

FEASIBILITY STUDIES

Introduction

- ▶ Business is a venture undertaken towards making some profits. Business ventures involve some operations which are characterized by various forms of risk. Therefore, it is always advisable to carry out some assessment of the viability of the business before embarking on the project.

Meaning of Feasibility Study

- Feasibility study is a scientific investigation and analysis of a proposed project in order to determine its viability. It is a formal study undertaken to find out the viability (and profitability) or otherwise of an intended investment in a venture. Feasibility study shows you whether the business you plan to do will be profitable. Before the result of the feasibility study will be accepted, the information used must be valid and reliable. This information may either be primarily or secondarily sourced.

Importance of Feasibility

- ▶ It provides the necessary guide towards the planning, preparation and execution of the business project.
- ▶ It also aids rational decision making on whether or not to embark on the business.
- ▶ Feasibility study also helps you to raise enough capital for your business.
- ▶ It ensures that the expected income of the business will be more than its expected operating cost, thereby ensuring profitability.
- ▶ It helps creditors to take decisions on the business to invest in.
- ▶ To avoid some operational problems in carrying out the business.
- ▶ Identifies requirements in areas personnel and facilities for the business.
- ▶ To assess the potential demand and markets for the products/services of the new business.

Sources of Information for Feasibility Study

- ▶ There are various sources through which the required information for a feasibility study can be generated. Such sources are:
- ▶ National Bureau of Statistics
- ▶ National Directorate of Employment
- ▶ Federal Ministry of Trade and Investment
- ▶ State Ministries of Commerce and Industry
- ▶ Commercial Banks
- ▶ Chambers of Commerce
- ▶ Trade Associations

Sources of Information for Feasibility Study....cntd

- ▶ Newspapers and Periodicals
- ▶ Libraries
- ▶ Research Institutes
- ▶ Electronic Media
- ▶ The Internet
- ▶ Professional Journals
- ▶ Consultancy Firms

Contents of Feasibility Study

- ▶ **Title Page**
- ▶ **Table of Contents**
- ▶ **Executive Summary**
- ▶ This is the summarized version of the feasibility study. It must adequately cover the major points of the feasibility study on one or two pages.
- ▶ **Introduction**
- ▶ **Justification**
- ▶ **Objective of the study**
- ▶ **Scope of the study**

Contents of Feasibility Study...Cont'd

- ▶ **Product/service description**
- ▶ **The Promoter**
 - ▶ Name
 - ▶ Address
 - ▶ Telephone number/email address
 - ▶ Qualification
 - ▶ Work history and background in brief
 - ▶ Status of promoter - whether company, or individual
 - ▶ More detailed information on qualification and career history can be included in the appendices.

Contents of Feasibility Study....Cont'd

► Market Assessment

- In this section you provide an assessment of the market demand for your product or service. The analysis reveals who will buy much of your product and what they are willing to pay for it. It consists of identifying your markets, determining market factors that create demand for your product, and forecasting the potential demand for your product. It should identify opportunities or threats facing the proposed business. Describe the market research technique that you used to find answers to the questions below. The techniques can include telephone surveys, personal interviews, sales figures on existing products, statistical and published information in your target area, informed opinion of knowledgeable people and test marketing.

Contents of Feasibility Study....Cont'd

- ▶ *Questions to answer in the market assessment:*
- ▶ What is the size of the market?
- ▶ What is the sales volume?
- ▶ What is the production volume?
- ▶ Who is buying the product or service i.e. who is your target market?
- ▶ How many customers are there? Who are they?
- ▶ Where are they currently buying the product or service?
- ▶ Are the customers satisfied?

Contents of Feasibility Study....Cont'd

- ▶ How is your market segmented currently?
- ▶ What are the major trends affecting your market?
- ▶ What is the growth rate of the market?
- ▶ What would the buyers like to see changed about the products they are now buying?
- ▶ What are the market trends for your product?
- ▶ How is your target group changing?
- ▶ Are other groups starting to use your product?
- ▶ How do factors such as age, gender, family income, brand loyalty, lifestyle, etc affect your product?

Contents of Feasibility Study...Cont'd

- ▶ How do customers view warranties and packaging of the products? What is the price structure on your product?
- ▶ How has the price changed in the last year? Last five years?
- ▶ What determines price on your product - quality, size, demand, tourist trade?
- ▶ What promotional methods are most effective in reaching your target customers?
- ▶ What is your conclusion about your expected market share?
- ▶ Are there any legal, environmental or economic factors, which may impact on the business?

Contents of Feasibility Study....Cont'd

► Competition Analysis

- Who are your major competitors?
- What are the major strengths of each?
- What are the major weaknesses of each?
- What are their production capabilities?
- Are you familiar with the following factors concerning your competitors:
- Price structure?
- Product lines (quality, breadth, width)?
- Location?
- Promotional activities?
- Sources of supply?
- Image from a customer's viewpoint?
- Do you know of any competitor's plans for expansion?

Contents of Feasibility Study....Cont'd

- ▶ Have any firms of your type gone out of business lately?
- ▶ If yes, why?
- ▶ Do you know the sales and market share of each competitor?
- ▶ Do you know whether the sales and market share of each competitor are increasing, decreasing, or stable?
- ▶ Do you know the profit levels of each competitor?
- ▶ Are your competitors' profits increasing, decreasing, or stable?
- ▶ Can you compete with your competitors?

Contents of Feasibility Study....Cont'd

- ▶ **Marketing Strategy**
- ▶ Note: depending on the outcome of the feasibility study, your business plan will include a detailed marketing strategy. For the feasibility study a briefer outline of your strategy will suffice.
- ▶ How will the market be accessed? What distribution methods will you use?
- ▶ What is the competitive advantage of your product or the benefits of your product in relation to the competition?
- ▶ What will attract customers to your product?
- ▶ How is your product differentiated from the competition?
- ▶ What pricing methods will you probably use?
- ▶ What promotional methods will you use (i.e. tradeshow, advertising, etc)?
- ▶ Outline any commitments you have received from customers already
- ▶ Outline export potential if any.

Contents of Feasibility Study....Cont'd

- ▶ **Technical or Production Analysis**
- ▶ This portion should be based on verifiable data and contain sufficient information and analysis so that a determination may be made on the technical feasibility of achieving the levels of income or production that are projected in the financial statements. Depending on your particular business idea it may include the following considerations:
 - ▶ Determine the suitability of the production site including site environmental impact analysis (provided by architect, engineer or person with the necessary expertise to make the determination)
 - ▶ Does the site have the desired characteristics and available utilities and transportation facilities, etc.?

Contents of Feasibility Study....Cont'd

- ▶ What are the technology needs for the proposed business?
- ▶ What are the equipment/resource requirements?
- ▶ When and where can the technology or equipment be obtained?
- ▶ What does the technology or equipment cost?
- ▶ What are the production costs (to be included in the finance section)
- ▶ Will the technology achieve the intended production levels?
- ▶ What will the production process be?
- ▶ What are the product storage requirements etc?
- ▶ Is there availability of local labour?
- ▶ Are there any legal or environmental factors or other developments which may impact on the business?

Contents of Feasibility Study....Cont'd

- ▶ **Prototype or sample product**
- ▶ If you need to develop a sample product or prototype as part of the feasibility, a description should be give here.
- ▶ **Management Capability**
- ▶ Describe the requirements for the management positions and responsibilities for those personnel.
- ▶ Describe the skills/expertise you will need to bring to the business.
- ▶ Describe existing capabilities within the business (related to qualification and experience of promoter).

Contents of Feasibility Study....Cont'd

- ▶ **Financial Analysis**
- ▶ Include preliminary financial projections (with a clear understanding of assumption) and an estimation of all variable and fixed (overhead) costs will be necessary to estimate the profitability of the proposed venture. The accuracy of your revenue projections and costs will be dependent on the reliability of the marketing predictions and production information.
- ▶ Important consideration to determine profitability include:
- ▶ Are you sure that you have considered all costs, variable and fixed, that should be allocated to the new enterprise?
- ▶ Do you have enough information to prepare projected statements for the next three or more years i.e. cash flow forecast, profit and loss, balance sheet?

Contents of Feasibility Study....Cont'd

- ▶ Have you done a “sensitivity” analysis to predict the impact that possible variations in costs and revenues will have on profitability?
- ▶ When will the enterprise reach the break-even point?
- ▶ When will the business become profitable?
- ▶ Is there enough profit to allow for growth of the business?
- ▶ **Required Financing**
- ▶ Required funding to enter this market and feasibility of raising capital (if necessary)
- ▶ **Economic Impact**
- ▶ Show the potential economic impact of the proposed venture e.g. job creation, salaries of employees, sourcing local suppliers, etc. limits and constraints.

Conclusion and Recommendations

- ▶ A suggestion as to the feasibility of the project
- ▶ **Appendices**
- ▶ Include any supporting documentation including references here.
- ▶

CALCULATION OF INITIAL PROJECT COSTS

- ▶ Preliminary and preoperative expenses
 - ▶ Feasibility study
 - ▶ Business plan
 - ▶ Information gathering
 - ▶ Consultation with funding partners/banks
 - ▶ Business registration
 - ▶ Promotion costs e.g. pilot staff expenses and running costs
 - ▶ Net total: **₦2.0M**

CALCULATION OF INITIAL PROJECT COSTS....Cont'd

- ▶ Land & property acquisition costs
 - ▶ Purchase of land/building
 - ▶ Costs of rent: Land/building £0.5M
 - ▶ Construction of building
 - ▶ Main factory/offices
 - ▶ Society post
 - ▶ Store
 - ▶ Construction of factory/layout £0.5M
 - ▶ External layout £0.5M
 - ▶ Net total **£1.5M**

CALCULATION OF INITIAL PROJECT COSTS....Cont'd

▶ Cost of purchasing assets-fixed assets	
▶ Plant/machinery/vehicles	₦3.0M
▶ Equipment/refrigeration, display, e.t.c	₦0.5M
▶ Installation-plant and machinery, electrical fittings, p/w	₦0.5M
▶ Generator	₦0.5M
▶ Transformer/PHCN connections	₦0.5M
▶ Net total	₦5.0M

CALCULATION OF INITIAL PROJECT COSTS....Cont'd

- ▶ Cost of working capital

▶ Raw materials	₦ 0.5M
▶ Salaries and wages	₦ 0.5M
▶ Utilities	₦ 0.2M
▶ Transportation costs, e.t.c	₦ 0.2M
▶ Repairs and maintenance	N0.2M
▶ Environmental rates, permits, e.t.c	₦ 0.1M
▶ Others	N0.3M
▶ Sub Total	N2.5M
▶ Initial total cost	₦ 10.5M

FINANCING PLAN

- ▶ Debt/equity ratio 2:1
- ▶ Contribution from others ~~₺~~3,500,000
- ▶ Long term loan -3 years ~~₺~~5,000,000
- ▶ Overdraft ~~₺~~2,000,000
- ▶ Net total ~~₺~~10,500,000

CASH FLOW ANALYSIS

INFLOWS + OUTFLOWS

INFLOWS

S/ N	ITEMS	YEAR 1 (₦000)	YEAR 2 (₦000)	YEAR 3 (₦000)	YEAR 4 (₦000)	YEAR 5 (₦000)
1	Capital contribution	3,500	-	-	-	-
2	Long term loan	5,000	-	-	-	-
3	Overdraft	2,000	2,000	2,000	2,000	2,000
4	Sales	2,000	4,000	8,500	12,000	12,000
	Total sales inflow	12,500	6,000	10,500	14,000	14,000

B. OUTFLOWS

S/N	ITEMS	YEAR 1 (₦000)	YEAR 2 (₦000)	YEAR 3 (₦000)	YEAR 4 (₦000)	YEAR 5 (₦000)
1	Preliminary expenses	2,000	-	-	-	-
2	Rent of building	500	500	500	500	500
3	Factory layout	500	-	-	-	-
4	External layout	500	-	-	-	-
5	Plant and machinery	3,000	-	-	-	-
6	Equipment/installation	1,000	-	-	-	-
7	PHCN installation/trans	500	-	-	-	-
8	Generator	500	-	-	-	-
9	Raw materials	500	1,000	1,500	2,000	2,500
10	Salaries and wages	300	300	500	500	500
11	Utilities	200	400	500	500	500
12	Transport costs	200	400	500	500	500
13	Repairs & maintenance	200	400	500	500	500
14	Environmental rates	100	100	100	100	100
15	Interest on loan 20%	1,400	1,150	900	650	400
16	Loan repayment	-	1,250	1,250	1,250	1,250
	Total outflows	11,400	5,500	6,250	7,000	7,650
	Net cash flow (A-B)	1,100	500	4,250	7,000	6350
	Add opening balance b/f	-	1,100	1,600	5,850	12,850
	Closing cash balance c/f	1,100	1,600	5,850	12,850	19,200

PROJECTED PROFIT & LOSS Alc

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Sales	2,000	4,000	8,500	12,000	12,000
Cost of raw materials	(500)	(1,000)	(3,500)	(4,000)	(4,000)
Gross total	1,500	3,000	5,000	8,000	8,000
Less					
Rent paid	500	500	500	500	500
Salaries	300	300	500	500	500
Utilities	200	400	500	500	500
Transport	200	400	500	500	500
Repairs	200	400	500	500	500
Rates	100	100	100	100	100
Interest	1,400	1,150	900	650	400
Depreciation ₦8.0/10 yrs	800	800	800	800	800
	3,700	4,050	4,300	4,050	3,800
Profit/loss	(2,200)	(1,050)	700	3,950	4,200
Profit/loss (b/f)	-	(2,200)	(3,250)	(2,550)	1,400
Accumulated profit/loss	(2,200)	(3,250)	(2,550)	1,400	5,600

ASSUMPTIONS

- ▶ The overdraft facility of ₦2.0M is revolving and will run through five years
- ▶ Interest on the long term loan and overdraft facility is 20% per annum
- ▶ All the preliminary expenses and assets will be depreciated for a straight line of a period of ten years
- ▶ The factory will not be expanded until after five years of operation.
- ▶ The schedule of staff salaries must be attached
- ▶ The schedule of Assets depreciation must be attached
- ▶ Prepare a Projected Balance Sheet for at least the first year
- ▶ COST OF Initial Assets for Depreciation

ASSUMPTIONS....Cont'd

- ▶ Preliminary & Preoperative Expenses N2.0
- ▶ Construction of Factory Layout N0.5
- ▶ Construction of External Layout N0.5M
- ▶ Plant & Machinery N3.0m
- ▶ Equipment N0.5M
- ▶ Installations N0.5M
- ▶ Electrical Installation N0.5m
- ▶ PHCN Connections N0.5m
- ▶ TOTAL N10.M
- ▶ to be depreciated for years using straight line method.