

FLEASIBILITY STUDY FOR DEVELOPMENT BUSINESS PT. J

Jaya, Adi Gama Tengtarto¹, David Sukardi Kodrat²

Universitas Ciputra
INDONESIA

E-mails: muteki_jack@hotmail.com, david.kodrat@ciputra.ac.id

ABSTRACT

Analysis of the feasibility for development business of PT. J is intended to determine the feasibility of the business plan development and investment capabilities within providing benefit to the amount of capital invested.

This study examined the feasibility of developing business through five aspects, namely, the environmental aspects of the industry, market aspects and marketing, technical aspects and technology, management and human resources, and financial aspects. From the five aspects of the business development plan indicates that PT. J are acceptable and feasible.

This study use four methods for calculating investment feasibility analysis tool with the results of the following calculation: Method NPV (Net Present Value) obtained a positive value of Rp 2,192,392,228. Method IRR (Internal Rate of Return) obtained an interest rate of 13.18%. Payback Period method showed that the time required to cover the investment of Rp 1.8 billion is 5 years and 5 months. Methods PI (Profitability Index) show the results obtained greater than 1 that is equal to 2.22. From the calculations using these four methods can be interpreted that the business development plans of PT. J are acceptable and feasible.

Keywords: Feasibility Study, Business Development, Family Business, Analysis

INTRODUCTION

Trade in this globalization era is growing rapidly along with the increasing needs of the global community. In fact, it takes the role of manufacturers to produce goods that have better quality with competitive prices. Opportunities to develop business in the field of manufacturing knitted gloves manufacturer in Indonesia still widely open, because Indonesia is a developing country.

PT. J is a family company that is engaged in manufacturing knitted gloves and has been established since 2000 with the number of machines early as 20 machines, and at this time amounted to 216 machines. The purpose of developing this family business is to master the local market in Indonesia.

Table 1. Comparison Between Production and Sales PT. J

Years		Total (dozens)
2008	Last Stock	22.510
2009	Production	648.214
	Selling	644.060
2010	Production	717.327
	Selling	715.521
2011	Production	747.963
	Selling	758.475
2012	Production	1.183.628
	Selling	1.096.344
2013	Production	1.059.499
	Selling	1.163.663

Source: Data were processed in 2014

Table 1 describes the comparison of data between the production and sales of the PT. J where the data can be seen that the sales of PT. J almost always achieve the maximum capacity of production held by PT. J. This suggests that the developing the business of PT. J can be said to be worthy seen from the data presented in Table 1.

In 2013, economy of east java is supported by three main sectors, namely: agriculture (14.91%), manufacturing industry (26.60%), and trade, hotels and restaurants (31.34%) and industrial gloves in industry processing. The third major sector accounted for 72.85% of the GDP in East Java, namely Rp 1.136.330.000.000,00. Economic growth in East Java in 2013 grew by 6.55% and the growth of industrial sector reached 5.59%. Industrial gloves are included in the textile sub-sector showed a growth of 5.14% compared to the previous year of 1.70%.

CONTEXT AND REVIEW OF LITERATURE

Understanding the Feasibility Study of the Business Development

Understanding of business feasibility study is a study that aims to determine whether a business idea is feasible or not. A business idea is declared feasible to be implemented if the idea can bring greater benefits for all parties (stakeholders) than negative impacts (Suliyanto, 2010: 3). Categories of business feasibility study is divided into three categories (Subagyo 2011: 29), namely: the establishment of new businesses (create a new business), business development (developing of business), and the purchase of an existing business (business acquisition). Category studies the feasibility study to be conducted within this opportunity is a business feasibility study on business development (developing of business) because researchers have an existing business and has plans for further expansion. At this stage of the establishment of new businesses (create a new business), aspects that need to be addressed is (1) Legal Aspects, (2) Environmental Aspects of Industry, (3) Aspects of Market and Marketing, (4) Technical Aspects and Technology, (5) Aspects management and Human Resources, and (6) Financial Analysis. At this stage of business development (developing of business), the analysis of the aspects that will be addressed in the feasibility study on business development (developing of business) is (1) Environmental Aspects of Industry, (2) Aspects of Market and Marketing, (3) Aspects technical and Technology, (4) Aspects of Management and Human Resources, (5) Financial Analysis. (Suliyanto, 2010: 251).

Legal aspects not be used in the study of developing business / legal aspects of business because only deals before setting up a license of a company.

Aspects in Feasibility Study of the Business Development

1. Environmental Aspects of the industry

According to Ireland (2013: 36-44) environment generally consists of segments that are outside of the company. Although the effect of different levels, it affects the entire segment of the industry environment and the companies that compete in them. Analysis is performed within aspects of the industrial environment is PEST analysis (political, economic, social and cultural, and technological) and five analysis.

2. Aspects of market and marketing

The market is a group of buyers and sellers of goods or services. As a group, the buyers determine how much demand for such goods, and as another group, the seller determines how much the supply of goods (Mankiw, 2009: 78). Analysis is performed within market and marketing aspects is STP Analysis (Segmenting, Targeting, and Positioning) strategy and the marketing mix (Product, Place, Price, and Promotion).

3. Aspects of technical and technology

Businesses fail because it does not able to deal with technical problems. Therefore, the analysis of the technical aspects be used to answer the question of whether the business is technically able to run or not (Suliyanto, 2010: 133). Things that need to be analyzed on the technical aspects of within industrial environment, such as: (1) the selection of the location of the plant development, (2) determination of the optimal scale of production, (3) the selection of machinery and equipment, (4) the determination of plant layout and building, (5) technology selection.

4. Aspects of management and human resource

Aspects of human resource are an important aspect in the analysis and the need for material as well as development of a business. The role of human resources no longer as a technical implementation, but as a partner within company to be actively involve in efforts to achieve competitive advantage (Nature, 2009: 101). The discussion within aspect of human resources include: (1) organizational structure, (2) job analysis, (3) as well as compensation and benefits.

5. Aspects of financial

Aspects of financial include information and data from whole other aspects to be one in the financial statements. These financial statements will be analyzed by means of investment criteria, namely: Net Present Value, Internal Rate of Return, Payback Period and Profitability Index (Muslich, 2009: 153).

RESEARCH METHODS

The research approach applied to this feasibility study is applied research, which this kind of research concerns the application of theory to solve a particular problem (Kuncoro, 2009: 7). Type of applied research is divided into three, namely: research evaluation, research development, and action research. This research uses the evaluation and development of research in which the research is expected to contribute ideas, feedback, and evaluation materials for business development within this study to determine whether or not the business / enterprise to be developed.

Table 2. Sampling Method

No.	Description	Population	Sampling Method	Number of Sampling
1.	Supplier	4	Saturation Sampling	4
2.	Customer	31	Purposive Sampling	3
3.	Competitor	4	Saturation Sampling	4

Source: Data were processed in 2014

Table 3. Data Gathering Method in Every Aspect

No.	Aspect	Types of Data	Data Sources	Data Gathering Method
1.	Environmental Aspect of the Industry		Secondary	
	a. Politic	Nominal		Documentation
	b. Economy	Ratio		Documentation
	c. Social	Nominal		Documentation
	d. Technology	Nominal		Documentation
	e. Customer	Ratio	Primer, Secondary	Documentation, Interview
	f. Supplier	Ratio		Documentation, Interview
	g. Competitor	Ratio		Documentation, Interview
2.	Aspects of Market and Marketing		Primer, Secondary	
	a. Total market (Rp)	Ratio		Observation, Documentation, Interview
	b. STP	Interval		Observation, Documentation, Interview
	c. 4P	Nominal		Observation, Documentation, Interview
	d. SWOT	Nominal		Observation, Documentation
3.	Aspects of Technical and Technology		Primer, Secondary	
	a. The development of the factory site selection	Nominal		Observation, Documentation
	b. The determination of the optimal production scale	Nominal		Observation, Documentation
	c. The selection of machinery and equipment	Nominal		Observation, Documentation
	d. The determination of plant layout and building	Nominal		Observation, Documentation, Interview
	e. The selection of technology	Nominal		Observation, Documentation
4.	Aspects of Management and Human Resource		Primer, Secondary	
	a. Organizational structure	Nominal		Observation, Documentation
	b. Job analysis	Nominal		Documentation, Interview
	c. Compensation and benefits	Ratio		Observation, Documentation
5.	Financial		Primer, Secondary	
	a. Investment costs (Rp)	Ratio		Observation, Documentation
	b. Lending rates (%)	Ratio		Documentation

Source: Data were processed in 2014

RESULT

a. Environmental Aspects of the industry

From the analysis of the five forces that exist in the market, can be made to summarize the five forces analysis is shown in Table 4 below.

Table 4. Summary Analysis of Five Forces in the Market

Indicator	Conditions
Bargaining power of buyers	Strong
Bargaining power of suppliers	Strong
Competition among companies	Medium

Source: Data were processed in 2014

Table 5. SWOT Calculation

Element	Point	Rating	Value
INTERNAL FACTORS			
<i>STRENGTH</i>			
Management is open to any changes, especially changes made to develop the business	0,183	3	0,55
Efficiency in the production process	0,250	4	1,00
Cheaper price with quality maintained	0,117	3	0,50
Total			2,05
<i>WEAKNESS</i>			
Product sold almost the same as the product sold by competitors	0,217	3	0,65
Limited capital to develop the business	0,117	3	0,35
Less experience of running gloves businesses than competitors	0,117	3	0,35
Total	1		1,35
Total Internal Factor			+ 0,70
EXTERNAL FACTORS			
<i>OPPORTUNITY</i>			
Gloves can be sell freely for export to the ASEAN region	0,233	4	0,93
Strict safety regulations from the government	0,233	4	0,93
Pro-market policies to support domestic businesses	0,083	3	0,25
Total			2,12
<i>THREAT</i>			
The entry of foreign products into Indonesia	0,183	3	0,55
The slow development of engine technology of gloves	0,133	3	0,40
Consumer loyalty to a product that has been purchased	0,133	3	0,40
Total			1,35
Total of External Factor			+ 0,77

Source: Data were processed in 2014

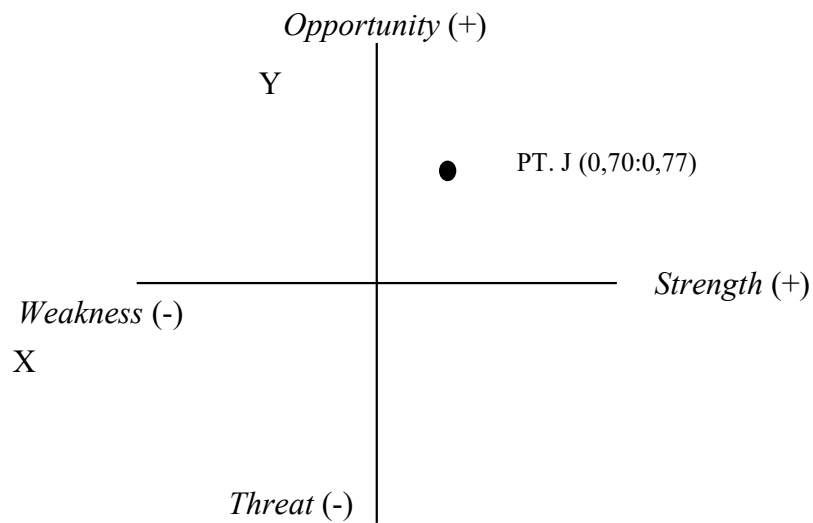


Figure 1. SWOT Calculation
Source: Data were processed in 2014

b. Aspects of market and marketing

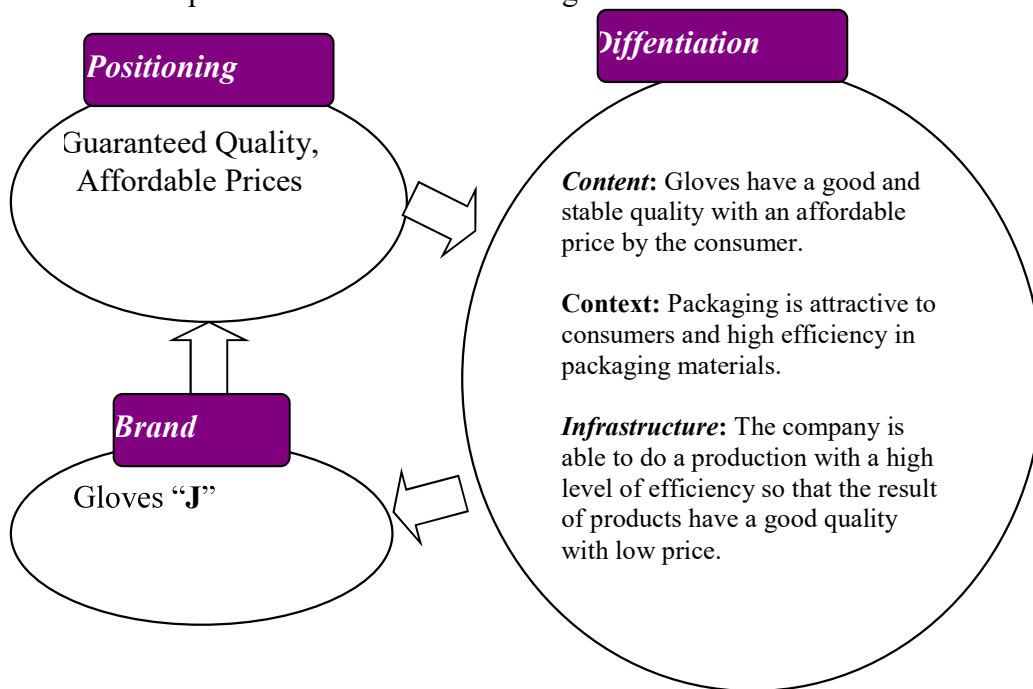


Figure 2. Brand-Positioning-Differentiation Concept
Source: Data were processed in 2014

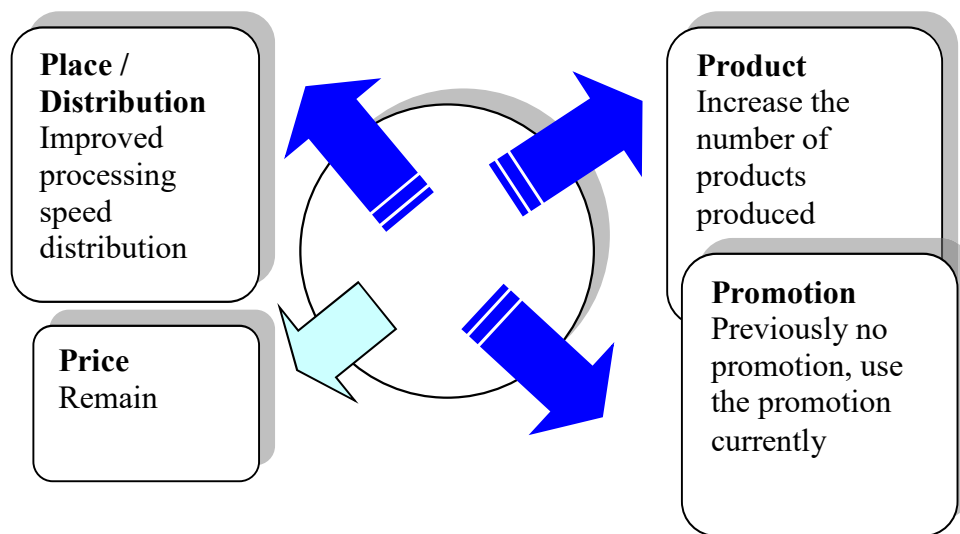


Figure 3. Implementation of Growth Oriented Strategy in Marketing Mix

Source: Data were processed in 2014

c. Aspects of technical and technology

Table 6. Analysis of Technical and Technological Aspects

No.	Terms	Condition at PT. J	Analisis
1.	Location of business development sufficient and feasible for use.	Location to be used still in the process of development.	Feasible
2.	The equipment for production and production support easy to obtain.	Production equipment can be obtained.	Feasible
3.	Suppliers are ready to send the raw materials.	Suppliers of raw materials ready to send.	Feasible
4.	Skilled labor has been in the process of production and packing.	Skilled labor able to obtain.	Feasible

Source: Data were processed in 2014

d. Aspects of management and human resource

Table 7. Analysis of Management and Human Resource Aspects

No.	Terms	Condition at PT. J	Analisis
1.	The organizational structure has been formed.	There has been a functional organizational structure int the company	Feasible
2.	Analysis of the work has been established.	PT. J has made the job analysis	Feasible
3.	Standard operation procedure has effectively formed.	PT. J has the SOP	Feasible
4.	Employee management system has been well established.	PT. J has management system for employess	Feasible

Source: Data were processed in 2014

e. Aspects of financial
 a) Initial Investment

Table 8. Initial Investment

Type of Expenses	Total		Value per unit (Rp)	Total Vaue (Rp)
Purchase of machinery	31	Piece	50.000.000	1.550.000.000
Initial Cost				
Remodeling the place	1	Time	50.000.000	50.000.000
Recruitment new employees	1	Time	500.000	500.000
Training employees	5	Day	200.000	1.000.000
New work equipment	24	Person	250.000	6.000.000
Inventory				
Initial inventory	1	Package inventory	185.000.000	185.000.000
Total Initial Expenses				1.792.500.000

Source: Data were processed in 2014

b) NPV (Net Present Value)

Table 9. Net Present Value (Rp)

Description	Number	Discount Factor	Final Value	Accumulation
Cash Out	(1.792.500.000)	1,000	(1.792.500.000)	(1.792.500.000)
1 st year cash in	223.743.979	0,917	205.269.706	(1.587.230.294)
2 nd year cash in	229.450.120	0,842	193.123.576	(1.394.106.718)
3 rd year cash in	280.295.066	0,772	216.439.220	(1.177.667.498)
4 th year cash in	334.699.159	0,708	237.109.322	(940.558.176)
5 th year cash in	392.911.537	0,650	255.365.540	(685.192.636)
6 th year cash in	736.666.635	0,596	439.250.245	(245.942.391)
7 th year cash in	829.916.737	0,547	453.992.876	208.050.485
8 th year cash in	897.594.346	0,502	450.472.335	658.522.820
9 th year cash in	970.009.388	0,460	446.619.269	1.105.142.089
10 th year cash in	2.573.916.484	0,422	1.087.250.139	2.192.392.228

Source: Data were processed in 2014

In the 10th year, NPV has reached a positive value with a value of Rp 2.192.392.228,00

c) IRR (Internal Rate of Return)

Table 9. Net Present Value (Rp)

Description	Total
Cash out	(1.792.500.000)
1 st year cash in	205.269.706
2 nd year cash in	193.123.576
3 rd year cash in	216.439.220
4 th year cash in	237.109.322
5 th year cash in	255.365.540
6 th year cash in	439.250.245
7 th year cash in	453.992.876
8 th year cash in	450.472.335
9 th year cash in	446.619.269
10 th year cash in	1.087.250.139
IRR	13,18%

Source: Data were processed in 2014

IRR in the 10th year reaches 13,18%.

d) PP (Playback Period)

Table 10. Playback Period

Description	Total	Accumulation
Cash out	(1.792.500.000)	(1.792.500.000)
1 st year cash in	223.743.979	(1.568.756.021)
2 nd year cash in	229.450.120	(1.339.305.900)
3 rd year cash in	280.295.066	(1.059.010.834)
4 th year cash in	334.699.159	(724.311.675)
5 th year cash in	392.911.537	(331.400.138)
5 th year on 5 th month cash in	331.400.138	0
6 th year cash in	736.666.635	405.266.497
7 th year cash in	829.916.737	1.235.183.235
8 th year cash in	897.594.346	2.132.777.581
9 th year cash in	970.009.388	3.102.786.969
10 th year cash in	2.573.916.484	5.676.703.453

Source: Data were processed in 2014

In the 5th year 5th month there has been a payback period of the final value in year 6th has reached Rp 405.266.497,00.

e) PI (Profitability Index)

Table 11. Playback Period

Description	Value
a. Cash Out	1.792.500.000
b. Cash In	3.984.892.228
PI (b : a)	2,22

Source: Data were processed in 2014

The PI value is 2,22.

CONCLUSION

Based on the research on the 5 aspects that have been done above, it can be concluded as follows:

1. From all aspects studied, the environmental aspects of the industry, aspects of market and marketing, aspects of technical and technology, aspects of management and human resources, and financial aspects, indicating that PT. J's condition is feasible at this time to be developed.
2. The plan of business development which will be carried out by PT.J, studied through the financial aspects with the following results:
 - a. The Net Present Value (NPV)
In this study, the expected NPV of the 7th year have reached a positive value. At the end of the 7th year NPV value has reached Rp 208 050 485,00, so in terms of business development, NPV is feasible to be applied.

- b. Internal Rate of Return Method (IRR)
In this study, the limit value for IRR is 9%. The calculations show that the IRR is equal to 13.18%, so in terms of business development, IRR is feasible to be applied.
- c. Payback Period Method (PP)
In this study, the payback period is to be achieved within seven years. The calculations show that the PP occurred in the 5th year 5th month, so in terms of business development, PP is feasible to be applied.
- d. Profitability Index Method (PI)
In this study, the PI is expected after running the business for ten years is 1.5. The calculations show that the PI value of 2.22, so in terms of the PI, business development is feasible to be applied.

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