UNIT 6

CHAPTER 1

BUSINESS PLAN PREPARATION

CONTENTS

- **Starting a business**
- **What is a business plan?**
- **Set your goals**
- **Review your business plan**
- **Why businesses fail?**
- **How to succeed?**
- **The Do's and Don'ts**

- **Business plan is a tool which helps you to analyze the future prospects for your business.**
- **In this chapter we are going to look into some of the pre-requisites of a business plan and the Do's and Don'ts of it.**
- **The objective is to familiarize you with the concept and gradually proceed to the nitty gritty of it!**

1.0 Business Plan Preparation

1.1 Starting a Business

A business enterprise is an economic institution engaged in the production and/or distribution of goods and services in order to earn profits and acquire wealth. The scope of business is very wide. It includes a large number of activities which may be classified into two broad categories i.e. industry and commerce. Production of goods is the domain of industry and distribution comes under “commerce”.

Every entrepreneur aims at starting a business and building it into a successful enterprise. The term entrepreneur means to undertake and pursue opportunities and to fulfil needs and wants of people through innovation. S/he innovates and combines resources in the form of men, machinery, material and money and brings them together to make the business venture profitable. S/he is prepared to take risks and face the challenges. Thus, innovation and risks are the two basic elements of good entrepreneurship. The whole process of starting a business begins with writing a business plan. A good business plan is the key for setting up a successful business.

1.2 What is a Business Plan?

A business plan is the first major step along the trail of starting a successful business and a well thought out plan can easily turn out to be a critical element in your success. A business plan is a map of how you are going to start and run your business in the first three to five years. A good business plan is a kind of “reality check”. It helps you to identify the challenges as well as the opportunities your business will face. It forces you to clearly identify your target markets and your competitors. It pushes you to think through your operational and financial requirements and how you will handle sales and promotion. But, perhaps most importantly, it is a practical tool that prospective investors or lenders can use to judge the potential of your business idea. Thus, business plan is a written statement that describes your business, analyzes it and projects its future.

A business plan is a tool with three basic purposes:

- ⇨ Communication
- ⇨ Management and
- ⇨ Planning

As a communication tool, it is used to attract share capital, secure loans, and convince workers to stay on and to lure a strategic business partner. A comprehensive business plan shows whether or not a business has the potential to make profit. It requires a realistic look at almost every facet of business and allows you to show that you have ironed out all the problems and decided on potential alternatives before actually launching your business.

As a management tool, the business plan helps you track, monitor and evaluate your progress. It is a living document that you will modify as you gain knowledge and experience. By using your business plan to establish timeliness and milestones, you can gauge your progress and compare your projections with actual accomplishments.

As a planning tool, the business plan guides you through the various phases of your business. A thoughtful plan will help identify roadblocks and obstacles so that you can avoid them and establish alternatives. Many business owners share their business plans with their employees to foster a broader understanding of where the business is going.

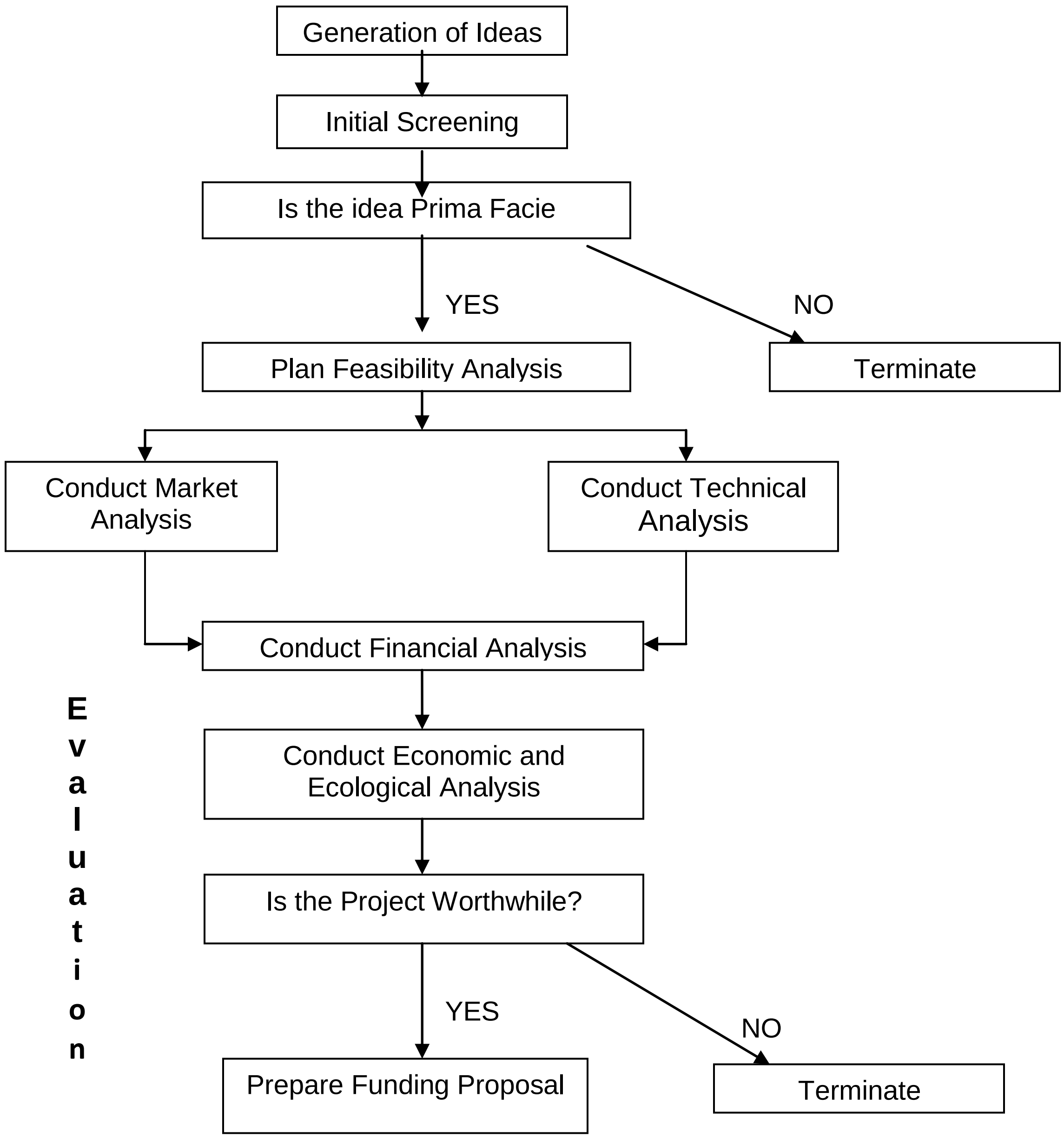
Why should you prepare a business plan?

- ⇨ A plan helps you decide to go ahead or stop.
- ⇨ A plan is a guide to follow; it can keep you on track.
- ⇨ A plan helps you get money
- ⇨ A plan improves your odds of success.
- ⇨ A plan is a tool for improving your business.

The following table provides a schematic diagram of the business plan.

TABLE – 1

Business Plan – A Schematic Diagram



1.3 Setting Your Goals

Your business will not operate as efficiently and effectively as it could without specific and defined goals. Your business plan is likely to outline goals for some or all of the following:

- ⇨ Financial Objectives: To increase turnover or reduce operating costs by 5% during this year.
- ⇨ Strategic Objectives: To increase the number of corporate clients by 25% in next two years.
- ⇨ Marketing Objectives: To increase total sales to existing customers by 10% in next six months.
- ⇨ Operational Objectives: To increase output by 5% in next three months.

Keep your goals realistic and pertinent to current general economic conditions as well as your specific industry conditions e.g. during the period of global economic downturn, it is more effective to look at ways to decrease costs than to increase sales.

> Mr. Samuel Ezekiel of Chennai started providing Children Day Care service because he loved children. But he did not get anticipated response for more than one year and incurred losses. One of the major problems that he faced was recovery of monthly charges. Some of the parents paid after 2-3 months. Another problem was how parents discipline their children differently. He had to learn new ways. He even underwent a course in child development. He consulted an expert to learn how to set priorities and goals.
>
> Situation gradually started improving. After 3 years, he started offering services for 12 hours a day. He started with 8 children and now he has 44 children and is employing 4 persons. He is also offering transport facility to and from school. His one line advice to the prospective entrepreneurs is “Find out as much as you can about the business before starting”.

1.4 Review Your Business Plan

Your business plan is a living document that grows and changes over a period of time. Its objective is to identify your key goals and guide you to achieve them, while taking market and technological trends into account. The effectiveness of your business plan, as a management tool, depends on you referring back to it as a reminder of your plans and objectives, and updating your plans in order to keep them relevant. Reviewing your progress against your business plan is a good way to measure actual performance and will form the basis for revisiting and updating your plans. Since the nature of your business and the market you operate in will change with the passage of time, it is advisable to review and update your business plan once a year.

Your business plan is the tool that you will use to shape up your future and on which your performance will be judged. It will be the basis on which you negotiate for resources. It should be imaginative, challenging and achievable. Preparing it will be a team effort.

1.5 Do You Know Why Businesses Fail?

- Ignoring/underestimating the competition
- Absence of a strong leadership
- Failure to clearly define goals and objectives
- Misunderstanding what customers want
- Failure to communicate the Plan
- Ineffective systems and procedures
- Ignoring risks
- Lack of critical business skills
- Business Plan – A dead document
- Inadequate financial planning
- Over optimism
- Faulty Business Plan

1.6 Hence, Ensure the Following to SUCCEED

- Set clearly defined goals and objectives
- Analyze your SWOT
- Learn about your competitors and customers
- Ensure adequate financial resources and strict financial control
- A mind-set to anticipate change
- Develop a plan and put it in writing
- Make it a living document – never dump it

1.7 Preparation of a Business Plan – The Do's and Don'ts

Do's

- Prepare a complete business plan for the product/service selected by you
- Research (use search engines) to find business plans that are available on the internet
- Package your business plan in an attractive kit as a selling tool
- Submit your business plan to experts for their advice
- Spell out your strategies on how you intend to handle adversities
- Spell out the strengths and weaknesses of your management team
- Include a monthly one year cash flow projection
- Freely and frequently modify your business plan to account for changing conditions

Don'ts

- Be optimistic (on the lower side) in estimating future costs
- Be optimistic (on the higher side) in estimating future sales
- Stress long term projections. Better to concentrate on first year
- Project yourself as someone you are not. Be very realistic
- Depend entirely on the uniqueness of your business or the success of an invention
- Proceed without adequate financial and accounting know-how
- Base your business plan purely on a wonderful concept. Test it first
- Forget to prepare a business plan before starting

Your business plan needs constant updating

Mr. Deepak Kothari from Bangalore is the sole proprietor of an enterprise engaged in design, construction, management and consulting, and employs six professionals. Most of his peers felt that he is crazy as he left a comfortable job and started his own business in the middle of the recession. But his business plan was ready and he had identified issues and contingency plans to face them. This has helped him a lot and there is a steady growth in business. He finds it very difficult to say 'no' to clients. However, he has learnt that if you do not say 'no' to your client, accept the job and then do not complete it in time then you face his wrath. But by saying 'no' to your client you gain his respect. He updates his business plan regularly which allows him to make necessary adjustments in the ever changing marketplace and monitor the goals and objectives effectively.

EXERCISE

- **List down any three reasons for preparing a business plan.**

- **Explain why business plan is a ‘living document ‘.**

UNIT 6

CHAPTER 2
BUSINESS PLAN ESSENTIALS

CONTENTS

- **Preparing a Business Plan**
- **Business Plan Outline**

Having seen the relevance and importance of a business plan in effectively planning, successfully implementing and efficiently managing an enterprise, we now turn to the making of it.

OBJECTIVES

A business plan is a critical step in developing a successful business. Formats and outlines of this plan may vary but generally a plan will include components such as description of the promoters, product or service, market and financial analysis etc. Your plan will depend upon your specific situation. But here are some suggested topics which you can tailor into your plan.

2.0 Business Plan Essentials

2.1 Preparing a Business Plan

Your business plan should provide details of:

- How you are going to develop your business?
- When you are going to do it?
- Who all are going to take part?
- How will you manage the finances?

Clarity on these and many such issues is particularly important if you are looking for financial assistance or equity participation. The process of building your plan will also focus your mind on how your business will need to operate to give it the best chance to succeed.

How do you do it? It is not easy. And it is unlikely that you can just sit down and prepare a good plan in one sitting because a lot of trial and error and testing of ideas is involved. It will most probably evolve over a period of time. Think about your business idea, time and again, and ask yourself these questions about every aspect of it. Who? What? Where? When? Why? How? How much? How often? How many? Write down the answers. Look for 'holes'. It is easy to list all kinds of ideas. Do you have the knowledge and resources to carry them out cost effectively? Why do you want to pursue a particular part of your plan? Who will carry it out? How much will it cost? How much sales will each marketing campaign generate? Which machines do you need? How do you decide on product pricing?

Ask and answer these questions over and over until you are convinced that you know how your business will function day-to-day. Now capture this knowledge in your plan and show how it will work financially. Make changes in your plan until you have a plan where all the elements fit together and work from a marketing, operational and financial perspective.

Make your business plan before you start

Mr. Hemant Pradhan owns a fast food restaurant in Pune. He had many years of relevant experience and sufficient savings. He thought he knew everything. But very soon he realized that he does not have a concrete road map or a business plan and was working on daily basis. With growing competition, his business started witnessing downfall. He attended a seminar organized by one business school in Pune and that is when he realized importance of making a realistic business plan. In a span of next three years, he had bought the rented property of the restaurant as he thought that real estate is always a safe investment.

He would like to give you some important tips before you start your own business:

- ⇨ Make an exhaustive business plan.
- ⇨ Find out perfect location. It is not possible to change location every now and then.
- ⇨ Make sure you read and understand all the terms and conditions of the lease contract before you sign it.
- ⇨ Always be ready for the unexpected.

2.2 Business Plan Outline

There is no single prescribed format for a business plan. But it has to be a systematic assessment of all the factors critical to your business purpose and goals. Business planning is about results. You need to make the contents of your plan match your purpose. A business plan is any plan that works for a business to look ahead, allocate resources, focus on key points and prepare for problems and opportunities. Businesses need plans to optimize growth and development according to priorities. Plan formats and outlines vary, but generally a plan will include components such as; description of the company, product or service, market, forecasts, management team, and financial analysis. However, a comprehensive format for micro units is placed at Appendix 1 and a checklist for bigger projects is available at Appendix 2.

Here are some suggested topics you can tailor into your plan.

[a] Executive Summary

This is an overview of the business you want to start. The objective of the summary is to persuade your reader (investor or lender) that the business proposal is worth investing in. This section should touch on all the key elements of your plan including a description of your business or product, target market, management team, business strategy, financial needs and projections. Although this is at the beginning of the document, it should be written last, after all your decisions are made. The remainder of the plan provides the details.

[b] Promoters, Constitution and Statutory Compliances

An excellent business plan can go awry if the promoters are not competent. Provide detailed resume of each promoter including financial information backed up by income-tax and/or wealth tax returns for preceding three years, details of other enterprises where they are associated, functional responsibilities and financial contribution in the venture and contribution to the success of the business (historical and anticipated).

Briefly describe the constitution and relevant registrations. List down all statutory compliances needed and actually obtained till date.

[c] Industry Analysis

Describe your product or service. Explain whether you intend to manufacture, distribute, service or wish to undertake some combination of these. What need or want does your product or service satisfy? To understand the environment in which your business will operate, an examination of the industry is essential. Hence, provide a detailed description of the industry. Present an industry analysis which will include research on economic, social, technical and regulatory aspects like prospects for the industry and total estimated industry sales (current and future), general industry standards, benchmarks and performance requirements, industry trends, major players, cyclical changes and so on.

[d] Demand Analysis, Marketing Plan and Product Mix

A thorough research of the market is the most important part in the development of a business plan. Research will determine the expected size of the market for your product. You should clearly define overall size of the market and expected growth in future, your position in it and who your competitors are. Tariff protection or import restrictions affecting your product should also be clearly spelt out. All other critical factors that determine market potential need to be mentioned. You should be able to prove that your business has the potential to attract customers in a growing market despite the competition. Spell out your marketing plan in detail.

[e] Technical Feasibility

Analysis of technical aspects is done continually when a project is being examined and formulated. Other types of analysis are closely inter-twined with technical analysis. The broad purpose of this analysis is to ensure that all the inputs required to set up the business are available and to facilitate the most optimal formulation of the business plan in terms of technology, size, equipments, location and so on. It begins with the determination of the production capacity and includes the entire gamut of technical features.

[f] Cost of the Project & Means of Financing

The cost of the project represents the total of all items of outlay associated with setting up of business which are supported by long term funds. Expenditure on all long term assets like land and site development, buildings, plant & machinery, miscellaneous fixed assets etc. along with margin money for working capital are included to arrive at the cost of the project. Considerable documentary evidence needs to be collected to justify various cost components.

Means of financing primarily deals with how and when the cost of the project shall be funded. There are various means of finance for funding your business, but there are certain guidelines and considerations which should be borne in mind before taking a final decision. There are certain norms laid down by the government or financial institutions like debt equity ratio, promoters' contribution to the total cost of the project, security margin etc. and while finalizing the funding pattern, these norms must be adhered to. Likewise, there are some business considerations which are critical for the financing decisions like cost, risk, flexibility, control etc. and any decision has to be taken after careful consideration of these parameters.

[g] Financial Viability

This chapter basically deals with the potential of your business to earn optimum profits and safely return the borrowings and also provide returns to the promoters. The most important statement in this regard is the projections of performance and profitability. It has to be prepared for 3 to 5 years. It provides estimates of yearly sales in value and total cost to be incurred to achieve this volume of sales. This statement indicates the amount of profit (or loss) which your business may earn each year. Other important statements like projected cash flow and balance sheet help you find out the intrinsic financial strength of your business. Financial tools like the debt service coverage ratio and the break even analysis help you as well as the lending institution to gauge the potential of the business to repay the borrowings as per the agreed terms. Throughout this chapter, it is necessary to outline all assumptions made by you to avoid any ambiguity.

(h) Implementation Schedule

Timely implementation of project is very critical as any delay may result in cost overrun. This may jeopardize the financial viability. While formulating this schedule, you must take into account all the uncertainties to the extent possible to work out a schedule which can be adhered to.

[i] Growth and Exit Strategy

Business plan must also briefly deal with future possibilities in terms of expansion, backward or forward integration, diversification etc. This further strengthens the confidence of investors and lenders. Similarly, it is advisable to mention your short term or long term exit policy. It may seem odd to develop exit strategy at this stage but potential investors would certainly like to be aware of it if you have any such inkling in your mind.

[j] Enclosures

Business plan has to be as much transparent as possible. This helps investors or lenders to take a quick decision. Therefore, all relevant documents like resume along with tax returns of the promoters, copies of statutory registrations, sale deed for land, estimates and blue print from an architect for all civil work, quotations for machinery and other major assets etc. must be enclosed. A list of all such documents may be given separately to facilitate easy access to them.

> Remember that the person reading the plan may not understand your products and business, services or processes as well as you do. So try to avoid JARGONS. It is a good idea to get some one who is not involved in the business, friends or family members, to read your business plan and make sure that S/he understand it.

EXERCISE

- **Why cannot executive summary be prepared till the entire plan is ready?**

- **Justify, ‘why industry analysis is critical’.**

Appendix 1

Business Plan for Micro and Small Enterprises

Micro enterprises normally do not need a business plan. But sometimes it may be helpful for financing and business planning. Business plans for micro enterprise are rather rudimentary and adapted to the very limited accounting and management capacity of micro enterprises.

Business plans for small enterprises are more detailed than micro business plans but also based on a limited capacity in accounting, cost calculation and financial projection of the small business owners.

Business Plan

Personal Data

Full name of the business operator / partners..

Address...

Educational qualification...

Special training ....

Work experience ....

Business Profile

Type of the plan/work/business..

Legal form of the business ....

Year of the Business Plan: From.......................... to ....

Work premises at the disposal of the operator

(Location, size, facilities) ....

....

Specify if there is any advantage or problem related to the location:

....

Market Study

Main Customers and Market Segments:

Competitors			
No.	Competitor	Main Products	Price per Unit

Marketing strategy to win customers and overcome competitors:

....

....

....

List of Suppliers		
Suppliers	Products/Equipment[1]/ Working materials	Ranking of price - performance

Production Plan

3.1 Production and Sales				
No.	Item	Total Quantity per Year	Sales per year	Capacity / Utilisation
1				
2				
3				

3.2 Machinery/Equipment				
No	Item	Unit Price	Total Value	Maintenance Costs
1				
2				
3				
4				
	Total:			

3.3 Raw Material Requirement				
No.	Item	Quantity	Total Annual Requirement	
			Value	Source
1				
2				
3				
4				
	Total:			

.

3.4 Utilities / Infrastructure					
No.	Item	Annual Requirement	Total Annual Costs	Maintenance Costs	Source
1	Electricity				
2	Gas				
3	Water				
4	Rent				
5	Other				
	Total:				

3.5 Labour				
No.	Particulars	No. of Staff	Annual Wages/ Salaries	Further Training required
1	Skilled			
2	Semi-skilled			
3	Unskilled			
4	Owner's salary			
5				
	Total:			

3.6 Administrative and Selling Costs			
No.	Item	Quantity	Amount
Total:			

4.1 Fixed Capital				
No.	Item	Value		
		Initial	- Depreciation	= Actual
1	Land/Building			
2	Machinery/Equipment			
3	Furniture and Fixtures			
	Total:			

Cost Calculation

4.2 Working Capital				
No.	Item	Duration	Quantity	Value
1	Raw materials stock			
2	Semi-finished goods stock			
3	Finished goods stock			
4	One month production expenses (utilities, administration, wages, salaries)			
	Total:			

Financing

Financing			
No.	Item	Value	Remarks
	Own funds		
	Loan for fixed capital items		
	Working capital loan		
	Other		
	Total		

Yearly Profit and Loss Statement

Yearly Profit and Loss Statement	
Period: from............... to...................	
Gross Sales	
Less: Returns and allowances	-
= Net Sales	=
Less: - Costs of goods sold	-
- Direct material	-
- Direct labour	-
- Overhead	-
= Gross Profit	=
Less: - Administrative and selling expenses	-
- Salaries	-
- Telephone	-
- Water	-
- Electricity	-
- Rentals	-
- Others	-
= Operating Profit	=

Less: - Interest expense	**-**
= Net Profit before Tax	**=**
Less: - estimated Income Tax	**-**
= Net Profit after Tax	**=**
Date Signature	

Appendix 2

Business Plan Checklist

Executive Summary

- What is the nature of the project?
- What are the entrepreneur's competencies and qualifications?
- What are the project's contributions to the local and national economy?
- In addition, good to include the following:
  - Your knowledge of the business:- How much do you know about the area? Will you have to spend extra time and money teaching yourself the business? Will you have to take on a partner because you don't know the business well enough?
  - Your experience in the field:- In some cases, you may have a lot of knowledge about the subject, but not much experience. Have you ever owned or worked in this type of business before? To what extent is hands-on experience crucial to the business?
  - Your skills:- Try to concentrate on skills that are unique to that business. To what extent do you possess those skills? If you lack them, how difficult will it be to acquire them?
  - Ease of entry:- Think both of the costs of entering the business and of the competitive barriers that might exist. For example, a service business that you can run from your home might be relatively inexpensive to start, but if several others are already providing that service, entry in the field may be difficult.
  - Uniqueness:- Uniqueness does not necessarily mean that literally no one else is providing the same product or service; it can mean that no one else is providing the product or service in the same way you intend to provide it, or it

can mean that no one else is providing that product or service in your area. You're looking for some way to distinguish your product or service from others who are already in business.

Sales and Marketing

- What is the product? How does it compare in quality and price with its competitors?
- Where will the business be located?
- Which geographical regions will be covered by the project?
- Within the market area, to whom will the business sell its products?
- Is it possible to estimate how much of the product is currently being sold?
- What share or percent of this market can be captured by the business?
- What is the selling price of the product? How much of the product will be sold?
- What promotional measures will be used to sell the product?
- What marketing strategy is needed to ensure that sales forecasts are achieved?
- How much do you need to promote and distribute your product?

Production

- How is the production process characterised?
- What buildings and machinery (fixed assets) are needed and what will their costs be?
- What is the useful life span of the building and machinery?
- How will maintenance be carried out and are spare parts available locally?
- When and where can the machinery be obtained?
- How much capacity will be used?
- What are the plans for using spare capacity?
- When and how will the machinery be paid for?
- Where will the factory be located and how will the factory be arranged?
- How much raw material is required? How much will the raw material cost?
- What are the sources of raw material? Are they available throughout the year?
- How much direct and indirect labour is needed and which skills should they have?
- What will be the costs of labour?
- Are workers available throughout the year? If not, what effect will this have on production?
- How will the workers be motivated?
- What factory overhead expenses are involved?
- What are the production costs per unit?

Organisation and Management

- How will the business be organised? How will the business be managed and operated?
- What is the business experience and qualifications of the entrepreneur?
- What pre-operating activities must be undertaken before the business can operate?
- What pre-operating expenses will be incurred?
- What fixed assets will be required for the office?

- What administrative costs will be incurred?

Financial Plan

- What is the total capital requirement?
- Is a loan needed? What will be the equity contribution of the entrepreneur? And how high will it be?
- What security (collateral) can be given to the bank?
- What does the Profit and Loss Statement indicate?
- What does the Cash Flow Statement indicate?
- What does the Balance Sheet indicate?
- What is the loan repayment schedule?
- What is the Break-Even Point (BEP)?
- What is the Return on Investment (ROI)?
- Is the project viable?

UNIT 6

CHAPTER 3

FORMULATE (AND REFORMULATE) BUSINESS PLAN

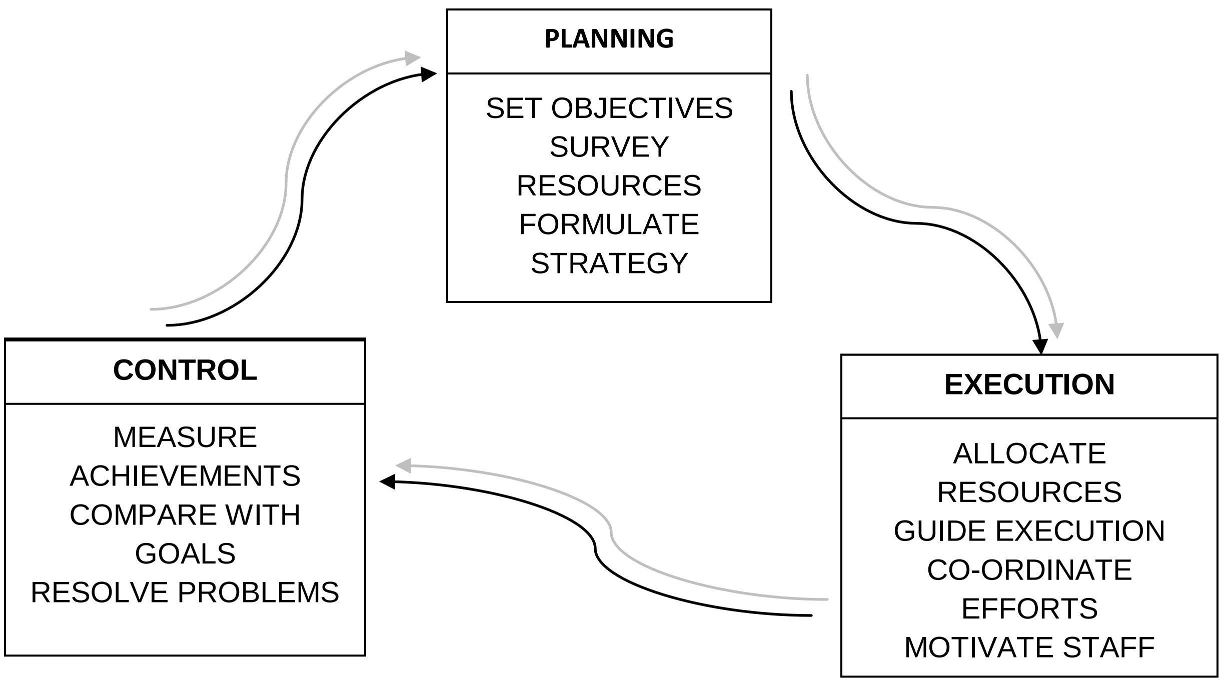
Some very important practical suggestions with regard to formulating and reviewing your business plan

3.0 Formulate (and Reformulate) Your Business Plan

Donald N. Sull, Associate Professor of Management Practice at the London Business School in an article in the MIT Sloan Management Review offers some practical suggestions on managing inevitable risks while pursuing opportunities. Here are some of the suggestions on how to formulate (and reformulate) your business plan.

- Be flexible early in the process and keep it fluid. Do not commit too early. Expect your first plan to be provisional and subject to revision.
- Ask yourself if your experience or expertise match with the opportunity you identified.
- Identify your potential deal killers - those variables that are likely to prove fatal to the venture.
- Clearly identify what you see as the key drivers of success.
- Raise sufficient money to finance the experiment or evaluation with a cushion for contingency.
- Delay hiring key managers until initial rounds of experimentation has produced a stable business model.
- At some point, take the plunge and test your product or service on a small scale in the real world through customer research, test marketing or prototypes.
- Test and refine your business model before expanding your operations.

THE PROJECT MANAGEMENT CYCLE



Do not lose sight of the fact that a business plan is not just about obtaining finance. Although this may be the result you are looking for. Your business plan will be most effective if it is positioned as a "working document" that is continuously evolving and so needs to be updated to reflect market conditions and performance of business.

After all, in the absence of a crystal ball, even the most forward thinking management team will have difficulty predicting tomorrow.

UNIT 6

CHAPTER 4

PROMOTERS, CONSTITUTION AND STATUTORY COMPLIANCES

CONTENTS

- **Promoters**
- **Constitution**
- **Statutory Compliances**

The guiding force behind any business venture is undoubtedly the promoters. Choosing appropriate constitution hinges upon factors like nature of business and scale of operations, the desired degree of control, amount of capital needed and so on.

You have no choice about statutory compliances. Non-compliance can put you in serious trouble.

OBJECTIVES

These three are the important dimensions of any business having long term implications. You should be very careful about them. Let us examine each dimension in detail.

4.0 Promoters, Constitution & Statutory Compliances

Promoters

Promoters can make or break a business. They provide leadership, direction and motivation to the entire enterprise. Hence, it is imperative to provide maximum possible details about each of them. If you are looking for external funding then promoters could be a decisive factor. Explain who are involved, their role and how they fit into the organization. Enclose resume or a paragraph on each promoter outlining background, relevant experience and qualifications. Provide similar details of advisers/consultants, if you intend to retain them. Provide financial details of all promoters along-with copies of tax returns. Contribution of each one in the capital has to be categorically mentioned.

If you are looking to satisfy your lender or investors, you need to demonstrate that your team has the right balance of skills, drive and experience to enable your business to succeed. Key skills include sales, marketing, financial management and production. Your investors will also want to be convinced that you and your team are fully committed to the business. Therefore, it is necessary to set out how much time and money each one will contribute, division of functional responsibilities and the salaries and the benefits you intend to draw.

In other words, to facilitate proper assessment of promoters, following details must be provided in the business plan.

- Educational and financial background
- Track record
- Familiarity with industry in general and with the contemplated product in particular
- Compatibility of active promoters
- Prospects of division of work
- Their commitment to the project

> Being in business is not for everyone
>
> Ms. Madhuri Trivedi a graphic designer is a mother of two children. She feels that being in business calls for tremendous balancing act. Being a mother of two and as a woman, she found it difficult to balance her love for children, her artistic talent, the business and family responsibilities. She had to make a choice and her decision was not to be an entrepreneur.

Constitution

A business enterprise can be owned and organized in several forms. Each has its own merits and demerits. The ultimate choice depends upon the balancing of the advantages and disadvantages of the various forms of business. The right choice of the constitution of business is very crucial because it determines the power, control, risk and responsibility of the promoters as well as the distribution of profits and losses. Being a long term commitment, the choice of the form of business should be made after considerable thought and deliberations.

Options available are

- ⇨ Proprietorship
- ⇨ Partnership Firm
- ⇨ Private Limited Company
- ⇨ Public Limited Company
- ⇨ Co-operative Society
- ⇨ Hindu Undivided Family (HUF)/Joint Hindu Family

The choice of the form of business is governed by several inter-dependant and Inter-related factors like:

a) The Nature of Business

Businesses providing direct services like tailoring, restaurants and professional services like doctors, lawyers are generally the proprietary concerns whereas businesses requiring pooling of skills and funds are better organized as partnership firms. Manufacturing organizations of large size are invariably set up as private or public limited companies.

b) Scale of Operations

Here volume of business and size of the market (local, regional, national, inter-national) are the key factors. Large scale enterprises catering to national and international markets can be organized more efficiently as private or public limited companies. Small and medium scale businesses are generally set up as proprietorships or partnerships.

c) The Degree of Control Desired

A person who desires direct control of business prefers proprietorship because a company involves separation of ownership and management

d) Financial Requirments

Partnership allows you to invite a financial partner. Further, it can be converted into a company when it grows beyond the capacity and resources of a few persons. Large fund requirement right from the beginning calls for company type of organization.

e) Risks and Liabilities

The volume of risks and liabilities as well as the willingness of the owners to bear them is also an important consideration.

f) Statutory Compliances and Income-Tax Liability

Proprietorship invites minimum compliances whereas public limited companies have to adhere to strict discipline. Likewise, income-tax liabilities vary for each form of business organization.

Statutory Compliances

Once all important decisions related to starting a business are taken, you have to take into account the basic regulatory requirements which are to be complied with for starting the business. As per the provisions of the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, filing of Memorandum with the concerned District Industries Center (DIC) has been made optional for the entrepreneurs who are into manuacturing or services sector and want to operate micro andl small scale level where as in the case of Medium enterprises, it is optional for service providers but compulsory for the entrepreneurs who are into manufacturing which means filing of the Memorandum is compulsory only in the case of those who are into manufacturing sectors and that too operate at a medium scale. Units qualifying as “large scale” must apply for registration to The Secretariat for Industrial Approvals (SIA), Govt. of India. Even though registration has been made optional in case of many categories as explained earlier, it is advisable to obtain registration by submitting the Memorandum as the procedure is very simple, it helps you to avail off many incentives as and when announced. Financial institutions or banks also consider it as a positive feature and that gives you a legal sanctity also.

TABLE 1
New Nomenclature and Classification of MSME

Manufacturing Enterprises (Ceiling on investment in Plant and Machinery)		Service Enterprises (Ceiling on investment in Equipment)
₹. 25 lac	Micro	₹. 10 lac
₹. 5 crore	Small	₹. 2 crore
₹. 10 crore	Medium	₹. 5 crore

The next important regulation is pollution control and environment protection. Each state has the Pollution Control Board and depending upon the contemplated product, necessary permission may have to be taken from the Board. Separate set of laws and rules for emission of hazardous wastes have been enacted. The Ministry of Environment and Forests, Govt. of India is the nodal agency for regulating all such environmental aspects.

Certain other registrations which may have to be obtained depending upon the product, sales volume, number of persons employed etc. are listed below:

- Registration under the Factory Act
- Sales-tax or Central Excise Registration or VAT
- Registration under the Explosives Act
- Registration with local civic authorities
- Registration under FPO in case of fruits and vegetables processing
- Registration with the Office of the Textile Commissioner
- Registration with the Office of the Drug Controller in case of pharmaceutical products

Please note that this is just a representative list. You are advised to visit the District Industries Center to obtain the latest amendments and guidelines.

The Commissionerates or Directorates of Industries are the nodal agencies in different states which assist and guide entrepreneurs in starting up an industrial unit. They provide an interface between industry and other agencies and enable the entrepreneurs to obtain different industrial approvals and clearances from various departments. They sanction incentives to eligible industrial undertakings and create a transparent and automatic system of allotment of scarce raw materials. Hence, a new entrepreneur must approach this office while setting up business.

EXERCISE

- **Find out and compare Income-Tax repercussions on your venture if it is a proprietorship or a partnership**
- **Do you agree with the following statement? If yes then why?**
  "The dexterity of an entrepreneur lies in how best he can manipulate environment to his advantage "

UNIT 6

CHAPTER 5
INDUSTRY ANALYSIS

It is imperative for you to know which particular industry group you belong to. Understanding the forces at work in the overall industry is an important component of effective strategic planning.

OBJECTIVES

By now you are clear about certain basic parameters like why and how you should prepare a business plan, which constitution suits you the best and what compliances you must adhere to. This is the time to understand and analyze the macro and micro picture of the industry to which you and your product belong to. In the words of Kenneth J. Cook, “understanding your industry directly impacts your ability to succeed” Let us dwell on this.

5.0 Industry Analysis

Industry analysis is a tool that facilitates you to understand your position with others who produce similar products or provide identical services. Understanding the forces at work in the overall industry is an important component of effective strategic planning. Industry analysis enables you to identify the threats and opportunities facing your business and to focus resources on developing unique capabilities that could lead to competitive advantage. Kenneth J. Cook in his book “Complete Guide to Strategic Planning for Small Business” states that “Many small business owners and executives consider themselves at worst victims and at best observes of what goes on in their industry. They sometimes fail to perceive that understanding your industry directly impacts your ability to succeed. Understanding your industry and anticipating its future trends and directions gives you the knowledge you need to react and control your portion of that industry. However, your analysis of this is significant only in a relative sense. Since both you and your competitors are in the same industry, the key is in finding the different ability between you and the competition in dealing with the industry forces that impact you. If you can identify abilities you have that are superior to your competitors, you can use these abilities to establish a competitive advantage”.

Michael E. Porter who has developed a model for analyzing the structure of an industry has written in his book “Competitive Strategy: Techniques for Analyzing Industries and Competitors” that, “An effective competitive strategy takes offensive or defensive action in order to create a defendable position against competitive forces”.

Hence, it is imperative for you to have in-depth knowledge of the industry group to which your products belong to (textile, chemical, plastic, heavy machinery, food processing, leather and so on).

An analysis of the government policy towards your industry group is very important. Sometimes, the union as well as the state governments come out with some major measures either to promote or discourage certain products. Such decisions would have major bearing on your plans.

Some regional customs or taboos may also affect your plans. (Aversion of Gujarati people towards non-vegetarian food).

Technological advancement is one more area requiring attention.

Hence to analyze the economic, social, technical and regulatory aspects of your industry, it is advisable to look into the trend of past few years. This trend analysis would also help you to know the general industry standards and benchmarks. Ideally, industry analysis should be done with regard to:

- ⇨ Past Performance
- ⇨ Present Status
- ⇨ Future Prospects

Dwelling on the past performance of the industry would give you a balanced perspective about its inherent potential, how it has evolved over a period of time, attitude and approach of the regulatory authorities, cyclical trends, if any, growth of big players in the industry (steady, random, unplanned), major benchmarks, how quick are the technological advancements and so on. This is very critical as it tells you about the intrinsic strengths and weaknesses of the industry, degree of its vulnerability and performance requirements which in turn, enables you to provide adequate, proper and timely safeguards, checks and controls in your business plan.

Analysis and assessment of the present status of the industry helps you to evolve your own marketing strategy to penetrate the market. It includes several aspects like total current demand and how it is satisfied, nature and intensity of competition, distribution methods or channels and pricing policy of the competitors, aspirations of consumers, alternate or substitute products available in the market, elasticity of demand, major technological advancements, possibilities of adding new product lines etc. This information is badly needed as it results in your finalizing the market development plans for your business systematically with reduced chances of failure.

Gathering information on historical developments and putting it in sync with present status will help in assessing potential market opportunities for the future. Business success is determined by recognizing not only what “today’s” customers want but also what "tomorrow's" customers will need. A peep into the future is, therefore, very crucial. Future growth or otherwise in demand would help you determine your line of action. It would help you to prepare your own sales forecast for next few years and then many other features of your business could be finalised. Decisions like installed production capacity and expected yearly capacity utilization would throw light on many other major decisions like selection of machinery, sourcing of raw material and other inputs, manpower planning, formation of sales team, target markets and so on. And the most important aspect of your business i.e. requirement of funds shall be crystal clear to you.

Thus, industry analysis is the starting point for your planning and therefore it has to be done very carefully without any bias. If needed, you can always seek help from the experts. Now-a-days, substantial authentic information is available from various sources like web-site of concerned ministries of the Govt. of India and many other sites, chambers of commerce, industry specific Export Promotion Councils (EPC) or boards, industry associations, specialized magazines and periodicals, Technical Consultancy Organizations (TCOs) and many such sources. A representative list of some of the organizations is enclosed with this chapter for your perusal. (Appendix 1)

By now, you have understood why and how important it is to thoroughly analyze the industry to which you belong. In order to determine and assess your current strategy and its appropriateness and potential for success, you must understand the dynamics of the industry in which you are likely to compete. While we often take it for granted that this is easy to do, it takes a great deal of thought and analysis. Professor Harvey B Lermack of Philadelphia University poses seven key questions that you must analyze:

⇨ What are the industry's dominant economic characteristics?
⇨ What kind of competitive forces are industry members facing?
⇨ What factors are driving industry changes and what impacts will they have?
⇨ What market positions do rivals occupy – who is strongly positioned?
⇨ What strategic moves are rivals likely to make next?
⇨ What are the key factors for future competitive success?
⇨ Does the outlook for the industry present an attractive opportunity?

Remember that some of the great inventions of all time, like aircrafts and cars, did not result in economic benefits for many of those who tried to exploit these great inventions. The cumulative earnings of all airlines since Wilber Wright flew that first plane are zero (Losses of airlines are greater than their profits). Success comes to those who find business with great economics and not necessarily great inventions or advances to mankind.

EXERCISE

Make a quick assessment of the readymade garments industry in your State.

Visit at least five websites relevant to your chosen product and prepare industry analysis.

Appendix 1

Export Promotion Councils/Boards

[1]	Engineering Export Promotion Council 14/IB, World Trade Centre Ezra Street, Kolkata 700 001 Website: www.eepc.gov.in
[2]	Plastics and Linoleums Export Promotion Council Centre-I, 11th Floor, World Trade Centre, Cuffe Parade Mumbai 400 005 (Website: www.plexcon.com)
[3]	Basic Chemicals, Pharmaceuticals and Cosmetics Export Promotion Council Jhansi Castle, 4th Floor, 7 Cooperage Road, Mumbai 400 039 Website: www.chemexcil.com
[4]	Chemicals and Allied Products Export Promotion Council World Trade Centre, Ezra Street, Kolkata 700 001
[5]	Council for Leather Exports Leather Centre, 3rd Floor, 53 Sydenhams Road Chennai 600 003 (Website: www.leatherindia.com)
[6]	Sports Goods Export Promotion Council I-E/6, Swamin Ram Tirthnagar Jhandewala Exdtension, New Delhi 110 055
[7]	Gems and Jewellery Export Promotion Council Diamond Bazar, 5th Floor, 391-A, Dr. Bhadkamkar Marg Mumbai 400 004
[8]	Cashew Export Promotion Council Post Box No 1709, Chittor Road, Cochin 682 016
[9]	Electronics and Computer Software Export Promotion Council PHD House, Phase-II, Opp. Asian Games Village New Delhi 110 016 (Website: www.indiansources.com)

[10]	Apparel Export Promotion Council NBCC Towers, 15 Bhikaji Cama Place, New Delhi 110 066 Website: www.aepc.com
[11]	Carpet Export Promotion Council 101-A/1, Krishnanagtar, Safdarjung Enclave New Delhi 110 029 (Website: www.indiancarpets.com)
[12]	Cotton Textile Export Promotion Council Engineering Centre, 5th Floor, 9 Mathew Road Mumbai 400 004 (Website: www.texprocil.com)
[13]	Export Promotion Council for Handicrafts 6 Community Centre, Basant Lok, Vasant Vihar New Delhi 110 057 (Website: www.epcd.asiansources.com)
[14]	Handloom Export Promotion Council 18 Cathedral Garden Road, Nugambakkam, Chennai 600 034
[15]	The Indian Silk Export Promotion Council 62 Mittal Chambers, Nariman Point, Mumbai 400 021
[16]	Wool and Wollen Export Promotion Council 312/714, Ashoka Estate, 24 Barakhamba Road, New Delhi 110 001 (Website: www.wwepc.com)
[17]	Agricultural and Processed Food Products Export Development Authority 4th Floor, Banking Complex, Sector 19A, Vashi, New Mumbai 400 705
[18]	Marine Products Export Development Authority MPEDA House, Panampillynagar Avenue, Cochin 682 015
[19]	Synthetic and Rayon Textiles Export Promotion Council Resham Bhavan, 78 Veer Nariman Road, Mumbai 400 021
[20]	Coffee Board 1 Dr. Ambedkar Veedhi, Bangalore 560 001
[21]	Coir Board PO Box No 1752, MG Road, Ernakulam South Cochin 682 016
[22]	Rubber Board PB No 280, Sastri Road, Kottayam 686 001
[23]	Spices Board PB No. 1909, St. Vincent Cross Road, Cochin 682 018
[24]	Central Silk Board Meghdoot, 95-B, Marine Drive, Mumbai 400 021
[25]	Tea Board 14 Biplabi Trailokya, Maharaj Sarani, Kolkata 700 001

Chambers of Commerce and Industry Specific Associations

[1]	All India Cottonseed Crushers' Organization, Mumbai-400020
[2]	All India Stainless Steel Industries Association, Mumbai-400034
[3]	All India Woolen & Textiles Association, Mumbai-400002
[4]	Association of Manmade Fiber Industry of India, Mumbai-400020

[5]	Bombay Chamber of Commerce & Industry, Mumbai-400001
[6]	Gujarat Chamber of Commerce & Industry,Ahmedabad-380009
[7]	Southern Gujarat Chamber of Commerce & Industry, Surat
[8]	Cement Manufacturers' Association, Mumbai-400020
[9]	Confederation of Indian Industry,Mumbai-400018
[10]	Dyestuff Manufacturers' Association of India, Mumbai-400003
[11]	Fragrances & Flavors Association of India, Mumbai-400020
[12]	Indian Chemical Manufacturers' Association of India,Mumbai-400023
[13]	Indian Drug Manufacturers' Association of India,Mumbai-400018
[14]	Indian Institute of Packaging,Mumbai-400093
[15]	Indian Merchants' Chamber, Mumbai-400020
[16]	Indian Pump Manufacturers' Association,Mumbai-400018
[17]	Indo-American Chamber of Commerce, Mumbai-400020
[18]	Process Plant & Machinery Association of India, Mumbai-400009
[19]	The All India Ball Bearing Merchants' Association, Mumbai-400003
[20]	The Institute of Indian Foundry men, Mumbai-400051

Research Laboratories under the Council of Scientific and Industrial Research (CSIR), Government of India

(In all 39 labs and 50 field stations or extension centers).

[1]	Central Building Research Institute (CBRI), Roorkee
[2]	Central Drug Research Institute (CDRI), Lucknow
[3]	Central Electronics Engineering Research Institute (CEERI), Pilani
[4]	Central Food Technological Research Institute (CFTRI), Mysore
[5]	Central Glass and Ceramic Research Institute (CGCRI), Kolkata
[6]	Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow.
[7]	Central Leather Research Institute (CLRI), Chennai

[8]	Central Mechanical Engineering Research Institute (CMERI), Durgapur
[9]	Central Salt and Marine Research Institute (CSMRI), Bhavnagar
[10]	Indian Institute of Chemical Technology (IICT), Hyderabad
[11]	National Chemical Laboratory (NCL), Pune

UNIT 6

CHAPTER 6
DEMAND ANALYSIS, MARKETING PLAN AND PRODUCT MIX

CONTENTS

OBJECTIVES

This is the crux of your business plan. This chapter has to describe the potential demand for your products, how have you estimated it, who are your customers, how you intend to satisfy them, nature of competition and your strategy to penetrate the market.

What is your pricing policy? How will you promote your products? How will you sell?

Finding out correct answers to these and many such questions is a difficult task. Nevertheless, without such in-depth analysis you should not proceed further. Let us go through the ways and means of actually doing it.

6.0 Demand Analysis, Marketing Plan and Product Mix

6.1 Demand Analysis

Demand for a product or service is the total volume that will be bought by a defined customer group, in defined geographical area, in a defined time period and in a defined environment at a specific price. Demand analysis is a very critical exercise for your enterprise as it helps you in arriving at some of the major decisions and your marketing plan is based on the information collected by you during this analysis. Reliance on intuition or hearsay may prove suicidal.

[A] Need and Importance

- ⇨ It helps you to understand your business as a whole.
- ⇨ It results in understanding the overall size of the market, geographical spread, substitute products available in the market, possibility of new applications, product obsolescence etc.
- ⇨ It tells you about the nature of competition.
- ⇨ It helps you to finalise production capacity of your venture
- ⇨ Estimation of cost of the project becomes easier and reliable.
- ⇨ It facilitates evaluation of diversification possibilities
- ⇨ It helps you in finalizing your sales and marketing network including manpower planning.
- ⇨ A systematic demand analysis is the foundation of your marketing plan.

[B] Market Demand – A Six Element Concept

i) Product

Your product has to be defined accurately in terms of industry sector to which it belongs. Color, actual end-use, packing, geographical area in which it is to be sold, whether substitute, alternate or a competing product etc. have to be very categorically spelt out. Clearly defined product helps you in gathering relevant and accurate information.

ii) Volume

Demand can be estimated in volume or value or in both terms. When the product is homogenous, it is advisable to compile details in terms of volume. But in case of products where sizes, specifications, flavor, models are multiple; it becomes impractical to collect volume based details. In such cases information needs to be collected in value terms.

iii) Customer Group

Estimates of demand can be made for the entire market or some specific segments as well e.g. households, institutional market and possibilities of breaking down of market according to age or annual income etc. Product limitations or organizational constraints may compel you to look at the limited scenario.

iv) Geographical Area

New or first generation entrepreneurs may find it difficult to sale their products in a wider area or the product could be such that it can not be sent to far flung areas (volume, logistics, life etc). Hence, demand should be measured with reference to a well-defined area.

v) Time Period

Estimates must be made for a period of 3 to 5 years. With constant changes in the market dynamics; it is not advisable to stretch them beyond reasonable period.

vi) Market Environment

These estimates are made under a given socio-economic and political environment. Radical or totally unforeseen developments would change them drastically.

[C] Market Survey

How do you really estimate the demand for your chosen product or service? It is not a difficult task if you undertake market survey systematically. It involves three stages:

- ⇨ Determination of information needs
- ⇨ Information gathering
- ⇨ Analysis of the information and arriving at the conclusions

i) Determination of Information Needs

Information needs would vary from product to product and other factors like production capacity, product range, targeted geographical areas, expansion plans in the near future etc. Information has to be gathered on many aspects like:

- Life of the product and consumption norms
- A regional break up of present demand
- Determinants of demand
- Seasonal/cyclical character of the product

- Qualitative feedback from customers or dealers
- Information with regard to price trends
- Degree and nature of competition
- New entrants in the pipeline
- Import statistics over a period of time
- Distribution channels and commission to middlemen
- Government policy with regard to imports and exports, price preferences, promotion, bank finance, packaging standards, etc

You must try to compile as much information as possible to really understand and digest your business.

ii) Information Gathering

After going through a fairly exhaustive list, you must be wondering as to how this information is to be collected? What are the sources? Where do I start? Who would help me? Before you proceed further, make sure that you associate a technocrat who is familiar with your product or who is going to help you in setting up the venture. He will be in a better position to collect and analyze the information.
There are two ways in which the requisite information can be collected. They are:

a) Exploratory-cum-Desk Study

This can be undertaken in two ways.

Personal Interviews

You can meet certain people associated with your product and industry and with the help of a semi-structured questionnaire, seek their opinions on the relevant aspects e.g. a banker can perhaps provide you information on certain aspects based on his experience of the bank assisted similar enterprises. But a machinery or raw material supplier can give you a broader picture. Some other sources could be:

- ⇨ Existing producers of the product
- ⇨ Existing consumers of the product
- ⇨ Manufacturers or suppliers of raw materials
- ⇨ Middlemen like wholesalers, distributors or retailers
- ⇨ Industry associations

At the end of this exercise, you will have a fairly reliable picture of the market place.

Desk Research

Now-a-days quite accurate and latest information is available from several sources like the publications of the Union and state governments, industry associations, organizations like CII and FICCI, industry specific magazines, journals etc. A list of some useful publications is provided at Appendix 1 to this chapter.

Information Technology has literally opened up the flood gates and today all types of information is virtually available on your finger tips Use search engines like Yahoo, MSN and Google and compile the information. Collection of information is no more a constraint.

Information available from such secondary sources is economical and fast. But its reliability, accuracy and relevance must be carefully examined. It is imperative to look into following aspects:

- Who gathered this information and why?
- When was it collected and when was it published?
- The period for which it was gathered
- Have the terms of the study been carefully and unambiguously defined?
- What was the target group?
- How the sample was selected and was it representative?
- How satisfactory was the process of information gathering?
- What was the degree of misrepresentation by respondents?
- How accurately was the information edited, tabulated and analyzed?
- Was statistical analysis properly applied?

b) Questionnaire Administration

Information gathered through exploratory-cum-desk study may be adequate in case of micro or small scale units. But in case of medium scale units or for certain products irrespective of the investment, it becomes necessary to undertake a product specific market survey. Many a times, information collected through desk research could be inadequate. In such cases, it is advisable to undertake a market survey with the help of a structured questionnaire.

Major steps involved are:

i) Determination of Objectives

There could be various objectives like finding out total demand and its growth rate, motives for buying, income and price elasticity of demand, unsatisfied needs, trade practices and so on. There has to be clarity about the objectives.

ii) Defining the Target Population

When the end-users are limited (capital goods), it is feasible to include the entire or bulk of the population. This is known as the census survey. But in case of products with very large consumer base (detergent powder, tooth paste, shampoo etc.) covering even majority of the population may prove prohibitively expensive, time consuming and unmanageable. In such cases, a sample survey is conducted. Based on the information collected from the sample, inferences about the population are drawn.

iii) Developing a Questionnaire

Designing a questionnaire requires special skills, imagination, and complete knowledge of the product/s and some understanding about the human behavior.

Some tips which could be useful to you while designing a questionnaire are provided below.

TABLE 1

Questionnaire Design: Some Suggestions

1. Ask specific and precise questions.

2. Define even apparently simple concepts. Establishment of an enterprise may mean company or an organization to some and commencement of production to others. A shift may be of 6 hours or 8 hours. It is better to define all such concepts so that you avoid the danger of a particular response conveying varied meanings.

3. It is useful to divide the questionnaire into separate groups of questions. Sometimes, there may be a portion of questionnaire which is irrelevant for a particular respondent.

4. Pay proper attention to sequencing of the questions.

5. Do not leave things to the investigator's discretion. For instance, unit of measurement (kilo or tonne).Such points must be clearly specified.

6. Do not frame questions in such a manner so as to cast a substantial computational responsibility on the investigator (For instance, if an investigator has to ascertain five streams of output, multiply each stream by unit-price and work out a total of such five products as an answer to a question, he may commit an error).

7. The layout of the questionnaire, the space to be provided, the boxes to be provided etc are very important. A well-laid out questionnaire facilitates the investigator's task.

8. It sometimes helps to incorporate similar questions in order to crosscheck. This means touching upon a given issue more than once. If a respondent comes out with a different or contradictory response, it raises doubt about the veracity of his response.

9. It is customary to include an open-ended question in the nature of "other comments" at the end of the questionnaire so that a respondent gets a chance to express his views on issues left out under the earlier (structured) part of the questionnaire.

10. It is wise to avoid questions which are too sensitive (or threatening) or are likely to make the respondent feel apprehensive. Such questions tend to reduce the

respondent's cooperation even in respect of harmless questions (e.g. in India, question on profit put to a proprietorship or partnership firm is likely to cause such a situation). If necessary, such questions may appear towards the end of the questionnaire.

iv) Recruit and Train the Investigator

Recruit, train and give adequate orientation to the investigators and allocate work amongst them. You may like to do a part or whole of survey yourself, in which case, either few or no investigator is required.

Mailing (either through post or courier or sending e-mails) the questionnaire is another way of doing it. But the response is normally lukewarm.

v) Pilot Survey

It is always useful to try out the questionnaire on a few respondents. This brings out certain facts like lack of clarity, information gaps, and unwanted/unnecessary questions. A questionnaire can then be suitably modified.

vi) Actual Survey

Investigators carrying out personal interviews as per the sampling plan.

vii) Supervision

This is to ensure that the investigators are carrying out the work as planned. Supervisor has to randomly select few respondents, meet them and find out the facts.

viii) Screening of Completed Questionnaires

Incomplete, invalid or inconsistent data has to be eliminated.

c) Tabulate, Analyze and Interpret the Data

Now that you have collected adequate information, how would you analyze it? The answer to that query is common sense. There are cases, however, which provide scope for complex, technical work. For instance, let us assume you arrive at a set of parameters – interlinked – which determine the demand for fertilizers in India. Presume that these are: agro-climatic zone, size of land-holding, crops cultivated, monsoon prospects, fertilizer-subsidy policy, agricultural credit policy, and agricultural output prices. You have information you need on the behavior of these parameters. But, the relationship among these parameters and fertilizer demand is not one-to-one. It is rather complicated. So, you have to work upon it and build a mathematical model to explain the relationship, and then use the model to project fertilizer demand. It is neither necessary nor practical for you to do such work (but, if others have done such work, it would be wise to utilize it). For analyzing information on our own, utilize simple concepts such as:

Simple Statistical Tools:

The percentages, weighted average, frequency distribution, matrix and other such concepts are handy.

TABLE 2

Aluminum Collapsible Tube Supply: Past and Present Position

Year	Aluminum Collapsible Tube % of Aluminum used for Packaging	Production 50gm equivalent aluminum tubes in lac (numbers)	Growth over previous year (in %)
2004	6	1000	-
2005	6.3	1334	33%
2006	8.2	1500	12%
2007	8.1	2000	33%
2008	8.8	2334	17%

Such percentage computation helps you in understanding the trends in simple terms.

Market Segment:

Use this concept generously. It helps you understand the findings far better.

TABLE 3

A Gross View of Demand: Present and Projected

Segment	Present		Projected	
	Quantity (in lacs)	Value (₹. in lacs)	Quantity (in lacs)	Value (₹. in lacs at current prices)
Toothpaste (150 gms)	1000	900	1322	1190
Pharmaceutical (10gms)	3000	375	8340	1043
Shaving Cream (75gms)	100	60	150	90
Other Products	-	128	-	232
		1463		2555

Market Share

You have figured out the size of the total market. You also know the number of players and how large and strong they are. So, you now can project a market-share for yourself.

Consistency:

This means that you adhere to basic assumptions and premises and do not change these in an illogical manner.

Trend:

It is useful to try to decipher this. Is the demand rising, declining, or stagnating? Is there an erratic trend? What has been the rate of growth? Use growth measures clearly and carefully. The analysis will also help you identify some turning points in time and the reasons underlying such turning points.

TABLE 4

Production of Injection-molded Plastic Goods in State "A"

Year	Tonnes	Annual Growth Rate
2006	300	-
2007	1200	400%
2008	1250	4.17%
2009	1375	10%
Average annual compound growth rate for three years is 138.06%. Although this rate is correct, nevertheless is a misleading statement. It is so large because of a small base (300 tonnes) in 2006.		

Production of Injection-Molded Plastic Goods in State "B"

Year	Tonnes	Annual Growth Rate	
		Simple	Compound
2004	800	-	-
2005	880	10%	10%
2006	836	4.5%	(5%)
2007	1000	25%	19.6%
2008	920	15%	(8%)
2009	1200	50%	30.4%
Average Annual Growth Rate		28.9%	9.4%
See how different the average annual growth rates are depending on whether you use compound or simple one. Also notice that the growth rates mark erratic (up and down) trend.			

Projections

Just as you dissect the past and try to understand the trend, try to look ahead and anticipate what the future holds in store for you. Remember, you are a businessman. It is not possible to predict the future precisely. So, you are unlikely to spend too much time and effort on a perfect academic forecast. You are likely to be satisfied with a broad forecast, which under normal circumstances, will not be out of tune with what happens

Results of the data need to be extrapolated to the target population. The results may be misleading on account of:

a) Non representative sample
b) Defects in the questionnaire
c) Inability of the respondents to understand questions
d) Deliberate distortions in the answers
e) Poor handling of the interview
f) Dishonesty/cheating on the part of the investigators
g) Incorrect scrutiny of data
h) Inappropriate analysis

Carrying out field interviews requires some special skills like communication, patience, perseverance, information seeking, balanced judgment and so on. These skills along with following practical suggestions may make your task easier.

1. Some amount of "Warming up" is essential. Initial conversation should reveal to you how knowledgeable, co-operative or enthusiastic the respondent is. Further questioning in terms of content and style will, to a large extent, depend on this.

2. "Networking" is a crucial input. It may be of help if a bank official who has extended credit to a certain unit, can recommend you for an interview with the present owner of the unit you would like to speak to, rather than your meeting the owner directly. You can also utilize the help or assistance of friends, relatives, acquaintances and business associates to reach the right persons and obtain quality information from them.

3. While collecting data from knowledgeable persons, particularly your competitors, you will have to make an ethical choice of how truthful you want to be about your objective. There is a possibility that if you tell the truth, he may not co-operate. So, there are entrepreneurs who have posed as potential customers. Obviously, they get a much better response, though the context is different. You decide for yourself what you would like to do.

4. You should be sensitive to clues. An interviewee may make a statement on which he may not have back up data and information or he may not be willing to disclose such follow up information (because, he might guess your real mission in interviewing). Contact some other person in the line to secure such back up data and information.

5. Generally, an existing manufacturer is more often willing to talk about his competitors or other manufacturers rather than talk about him.

6. Motivated or false responses are a danger you must guard against. Plant suppliers normally present an exaggerated picture of market prospects. Existing manufacturers try to discourage you if they suspect you to be a prospective entrant. The customers of a product or service on the other hand, always welcome a new manufacturer irrespective of the fact whether there is room for him or not.

7. Employees often provide information which the owners may be unwilling to furnish. It is useful to pick up preliminary information from employees. Likewise, it is rewarding (if the owner agrees) to meet an employee (in the owner's absence) who may be amenable to relaxed conversation and perhaps unaware of the actual objectives of investigation. Retired employees are normally forthcoming and are enthusiastic to volunteer information.

8. Sometimes, many of the knowledgeable persons are available at a single location. This saves time, efforts and cost. For example, Southern market in New Delhi accounts for 20% of the acrylic yarn market in India. Likewise, a visit to Princess Street of Mumbai can help you gather information on anything and everything about bulk drugs and pharmaceutical products.

9. You should analyze things quickly and fine tune your interview plan as you go along. Let us assume that you want to manufacture hardware. Therefore, you begin to interview building contractors – your customers. The building contractors will tell you that hardware is a subject in which building owners take a great deal of interest. They decide on the type and brand of hardware to be bought. You should, given this observation, put building owners on your list of interviewees and probe into how they arrive at decisions.

10. Do not rely on your memory. You receive so much information from so many quarters, at such a rapid pace, that you are likely to forget or mix things up. So make brief, precise notes. These notes serve an additional purpose of helping you clarify your mind and enable you to decide specific questions on which you should concentrate, when you hold another interview with somebody else.

11. Collect and preserve the visiting cards of persons whom you meet. Collect product/market literature. You will find these useful while making decisions or marketing after you have commenced production.

d) Test Marketing

1. Relevance and Purpose

Test marketing is a useful tool to obtain instant reaction from the consumers. In case of established products, reaction of the potential customer to product features and other such questions is sufficient to judge the response. But in case of new products, the customers often find it difficult to react unless they have an opportunity to use it or to watch it perform. Test marketing is undertaken in case of such new products to find out consumer reaction and expectations. Test marketing is undertaken selectively before formally launching the product. It is frequently used for consumer products and not much for industrial products.

2. Method

It means actually passing on a sample to potential customers for consumption or use or undertaking live demonstration seeking their reactions or order. These reactions or placement of orders provide the promoters some insight into the acceptance of the product.

e) Errors and Precautions

Market Survey is a difficult task. There are some specialized agencies and you may like to seek their help. However, if you decide to undertake either a desk research or a detailed market research, please be careful about the following aspects as you may make certain errors.

1. Imperfect Information

Incomplete, inaccurate or stale information is a major problem. There are some entrepreneurs who believe that the information published by the Government or compiled through websites is always reliable. This is not the case always. Hence, make it a point to compare notes with a few knowledgeable persons if you have the slightest doubt about the authenticity of critical information irrespective of its source.

2. Population Theory

Many entrepreneurs convert market study in a population based number game. For example, you want to launch a kitchen gadget in Hyderabad. So, you find out the number of households, the proportion of upper and working class households and then estimate the potential. This is too simplistic. How strong is the need for such a gadget? What are the ways in which the need could be fulfilled? Who are the competitors? These and many such questions are relevant to determine the market prospects. Even some of the multi nationals who entered the Indian market in the late 1990s were carried away by the sheer population of the country and had to make a hasty retreat.

3. Technical co-efficient.
Let us assume that you are doing a study on Jelly Filled Telephone Cables (JFTC). You know how many connections will be installed in the next few years (but fiber optic is replacing some amount of JFTC).
There are experts who believe JFTC requirement to be 9 core kms per connection whereas there are some who put it at 7.5 core kms per connection. Your findings for market potential will depend on which co-efficient you accept. It is sometimes difficult to decide. Use a range in this case.

4. New Products – Inadequate Knowledge

New or innovative products, in many instances, either seek to fulfill some needs not satisfied presently or offer a substitute for the prevailing products. Your knowledge of product features, technical superiority or potential cost saving associated with such products could at times be based on limited experience/exposure. There are “snags” in case of such products which are either played down or genuinely overlooked. A market study overlooking such “snags” is bound to indicate favorable market position. You should be extra careful if you are contemplating any such product.

5. Promotion Oriented New Product

There are new products, particularly consumer products and services, for which demand has to be created. These pertain to needs which may not be actually felt (or which are felt only by a few) but which once satisfied through novel means, tend to grow. There are food, clothing, cosmetics, white goods and many such products for which demand must be generated through promotion. In case of such products, it is difficult to forecast market response through a conventional market study.

6. Supply Position – A Twilight Zone.

It is possible to build a demand forecast for a given product/service. But it is not so easy to arrive at a supply forecast. This is primarily because it is difficult to estimate how many new entrepreneurs will enter the product line or how many existing enterprises will expand their capacity. The problem is critical in case of small enterprises since implementation time is fairly short. However, if demand supply gap is very large, you can reasonably hope not to be hurt badly by the new entrants in the short run. Likewise, if you can entrench firmly in the market during initial years, you can face the competition comfortably.

7. Excessive Analysis – An Avoidable Problem.

You must also remember that it is possible to carry any analysis to extremes. Such analysis causes confusion rather than clarity. Market study is not an academic exercise. This process must be completed within a specified time and do not forget that you have limited financial resources to accomplish it. Therefore, you need to have a balanced market study perspective.

8. Uncertainty – a Fact of Life.

There are imponderables and so you must learn to live with some uncertainty over market prospects. A law and order problem can destroy tourism prospects. A bad monsoon leads to economic shockwaves. So remember that the purpose of the study is to provide you a normal, likely picture rather than a guarantee on market prospects.

6.2 The Marketing Plan

You still have lots and lots of unanswered questions.

- ⇨ To whom will you sell?
- ⇨ Where are they?
- ⇨ Why will they want to buy from you?
- ⇨ What is your competitive advantage?
- ⇨ How will your business grow?
- ⇨ How will you cost effectively reach your customers?
- ⇨ What will it cost to make a sale?
- ⇨ At what price do you sale?
- ⇨ What sales volumes are required?

Answers to these and many such questions demonstrate the "Unique Selling Proposition" (USP), the distinctive niche or the competitive edge that your business can bring to the market place. Therefore, this is the heart of your business plan.

Physical or actual sale is an off shoot of a well-thought of, properly documented and efficiently implemented marketing plan. A suitable marketing plan needs to be developed covering pricing, promotion and service to enable the product to reach a desired level of market penetration. A tactical short term and strategic long term plan must be developed in harmony with the objectives of the enterprise. Basic strategies and major moves often involve irreversible commitments of resources and long life spans.

A marketing plan usually has the following components:

[A] Current Situation

This part of the plan deals with the different dimensions of the current situation. It examines the following aspects:

i) Market

It deals with the size, growth, consumer aspirations, cyclical variations and buying behaviors in the markets under consideration. It tells you what makes your product or service special and what need does it fill and who are your potential customers and what will make them purchase from you. It is imperative to understand and analyze the overall size of the market, historical data about its development and key current issues.

ii) Competitors

Analysis of the competitors may prove to be the toughest job especially if you are new to the market place. Investigate the competition. Understand your direct and indirect competition e.g. if you are planning to open a restaurant serving traditional Gujarati meals, then all other restaurants in the vicinity serving Gujarati meals are your direct competitors. But there could be some other restaurants in the vicinity serving Punjabi or Rajasthani or Continental varieties. They are your indirect competitors. Examine the substitute products as well. For potato wafers, the substitutes available are roasted peanuts, corn flakes or many other ready to eat snacks.

Analyze their pricing and promotional strategies as well as make overall assessment of their competitive advantages. Based on this, you can identify key obstacles for your business, the additional services/features you may like to offer and competitive challenges as well as opportunities ahead. It is also advisable to identify the product or products that your competitors rely on for most of the revenues. Examining the strengths and weaknesses in the following areas can develop an analysis of the competition:

- Ability to satisfy customer needs
- Market penetration
- Track record and reputation
- Price
- Product quality
- Staying power (financial resources)
- Key personnel

Likewise, it is useful to consider various entry barriers for you that may include:

- Cost or investment
- Time
- Key personnel
- Technology
- Existing patents and trade-marks
- Customer inertia (brand loyalty, existing relationship)
- Market position

iii) Distribution

Primarily this compares the distribution capabilities of the competitors like distribution channels, trade commission, incentive schemes, replacement policy etc. Examine what distribution channels are being used e.g. original manufacturers, distributors and retailers or through direct channels (mail orders). This will help you to decide how and where you plan to sale and distribute your product or service. Ensure that your sales targets and volumes make sense for the logistics of your business. Timely, efficient and cost effective distribution is the key in the present day competitive environment. Understand the prevailing practices in your industry before finalizing your own strategy.

iv) Macro Environment

Find out the effect of social, political, economic, technological and other external variables on your product. e.g. introduction of a special variety (Jain food) of eatables. Even some multi-nationals produces the similar product attract a particular section many manufacturers also wiling to set up their enterprises in the state of Gujarat due to favorable political and economic environment. These macro-level external variables are critical in case of some products and their impact on your product (if any) has to be assessed properly.

[B] Opportunity and Issue Analysis

Conduct a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis to identify the core issues of your product/s.

i) Product / Services

What is it?
What is it used for?
Is it a new idea?
Has it been protected by patent, copy-right or other legal means?
What are the negative environmental impacts of the product or service, including those associated with production, use and disposal and how they can be minimized?
How soon can it be expected to become obsolete? Do you plan to modify or update it in future?

ii) The Market

Think of ways and means to overcome the threat of substitute products.

Does your product or service maximize the potential for tapping into the growing environmental awareness of consumers? How will you make profit and yet remain competitive?

What kind of changes you anticipate in the market and how do you and your competitors would react to them? Have you considered and drawn up contingency plans to cope up with the changing scenarios?

iii) Competition

Is their sales increasing, decreasing or steady? Why?
Compare your business with theirs in terms of size, reputation or goodwill, location, distribution channels etc.
Compare your product or service with theirs in terms of warranty, quality, price, image etc.
What have you learnt from their track record?

Whether new competitors are entering the market or existing ones are leaving?

[C] Objectives

A thorough research of the current marketing situation and opportunity and issue analysis helps you to clearly set your marketing objectives or goals. Objectives have to be clear cut, specific and achievable. Objectives must provide answers to the following questions.

- ⇨ What do you want to sell?
- ⇨ How much?
- ⇨ At what price?
- ⇨ Where is your target market?
- ⇨ How will you reach to your customers?
- ⇨ What is your time frame to achieve the break even sales?
- ⇨ What are your expectations about grabbing a particular market share?
- ⇨ Are you aiming at export markets?
- ⇨ Who will be your competitors and how will you handle them?

[D] Marketing Strategy

You are now ready for the final phase of your marketing plan – crafting your marketing strategy. Your strategy should address such questions as:

- ⇨ Does recent data show the market for your product or service is growing?
- ⇨ Do you have a plan to offer new products or line extensions in the first few years?
- ⇨ Are there other ways to position your enterprise more competitively in the market?
- ⇨ What is your USP?
- ⇨ How will you attract potential customers?
- ⇨ Who are your customers?
- ⇨ What is your pricing policy?
- ⇨ How will you reach your customers?
- ⇨ What channels you will use?

Answers to these questions would lead you to the "**Four Ps**" collectively known as the Marketing Mix.

Product: What are you selling?
Price: How much you will charge?
Place: Where will you sale your product?
Promotion: How will you promote your product?

In other words, your marketing strategy has to focus on the following aspects:

i) Target Segment

It has to clearly specify the target groups. The target groups could be middle or higher income groups, urban and/or rural population, students, teenagers, entry level executives, retired people and so on.

ii) Positioning

Positioning is how a product is placed in the mind of the customers e.g. romantic, rugged, day long freshness, durability, saves energy, eco-friendly etc.

iii) Product Line

Single variant or more than one variant? Like different models of cars, different fragrances of soaps and shampoos, several flavors of processed foods etc.

iv) Price

Whether the product is to be launched in low, mid or higher price segment or all? Why? Is it because that segment is growing or it has less competition?

v) Distribution

It covers some critical features like distribution channels, logistics, geographical spread like within the state, nearby states, all across the country, export markets, etc.

vi) Sales Force

It includes the manpower required, recruitment policy, reporting systems, targets, budgets, training and other related matters.

vii) Sales Promotion and Advertising

It encompasses matters like promotion directly to the consumers or through dealers or retailers, selling commission, incentive schemes, after sales support, advertising etc.

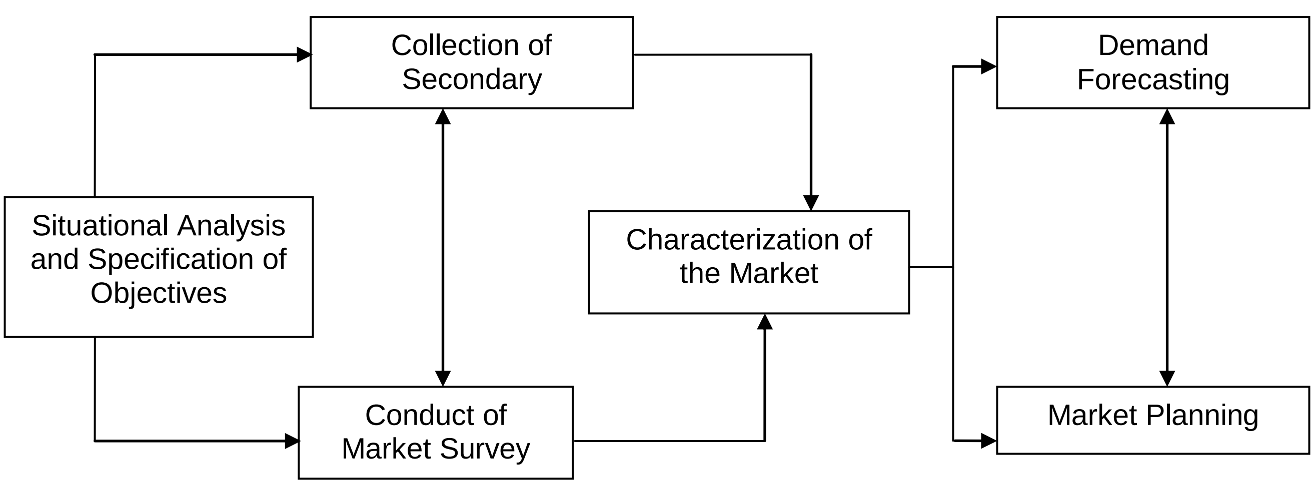
Monitoring

To ensure efficient implementation of the marketing plan, there has to be constant monitoring. Ideally even the monitoring mechanism has to be built in the plan. The monitoring system must bring out all deviations from the original plan so that quick and appropriate corrective measures can be initiated.

The following table shows key steps involved in market and demand analysis and their inter-relationship.

TABLE 5

Key Steps in Market and Demand Analysis and their Inter-relationship



6.3 Product Mix

Product mix refers to the volume relationships between two or more products. Assume that 2000 units of product A and 4000 units of Product B were sold during the last year. But sales plan for the current year calls for 3000 units of product A and 3000 units of product B. The overall volume in both years will be 6000 units but there would be change in the product mix.

Determination of the number and variety of products that an enterprise would offer is crucial in the development of a sales plan. Both the long and short range sales plans must include tentative decisions regarding new products to be introduced, old or existing products to be dropped, innovations or improvements in the products and resultant product mix.

If the long term plan includes changes in product lines with broad indication as to the timing of such changes then they must be brought into sharp focus through management decisions and be included in the relevant short term plan. Policies must be firmed up about such important matters like:

- ⇨ Which of the products will be pushed?
- ⇨ When will the new product be available?
- ⇨ What quality and style changes will be made?

Several recent surveys have revealed that one primary cause for failure of many businesses is that they failed to keep up with the competitors in product development, improvement and design.

EXERCISE

- ⇨ **How will you go about assessing the demand for your chosen product?**

- Develop a questionnaire to carry out market survey of a small sample size in your city to find out demand potential for Brown Bread?

- Describe first four steps in administration of a questionnaire.

⇨ **Why and how demand analysis is important?**

APPENDIX 1
INFORMATION SOURCES

General Sources

- Census of India
- National Sample Survey Reports
- Plan Reports of the Planning Commission of the Government of India
- Yearly publication of the Central Statistical Organization
- India Year Book
- Statistical Year Book published by the U.N. describing world statistics on population, demography, industrial production, international trade etc.
- Economic Survey published by the Ministry of Finance, Government of India
- Annual Bulletin of Statistics of Imports and Exports of the Ministry of Commerce, Government of India
- The Stock Exchange Directory

Industry Specific Sources

- Monthly newsletters and annual reports of the Export Promotion Councils
- Chemical Age of India
- Indian Drug Manufacturers' Association
- Electronic Digest
- Indian Machine Tools Manufacturers' Association
- Indian Textile Bulletin
- Indian Packaging Directory
- Glass Udyog
- Economic Times
- Financial Express
- Business Standard
- Business India
- Corporate Observer
- Facts for you
- Industrial Researcher
- Chemical Business
- Chemical Weekly
- Computer Today
- Electronics For You
- Indian Electrical and Electronic Manufacturers' Association
- Popular Plastics and Packaging
- Food Industry News

UNIT 6

CHAPTER 7

ASSESSMENT OF TECHNICAL FEASIBILITY

CONTENTS

- **Need and Importance**
- **Typical Coverage**

After having finalised your marketing plan, you are now equipped with information about the contemplated production capacity utilization. This throws light on many other aspects of the project like which machinery and equipment to buy, the quality and quantity of raw materials needed each year, manpower requirements and so on. This helps you to look into the technical features of your business. This is the subject matter of this chapter.

OBJECTIVES

- **To ensure that the project is technically feasible.**
- **To facilitate the most optimal formulation of the project in terms of technology, production capacity, machinery, infrastructure, raw materials etc.**

7.0 Assessment of Technical Feasibility

a) Need and Importance

Having finalised the marketing plan, you are now in a position to look into the technical and engineering aspects of your project. This is done continually when a project is being examined and formulated. The broad purpose of this analysis is:

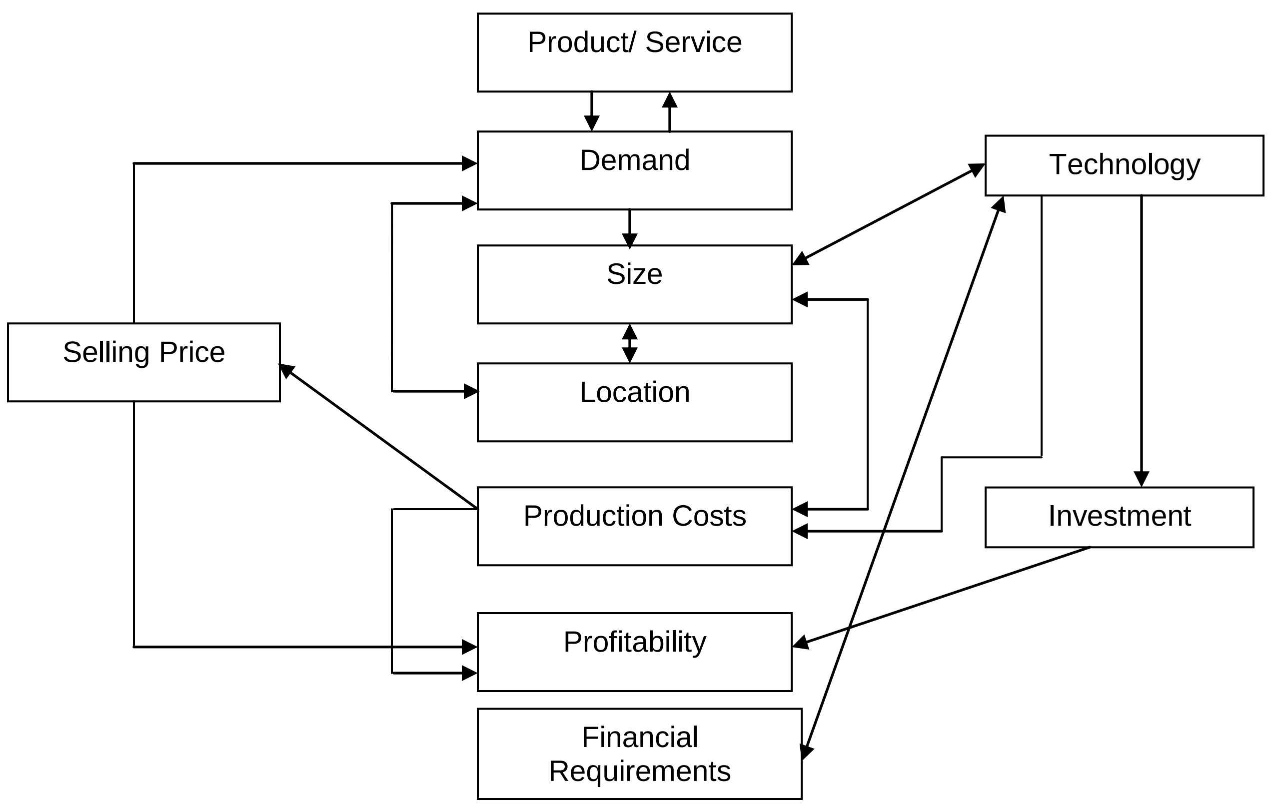
- ⇨ To ensure that the project is technically feasible and all the inputs needed to implement the project are available.

- ⇨ To facilitate the most optimal formulation of the project in terms of technology, production capacity, location, machinery, infrastructure, raw material etc.

Technical analysis has to be done by a team of technical experts but it is necessary to include a financial analyst as well to make sure that the technical aspects are properly looked into using economic logic.

There could be many alternatives available to you, but it is imperative to keep in mind the inter-linkages among key factors of the project like plant capacity, demand, technology, production cost, location, financial resources, selling price and profitability. The following table lists down these inter-linkages.

TABLE 1
Key Project Inter-linkages



b) Typical Coverage

Following aspects must be thoroughly looked into while arriving at the technical feasibility of any project.

i) Minimum Viable Size of the Project

Each project must have certain minimum production capacity to ensure its financial viability. Availability of machinery, market demand, technology, capital investment, availability of raw materials are some of the considerations which guide decisions about the capacity. A careful analysis of the similar projects, discussions with the machinery suppliers or industry experts should help you in this regard. At times even the financial institutions have their own norms about the minimum viable size. Hence, you can even have discussions with their officers at an appropriate juncture.

ii) Selection of Technology or Manufacturing Process

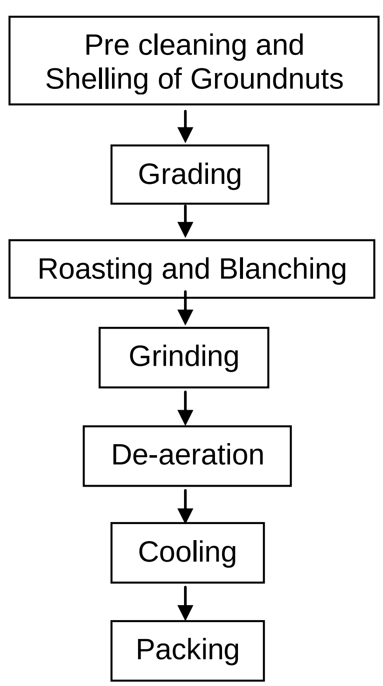
Very often multiple technologies or processes are available for manufacturing a product or providing service (e.g. manufacture of cement, soap, French-fries, retreading of used tyres etc.). Hence, following aspects must be borne in mind while making a final choice:

- ⇨ Source and track record of the technology
- ⇨ Ease of absorption and compatibility
- ⇨ Availability of suitable raw material in adequate quantity
- ⇨ Investment and cost of production
- ⇨ Latest developments

An attempt has to be made that the process/technology finally selected is proven and cost effective and capable of giving optimum and quality production. Make a detailed process flow chart clearly indicating the flow of material along with time taken and input-output details.

A typical process flow chart of a unit manufacturing peanut-butter is given below:

Process Flow Chart for Peanut Butter



iii) Technical Arrangements

In case of micro, small and medium enterprises, mostly the promoters are capable to take care of technical aspects including production and reliance on outside expertise is very limited. But in case you are buying know-how then you must make sure that the agreement for technical assistance includes the following.

- ⇨ The nature of support
- ⇨ Process and performance guarantees
- ⇨ Price (one-time payment or royalty)
- ⇨ Benefits of Research & Development in future
- ⇨ Termination of the agreement
- ⇨ Force majeure

iv) Selection of Location and Site

Selection of location is a long-term decision. Errors in selection of location may be very difficult and expensive to rectify. Availability of raw materials and labor, proximity to markets, infrastructure, climatic factors, government regulations and policies, existence of complementary and competitive industries, easy compliances with environmental rules and regulations are the key factors affecting the final decision about location. Location means a fairly broad area whereas site indicates the exact place of factory within the location. For choosing the exact site you have to basically look into the price factor. High price of land may wipe out the other advantages of that location. If it is proposed to take land on lease then the question of rent and taxes must be considered as such charge will add to the annual working expenses.

Availability of infrastructure is equally important aspect. Power, water, approach roads, transportation, communications are some of the all important necessities to establish and run your business successfully. Make sure that they are available at the proposed site and if some of them are not then have some alternate arrangements. Selection of site is a long term decision and hence you should take into consideration not only the present requirements but also your future needs.

v) Land and Buildings

Once the location and site are finalized, buy or lease the required area of land. But to find out your present need of land you must know your requirement of constructed or built up area and to arrive at this, you should have plant lay out. Precisely this is the reason why you should have a competent technical person in your team at every stage of planning, organizing and implementing. Plant lay out would indicate the total shop floor or production area. Add to that the area of other structures like office, utility room/s, godowns, laboratory, workshop, security cabin etc. as per your exact needs and you now have estimate of the total constructed area. Find out rules about Floor Space Index (FSI) from the civic authorities and work out your present requirement of land. Add to that some more area and you know how much land you must buy or lease.

Simultaneously, appoint an architect to make location and site map and lay out for the civil work or buildings along with cost estimates. This would help you to appoint a suitable engineer or contractor to actually construct the building. The entire expenditure under this head can be divided into three categories:

⇨ Land and Site Development
⇨ Buildings
⇨ Outdoor Work

Land cost would include actual cost of land and other expenses like stamp duty and registration charges, legal fees etc.

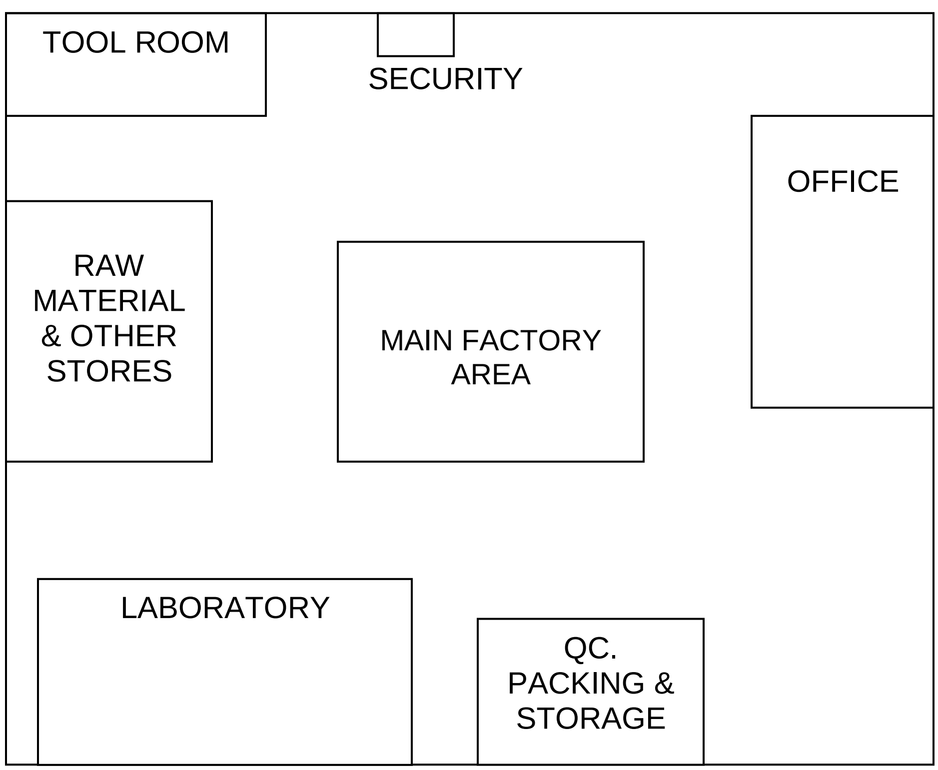
Items under site development would be land filling and leveling, fencing, approach and/or internal roads, entrance etc.

Buildings shall include main factory building and other support facilities like storage, packing, office, workshop, laboratory, and architects' fees and so on.

Under outdoor work there could be items like security cabins and office, toilet blocks, supply and distribution of utilities, handling and treatment of effluent, landscaping etc.

Grand total of expenses under these three heads would give an estimated expenditure under the heads land and site development and civil work or buildings.

A TYPICAL FACTORY LAYOUT



Legal compliances would include:

- ⇨ Execution and registration of sale deed or lease deed with competent authorities.
- ⇨ Conversion of land into non-agriculture, if not done.
- ⇨ Obtaining permission from the local civic authorities for construction of building.
- ⇨ Approval of the proposed building and plant lay out from the concerned Pollution Control Authorities, wherever applicable.

A Word of Caution!

Understand the technical parameters of your project completely. At times, architect or contractor is not briefed comprehensively and some drawbacks crop up.

Many entrepreneurs tend to over invest in land and buildings thinking that its market price shall, in any case, appreciate. But remember that you are an entrepreneur and not an investor. Such avoidable expenditure especially in the beginning may put you in serious liquidity crisis. Even before you realize, the incipient sickness may creep in!

vi) Machinery and Equipment

Finalise the List

Once you have finalised the production capacity and process technology, it becomes easier to finalise the list of machinery and equipments needed to carry out manufacturing and auxiliary operations. But remember to ensure capacity balancing in your production process. While finalizing the list of machinery and equipments, avoid any mismatch (under or over capacity) within the production departments or else some machines might be lying idle or your production will be hampered.

Prepare an exhaustive list of machinery with requisite technical details and names of suppliers separately, furnishing:

- ⇨ Basic price
- ⇨ Applicable taxes
- ⇨ Packing expenses
- ⇨ Transport and insurance charges
- ⇨ Loading and unloading expenses
- ⇨ Erection and installation charges
- ⇨ Electrification expenses

You should obtain quotations for all major equipments and machinery at least from 2-3 suppliers so that you can compare their respective offers on the above stated guidelines. Make a comparative statement of the features mentioned above to enable you to tentatively finalise the suppliers.

Selection of Supplier

Next task is to finalise the suppliers. You can either buy the entire plant on turnkey basis (if there are such suppliers for your product) or you may place orders with different suppliers. In either case you should finalise the supplier/s after careful consideration of the following aspects:

- ⇨ Price is obviously a major consideration. It has to be competitive.
- ⇨ Technical features offered by the supplier.
- ⇨ Reliability of the equipment offered by each supplier.

- ⇨ Reputation of suppliers in the market.
- ⇨ Record of suppliers in sticking to the delivery schedules
- ⇨ Nature of warranties or performance guarantees offered by each supplier
- ⇨ Terms and conditions about after sales service and track record.

Old Machinery – Need to be Careful

In case you are planning to buy old machinery, you must satisfy yourself about their present condition, estimate whether you have to incur expenses on repairing or renovation and what is the residual life. Lending institutions are somewhat skeptical about financing old machines, so please check out their policy or opinion if you intend to borrow.

vii) Raw and Packing Materials

Technical Specifications

Clearly define each raw material or auxiliary material required for production specifying individual properties. Also broadly categorize the sector to which it belongs viz. agriculture, mineral, marine, livestock etc. You may also require some auxiliary material like chemicals, additives, oil, cleaning material etc. Their quantity or value may not be much but do not neglect them. At times, their non-availability can have adverse impact on your working. Quality of your product largely depends upon the inputs. So, never compromise on the quality of inputs.

Undertake similar exercise for your packing needs. In most plans, packing materials do not get due importance. But remember, your finished product will not be dispatched if not packed properly. Packing also offers your product an identity and visibility.

Sources and Prices

Find out different sources for each of the item; compare their technical specifications, delivery schedules, prices, terms of payment etc. and short list at least two or three suppliers for each item. Make sure that you have adequate storage arrangements. If some of the items are in short supply or seasonal or need to be imported, then you have to be extra careful. Decide stocking norms in such a way that your production is not held up for want of a particular item or you do not end up incurring excessive inventory carrying cost. Be on guard for perishable items by providing adequate care like cold storage or maintenance of optimum temperature, fumigation etc.

Consumption Norms

Raw materials constitute a major percentage of your cost of production. Any saving or reduction in wastages directly reduces your cost and contributes to your profits. Therefore, always be vigilant about the following aspects.

- ⇨ Work out the consumption norms for each of the raw or auxiliary material judiciously. In your zeal to bring down the production cost, never compromise on either quality or quantity of materials at the cost of the quality of the finished product.
- ⇨ Analyze and try to control material loss at each stage of production.

viii) Manpower Needs and Proposed Arrangements

You need people to manage your business. Give details of your workforce in terms of total numbers in each department. Your plan should also outline recruitment or training procedures. It is vital to be realistic about the commitment and motivation of your people. Hence, spell out plans to improve or maintain staff morale.

In a micro or small enterprise, generally promoters look after many functions and to that extent reliance on employees is limited. However, you do require some people in following three departments:

⇨ Production
⇨ Sales and Marketing
⇨ Accounts and Administration

Production

Find out your requirement per shift in terms of:

– Skilled Workers
– Semi-skilled Workers
– Unskilled Workers
– Supervisors
– Plant-in-charge

Sales and Marketing

You may need:

– Salesmen/Sales Representatives
– Supervisors
– Area Managers

Accounts and Administration

Depending upon the size of your operations, you may require:

– Clerks
– Computer Operators
– Managers
– Accountant

Find out wage/salary structure prevailing in the vicinity and your industry and then offer comparable package to your employees. This exercise would also throw light on your annual expenditure under this head.

ix) Environmental Aspects

Small businesses may not pose serious threat to the environment but it is always in your interest to find out whether your business would discharge any solid or liquid material or there would be gaseous emissions or noise pollution. You must properly estimate volume of effluents and emissions and install requisite disposal and treatment plants. You must secure all environmental clearances and comply with all statutory requirements.

EXERCISE

- **Why a financial analyst is needed in technical assessment?**

- **Differentiate between location and site.**

- **How do you finalise suppliers for machinery?**

- **How do you estimate your manpower needs?**

UNIT 6

CHAPTER 8

COST OF PROJECT AND MEANS OF FINANCING

CONTENTS

Assessment of technical feasibility enables you to arrive at the individual cost components. There are certain other costs like preliminary and pre-operative expenses, working capital margin and contingencies which have to be estimated separately. But the grand total of all these costs gives you an idea about the total financial outlay. This, in turn, allows you to mobilize the necessary funds.

OBJECTIVES

Cost of the project clearly brings out the requirement of funds. The promoters can then start looking for funds. Financial viability of any project largely depends on the total cost of setting up the project and its capital structure.

As discussed in detail subsequently, this is the stage where the promoters have to be vigilant. They must take utmost care to make sure that all wasteful expenses are avoided but no compromises are made in the expenses required to be incurred in having a good manufacturing set up.

Decisions taken in the beginning about fixed assets are irreversible at least in the short term and thus call for stringent scrutiny.

Let us examine why it is so much important.

8.0 Cost of Project and Means of Financing

You are now at a stage where you have thoroughly analyzed your business plan from market and technical point of view and you are convinced that you can produce a quality product and it has good potential in the market. By this time you also have fairly good idea about how much it would cost to set up the business. But guess work will not do now. You are at a stage where you should know exactly how much it is going to cost. How do you do that?

Cost of Project

While analyzing technical feasibility, you have tried to arrive at costs under different heads. These and some other costs put together gives you the total cost of project which you may have to incur while setting up the project. You must work out the project cost because;

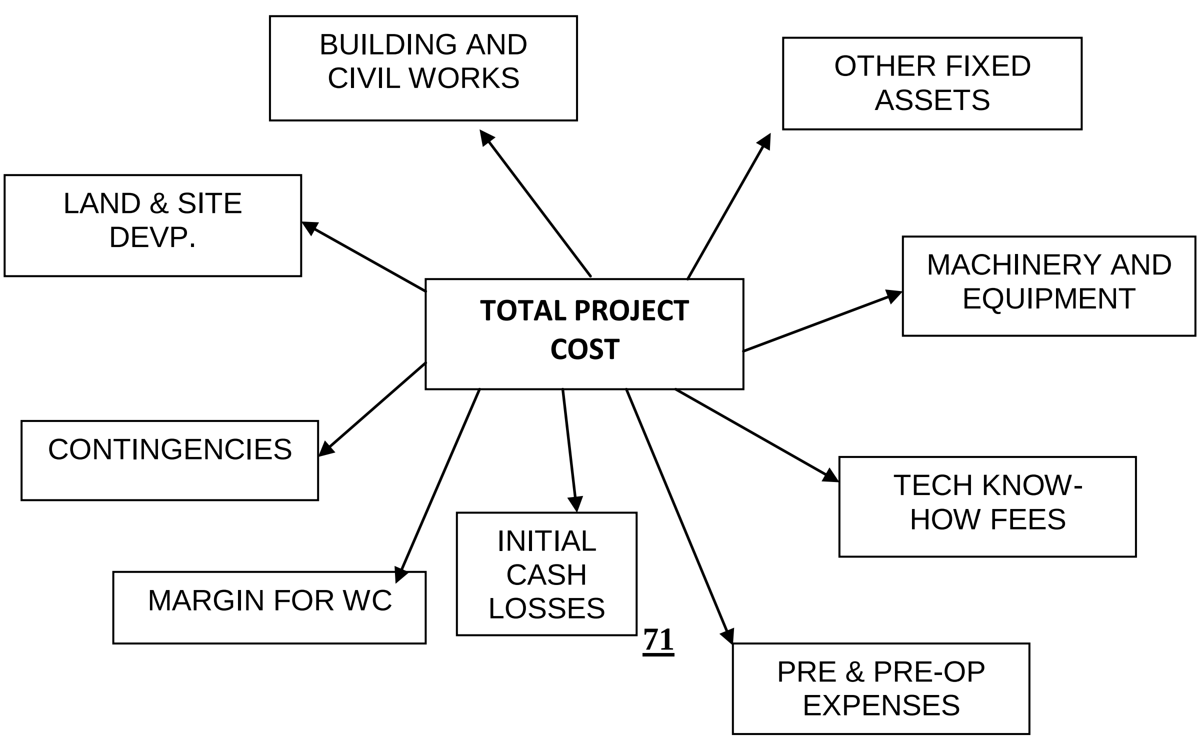
- ⇨ It tells you whether the proposed venture, from your personal risk bearing angle, is compatible or not.
- ⇨ It provides the basis for computing your own financial contribution to the project and the amount of loan which you may procure.
- ⇨ It has a direct bearing on the profitability of your enterprise so far as items like depreciation and interest are concerned.

Computation of Project Cost

You have to incur expenditure on several items right from conception till actual implementation of your project. For successful operation of the enterprise, you need working capital. The final total of such expenses till you commence production and the margin money which the enterprise has to bring in to avail working capital finance, constitutes the cost of the project.

Following graphic presentation would make it absolutely clear to you:

COMPONENTS OF PROJECT COST



Let us now analyze each cost component

i) Land and Site Development

This comprises following items:

- ⇨ Actual cost of land
- ⇨ Stamp duty, registration and other legal charges
- ⇨ Cost of land leveling and filling
- ⇨ Cost of internal and approach roads
- ⇨ Cost of fencing, gates etc.

The cost of land is the cost mentioned in the sale deed and not the market price. Legal charges would depend upon the location and the regulations in that state. You can obtain estimates for other expenses from a civil contractor.

ii) Building and Other Civil Work

As discussed in the earlier chapter, you may divide the total area to be constructed into main factory building and outdoor work.

The items to be included are:

Factory Building

- ⇨ Production Area or Factory
- ⇨ Godowns/Store Rooms
- ⇨ Packing Rooms
- ⇨ Office
- ⇨ Workshop/Laboratory

Outdoor Work

- ⇨ Security Posts and Office
- ⇨ Toilet Blocks
- ⇨ Supply and Distribution of Utilities (Boiler room, DG room, Pump room)
- ⇨ Effluent Treatment Plant
- ⇨ Staff Quarters and Canteen
- ⇨ Packing Area

Some of the items mentioned above may not be required by some units. Expenditure on foundation of machinery is to be included in machinery cost.

You may appoint a contractor who would give you estimates for the civil work including supervision charges. Architect would charge you fees for preparing lay out, blue prints, supervision and certification work. His fees are also to be included in the costs.

iii) Machinery and Equipment

As discussed earlier, after careful consideration of several relevant factors, you select machinery supplier/s and obtain quotation/s. The supplier generally provides quotation with all technical specifications, quantity, rate and total price of machinery and equipment including packing charges. Stores and spares to be bought along with machinery are also to be included. This is known as the basic price. Then all applicable taxes like Sales-tax and/or Central Sales-tax, Excise Duty, VAT, etc. are added. This is known as ex-factory price. Add other charges like transportation, unloading, transit insurance etc. which gives you the landed cost at your factory.

Over and above this cost, you have to incur electrification and erection and installation charges at your end. Obtain estimates and add this cost to the landed cost and you have proper estimate for machinery and equipments.

Suppliers mention time period up to which the quotations are valid. If you feel that by the time you are ready to finalise the orders, this validity period could be over then obtain fresh quotations or get the validity period extended. Otherwise you could be in trouble if there is a substantial increase in the prices.

iv) Technical Know-how Fees

There are various activities for which you may have to rely on outside technical expertise like design engineering, selection of machinery suppliers, erection of machinery etc. Further, you may have to buy process know-how from within the country or abroad. Such expenses could be one time and/or by way of royalty over a period of time. Royalty payments to be made in future need not be included at this stage but all other expenses like payment of fees, lodging and boarding, to and fro fare, local conveyance etc. must be included under this head.

v) Other Fixed Assets

You need many other supporting assets to run your enterprise. They are:

- ⇨ Furniture, Fixtures and Office equipments

  Office equipments like computers, photo-copying machine, printers, laptops, water coolers, fans, air-conditioners, etc.
- ⇨ Vehicles
- ⇨ Equipments, cabling, transformers, panels, electrical items etc. for distribution of power including installation charges
- ⇨ Equipments, piping, hardware items, etc. for supply and treatment of water
- ⇨ Equipments, piping, duct not included in machinery and equipments for supply of steam or air.
- ⇨ Laboratory equipments
- ⇨ Workshop equipments
- ⇨ Fire-fighting equipments
- ⇨ Boiler
- ⇨ Diesel generating set
- ⇨ Effluent collection, treatment and disposal arrangements
- ⇨ Storage racks, bins, cupboards, plastic crates, material handling accessories, etc.
- ⇨ There could be some other items as well.

Some of the items listed above may not be required by you. But, make sure that you include all the necessary items. The cumulative cost of the items you need is your total cost under this head.

vi) Preliminary and Pre-operative Expenses

You incur considerable expenses from the time you conceive, conceptualize and actually implement the project on legal, financial and administrative matters. They are incurred prior to the commencement of commercial production and hence cannot be included in the profit and loss account of the first year. Further, they are incurred during the course of setting up the business and thus they do not pertain to any particular asset like land or building or machinery.

Hence, they are grouped separately under this head while finalizing the cost of project.

Preliminary Expenses

Expenses incurred during the process of identifying a product, market survey, preparing the feasibility report or business plan are included under this head. Further, expenses on incorporation of company or formation of partnership firm are also included here.

Expenses in connection with raising capital from the public popularly known as public issue expenses are also included under the preliminary expenses.

Pre-operative Expenses

All other expenses incurred till commencement of commercial production are grouped under this head. They could be :

- Salary and administrative expenses
- Rent, rates and taxes
- Travelling expenses
- Insurance
- Interest during implementation on borrowings
- Mortgage expenses in connection with borrowings
- Statutory deposits and license fees
- Processing fees of financial institutions
- Trial run and other start up expenses

Pre-operative expenses may be capitalized by appropriating them to fixed assets proportionately. They can also be treated as deferred revenue expenses and you can write them off over a period of time.

You should know a little bit more about two items listed above.

Interest during Implementation

Financial institutions or banks sanction you loan and after execution of legal documents you are allowed to draw money in installments depending upon the progress of the project. Thus, you may draw the loan in 4-5 or more tranches. But the institution shall charge you interest from day one of the first disbursement. In other words, there is some interest liability on you even before you start commercial operations. This interest is included in pre-operative expenses.

Trial Run Expenses

Before venturing into commercial production, it is advisable to take some trial production to ensure that everything is in place and quality of finished products is salable. But this entails some expenditure on raw material, utilities and wages. The output may or may not fetch any income. The net expenditure on account of trial run is included in pre-operative expenses.

vii) Working Capital Margin

After setting up the enterprise, you need money to run it – to buy raw materials, to pay for utilities, to pay wages and salaries etc. This is known as working capital and you have to work out your yearly requirements and arrange for required funds. Or else, you will not be able to operate your business.

The amount of working capital required depends upon the capacity utilization or level of production. Ideally, with the passage of time it should go up. Normally, a small scale unit achieves maximum capacity utilization of around 80-85% in the third or fourth year of operations. Thus, your yearly working capital needs would go up in line with increase in production or capacity utilization.

You can avail working capital loan from commercial banks but remember that you do not get 100% loan. You are required to bring in around 25% to 30% of your requirement and this contribution from your side is known as working capital margin. Since it is assumed that your business shall run successfully, it becomes a long term financial commitment as the amount of margin money would remain invested in the enterprise till it functions. This is the reason why the amount of working capital margin is included in the project cost. For big projects, it is customary to include working capital margin of the year in which the enterprise achieves break even level (no profit no loss). But in case of micro or small enterprises, this is invariably the first year of working. With increase in the capacity utilization in the subsequent years, your working capital need shall also increase. It can be met with additional loan from bank and additional margin amount shall come from the cash generated by the enterprise as profits.

Banks have clearly laid down policy on working capital loans and the application has to be made in the prescribed format. There are cases where the promoters have invested funds meant for working capital margin in funding the cost over runs. Please refrain from doing this. This may lead you to a situation where your project is commissioned but you are unable to operate it for want of working capital.

Remember following points while computing your working capital needs:

1. What is the expected capacity utilization or output in physical terms during the first year of operation?
2. What quantity of raw materials is required to achieve this output and what would be the unit price of each raw material?
3. Determine the quantity of raw materials your enterprise should have for uninterrupted flow of production at any given time. It could be fifteen, thirty or forty five days or even more depending upon the following factors:

- ⇨ If it is an imported item then you should have adequate stocks as the lead time (placement of order and actual receipt of goods) would be longer.
- ⇨ For the items which are in short supply or where delivery periods are long, there will be need to have higher inventories.
- ⇨ If the prices are volatile, then you may like to buy extra quantity when you feel that prices have come down.
- ⇨ In case of materials available on seasonal basis you are forced to buy large volumes during season.
- ⇨ There could be a law governing the stocks of some critical items like edible oil or sugar.

4. Ascertain total amount required to maintain adequate stocks of raw materials.

5. Carry out similar exercise for other items like consumables, packing materials, stores etc. and arrive at total value of carrying sufficient stocks of these items.

6. Estimate the values of goods in process at any given time. This will depend upon the production cycle. Production cycle means total time needed to convert raw materials into finished goods. If it is three days and during this time it is possible to produce 1,000 kgs., then it means that at any given time that much material will be under process. You will also have to spend on electricity, wages and other direct expenses. The total of all direct expenses for one production cycle is your cost of work in progress.

7. Work out the number of days you have to keep the finished goods in the factory. An enterprise undertakes production against confirmed orders may not have to carry large stocks but have to produces goods in anticipation of demand will call for large stocks. If the demand is seasonal (fire crackers, woolen garments, kites) then there is a need to build up large stocks. Transportation cost could also be a deciding factor. Amount blocked in stocks of finished goods is total cost less selling expenses like commission, transportation and transit insurance.

8. In case of cash sales there is no waiting period but credit sales implies some time gap between sale and receipt of actual payment. Your funds are blocked in case of credit sales. Actual amount blocked is your entire cost of production.

9. The amount of your monthly expenses on wages and salary, utility bills, factory overheads, administrative expenses etc. is also a part of your working capital.

10. Add up all these items to arrive at your working capital requirements.

The Tandon Committee has suggested three methods to work out the maximum permissible bank finance for working capital. However, presently, banks are free to follow their own norms. Many of them follow the second method suggested by the Tandon Committee. Under this method, at least 25% of current assets must be supported by long term sources of finance like equity from the promoters.

viii) Provision for Contingencies

In spite of all precautions, you may forget to include a particular item in other fixed assets. A genuine human error! There is always a time lag between finalization of business plan and actual implementation and prices of certain items or construction material may go up during this intervening period. Hence, to take care of such unforeseen developments and a genuine mistake, it is necessary to provide for contingency while finalizing the project cost. There are no clear cut rules or guidelines as to how much contingency is adequate. But the implementation period provides some yard-stick. Longer implementation period means higher risks and therefore calls for higher provision on account of contingency.

Firm and Non-firm Cost Items

It is advisable to classify all the cost components into "firm" and "non-firm" items. Firm cost components are those which have been already acquired or for which definite arrangements have been made. (Land can be acquired by making 100% payment or certain machines can be bought out-right or by making 50% advance payment).On the other hand, there could be some items for which you have not to incur any expense. These are the non-firm items.

You can make a provision of 5% to 10% on all non-firm items including the margin money for working capital if the implementation period is one year or less. For every additional year, make an additional provision of 5%.

ix) Initial Cash Losses

Most of the projects incur cash losses in initial years but the promoters do not show it as they are obviously interested in presenting a rosy picture to the financial institutions or to the public inerested in investment. This has severe impact on the liquidity.

But, this is true in case of large projects or projects with longer gestation period. In any case, you should also look into this aspect while drawing your business plan. If you find that this is applicable to you then you may not show it in black and white but you should be prepared to bring-in required funds to fund such losses to avoid any disaster.

Following format provides various components of the cost of project in a summarized form.

TABLE 1
Components of Project Cost

Components of Project Cost

1. Land and Site Development
   - Cost of Land
   - Land related legal charges
   - Land leveling and filling
   - Approach and internal roads
   - Compound/Fencing
   - Gates

2. Building and Civil Works
   - Main factory building
   - Office, go down, workshop, laboratory and such other structures
   - Tanks, garages, security cabin, toilet blocks etc.
   - Sewer, drainage etc.
   - Architect's Fee

3. Plant and Machinery
   - Basic Price of Machinery
   - All applicable taxes
   - Packing, transit insurance, loading and unloading
   - Stores/Spares bought alongwith machinery
   - Erection and installation charges
   - Electrification

4. Other Fixed Assets
   - Furniture and Fixtures
   - Office Equipments and Computers
   - Vehicles
   - Electrification, cabling for distribution of power
   - Equipment and piping for water supply
   - Laboratory equipments
   - Workshop equipments
   - Firefighting equipments
   - Effluent collection, treatment and disposable arrangements
   - Diesel Generating set
   - Boiler
   - Other assets

5. Technical Know How Fees
   - Either lump sum fees or royalty as the case maybe
   - To and fro fare, lodging and boarding and local conveyance

6. Preliminary and pre Operative Expenses
- Company Formation or establishment of partnership concern.
- Feasibility Report
- Salary and Administrative expenses during implementation
- Rent, rates and taxes during implementation
- Traveling costs during implementation
- Interest during implementation
- Cost of raising capital and scrutiny fees to be paid for loans
- Fees for various licenses and deposits for certain amenities
- Cost of trial runs

7. Working Capital Margin

8. Contingencies

9. Initial Cash Losses

Means of Financing

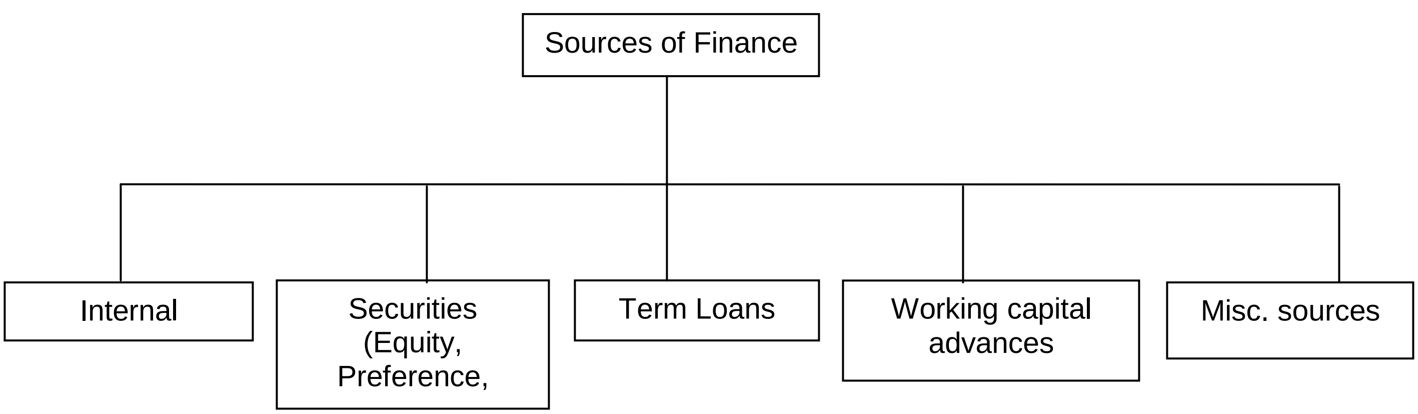
You need money to make money. Finance is the life-line of any business. An enterprise requires finance to commence its operations, to continue its operations and for its growth. There must be continuous flow of funds in and out of business. Future plans, efficient production and marketing are all dependent on smooth flow of finance.

Project financing is a difficult decision as it has long term implications in terms of interest, repayment obligations, income tax liability, and dilution of control and so on. There are various sources of finance as indicated below and the right mix of these sources is very crucial.

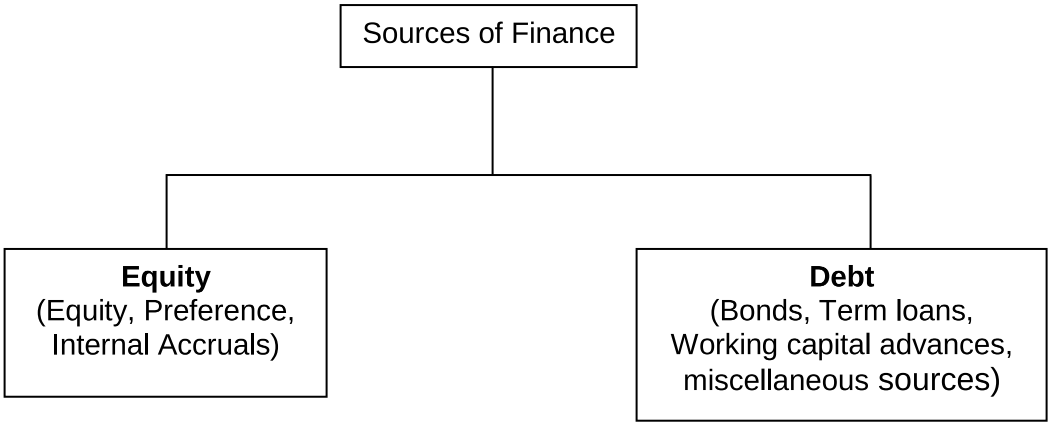
TABLE 2

Sources of Finance

PART A



PART B



Financial needs of a business may be classified into two on the basis of the extent of permanence:

Fixed Capital

Funds required to purchase fixed or durable assets are known as fixed or long term capital. Fixed assets are land and building, machinery and equipments etc. These assets continue to generate income and profits over an extended period of time. Also, funds which are once invested in fixed assets cannot be withdrawn and put to other use.

Working Capital

Money invested in short term assets or current assets is known as working capital. It includes purchase of raw material, payment of wages and salaries, rent, fuel, electricity and water, repairs and maintenance of machinery etc. Sale of goods on credit leads to the holding of debtors and bills receivables which are regarded as current assets. The requirement of funds for all these purposes arises at short intervals. Working capital, therefore, is also known as circulating or revolving capital because funds invested in such assets are continuously recovered through realization of sales and again reinvested.

Thus on the basis of period of use, the financial needs of the business can be classified into:

Long Term Capital

This is generally required for a period of five or more years.

Short Term Capital

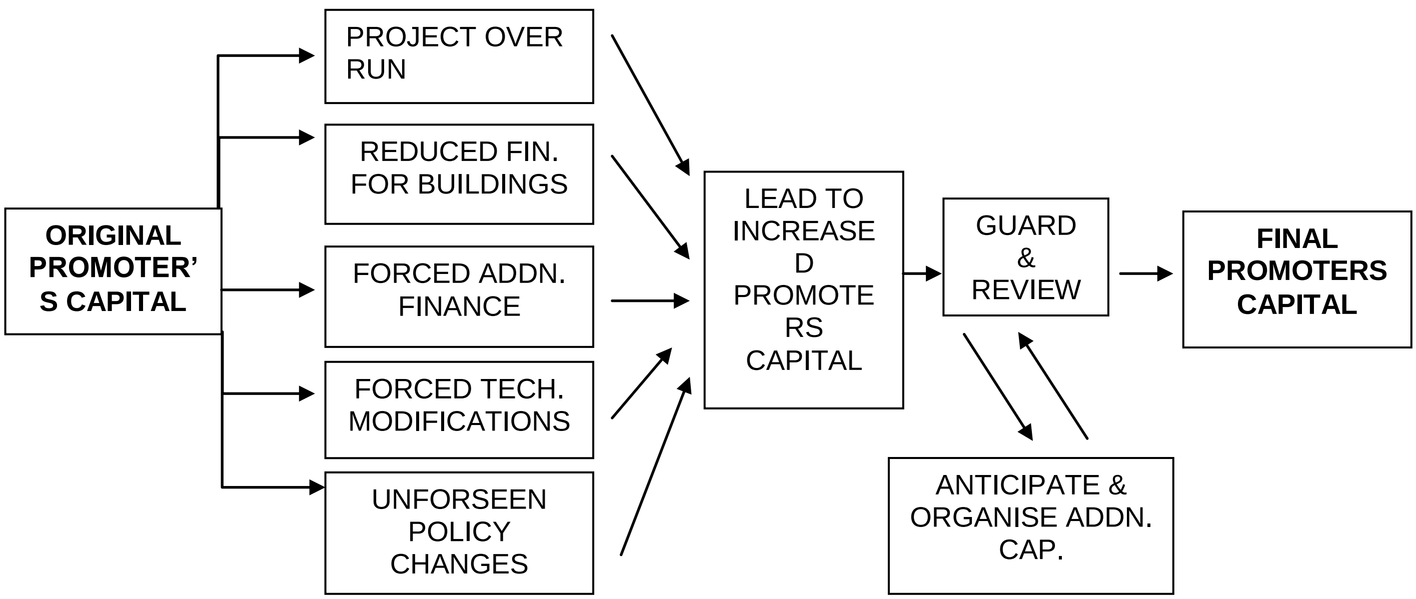
This is basically required to finance current assets and day-to-day expenses.

Owners' Contribution or Share Capital

Owners are required to contribute certain amount of the project cost which is also a long term source. As per the existing norms of the financial institutions and banks, the promoters of micro, small and medium scale businesses are required to contribute around 20% to 25% of the total cost of the project. But they also have other norms like debt equity ratio, security margin etc. So in reality, promoters should be mentally prepared to bring in around 30% of the project cost.

Owners should also be prepared to meet the ultimate shortfall as there could be some unforeseen developments like sudden increase in the prices, reduction in the funding by the institution, unexpected policy changes etc. In such situations, their contribution may go up beyond the accepted norms as shown below:

PROMOTER'S CAPITAL – ORIGINAL AND FINAL



Capital Subsidy

This is one more long term source. Governments in many states accord outright grant or subsidy to promote backward areas. If you set up your enterprise in a notified backward area then you are entitled to get some fixed percentage of your investment in land, building and machinery by way of subsidy which is not to be repaid. Thus, this becomes a long term source.

You may like to ascertain whether there is any such scheme from the District Industries Centre of the district in which you plan to set up your enterprise.

Term Loans

Term loans are long term loans sanctioned to buy long term or fixed assets. They are sanctioned by the State Financial Corporations (S.F.C.s.) or banks. The rate of interest varies from 10% to 15% depending upon the quantum of loan, risk perspective of the lending agency, priority sector advances, R.B.I. guidelines etc. The repayment period ranges between five and eight years. It depends upon some of the aspects mentioned above and features like repayment capacity or profitability of the project.

Some of the important norms observed by the institutions are:

Margin Policy

Institutions have their own policies regarding margin to be provided against each fixed asset. Margins vary even according to the nature of assets. There are different norms for different industry sectors. In case of hotel projects, they may consider 75% finance against building but in case of a chemical project it could be 65%. Hence it is better to find out the financing norms before arriving at the means of financing.

Asset Coverage Position

The funding agency does not have any security against working capital margin as the security is given to the bank which extends working capital assistance. Likewise there are certain assets which cannot be sold in the market to recover the dues e. g. preliminary and pre-operative expenses, technical know-how fees etc. Hence term lending institutions segregate fixed saleable assets from your project cost. They work out the amount of term loan in such a way that the value of marketable fixed assets exceeds the amount of term loan by 25 to 35%. In other words if the saleable market value of your fixed assets, according to the term lending agency, is ₹. 130 to 135 lacs then you may get term loan of about ₹. 100 lacs. This is known as "Asset Coverage Ratio".

Cost Overrun

During actual implementation of the project, prices of some assets may go up sharply or there could be steep rise in some of the taxes. At times, there is delay in implementation of the project on account of some genuine reasons. Your project cost may go up sharply due to such developments. The term loan agency may consider financing such cost overrun if there is proper justification and if this overrun does not make your project unviable.

Evidence Regarding Capital

You will have to prove to the lending institution that you are in a position to bring in the requisite amount of capital/contribution as and when required. Your Income Tax returns and documentary evidence about availability of funds is very critical. Some entrepreneurs do not possess legitimate resources and are put in difficulty.

Sanction of Term Loan

If your business plan is viable and if you submit duly filled in prescribed loan application with necessary enclosures then you may be sanctioned loan in around 8 to 10 weeks. There would be personal discussions with the appraising officers of the institution and they may ask for some additional information or clarifications. The agency must feel confident that you have capabilities to establish and manage the business successfully. If you are serving somewhere then the agency would want you to leave that job at the appropriate time to ensure your commitment. Ultimately if the agency is convinced about the technical feasibility and financial viability of the project and your capabilities and competencies to run it, then it would sanction the term loan.

Progressive Disbursement

As explained earlier, the sanctioned amount will not be given to you in one go—it will be disbursed in installments. You have to create assets, obtain certificate to this effect from a Chartered Accountant and approach the agency with a request for disbursement. On verification of papers and at times even by visiting the project site, if the agency is satisfied that the expenditure is genuine then and then only it will disburse the loan to you directly or to the suppliers. Similar procedure will be undertaken for subsequent tranches. At times, there could be some delay in actual disbursement and you should be ready to arrange for temporary funds or else either the implementation will be held up or suppliers may create some problems.

Collateral Security

The term lending agency may ask for some additional security over and above the fixed assets of the enterprise. It could be your personal fixed property or shares of listed companies if they are owned by you or any other personal asset. The rules about collateral security for micro and small enterprises are very lenient to promote these sectors. But in reality, the lenders feel more comfortable if you can offer personal assets as collateral.

Other Instruments

There are many other ways of raising money like:

- Public Issue
- Issue of Debentures
- Public Deposits
- Deferred Credit

But very often than not these sources are used when the requirement of funds is large. Hence, let us not go into the details.

Thus, there are many avenues to raise funds. But for a micro or small enterprise, the ideal combination would be:

- Promoters' Contribution/Capital
- Term loan from financial institution/bank
- Capital Subsidy (if available)
- Working capital assistance from bank

Debt Equity Ratio and Promoters' Contribution

For micro and small businesses, these are the two basic norms which all financing agencies follow.

Debt Equity Ratio

The term "Debt" includes all long term borrowings like term loan, amount collected through bonds or debentures, public or private deposits etc. whereas "Equity" means total of share capital and reserves and surpluses.

In simple terms, this ratio indicates the proportion of debt (long term borrowing or term loan) and equity or promoters' contribution. Amount of capital subsidy is treated as the contribution of promoters.

Normally, debt equity ratio of 2:1 is acceptable.

There are no rules about when should a project deploy more equity or resort to debt. But generally accepted norms are as under:

Use more equity when	Use more debt when
-The tax rate applicable is low.	-The tax rate applicable is high.
-Business risk is high.	-Business risk is low.
-Dilution of control is not a major issue.	-Dilution of control is an issue.
-The assets of the project are mostly intangible.	-The assets of the project are mostly tangible
-The project has many growth options.	-The project has few growth options.

Promoters' Contribution

The financing agency expects you to contribute around 25% to 30% of the project cost including capital subsidy and balance amount is sanctioned by way of term loan.

Reality Check

Many of the state governments are either reducing the areas under subsidy (as they are no more backward) or reducing the quantum of subsidy. Even if you are eligible for the subsidy, you invariably do not receive it in time! There are many instances where the amount of subsidy is sanctioned but not actually disbursed for 15-20 months for want of funds. So be prepared to bridge this gap through own or other sources or else your business will never see the light of the day!

So, be judicious and very realistic while firming up the cost of the project and means of financing. Find out the exact norms of financing before you approach any funding agency. Each institution or bank operates within the broad framework stipulated by the controlling authorities. So norms may differ. Depending upon the past experience of a particular product or industry or even location, there are formal or informal instructions "to go slow" or "discourage" or "stipulate higher margins". This may delay your project as you will end up running from pillar to post or may have to stretch yourself beyond your means

AND REMEMBER, these are all projected figures. A small change here or there may result in increase in your contribution or decrease in term loan by 8-10% and perhaps you will be no where. So always keep aside some amount to overcome any such adverse impact.

EXERCISE

- What care one has to take while computing the cost of civil work?

- While finalizing the suppliers for machinery and equipments, which aspects would you consider?

- Why pre-operative expenses need to be amortized?

- List down reasons for making a provision for contingency

UNIT 6

CHAPTER 9

ASSESSMENT OF FINANCIAL VIABILITY

CONTENTS

- **Financial Forecasts**
- **Projection of Performance and Profitability**
- **Projected Cash Flow Statement**
- **Debt Service Coverage Ratio**
- **Break Even Point**
- **Profitability Ratios**
- **Sensitivity Analysis**

OBJECTIVES

A business venture is set up with a view to earning legitimate profits. If it is not a profitable proposition then it has to be shelved. But how do you decide its profitability? Let us switch over to this subject.

9.0 Assessment of Financial Viability

Financial management is related to the procurement of finance and its efficient utilization for the achievement of profit as well as wealth maximization of the enterprise. Assessment of financial viability of an enterprise is very crucial as it may happen that the venture is technically feasible, there are good marketing prospects for the contemplated product/s or service/s but even then it may not be financially viable. Hence, probe into the future to try to find out where your business would be five to eight years down the line.

9.1 Financial Forecasts

As part of your business plan, you will need to provide a set of financial projections, which translates what you have said about your business in numbers. Money is necessary for a business to run and grow. Mapping out how your business will make and spend money in advance will help you prepare for the financial commitments of your business. Simultaneously, this will also be useful for the lending agency to appraise your project systematically and to find out how you plan to repay the borrowings without adversely affecting your operations. Your forecasts should run for the next five to eight years (till all outside long term borrowings are fully repaid) and their level of sophistication should reflect the sophistication of your business. Include the assumptions behind your projections with your figures –both in terms of costs and revenues – so that your investors or lenders clearly understand the logic behind the numbers.

Let us now look into some of the critical financial statements which help you to analyze future prospects of your venture:

[A] Projections of Performance and Profitability

This is a very basic but equally important statement which helps you to determine the profitability potential of your venture and also results in systematic calculations of your working capital needs. Hence, be very careful, scientific and realistic. Let us now discuss various items appearing in the profitability statement

i) Capacity Utilization and Sales Income

Forecasting sales income is the starting point. Following aspects must be kept in mind:

- ⇨ It is not advisable to assume higher capacity utilization in the first year even though the product is standardized and technology is simple. There will always be some teething troubles. Stabilization of production always takes time. Production would gradually increase and would reach a peak level in third or fourth year. In view of power shortages, employee absenteeism, marketing bottlenecks and so on peg your maximum capacity utilization around 80-85%.

- ⇨ The selling price has to be net of all taxes but inclusive of selling commission. Commission has to be shown separately under the head 'selling expenses'.
- ⇨ The selling price assumed in the first year has to be the prevailing selling price. Same price has to be assumed for the subsequent years. If a proportion of production is to be sold at a controlled price, assume that price for that much quantity.
- ⇨ If there is any by-product or possibility of selling scrap or any such source of income, then show it separately.
- ⇨ Following table would give you an idea as to how to prepare this statement.

Table – 1

Capacity Utilisation and Sales Income

Years	**1st Yr**	**2nd Yr**	**3rd Yr**	**4th Yr**	**5th Yr**	**6th Yr**
Installed Capacity	←------ 24,000 Kgs per year – 2 Shifts 300 Days -----→					
Capacity Utilization	55%	65%	80%	80%	80%	80%
Output/Prodn. (Kgs)	13,200	15,600	19,200	19,200	19,200	19,200
Selling Price	←-------------------- ₹. 160 per Kg. -------------------→					
Sales Income (₹. Lacs)	21.12	24.96	30.72	30.72	30.72	30.72

In case of multiple products, these details have to be provided for each product.

ii) Cost of Raw and Packing Materials

Cost of raw materials is the most important element of price. Find out the requirement of various raw materials per unit (kg, liter, meter etc.) of production including wastage and multiply it by the expected level of production every year to arrive at the annual quantity. Likewise, find out the landed cost for each material at your factory i.e.

- Basic Price
- Taxes
- Transit Insurance
- Freight
- Loading and Unloading Costs

Simple multiplication of quantity required by landed cost would give you cost of raw material every year. On the same lines, work out the yearly cost for packing materials.

iii) Cost of Power, Fuel and Water

Cost of these utilities would go up in accordance with the increase in production. The cost of power would depend upon working hours, load factor, number of days, power tariff etc. The formula is:

KVA × KW (0.9) × Working hours × load factor (0.70) × No. of days × power tariff

If fuels like furnace oil, coal, fire-wood etc. are used then their cost has to be included.

Water charges to be paid to local authorities or private parties need to be estimated. But if the entire supply is assumed to be from own bore-well, water charges need not be shown separately.

iv) Wages and Salaries

It is advisable to compute total manpower requirements to arrive at expenditure under this head. Entire staff can be segregated into three i.e. (a) Factory, (b) Office and (c) Sales & Marketing.

Find out manpower needs at each level in each category and multiply it by prevailing rates in the industry and area to arrive at your total expenses. Add around 20% to 25% towards other benefits like provident fund, gratuity, bonus etc. Provide an increase of 8-10% in the subsequent years to take care of annual increments and/or increase in production.

v) Factory Overheads

Expenses on stores and consumables, repairs and maintenance, insurance of factory assets and stocks etc. are included. Expenses on repairs and maintenance of building, machinery and other assets are higher in the later years.

vi) Selling and Administrative Expenses

Selling expenses include commission, travelling, advertising, sales promotion schemes etc. Selling commission can be calculated in accordance with the value of sales whereas other expenses must be worked out after finalizing the actual needs.

There are various administrative expenses which an enterprise has to bear like rent, rates, and taxes, stationery and printing, telephone charges, local conveyance, insurance etc. These can be estimated by taking into account prevailing rates, industry norms and level of production.

vii) Financial Expenses

Interest on Term Loan

Sanction letter of financial institution clearly indicates amount of loan, moratorium period, rate of interest and repayment terms. Work out your yearly interest cost on term loan accordingly.

Interest on Working Capital

Bank sanction letter provides rate of interest and you have yearly figures of your working capital needs with a break up of bank finance and margin money. Find out your yearly interest obligations.

viii) Depreciation

This is non-cash expenditure. Pre-operative expenses and contingencies (if actually incurred) provided in the cost of the project should be added to the fixed assets proportionately to ascertain the value of fixed assets for determining the depreciation charge. Since, it is non-cash expenditure, it helps you build a cash reserve for replacement of the existing asset when such asset wears out or you are compelled to buy a new one due to technological advancements.

Business is Not a Cash-cow

Mr. Nayar set up a small enterprise in a rented premise. He invested ₹. 75 lacs in machinery. He made a cash profit ranging between ₹.10 and ₹. 21.50 lacs in a span of first four years. Mr. Nayar did not provide for any depreciation in his books of accounts. He thought that cash profit was his real income and spent most of the money on household expenditure. At the end of four years, it became imperative for him to replace some machines in view of technological advancements. This necessitated an expenditure of ₹. 30 lacs whereas his bank balance was hardly ₹. 10 lacs. He was forced to borrow. Had he been aware about the concept of depreciation and accounting profit, he could have made a provision for depreciation in the books and automatically would have spent less money on household expenses. In that case, perhaps, he would have managed the required money from the internal sources.

There are two methods of providing depreciation.

Written Down Value (WDV)
Straight Line Method (SLM)

Under the WDV method, value of asset goes down every year to the extent to which it has depreciated and hence the absolute amount of depreciation also decreases every year. But in case of SLM, depreciation is provided at a flat rate on the initial investment made on each fixed asset. Thus, the annual amount of depreciation remains constant till value of asset is exhausted.

Following table would illustrate the difference between two methods:

Table 2
Calculation of Depreciation

Cost of Building	₹.100 Lacs	
Rate of Depreciation		
As per WDV	10% per annum	
As per SLM	3.34% per annum	
	Depreciation (₹.Lacs)	
	WDV	**SLM**
Year One	10.00	3.34
Year Two	9.00	3.34
Year Three	8.10	3.34
Year Four	7.29	3.34

The Income-tax Act specifies that the WDV should be used for tax purposes and it also specifies rate of depreciation applicable to different assets. On the other hand, the Company Law for the purpose of financial reporting allows either of the two methods. So while preparing your financial statement like profit and loss account, you may use any method but for computing your Income-Tax liability, you must use the WDV.

ix) Preliminary Expenses Written Off

Preliminary expenses can be amortized or written off in ten equal annual installments.

x) Provision for Income-tax

It is essential to have sound understanding of the Income-tax Act to work out the amount of income-tax. A variety of concessions are given and there is a long list of disallowable. Once the taxable income is worked out, it is easy to figure out the tax liability by applying the appropriate tax rates. Tax rates vary according to the constitution of your enterprise viz. proprietorship, partnership, company type of organization etc. Amendments are made in the Act each year. Hence, it is advisable to consult an expert.

(xi) Retained Profit

Is the amount of profit retained in the business after taking care of all expenses, providing for income-tax and making provision for the returns to the owners – dividend if the company type of organization or withdrawals if it is a proprietary or partnership concern. It is also known as ploughed back earnings.

(xii) Net Cash Accruals

Depreciation and preliminary expenses written off are non-cash expenses and do not result in actual cash outflows. Hence, you add them to retain profit to arrive at the figure of net cash accruals.

At the end of this exercise i.e. once your projected profitability statement is ready, you have a fairly good idea about potential of your business. You can find out whether you have sufficient cushion after providing for everything. The figures of net cash accruals every year help you to find out whether you can repay your term loans comfortably or not. Compare your gross profit and net profit to sales with other units in your industry and find out whether there are any major deviations. If yes, find out why and where?

This is not a simple exercise. It calls for thorough knowledge of industry, production process, prices of raw materials, market, financial management etc. This statement forms the basis for other financial statements and ratio analysis which, in turn, helps you to take a final call. Study Appendix 1 of this chapter for better understanding.

[B] Projected Cash Flow Statement

Profitability of an enterprise tells you about the profit earning capacity. But that is not enough. The enterprise must generate enough cash to repay the long term borrowings, to provide for additional margin money for its increasing working capital needs when it is growing and to create a built in cushion to take care of any unforeseen adverse situation or to grab an opportunity for expansion, diversification or modernization. The cash flow statement precisely does this as it deals with the movement of cash into and out of the enterprise. It is prepared for the implementation period as well as for first six to eight years. If there is any cash deficit in the initial couple of years then promoters must bring in the requisite amount to bridge the gap. If this situation persists further then one has to look into the financial viability afresh. The required information is available from following statements:

- Cost of the Project and Means of Financing
- Projected Profitability Statement
- Projected Working Capital Requirements.

A comfortable closing cash balance indicates financial strength of your enterprise. Appendix-1 would clarify this point.

[C] Debt Service Coverage Ratio (DSCR)

The single most and easy to work out parameter to quickly assess the viability of the venture is to know what the D.S.C.R. is. It tells you whether the enterprise would generate enough cash to meet its loan repayment and interest liability. A financial ratio which measures capacity of the enterprise to repay installments of term loan and interest thereon in time every year is known as D.S.C.R./ A D.S.C.R. of one means that the enterprise will generate cash just enough to meet its obligations. This situation is certainly not acceptable and this is considered as totally unsatisfactory. Lender will always feel comfortable if there is some built in cushion to take care of any adverse development. Therefore, a D.S.C.R. of 1.75 is considered as satisfactory. However, there are no cut and dry rules as many other aspects like length of gestation period, size of the project, achievement of break even sales, capital intensive project also play a critical role. Perusal of Appendix 1 would explain how to actually work out DSCR.

[D] Break Even Point (BEP)

Cost volume profit relationship is popularly known as break even analysis. A break even point is a level of capacity utilization at which you make neither profit nor incur any loss. That is why it is also termed as no profit no loss level of activity. You earn profit only if you are able to achieve higher capacity utilization than this. If your break even capacity utilization is 65% then you will earn profit if your capacity utilization is higher than 65%. However, remember that each level of profitability has different level of break even point. In other words, higher the break even points in terms of capacity utilization, greater the degree of risk.

How would you make the calculations? At the B.E.P. level of activity, enterprise recovers only the variable expenses. Operations beyond this level provide you surplus to take care of your fixed expenses and to make profit. This surplus is termed as “contribution”. It means that you must segregate your total cost into fixed and variable costs.

⇨ **Fixed Expenses**

There are certain expenses which remain fixed or partly fixed irrespective of your capacity utilization. They are interest on term loan, depreciation and bulk of the administrative expenses. But, expenses on wages and salary are semi fixed.

⇨ **Variable Expenses**

Expenses on raw materials, power, packing materials, selling commission etc. vary directly in the proportion of production and sales. They either go up or come down according to the level of production or capacity utilization.

Thus, you must break down your total cost to work out the break even point.

Detailed calculations are provided in Appendix 1 of this chapter.
Remember the following:

Total sales in value (–) Total variable cost = Contribution

$$\text{Break even point} = \frac{\text{Fixed Cost}}{\text{Contribution}} \times 100$$

Kindly go through Appendix-1 of this chapter carefully. It explains to you how to prepare these financial statements. If you have done adequate homework and digested your project properly then and then only you can work out these statements correctly. Check and re-check your assumptions by scanning the market environment thoroughly and then you will realize that analysis of financial viability of your project is not all that difficult!

[E] Profitability Ratios

Profitability refers to the ability of your business to earn profit. It shows the efficiency of your business. Profitability has direct link with sales and that is the reason why these ratios are calculated on the basis of sales. Some of the indicative profitability ratios are:

i) Gross Profit and Net Profit Ratios

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$$

$$\text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Net Sales}} \times 100$$

Let us take a small illustration

Gross Profit	:	₹.40,000/-
Net Profit	:	₹.24,000/-
Sales Return	:	₹.20,000/-
Sales	;	₹.2,20,000/-

How do you work out these two ratios?

$$\text{Gross Profit Ratio} = \frac{40{,}000}{2{,}20{,}000 - 20{,}000} \times 100$$

$$= \frac{40{,}000}{2{,}00{,}000} \times 100$$

$$= 20\%$$

$$\text{Net Profit Ratio} = \frac{24{,}000}{2{,}20{,}000 - 20{,}000} \times 100$$

$$= \frac{24{,}000}{2{,}00{,}000} \times 100$$

$$= 12\%$$

There are no laid down rules about what should be the ideal ratio. It may vary depending upon efficiency of the management, location, size (capacity) of the enterprise and so on. But there are some established norms for each product and you should be nearer to those norms.

ii) Operating Ratio

This ratio indicates the relationship between operating cost and net sales. Operating cost consists of cost of goods sold and other operating expenses. [Net Sales (-) Operating Profit] It is also known as cost of sales. This ratio reveals the cost content and operational expenses absorbed in the sales. Higher ratio indicates lower efficiency because that means a major part of sales is eaten up by operating cost. You should try to increase net profit which is possible if the operating cost is reduced.

$$\text{Operating Ratio} = \frac{\text{Operating Cost}}{\text{Net Sales}} \times 100$$

Operating Cost = Cost of Goods Sold + Operating Expenses

illustration

Net Sales	=	₹.2,00,000/-
Cost of Goods Sold	=	₹.1,40,000/-
Operating Expenses	=	₹.20,000/-

$$\text{Operating Ratio} = \frac{1,40,000 + 20,000}{2,00,000} \times 100$$

$$= \frac{1,60,000}{2,00,000} \times 100$$

$$= 80\%$$

iii) Return on Investment

This is one of the most important ratios for the measurement of overall profitability. It measures the operational efficiency and borrowing policy of an enterprise. It also shows how effectively the capital employed in the business is used and the earning capacity of the net assets of your enterprise.

$$\text{Return on Investment} = \frac{\text{Net Profit before Interest, Tax \& Preference Dividend}}{\text{Capital Employed}} \times 100$$

Capital Employed = Net Fixed Assets + Working Capital

Net Fixed Assets = Fixed Assets – Depreciation

Working Capital = Current Assets – Current Liabilities + Provisions

Illustration

Find out Return on Investment from following Figures

Share Capital	15,00,000	Profit	4,00,000
Debentures	2,00,000	Net Fixed Assets	18,00,000
Current Liabilities	10,00,000	Current Assets	16,00,000

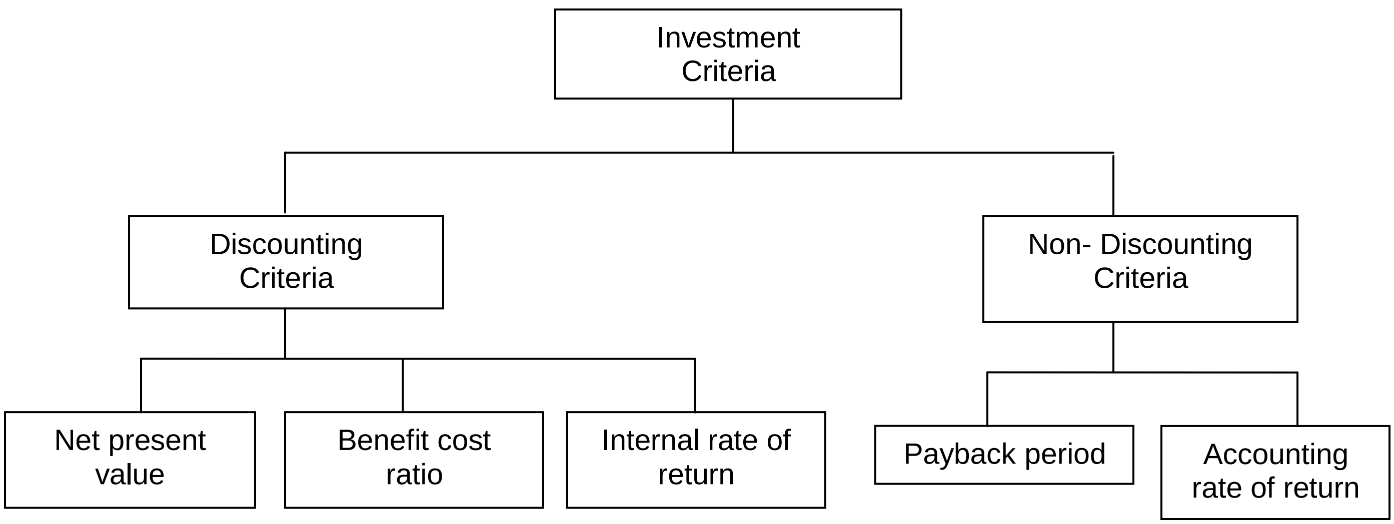
$$\text{Return on Investment} = \frac{4,00,000}{24,00,000} \times 100$$

$$= 16.67\%$$

There are some other sophisticated tools to analyze the financial viability of the project like the Net Present Value (NPV) or the Internal Rate of Return (IRR). But these techniques are complicated and they are relevant in case of medium or large scale projects and projects where the implementation or gestation period is very long.

Investment decisions in case of such projects are taken with the help of some sophisticated criteria as described in the following table:

TABLE 3



[F] Sensitivity Analysis

You may make critical assumptions like capacity utilization, selling price, raw-material price and consumption norms when you work out the projected profitability statement. Some of these assumptions may not come true. Through sensitivity analysis, you try to ascertain the impact of changes in the assumptions on enterprise viability. You may change assumption with regard to one variable (capacity utilization) or a few variables simultaneously (capacity utilization, selling price and raw material price) and watch the effect. It is pointless to change assumptions favorably. You are interested in assessing the impact of negative changes in assumptions. You may change one parameter negatively, other parameters remaining constant. The possibilities are endless. If the enterprise remains viable in the face of significant negative shifts with reference to key parameters, the risk is low. In contrast, if a negligible drop in selling price reduces DSCR to an unacceptable level, it means a heavy risk.

Sensitivity analysis makes you sharply aware of the critical assumptions you make. It brings variables into focus which you must constantly watch, monitor and act upon after you set up your business. It is advisable to be close to the realities and study the risk bearing capacity through sensitivity analysis.

You have now completely analyzed your business idea. Are you convinced that your proposal is technically feasible and financially viable?

If not, then go back to the drawing board and start afresh. Remember, this is a major decision and you just cannot afford to take it lightly.

Once the Plan is Ready . . .

To achieve the best results, you will have to monitor your performance against the plan. This will give you early warning as to when you should reconsider your actions in response to market developments. You should have:

- Plan to monitor revenues and costs
- Plan to manage cash flow
- Plan to manage people

Updating the Plan

You will have to decide when the plan should be updated and how this should be done. Short term problems may require immediate revisions.

The year-end review of results will help in amending the plan. Do not forget to review the market from time to time. This is a Never Ending Process. Businesses evolve and so should your plans. Plans should be designed to enable you to forecast the future, to help you stay ahead of the competition and to assist you in realizing your full potential.

Appendix – 1

Shree Siddheshwar Cotton Processing Co-op. Society Ltd

Preamble

Shree Siddheshwar is a 100% export-oriented unit being set up near Kolhapur in Maharashtra to manufacture cotton yarn. The society would also like to install in-house ginning and pressing facilities. It plans to import spinning frames and auto cone winders. The promoters have very good relevant technical and marketing experience. They have retained a reputed technical consultancy firm for selection and erection of the plant. There are good market prospects for export of cotton yarn and the Society is in the process of finalizing selling agreements with 4-5 foreign buyers.

From following information, let us prepare various financial statements:

Cost of Project and Means of Financing

Cost of Project

Description	**(₹. In lacs)** **Amount**
Land & Site Development	**75.00**
Civil Work	**192.17**
Plant & Machinery	
– Imported	207.40
– Indigenous	334.00
– Erection & Installation	30.00
– Electrification Charges	40.00
	611.40
Other Fixed Assets	**50.00**
P&P Expenses	**75.00**
Contingencies	**60.20**
Capital Cost of the Project	**1063.77**
Working Capital Margin	**75.00**

Total Cost of the Project **1138.77**
(Rounded up to 1140.00)

Means of Financing

	(₹.in Lacs)
Share Capital	440.00
Term Loan	700.00
Total	**1140.00**
Debt Equity Ratio	1:59 : 1
Promoters' Contribution	38.60%

Basic Assumptions

1) Implementation period is one year

2) Production capacity of 1350 tons per year based on 300 working days and triple shift working.

3) The expected capacity utilization is 75%, 85% and 90% respectively in first three years. There will not be any increase thereafter.

4) Sales realization at 100% shall be ₹. 1,710.55 lacs including income from by products of ₹.158.05 lacs.

5) Raw material is raw cotton and for producing one ton of yarn, requirement of raw cotton will be 3322 kgs. Or 3.32 tons. Considering price of ₹.19,000 per ton and some provision for transportation, the yearly expenditure on raw material will be:

First Year	₹.675.45 Lacs.
Second Year	₹.770.45 Lacs
Third Year	₹.811.30 Lacs

6) Total connected load for power is 700 KVA. Considering power tariff of ₹.5/unit total power bill at 100% activity level shall be ₹.138.90 lacs.

7) Wages and salaries including benefits are estimated to be ₹.37.22 lacs and they are expected to go up by 7½ % in second year. An increase of 5% every year is to be provided in the subsequent years.

8) Stores and Spares

   Annual provision of ₹.36.00 lacs is to be made in the first year and thereafter an increase of 5% is expected every year.

9) Repairs and Maintenance

   A provision of ₹.18.00 lacs in the first year and thereafter an increase of 10% each year shall be sufficient.

10) Other Manufacturing Expenses

A lump sum provision of ₹.18.l00 lacs, ₹.21.00 lacs and ₹.24.00 lacs respectively during first three years is to be made. Thereafter an increase of 5% every year is expected.

11) Depreciation

It has been computed on Straight Line Method (SLM) as under:

Civil Works ₹.192.17 lacs Depreciation @ 3.34% = ₹. 6.42 lacs

Plant & Machinery ₹.611.40 lacs Depreciation @ 4.75% = ₹. 29.04 lacs

Other Assets ₹. 50.00 lacs Depreciation @ 6.33% = ₹.3.16 lacs

Total Depreciation as per S.L.M. ₹. 38.62 lacs per year

12) Selling and Administrative Expenses

A provision as under is to be made

First Year	8% of Sales Income
Second Year	8.5% of Sales Income
Third Year	9% of Sales Income

For remaining years, an addition of 5% is envisaged every year.

13) Packing Expenses

Packing expenses for yarn work out to ₹.2, 000/tonne.

14) Interest

Interest on the term loan of ₹.700.00 lacs is to be computed @ 15% per annum assuming that the entire loan shall be repaid in eight years including a moratorium period of one year in 14 half yearly installments. Interest on working capital assistance from bank is to be computed @ 17% per annum.

15) Income-tax

There will not be any income-tax liability as this is a co-operative society.

16) Dividend @ 6% will be paid in 2nd and 3rd year and thereafter it will be pegged down at 12%.

Based on these facts, let us prepare various Statements.

Exhibit – 1

Repayment Schedule of Term Loan and Interest Calculations

(₹. in Lacs)

Months	Op. Balance	Repayment	Cl. Balance	Interest @ 15% p.a.
0 – 12	700.00	---	700.00	105.00
13-18	700.00	50.00	650.00	52.50
19-24	650.00	50.00	600.00	48.75
25-30	600.00	50.00	550.00	45.00
31-36	550.00	50.00	500.00	41.25
37-42	500.00	50.00	450.00	37.50
43-48	450.00	50.00	400.0	33.75
49-54	400.00	50.00	350.00	30.00
55-60	350.00	50.00	300.00	26.25
61-66	300.00	50.00	250.00	22.50
67-72	250.00	50.00	200.00	18.75
73-78	200.00	50.00	150.00	15.00
79-84	150.00	50.00	100.00	11.25
85-90	100.00	50.00	50.00	7.50
91-96	50.00	50.00	--	3.75

Exhibit – 2

Projections of Performance and Profitability

(₹. in Lacs)

Particulars	1st Yr	2nd Yr	3rd Yr	4th Yr	5th Yr	6th Yr	7th Yr	8th Yr
Installed Capacity	←--------------------------- 1350 Tons of Cotton Yarn -------------------------→							
Capacity Utilization (%)	75	85	90	90	90	90	90	90
Production (Tons)	1070	1220	1285	1285	1285	1285	1285	1285
Sales Income	1161.50	1322.50	1397.25	1397.25	1397.25	1397.25	1397.25	1397.25
Income from By-products	118.50	134.35	142.20	142.20	142.20	142.20	142.20	142.20
Total Income	**1280.00**	**1456.85**	**1539.45**	**1539.45**	**1539.45**	**1539.45**	**1539.45**	**1539.45**
Cost of Production								
Consumption of Raw Material	675.45	770.45	811.30	811.30	811.30	811.30	811.30	811.30
Power, Water, etc.	104.18	118.05	125.00	125.00	125.00	125.00	125.00	125.00
Wages and Salaries	37.22	40.00	42.00	44.10	46.30	48.60	51.05	53.60
Stores & Spares	36.00	37.80	39.70	41.70	43.75	45.95	48.25	50.65
Repairs and Maint.	18.00	19.80	21.80	23.95	26.35	29.00	31.90	35.10
Other Mfg. Exps.	18.00	21.00	24.00	25.20	26.50	27.80	29.20	30.65
Depreciation	38.62	38.62	38.62	38.62	38.62	38.62	38.62	38.62
Total Cost of Prodn.	**927.47**	**1045.72**	**1102.42**	**1109.87**	**1117.83**	**1126.27**	**1135.32**	**1144.92**
Add: Opening Stock of WIP & FG	--	41.95	48.90	51.70	51.70	51.70	51.70	51.70
Less: Closing Stock of WIP & FG	41.95	48.90	51.70	51.70	51.70	51.70	51.70	51.70
Cost of Sales	**885.52**	**1038.77**	**1099.62**	**1109.87**	**1117.83**	**1126.27**	**1135.32**	**1144.92**
Gross Profit	394.48	418.08	439.83	429.58	421.63	413.18	404.13	394.53

Less:								
Int.on Term Loan	105.00	101.25	86.25	71.25	56.25	41.25	26.25	11.25
Working Capital	29.75	33.85	35.70	35.70	35.70	35.70	35.70	35.70
Packing Expenses	20.20	23.00	24.30	24.30	24.30	24.30	24.30	24.30
Selling & Adm. Exps	92.90	112.40	125.75	132.05	138.65	145.60	152.85	160.50
Profit Before Taxation	**146.63**	**147.58**	**167.83**	**166.28**	**166.73**	**166.33**	**165.03**	**162.78**
Provision for Taxes	-----	-----	-----	-----	-----	-----	-----	-----
Net Profit	**146.63**	**147.58**	**167.83**	**166.28**	**166.73**	**166.33**	**165.03**	**162.78**
Add: Depreciation	38.62	38.62	38.62	38.62	38.62	38.62	38.62	38.62
Cash Accruals	**185.25**	**186.20**	**206.45**	**204.90**	**205.35**	**204.95**	**203.65**	**201.40**

Exhibit – 3

Projected Working Capital Requirements

			(₹ in Lacs)
Particulars	**1st Year**	**2nd Year**	**3rd Year**
Current Assets			
Raw Material (1½ Month's Consumption)	78.00	88.95	93.65
Stock in Process (3 Days)	7.20	8.10	8.55
Finished Goods (½ Month)	34.75	40.80	43.15
Receivables (1½ Months)	145.20	165.30	174.65
Other Current Assets	30.00	33.00	35.00
Total Current Assets [A]	**295.15**	**336.15**	**355.00**
Current Liabilities			
Creditors for Stores & Spares and Packing Material (½ Month)	2.35	2.55	2.65
Accrued Expenses (½ Month)	11.80	13.15	14.00
Other Current Liabilities	5.00	6.50	7.50
Total Current Liabilities [B]	**45.15**	**51.85**	**55.15**
Working Capital Gap [A] – [B]	250.00	284.30	299.85
Margin for Working Capital (30%)	75.00	85.30	89.95
Bank Borrowings	175.00	199.00	209.90

Exhibit – 4

Projected Cash Flow Statement

(₹. in Lacs)

Particulars	Impl. Period	1st Yr	2nd Yr	3rd Yr	4th Yr	5th Yr	6th Yr	7th Yr	8th Yr
Sources of Funds									
NPBT + Interest	---	281.38	282.68	289.78	273.23	258.68	243.28	226.98	209.73
Increase in Share Capital	440.00	---	---	---	---	---	---	---	---
Increase in Term Loan	700.00	---	---	---	---	---	---	---	--
Increase in Bank Borrowings for WC	---	175.00	24.00	10.90	---	---	---	---	---
Depreciation	---	38.62	38.62	38.62	38.62	38.62	38.62	38.62	38.62
Total Sources (A)	**1140.00**	**495.00**	**345.30**	**339.30**	**311.85**	**297.30**	**281.90**	**265.50**	**248.35**
Disposition of Funds									
Increase in Capital Expenditure	990.00	---	---	---	---	---	---	---	---
Increase in P&P Expenses	75.00	---	---	---	---	---	---	---	---
Increase in Current Assets	---	250.00	34.30	15.55	---	---	---	---	---
Decrease in TL	---	---	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Interest	---	134.75	135.10	121.95	106.95	91.95	76.95	61.95	46.95
Dividend	---	---	26.40	26.40	52.80	52.80	52.80	52.80	52.80
Total Disposition (B)	**1065.00**	**384.75**	**295.80**	**263.90**	**259.75**	**244.75**	**229.75**	**214.75**	**199.75**
Opening Balance	---	75.00	185.25	234.75	310.15	362.25	414.80	466.95	517.70
Add: Net Surplus [A]-[B]	75.00	110.25	49.50	75.40	52.10	52.55	52.15	50.75	48.60
Closing Balance	75.00	185.25	234.75	310.15	362.25	414.80	466.95	517.70	566.30

Exhibit – 5

Debt Service Coverage Ratio (DSCR)

(₹. in Lacs)

Particulars	1st Yr	2nd Yr	3rd Yr	4th Yr	5th Yr	6th Yr	7th Yr	8th Yr
Cash Accruals	185.25	186.20	206.45	204.90	205.35	204.95	203.65	201.40
Interest on Term Loan	105.00	101.25	86.25	71.25	56.25	41.25	26.25	11.25
Total [A]	**290.25**	**287.45**	**292.70**	**276.15**	**261.60**	**246.20**	**229.90**	**212.65**
Repayment of Term Loan	---	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Interest on Term Loan	105.00	101.25	86.25	71.25	56.25	41.25	26.25	11.25
Total [B]	**105.00**	**201.25**	**186.25**	**171.25**	**156.25**	**141.25**	**126.25**	**111.25**
DSCR [A] / [B]	2.76	1.43	1.57	1.61	1.67	1.74	1.82	1.92
Average DSCR	←-------------------------------------- 1.82 --------------------------------------→							

Exhibit – 6

Break Even Analysis

(In the third year at 90% capacity utilisation)

		(₹ in Lacs)
Total Income		**1539.45**
Variable Costs		
Raw Materials	811.30	
Power, Water, etc. (80%)	100.00	
Wages & Salaries (85%)	35.70	
Stores and Spares (90%)	35.75	
Repairs & Maintenance (90%)	19.62	
Other Manufacturing Expenses	24.00	
Interest on Working Capital	35.70	
Packing Expenses	24.30	
Selling & Adm Exps (80%)	100.60	1186.97
Contribution (Sales – Variable Cost)		352.48
Fixed Cost (Total Cost-Variable Cost)		184.65
BEP as % of Installed Capacity		58.20
BEP as % of Optimum Capacity		52.38

Exhibit – 7

Projected Balance Sheet

(₹. in Lacs)

Particulars	1st Yr	2nd Yr	3rd Yr	4th Yr	5th Yr	6th Yr	7th Yr	8th Yr
Liabilities (A)								
Equity Share Capital	440.00	440.00	440.00	440.00	440.00	440.00	440.00	440.00
Reserves & Surplus	146.63	267.81	409.24	522.72	636.65	750.18	862.41	972.39
Term Loan	700.00	600.00	500.00	400.00	300.00	200.00	100.00	---
Bank Borrowings for WC	175.00	199.00	209.90	209.90	209.90	209.90	209.90	209.90
Current Liabilities	45.15	51.85	55.15	55.15	55.15	55.15	55.15	55.15
Total A	**1506.78**	**1558.66**	**1614.29**	**1627.77**	**1641.70**	**1655.23**	**1667.46**	**1677.44**
Assets [B]								
Gross Block	990.00	990.00	990.00	990.00	990.00	990.00	990.00	990.00
Less: Depreciation	38.62	77.24	115.86	154.48	193.10	231.72	270.34	308.96
Net Block	951.38	912.76	874.14	835.52	796.90	758.28	719.66	681.04
Current Assets	295.15	336.15	355.00	355.00	355.00	355.00	355.00	355.00
Cash & Bank Balance	260.25	309.75	385.15	437.25	489.80	541.95	592.80	641.40
Total B	**1506.78**	**1558.66**	**1614.29**	**1627.77**	**1641.70**	**1655.23**	**1667.46**	**1677.44**

UNIT 6

CHAPTER 10

IMPLEMENTATION SCHEDULE

Implementation schedule, in simple words, is a time table which you have to set for implementing your business plan. Preparation of this schedule forces you:

- To enumerate various steps which you will have to take while setting up your business.
- To realize the inter-dependence of certain activities and thus the chain effect of delay in carrying out one activity on overall implementation of the project.
- To work out a calendar for mobilizing your funds.

Timely implementation is important because delay may result in cost over run. At times, this may have an adverse impact on the financial viability of an enterprise. While drawing the implementation schedule, please make sure that:

- You would undertake capital expenditure only after the term loan is sanctioned.
- Ensure that you have a sound project organization.
- Implementation is not entirely in your hands. You have to coordinate with different agencies. Hence, your planning has to be proper.

Be prepared (and have a contingency plan) for the unexpected, e.g. strike of transporters, delay in obtaining power connection, heavy rains etc.

- Wherever possible, take some advance action like finalizing location, preliminary enquiries with machinery suppliers, identifying technical consultants, initial discussions with bank for working capital, and so on.
- Effective monitoring of each activity and continuous review of deviations to take proper corrective measures.

Distance between the Cup and the Lip

Sanat Dave, a middle-aged chemist at Bhavnagar, decided to set up a salt work unit. The State Bank of Saurashtra sanctioned his loan promptly. But, Dave had to give residential building as a collateral security. Dave did not know about this requirement. His residential building was a part of a housing cooperative society. The individual members were given a loan by the state-level cooperative (SLC) and so the whole society was mortgaged to SLC. Dave paid off the remaining installments of loan and carried out a lengthy procedure of getting his house released from SLC mortgage. It took six months. Salt is a seasonal industry. He missed the season completely. There was a cyclone before the beginning of the next season. Salt work is essentially earthwork. It got wiped out. If there had been no delay, salt could have been procured for at least one season and half of the investment could have been recovered (pay back period was two years)

Activities to be incorporated in the schedule are manifold. Detailing of each activity broadly depends upon size of the project, availability of machinery, nature and size of building, import components in terms of machinery or technical know-how etc. But for a typical micro or small scale unit, an illustrative implementation schedule could be as under:

Table – 1
Implementation Schedule: An Illustration

TASK	Months									
	1	2	3	4	5	6	7	8	9	10
Business Plan preparation and submission of term loan application	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Term Loan sanction	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Negotiations and securing possession of land	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Building construction	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Tie-up for supply of utilities (power, water,etc.)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Placing order for Machinery	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Receipt and installation of machinery	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Recruitment of key manpower	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Trial Production	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Commencement of commercial production	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Activities within the broad tasks may be proposed in blocks. Month-wise blocking of activities would give an overall picture of intensity of work and monitoring becomes easier.										

UNIT 6

CHAPTER 11

GROWTH AND EXIT STRATEGY

[A] Growth Strategy

Potential investors or financial institutions would be interested to know, how you plan to grow your business once it is off the ground. This does not necessarily mean growth in revenue. The plan could be to reach new territories or new customers or even introducing new products. The obvious objective in outlining your growth strategy is to show how these moves will increase sales and profit. This can happen in number of ways:

i) Multiple Locations

Outline where you might plan to open additional shops if you are in retailing. But, do not assume that you can go national just because your product is doing well regionally.

ii) New Client Bases

Once you are able to reach to your original core customers find out who others are interested in your products?

iii) Franchising

Franchising is the best option when your product is consistent and customers have certain expectations about your brand. Restaurants often turn to franchising and it is a feasible option for many products/ services.

iv) New Products

This is a natural process of growth. There can be variations of your main products or completely new offerings that expand your overall base.

v) Online Strategy

Using the web is not mandatory for selling your products but your growth strategy should include an online element.

vi) Reducing Costs

Hands on experience of doing business gives you advantage of learning curves and economies of scale. With experience, you and your organization become more efficient. Economies of scale would reduce your unit cost.

vii) Acquisitions

You can explore this possibility once you are established in the business and are ready to expand in other markets. You can then decide about ideal acquisition targets.

[B] Exit Strategy

Your exit plans need to be clear in your own mind as they will dictate how you operate the business e.g. if you plan to pass on your business to your children then you will need to start training them at a certain point. Or if you have plans to get listed on stock exchange then you will have to follow certain accounting regulations. Some of the options available to you are:

i) Sell Your Shares

When you are ready to retire, sell your shares to your partners. You leave the firm with good taste and also gain earnings.

ii) Liquidate

Sell everything at market value and use this money to pay off the remaining debt. This is a simple approach but may not fetch you the desired returns. Since you are simply trying to match your assets with debts, you perhaps will be eager to sell and therefore at a disadvantage while negotiating.

iii) Merge

If such an opportunity exists, then merger is a good solution. If you wish to leave completely, then you can opt for it or you can be a part of the new entity.

iv) Acquisition

Other companies might be interested to acquire your business. Make sure that the price offered to you matches with your business valuation. If you choose your acquirer wisely, the value of your business can far exceed what you might otherwise earn in a sale.

UNIT 6

CHAPTER 12

ENCLOSURES

It is your project and you have to put in extremely hard work in preparing a business plan. You are fully involved in the whole gamut of conceiving, planning, organizing and implementing your business idea. But the concerned officers of the financial institutions/banks who would appraise your request may or may not be fully aware about your product and they would have lot of other responsibilities. Hence, it is in your interest that you provide them as much information as you can and strengthen their hands. This would help you avoid unnecessary delays and your file will not move back and forth.

You should, therefore, enclose all relevant/applicable documents from the following list along with your loan application form.

i) Copy of partnership deed or Memorandum and Articles of Association as the case may be.

ii) Copy of SSI registration/Enterprise Memorandum.

iii) A copy of permission converting agriculture land to non-agriculture land for the proposed site.

iv) Approval of building plans by the concerned civic authorities or allotment letter for shed.

v) Application made or sanction received for connection of electricity from the Board.

vi) Approval/Clearance from the Pollution Control Board.

vii) Sales tax/Central Excise/VAT Registration.

viii) Registration under the Shops and Establishment Act.

ix) Industry specific approvals (food processing, bulk drugs, textiles).

x) Registration under the Factories Act.

xi) Any other statutory clearances like boiler inspector, RBI permission for import-export, 100% EOU, environmental clearances, ONGC etc.

xii) Detailed resume of each promoter along with income-tax and wealth-tax returns for preceding three years.

If the applicant has existing business activities then provide performance highlights of the same.

xiii) Detailed resume of consultants.

xiv) Estimates for site development and civil work from contractor along with site and location map and all approved blue prints.

xv) Quotations for machinery and equipments and major items of other fixed assets, comparative statement of suppliers and justification for final selection.

xvi) Process flow chart.

xvii) Manpower requirements with organization chart.

xviii) Repayment schedule of term loan and interest calculations.

xix) Projections of performance and profitability.

xx) Projected working capital requirements.

xxi) Projected cash flow statement.

xxii) Projected balance sheet.

xxiii) Debt Service Coverage Ratio (DSCR).

xxiv) Break Even Analysis.

xxv) Implementation Schedule.

REFERENCES & RECOMMENDED READINGS

Books

[1]	Anatomy of a Business Plan, Linda Pinson
[2]	How to Write a Business Plan – Mike McKeever
[3]	The AMA Complete Guide to Strategic Planning for Small Business – Kenneth J. Cook
[4]	Competitive Strategy: Techniques for Analyzing Industries and Competitors – Michael E. Porter
[5]	Projects: Planning, Analysis, Financing, Implementation and Review – Prasanna Chandra
[6]	Developing Business Strategies – Anker David
[7]	Crafting and Executing Strategy – Thompson Arthur A, A.J. Strickland III and John E. Gamble

Websites

[1]	SBA Business Plan Basics : www.sba.gov
[2]	Creating a Business Plan: www.powerhomebiz.com
[3]	Writing a Business Plan: www.entrepreneur.com
[4]	For Sample Business Plans: www.bplans.com, www.vfinance.com, www.bnizplanit.com, www.cbsc.org
[5]	www.businesslink.gov.uk
[6]	www.wilsonwrit.com
[7]	www.entrepreneurs.about.com
[8]	www.acoa.com
[9]	Business Portal of India: www.business.gov.in
[10]	www.ehow.com
[11]	www.articles.bplans.com
[12]	www.business.govt.nz
[13]	www.myownbusiness.org
[14]	www.answers.com
[15]	www.scorememphis.org
[16]	www.waterlooregionsmallbusiness.com
[17]	www.rbi.org.in
[18]	www.india.gov.in
[19]	www.commerce.nic.in
[20]	www.dipp.nic.in

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