8
	Others	1.3	-3.7	-5.0	7.2	12.7	13.8	12.1	11.5	12.2
	Total	2.6	-11.2	8.6	1.0	100	100	100	100	100

		e.	E	xport Volum		-
			1.16 7 1 1	100	Unit	: US\$ Million
	Country	1997	1998	1999	1999 (Jan-sep)	2000 (Jan-Sep)
1	Liechtenatein	5.9	9.4	9.9	7.2	11.3
2	USA	18.8	19.1	15.5	12.2	11.1
3	France	13.2	12.1	10.8	8.7	7.6
4	Japan	2.0	2.0	2.2	1.7	3.1
5	Germany	2.4	2.7	3.0	2.2	2.1
6	Belgium	2.6	2.8	2.5	1.8	1.7
7	UK	3.0	2.3	1.6	1.0	1.4
8	Austria	0.9	1.1	1.2	1.0	1.3
9	Singapore	1.1	0.7	0.9	0.6	0.8
10	Italy	1.6	1.3	0.8	0.6	0.7
	Sum of 10 Countries	51.4	53.4	48.4	36.8	41.1
	Others	11.0	8.7	7.3	5.0	4.8
	Total	62.3	62.1	55.8	41.8	45.9

Table A-8: Export volume and major markets of *imitation jewelry* product of Thailand

Source: Trade Statistic Centre, Department of Business Economic

Table A-9:Volume growth rate and market ratio of export *imitated jewelry*
product of Thailand

		Vo	lume G	rowth R	ate			Ratio		
			Unit: Percent						Unit: P	Percent
	Country	97	98	99	2000 -Sep	97	98	99	99 -Sep	00 -Sep
1	Liktenstyle	-	59.3	5.3	56.9	9.5	15.1	17.7	17.2	24.6
2	USA	-	1.6	-18.8	-9.0	30.2	30.8	27.8	29.2	24.2
3	France	-	-8.3	-10.7	-12.6	21.2	19.5	19.4	20.8	16.6
4	Japan	-	0.0	10.0	82.4	3.2	3.2	3.9	4.1	6.8
5	Germany	-	12.5	11.1	-4.5	3.9	4.3	5.4	5.3	4.6
6	Belgium	-	7.7	-10.7	-5.6	4.2	4.5	4.5	4.3	3.7
7	UK	-	-23.3	-30.4	40.0	4.8	3.7	2.9	2.4	3.1
8	Austria	-	22.2	9.1	30.0	1.4	1.8	2.2	2.4	2.8
9	Singapore	-	-36.4	28.6	33.3	1.8	1.1	1.6	1.4	1.7
10	Italy	-	-18.8	-38.5	16.7	2.6	2.1	1.4	1.4	1.5
	Sum of 10									
	Countries	-	3.9	-9.4	11.7	82.5	86.0	86.7	88.0	89.5
	Others	-	-20.9	-16.1	-4.0	17.7	14.0	13.1	12.0	10.5
	Total	-	-0.3	-10.1	9.8	100	100	100	100	100

Table A-10:Import volume and major suppliers of raw materials (diamond,
gemstone, gold bar, silver bar, jewelry and others) in jewelry industry
of Thailand

	Raw materials		In	nport Volum	e	
					Unit	: US\$ Million
	Country	1997	1997 1998		1999 (Jan-sep)	2000 (Jan-Sep)
1	Israel	129.0	119.3	184.5	137.2	178.8
2	India	158.9	126.3	163.9	120.9	148.7
3	Belgium	91.2	78.2	122.6	87.4	131.9
4	Switzerland	113.9	73.1	110.7	82.5	121.2
5	Australia	129.0	89.3	95.9	70.4	95.4
6	USA	62.6	36.1	61.1	46.2	74.5
7	Hong Kong	43.7	51.1	62.5	47.3	71.8
8	Germany	76.5	79.6	74.2	56.9	58.9
9	Congo	40.0	37.5	46.8	30.9	36.0
10	UK	71.8	24.6	35.8	23.9	33.3
	Sum of 10 Countries	916.6	715.1	958.2	703.6	950.4
	Others	308.5	194.9	259.5	172.1	232.5
	Total	1,225.1	910.0	1,217.7	875.7	1,183.0

Source: Trade Statistic Centre, Department of Business Economic

Table A-11:Volume growth rate and market ratio of import raw materials
(diamond, gemstone, gold bar, silver bar, jewelry and others) in
jewelry industry of Thailand

	Raw materials	Vo	lume Gr	owth R	ate			Ratio		
				Unit:	Percent				Unit: P	ercent
	Country	97	98	99	2000 -Sep	97	98	99	99 -Sep	00 -Sep
1	Israel	-15.6	-7.5	54.7	30.3	10.5	13.1	15.2	15.7	15.1
2	India	-30.3	-20.5	29.8	23.0	13.0	13.9	13.5	13.8	12.6
3	Belgium	-49.7	-14.3	56.8	50.9	7.4	8.6	10.1	10.0	11.1
4	Switzerland	-23.6	-35.8	51.4	46.9	9.3	8.0	9.1	9.4	10.2
5	Australia	-38.8	-30.8	7.4	35.5	10.5	9.8	7.9	8.0	8.1
6	USA	-39.9	-42.3	69.3	61.3	5.1	4.0	5.0	5.3	6.3
7	Hong Kong	-63.5	16.9	22.3	51.8	3.6	5.6	5.1	5.4	6.1
8	Germany	-11.3	4.1	-6.8	3.5	6.2	8.7	6.1	6.5	5.0
9	Congo	106.6	-6.3	24.8	16.5	3.3	4.1	3.8	3.5	3.0
10	UK	-7.9	-65.7	45.5	39.3	5.9	2.7	2.9	2.7	2.8
	Sum of 10		-							
	Countries	-31.0	-22.0	34.0	35.1	74.8	78.6	78.7	80.3	80.3
	Others	-21.7	-36.8	33.1	35.1	25.2	21.4	21.3	19.7	19.7
	Total	-28.9	-25.7	33.8	35.1	100	100	100	100	100

-	Diamond		Ir	nport Volum	e		
					Unit: US\$ Million		
	Country	1997	1998	1999	1999 (Jan-Sep)	2000 (Jan-Sep)	
1	Israel	83.4	79.9	140.5	107.9	148.1	
2	India	135.8	110.1	137.7	100.3	132.3	
3	Belgium	90.5	77.7	120.5	85.6	131.1	
4	Congo	40.0	37.5	46.8	30.9	36.0	
5	USA	23.1	16.9	31.1	23.4	32.8	
6	Ghana	76.3	48.9	63.5	46.4	27.2	
7	Hong Kong	21.4	24.6	16.2	11.1	25.0	
8	UK	38.0	7.2	15.4	10.6	13.8	
9	Germany	7.6	11.2	7.0	5.5	6.6	
10	Switzerland	9.5	1.4	3.3	2.3	3.5	
	Sum of 10 Countries	518.5	414.2	578.9	421.7	558.6	
	Others	58.9	14.9	24.2	16.1	29.3	
	Total	577.4	429	603.1	437.9	587.9	

 Table A-12:
 Import volume and major suppliers of *diamond* of Thailand

Source: Trade Statistic Centre, Department of Business Economic

Table A-13: V	Volume growth rate and market ratio of import <i>diamond</i> of Thailand
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	Diamond	Vo	lume G	rowth R	ate			Ratio	0		
				Unit:	Percent	Unit: Percent					
	Country	97	98	99	2000 -Sep	97	98	99	99 -Sep	00 -Sep	
1	Israel	-25.2	-4.2	75.8	37.3	14.4	18.6	23.3	24.6	25.2	
2	India	-32.2	-18.9	25.1	31.9	23.5	25.7	22.8	22.9	22.5	
3	Belgium	-49.5	-14.1	55.1	53.2	15.7	18.1	20.0	19.5	22.3	
4	Congo	106.6	-6.3	24.8	16.5	6.9	8.7	7.8	7.1	6.1	
5	USA	-52.2	-26.8	84.0	40.2	4.0	3.9	5.2	5.3	5.6	
6	Ghana	-8.1	-35.9	29.9	-41.4	13.2	11.4	10.5	10.6	4.6	
7	Hong Kong	-69.7	15.0	-34.1	125.2	3.7	5.7	2.7	2.5	4.3	
8	UK	-14.9	-81.1	113.9	30.2	6.6	1.7	2.6	2.4	2.3	
9	Germany	-34.2	47.4	-37.5	20.0	1.3	2.6	1.2	1.3	1.1	
10	Russia	-79.1	-85.5	139.0	162.9	0.4	0.0	0.0	0.0	1.0	
	Sum of 10										
	Countries	-35.4	-20.1	39.8	32.5	89.8	96.6	96.0	96.3	95.0	
	Others	-40.2	-74.7	62.4	82.0	10.2	3.5	4.0	3.7	5.0	
	Total	-35.9	-25.7	40.6	34.3	100	100	100	100	100	

	Gold		Ir	nport Volum	ie	
				_	Unit	: US\$ Million
	Country	1997	1998	1999	1999 (Jan-Sep)	2000 (Jan-Sep)
1	Switzerland	75.5	53.3	90.9	68.2	100.7
2	Australia	114.4	77.9	85.4	63.9	80.5
3	Germany	54.9	52.2	53.5	40.6	39.9
4	Israel	40.8	34.3	42.1	27.8	29.3
5	Malaysia	15.7	17.0	23.0	15.7	22.7
6	South Africa	0.0	0.0	23.2	0.0	13.6
7	UK	31.5	4.6	2.6	2.2	12.7
8	USA	2.2	1.8	1.6	0.9	11.7
9	Singapore	46.8	9.9	11.0	7.3	10.6
10	Japan	1.8	2.2	2.2	1.4	4.2
	Sum of 10 Countries	383.5	253.1	335.4	228.1	325.8
	Others	16.7	7.0	14.5	11.4	10.0
	Total	400.2	260.1	349.9	239.4	335.8

Table A-14: Import volume and major suppliers of gold of Thailand

Source: Trade Statistic Centre, Department of Business Economic

Table A-15: Volume growth rate and market ratio of import <i>gold</i> of T
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	Gold	Vo	lume Gi	rowth R	ate			Ratio		
				Unit:	Percent	Unit: F				ercent
	Country	97	98	99	2000 -Sep	97	98	99	99 -Sep	00 -Sep
1	Switzerland	-3.3	-29.4	70.5	47.7	18.9	20.5	26.0	28.5	30.0
2	Australia	-38.1	-31.9	9.6	26.0	28.6	30.0	24.4	26.7	24.0
3	Germany	-3.7	-4.9	2.5	-1.7	13.7	20.1	15.3	17.0	11.9
4	Israel	11.8	-15.9	22.7	5.4	10.2	13.2	12.0	11.6	8.7
5	Malaysia	147.9	8.3	35.3	44.6	3.9	6.5	6.6	6.6	6.8
6	South Africa	-100	-	-	-	0.0	0.0	6.6	0.0	4.1
7	UK	-5.6	-85.4	-43.5	477.3	7.9	1.8	0.7	0.9	3.8
8	USA	-83.7	-18.2	-11.1	1200	0.5	0.7	0.5	0.4	3.5
9	Singapore	-5.6	-78.8	11.1	45.2	11.7	3.8	3.1	3.0	3.2
10	Japan	-65.8	22.2	0.0	200.0	0.4	0.8	0.6	0.6	1.3
	Sum of 10 Countries	-17.6	-34.0	32.5	42.8	95.8	97.3	95.9	95.3	97.0
	Others	-15.0	-58.1	107.1	-12.3	4.2	2.7	4.1	4.8	3.0
	Total	-17.4	-35.0	34.5	40.3	100	100	100	100	100

	Precious stone		Ir	nport Volum	ne	
				-	Unit	: US\$ Million
	Country	1997	1998	1999	1999 (Jan-Sep)	2000 (Jan-Sep)
1	USA	12.1	8.4	16.2	12.7	16.3
2	India	22.5	14.4	20.8	16.2	14.9
3	Hong Kong	8.7	10	10.5	8.3	8.6
4	Brazil	4.1	2.7	3.6	2.5	5.8
5	Canada	0.1	1.7	8.9	5.8	4.9
6	Switzerland	5.2	4.3	4.0	2.6	4.2
7	Germany	3.8	4.9	4.3	3.5	3.2
8	Australia	5.1	4.4	3.5	1.8	3.0
9	Sri Lanka	2.2	0.8	1.2	0.9	3.0
10	Japan	1.5	0.9	1.9	1.6	1.9
	Sum of 10 Countries	64.5	55.3	77.3	57.5	66.7
	Others	20.6	18.7	15.5	12.3	11.8
	Total	85.1	74.0	92.9	69.8	78.5

Table A-16: Import volume and major suppliers of precious stone of Thailand

Source: Trade Statistic Centre, Department of Business Economic

Table A-17:Volume growth rate and market ratio of import precious stone of
Thailand

	Precious stone	Vo	Volume Growth Rate			Ratio				
			Unit: Percent			Unit: Percent				
	Country	97	98	99	2000 -Sep	97	98	99	99 -Sep	00 -Sep
1	USA	-25.9	-30.6	92.9	28.3	14.2	11.4	17.4	18.2	20.8
2	India	2.3	-36.0	44.4	-8.0	26.4	19.5	22.4	23.2	19.0
3	Hong Kong	-66.3	14.9	5.0	3.6	10.2	13.5	11.3	11.9	11.0
4	Brazil	-56.2	-34.1	33.3	132.0	4.8	3.6	3.9	3.6	7.4
5	Canada	-51.7	1600	423.5	-15.5	0.1	2.3	9.6	8.3	6.2
6	Switzerland	-38.4	-17.3	-7.0	61.5	6.1	5.8	4.3	3.7	5.4
7	Germany	-18.6	28. 9	-12.2	-8.6	4.5	6.6	4.6	5.0	4.1
8	Australia	-38.7	-13.7	-20.5	66.7	6.0	5.9	3.8	2.6	3.8
9	Sri Lanka	-60.8	-63.6	50.0	233.3	2.6	1.1	1.3	1.3	3.8
10	Japan	-9.5	-40.0	111.1	18.8	1.8	1.2	2.0	2.3	2.4
	Sum of 10									
	Countries	-36.3	-14.3	39.8	16.0	75.8	74.7	83.2	82.4	85.0
	Others	-29.7	-9.2	-17.1	-4.1	24.2	25.3	16.7	17.6	15.0
	Total	-34.8	-13.0	25.5	12.5	100	100	100	100	100

	Silver	Import Volume								
				-	Unit	: US\$ Million				
	Country	1997	1998	1999	1999 (Jan-Sep)	2000 (Jan-Sep)				
1	Hong Kong	0.2	9.2	17.5	12.0	21.3				
2	Indonesia	4.6	9.3	8.0	5.0	10.8				
3	Australia	7.7	2.9	2.8	1.3	10.2				
4	South Korea	9.4	23.1	16.0	12.8	8.6				
5	UK	0.0	9.5	14.9	9.1	5.0				
6	Switzerland	13.1	8.7	3.6	2.6	3.9				
7	Japan	2.5	2.0	2.6	1.9	2.2				
8	Germany	1.8	2.2	3.2	2.5	2.1				
9	USA	17.5	1.8	2.3	1.7	1.5				
10	Japan	0.1	0.4	1.2	0.9	1.1				
	Sum of 10 Countries	56.9	68.9	72.1	49.9	66.8				
	Others	8.1	4.1	5.1	4.4	2.1				
	Total	65.0	73.0	77.2	54.3	69.0				

Table A-18: Import volume and major suppliers of silver of Thailand

Source: Trade Statistic Centre, Department of Business Economic

Table A-19:	Volume growth rate and market ratio of im	port <i>silver</i> of Thailand
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	Silver	Va	lume G	owth R	ate			Ratio		
			Unit: Percent			Unit: Percen				ercent
	Country	97	98	99	2000 -Sep	97	9 8	9 9	99 -Sep	00 -Sep
1	Hong Kong	-66.6	4500	90.2	77.5	0.3	12.6	22.7	22.1	30.9
2	Indonesia	14.1	102.2	-14.0	116.0	7.1	12.7	10.4	9.2	15.7
3	Australia	-33.7	-62.3	-3.4	684.6	11.8	4.0	3.6	2.4	14.8
4	South Korea	-31.7	145.7	-30.7	-32.8	14.5	31.6	20.7	23.6	12.5
5	UK	-99.7	41622	56.8	-45.1	0.0	13.0	19.3	16.8	7.2
6	Switzerland	116.0	-33.6	-58.6	50.0	20.2	11.9	4.7	4.8	5.7
7	Japan	3.0	-20.0	30.0	15.8	3.8	2.7	3.4	3.5	3.2
8	Germany	29.4	22.2	45.5	-16.0	2.8	3.0	4.1	4.6	3.0
9	USA	34.4	-89.7	27.8	-11.8	26.9	2.5	3.0	3.1	2.2
10	Japan	-79.8	300.0	200.0	22.2	0.2	0.5	1.6	1.7	1.6
	Sum of 10									
	Countries	-7.4	21.1	4.6	33.9	87.5	94.4	93.4	91.9	96.8
	Others	-14.9	-49.4	24.4	-52.3	12.5	5.6	6.6	8.1	3.0
	Total	-8.4	12.3	5.8	27.1	100	100	100	100	100

	Synthetic precious stone		Import Volume								
					Unit	: US\$ Million					
	Courter	1007	1009	1999	1999	2000					
	Country	1997	1998	1999	(Jan-Sep)	(Jan-Sep)					
1	China	8	5.7	10.7	8.1	8.1					
2	Switzerland	5.3	2.6	6.7	4.8	5.7					
3	Hong Kong	3.6	1.7	2.5	1.6	2.4					
4	USA	0.4	0.5	1	0.7	0.7					
5	Russia	0.3	0.5	0.5	0.4	0.6					
6	South Korea	0.5	0.7	0.4	0.3	0.5					
7	Taiwan	1.4	0.5	0.4	0.3	0.4					
8	Australia	0.2	2.9	0.8	0.7	0.3					
9	Austria	6.4	2.5	1.4	1.3	0.1					
10	France	0.5	0.3	0.3	0.2	0.1					
	Sum of 10 Countries	26.7	17.8	24.7	18.4	18.9					
	Others	4.5	3	0.4	0.2	0.4					
	Total	31.2	20.9	25	18.6	19.3					

Table A-20:Import volume and major suppliers of synthetic precious stone of
Thailand

Source: Trade Statistic Centre, Department of Business Economic

Table A-21: Volume growth rate and market ratio of import synthetic precious stone of Thailand

	Synthetic precious stone	Volume Growth Rate				Ratio				
				Unit:	Percent				Unit: Percent	
	Country	97	98	99	2000 -Sep	97	98	99	99 -Sep	00 -Sep
1	China	151.9	-28.8	87.7	0.0	25.6	27.3	42.8	43.5	42.0
2	Switzerland	-1.1	-50.9	157.7	18.8	17.0	12.4	26.8	25.8	29.5
3	Hong Kong	12.1	-52.8	47.1	50.0	11.5	8.1	10.0	8.6	12.4
4	USA	-1.5	25.0	100.0	0.0	1.3	2.4	4.0	3.8	3.6
5	Russia	-50.2	66.7	0.0	50.0	1.0	2.4	2.0	2.2	3.1
6	South Korea	26.9	40.0	-42.9	66.7	1.6	3.3	1.6	1.6	2.6
7	Taiwan	-27.2	-64.3	-20.0	33.3	4.5	2.4	1.6	1.6	2.1
8	Australia	-74.2	1350	-72.4	-57.1	0.6	13.9	3.2	3.8	1.6
9	Austria	-70.5	-60.9	-44.0	-92.3	20.5	12.0	5.6	7.0	0.5
10	France	12.8	-40.0	0.0	-50.0	1.6	1.4	1.2	1.1	0.5
	Sum of 10						_			
	Countries	23.7	-33.3	38.8	2.7	85.6	85.2	98.8	98.9	97.9
	Others	-5.7	-33.3	-86.7	100.0	14.4	14.4	1.6	1.1	2.1
	Total	11.6	-33.0	19.6	3.8	100	100	100	100	100

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	Platinum	Import Volume							
		Unit: US\$ Million							
	Country	1997	1998	1999	1999	2000			
	Country	1997	1990	1999	(Jan-Sep)	(Jan-Sep)			
1	Japan	8.9	6.0	7.6	5.6	9.3			
2	Germany	2.5	4.8	2.8	2.0	4.0			
3	USA	0.0	0.4	1.4	1.0	1.1			
4	Hong Kong	0.1	0.2	0.3	0.2	0.8			
5	Singapore	0.2	0.2	0.4	0.3	0.6			
	Sum of 5 Countries	11.7	11.6	12.5	9.1	15.8			
	Others	0.5	0.8	0.5	0.3	0.5			
	Total	12.2	12.4	13	9.4	16.3			

Table A-22: Import volume and major suppliers of *platinum* of Thailand

Source: Trade Statistic Centre, Department of Business Economic

Table A-23: Volume growth rate and market ratio of import *platinum* of Thailand

	Platinum	Volume Growth Rate				Ratio						
				Unit:	Percent				Unit: P	ercent		
	Country	97	98	99	2000	97	98	99	99	00		
	Country	97	90	33	-Sep	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	57	98	90		-Sep	-Sep
1	Japan	-37.4	-32.6	26.7	66.1	73.0	48.4	58.5	59.6	57.1		
2	Germany	-7.8	92.0	-41.7	100.0	20.5	38.7	21.5	21.3	24.5		
3	USA	-99.3	-	250.0	10.0	0.0	3.2	10.8	10.6	6.7		
4	Hong Kong	-89.3	100.0	50.0	300.0	0.8	1.6	2.3	2.1	4.9		
5	Singapore	-39.3	0.0	100.0	100.0	1.6	1.6	3.1	3.2	3.7		
	Sum of 5											
	Countries	-35.7	-0.9	7.8	73.6	95.9	93.5	96.2	96.8	96.9		
	Others	-74.0	60.0	-37.5	66.7	4.1	6.5	3.8	3.2	3.1		
	Total	-36.2	1.6	4.8	73.4	100	100	100	100	100		

	Pearl	Import Volume							
		Unit: US\$ Million							
	Country	1997	1998	1999	1999 (Jan-Sep)	2000 (Jan-Sep)			
1	Hong Kong	2.5	0.8	3.4	3.3	3.3			
2	Japan	3.5	3.3	4.1	3.7	3			
3	Australia	1.5	1.3	2.6	1.9	1.3			
4	China	0	0.1	0.1	0.1	0.6			
5	USA	0.1	0.2	0.1	0.1	0.3			
	Sum of 5 Countries	7.6	5.7	10.3	9.1	8.5			
	Others	1.7	0.4	0.3	0.1	3.2			
	Total	9.3	6.1	10.6	9.2	11.7			

Table A-24: Import volume and major suppliers of pearl of Thailand

Source: Trade Statistic Centre, Department of Business Economic

Table A-25: Volume growth rate and market ratio of import *pearl* of Thailand

	Pearl	Volume Growth Rate				Ratio				
				Unit:	Percent		_		Unit: P	Percent
	Country	97	98	99	2000	97	98	99	99	00
	Country	57	50	33	-Sep	37		33	-Sep	-Sep
1	Hong Kong	-46.9	-68.0	325.0	0.0	26.9	13.1	32.1	35.9	28.2
2	Japan	-76.3	-5.7	24.2	-18.9	37.6	54.1	38.7	40.2	25.6
3	Australia	-62.1	-13.3	100.0	-31.6	16.1	21.3	24.5	20.7	11.1
4	China	-97.0	-	0.0	500.0	0.0	1.6	0.9	1.1	5.1
5	USA	-84.6	100.0	-50.0	200.0	1.1	3.3	0.9	1.1	2.6
	Sum of 5									
	Countries	-68.7	-25.0	80.7	-6.6	81.7	93.4	97.2	98.9	72.6
	Others	99.2	-76.5	-25.0	3100	18.3	6.6	2.8	1.1	27.4
	Total	-63.0	-34.4	73.8	27.2	100	100	100	100	100

APPENDIX B

QUESTIONNAIRE

Questionnaire

Part 1 General Information

- 1.1 Type of your business
 - Gem jewelry
 - Gold jewelry
 - Silver jewelry
 - Education centre and institute (Pass to question 1.3)
 - □ Others, please specify

1.2 Sales transaction (approximate)

- Domestic _____ %
- □ Export _____%
- 1.3 Experience in this business
 - more than 10 years
 - □ 5-10 years
 - □ 3-5 years
 - less than 3 years
- 1.4 Number of employees in your organisation
 - more than 100
 - 51-100
 - 20-50
 - less than 20

		Not	Moderate	Highly
		agree	agree	agree
2.1	Thailand is the centre of cutting colour stone of the world.			
2.2	Thailand is the centre of cutting diamond of the world.			
2.3	Heat treatment or COOK technique is the advantage of Thailand.			
2.4	Thailand is lack of gemstone materials both in quantity and quality.			
2.5	Thailand is lack of precious metal materials.			
2.6	Thai gemstones have good image and accepted worldwide.			
2.7	Thai labours have skill and elaborate.			
2.8	Thai labours have the development in skilled and efficiency continuously.			
2.9	Labour cost compared with skill level of Thailand is lower than competitors.			
2.10	Thai jewelry industry lacks of specific high skilled labour.			
2.11	Thai jewelry industry lacks of qualify designer.			
2.12	Thai jewelry industry lacks of gemmologist.			
2.13	Thailand has strong relationship between industries (Since cutting-moulding-assemblying-until selling)			
2.14	Thailand lacks of own developed technology. We need to import expensive machines and equipments			
	from abroad.			
2.15	Thai jewelry product doesn't have the creditable product standard.			
2.16	Investment capital in jewelry industry is limited and not enough.			
	1			

Part 2 What are your agreements in the assumptions of Thai jewelry industry?

	Not	Moderate	Highly
	agree	agree	agree
2.17 Import duty rate in raw material is so high.			
2.18 Import duty rate in machine and equipment is so high.			
2.19 The custom measure in import-export is not convenience, slow and not clear.			
convenience, slow and not clear.			

<u>Part 3</u> What are your agreements about the external factors that affect the export potential of Thai jewelry industry?

		Moderate		Highly
		Not affect	affect	affect
Factor	s that increase export potential			
3.1 \	World economic has trend to be better			
3 .2 (Devaluation of Thai baht currency			
-	Thailand has joined several trade areas such as			
3.3 \	WTO, APEC, AFTA			
Factors	s that decrease export potential			
3.4	Thailand has cut GSP off in some product groups			
3.5	The unite of trade area such as EU, NAFTA			
3.6 ł	Higher competition from China, India, and ASEAN			
3.7 ł	Higher trade barriers			

Part 4 What importance of these factors to the success of Thai jewelry industry?

		Low	Mod	High
		important	important	important
4.1	Outsourcing raw material from abroad			
4.2	Survey for new sources of raw material in domestic			
4.3	Producing new specific skilled labour of education institute			
4.4	Developing the skill level of labours within the factory			

		Low	Mod	High
		important	important	important
4.5	Developing and producing qualify designer			
4.6	Developing and producing gemmologist			
	Developing and producing researcher in production			Π
4.7	technology			
4.8	Arrangement of jewelry fair anc exhibition			
4.9	Arrangement of product design contest			
4.10	Supporting in financial by providing the loan			
4.11	Export promotion policy			
4.12	Tax policy in raw material			
4.13	Tax policy in machine and equipment			
4.14	Tax policy about value added tax (VAT)			
4.15	Improvement of import and export operation			
4.16	Supporting of the government to find the new market			
	Collecting and providing the trading information and			
4.17	marketing research			
4.18	Internet and E-commerce to find the new market and			Π
	provide the information			
4.19	Having gemstones certificate			
	Having production standard certificate such as ISO			 1
4.20	9000		ĿJ	
4.21	Having own brand name of Thai producers			
	Marketing and management ability of the			m
4.22	entrepreneurs		L_J	
		•		

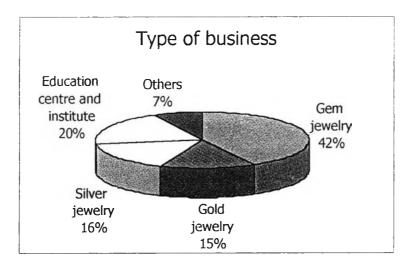
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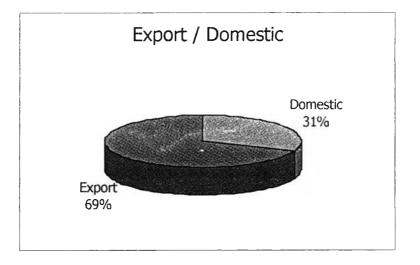
Thank you very much Researcher

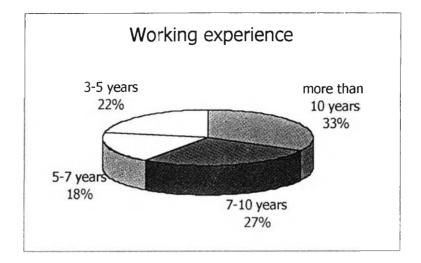
Results of Questionnaire by graph

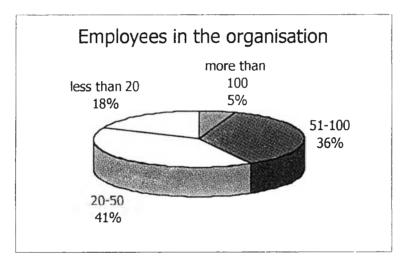
The summaries of the agreements and ideas of the entrepreneurs and specialists in Thai jewelry industry in each question are presented in graph that easy to look and compare as follows:

Part 1: General information

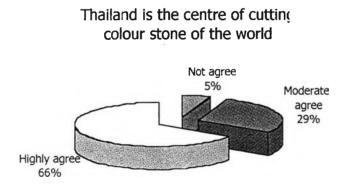


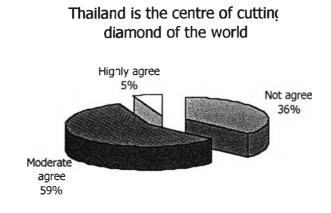




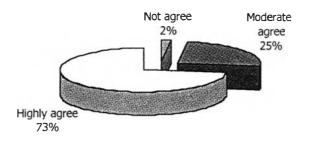


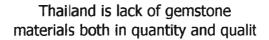
Part 2: About our assumptions of Thai jewelry industry

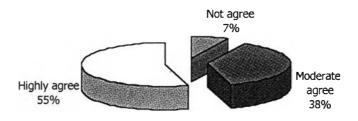




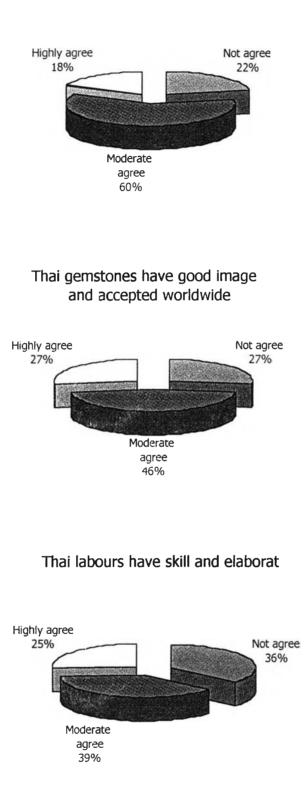
Heat treatment or COOK technique is the advantage of Thailand



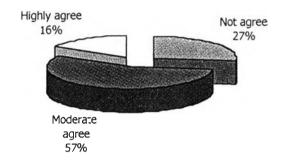




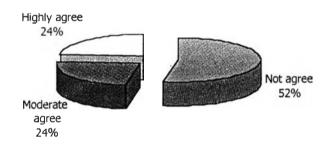
Thailand is lack of precious metal materia



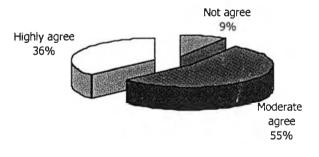
Thai labours have the development in skilled and efficiency continuousl



Labour cost compared with skill leve of Thailand is lower than competitor



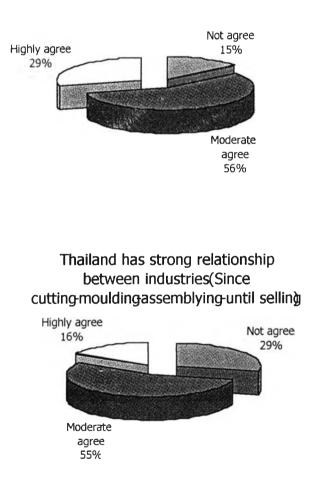
Thai jewelry industry lacks of specific high skilled labour



Highly agree 45% Moderate agree 50%

Thai jewelry industry lacks of qualify designe

Thai jewelry industry lacks of gemmologis

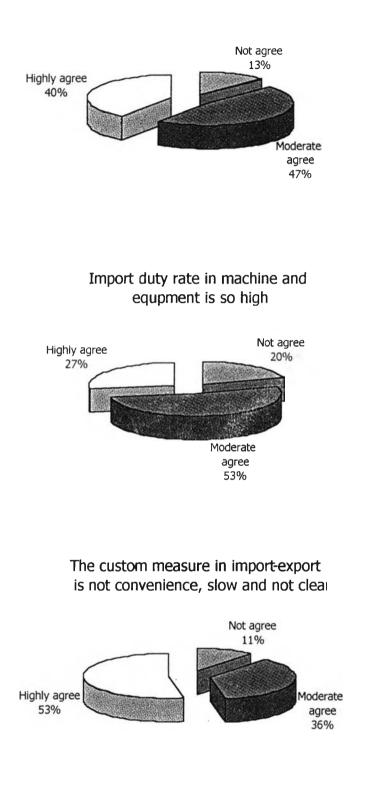


Not agree Highly agree 24% 18% Moderate agree 58% Thai jewelry product doesn't have the craditable product standard Not agree Highly agree 20% 25% Moderate agree 55% Investment capital in jewelry industry is limited and not enough Not agree 16% Highly agree 33%

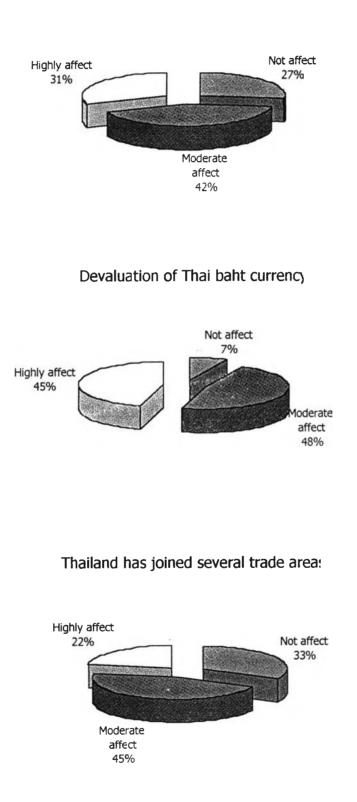
Moderate agree 51%

Thailand lacks of own developed technolog

147

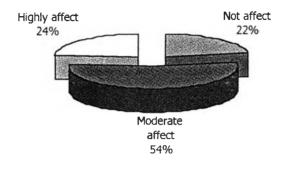


Import duty rate in raw material is so hig

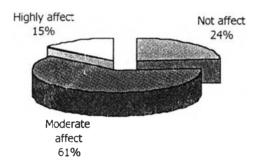


World economic has trend to be bette

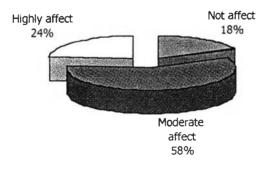
Thailand has cut GSP off in some product groups

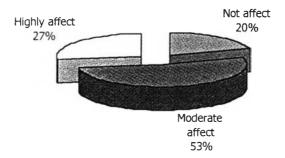


The unite of trade area such as EU, NAFTA



Higher competition from China, India and ASEAN



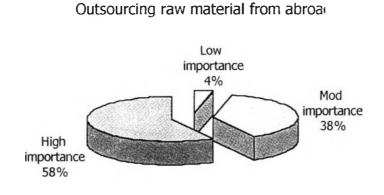


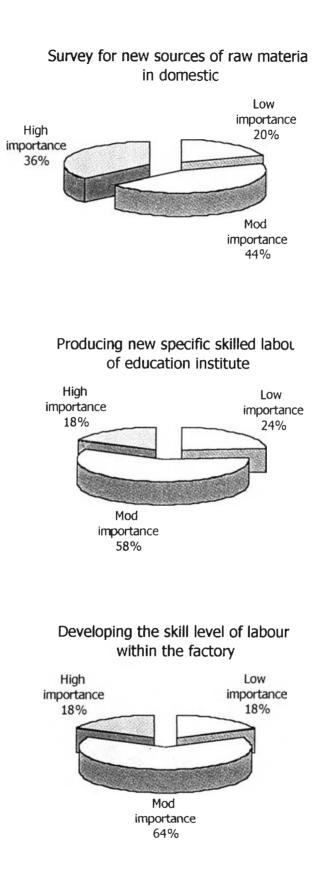
Higher trade barrier:

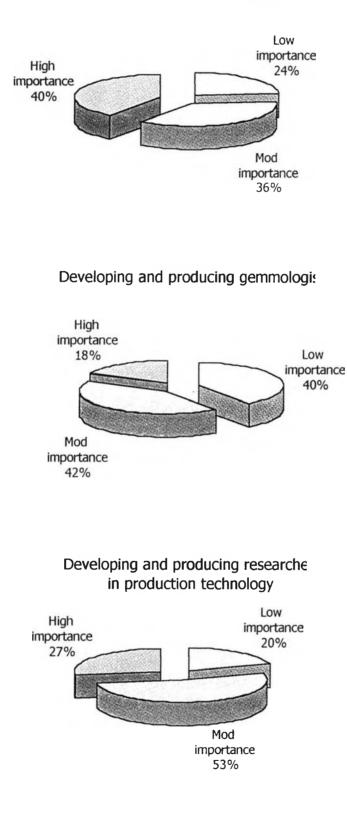
Part 4: About the critical success factors

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This part of questionnaire asks for the idea of the entrepreneurs 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 3 levels: low importance, moderate importance and highly importance.

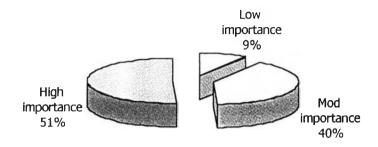




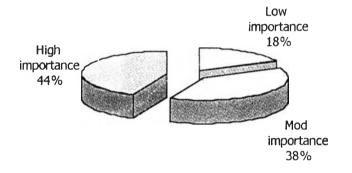


Developing and producing qualify designed

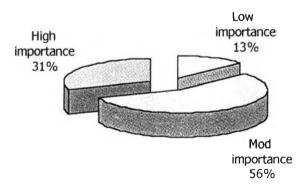
Arrangement of jewelry fair and exhibitio

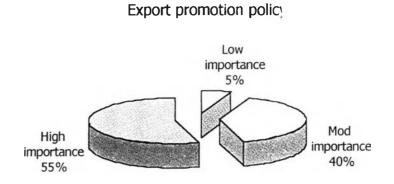


Arrangement of product design contest

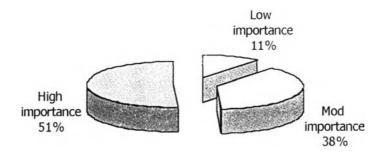


Supporting in financial by providing loa

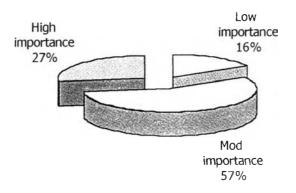




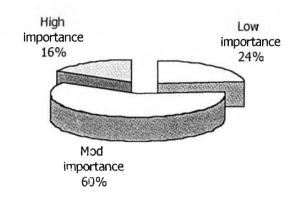
Tax policy in raw materia



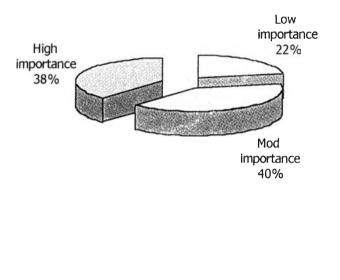
Tax policy in machine and equipmen

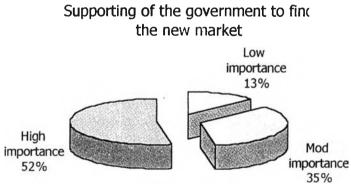


Tax policy about value added tax(VAT)

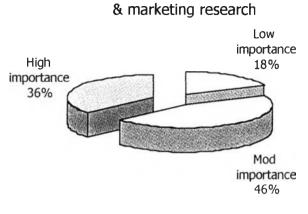


Improvement of import and export operatior



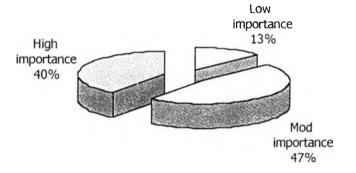




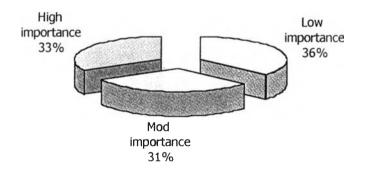


Providing the trading informatio

Internet and E-commerce to find the new market and provide the information

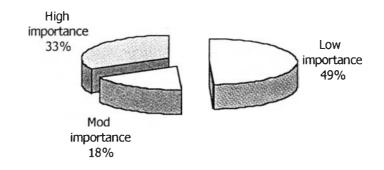


Having gemstones certificate

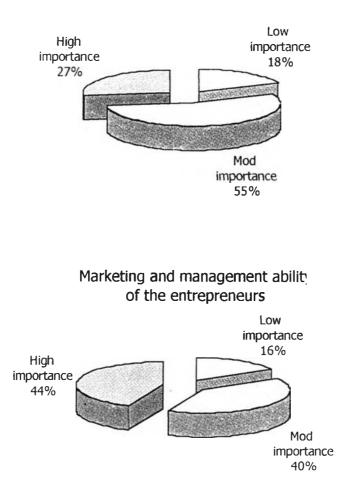


Having production standard certificat such as ISO 9000

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Having own brand name of Thai producers



BIOGRAPHY

Mr. Nattawut Tovikkai was born on May 25, 1977 in Bangkok, Thailand. He graduated the Bachelor's Degree in Industrial Engineering from Chulalongkorn University in academic year 1997. Then, he worked for Siam United Steel (1995) Company Limited for a year. After that, he resigned and has attended to study in Engineering Management at The Regional Centre for Manufacturing Systems Engineering. This centre is operated by the cooperation between Chulalongkorn University and University of Warwick, which has main base at Coventry, England. In 2000, he graduated Master's Degree in Engineering from Chulalongkorn University and Master's Degree in Science from University of Warwick.