Unit 3: Project Identification

3.1 Introduction

The identification of promising project ideas is the first step towards establishing a successful project. It is also the beginning of the mobilization of investment funds.

The identification of opportunities for project (investment) requires an understand of the environment in which one operates, sensitive to emerging investment possibilities, imaginative analysis of tangible and intangible factors, and also an element of luck. The task is partly structured and partly unstructured; partly dependent on convergent thinking and partly on divergent thinking; partly requiring objective analysis of quantifiable information, partly requiring subjective evaluation of qualitative factors; and partly amenable to control, partly dependent on fortuitous circumstances.

The task (objective) of identification stage is to identify investment opportunities, which are feasible and promising and which deserve further in-depth study and appraisal. To briefly discuss the identification stage, the following points are explored.

- ✓ Generation of ideas
- ✓ Monitoring the environment
- ✓ Corporate appraisal
- ✓ Scouting for project ideas
- ✓ Preliminary screening
- ✓ Project rating index
- ✓ Being an entrepreneur

3.2 Generation of Project ideas

‘Necessity is the mother of invention’ sounds rhythmic with projects, as they are roots of needs and wants. These needs may be social, political, economic, commercial, technical or environmental that drives the actions of entrepreneurs to pursue some creative actions. That is project ideas are generated in order to satisfy the needs and wants. These actions will impact both the macro and micro perspective of mankind.

Stimulating the flow of ideas:

Most organizations adopt a causal and haphazard approach to the generation of ideas. To stimulate the flow of ideas, the following are helpful:

a. SWOT Analysis – SWOT stands for strength, weakness, opportunities and threats. SWOT analysis represents a conscious, deliberate and systematic effort by an organization to identify their internal strengths and weaknesses and the opportunities and threats in the environment. This analysis helps to identify opportunities that can be profitably exploited by the organization in light of its strength and weakness. Thus, periodic SWOT analysis facilitates the generation of ideas.

b. Clear articulation of objectives – A clear articulation and prioritization of objectives of an organization helps in canalizing the efforts of employees and helps them to think more imaginatively.

The operational objectives of the firm may include

1. Cost reduction
2. Productivity improvements
3. Increase in capacity utilization
4. Improvement in contribution margin
5. Expansion into promising fields

c. Fostering a conductive climate – To tap the creativity of people and to harness their entrepreneurial urges, a conducive organizational climate has to be fostered.

3.3 Monitoring the environment

Basically a provision investment idea enables a firm (or entrepreneur) to exploit opportunities in the environment by drawing on its competitive strengths or to minimize the external threats hence, the firm must systematically monitor the environment and assess its competitive abilities. The business environment consists of all those aspects and forces in the

surroundings of business enterprises under which business operations are to be carried out effectively and efficiently. Business external environment can broadly be divided in to two categories, namely:

1. Macro – external environment, and
2. Micro – external environment

Macro – external environment

The macro environment (which include the economic, political and legal, social and cultural, and technological forces) and its important aspects studied in monitoring consists of the following:

Economic sector	- State of the economy - Overall rate of growth - The growth rate of primary, secondary and tertiary sectors. - Projected national income trends, GNP trends - Projected industry output, projected price movements - Trends in fiscal, credit and monetary policies - Cyclical fluctuation of the economy - Corporate taxation and incentives - Provisions of infrastructure - Inflation rate, interest rate, exchange rate - Unemployment level - Linkage with the world economy - Balance of payment (trade surplus/deficit) - Budget deficit/surplus
Governmental (political and legal) sector	- Manifestoes of party in power and the opposition - Attitude towards investors - Restrictions on areas of investment by private sector - Restrictions on imports - Industry policy - Import and export policies - International trade regulation - Government programs and projects - Tax framework - Subsidies, incentives - Financing norms - Lending conditions of financial institutions and commercial banks - Environmental protection laws - Control over prices and distribution of goods
Technological sector	- Emergence of new technologies - Access to technical know-how, foreign as well as

	indigenous - Transport - Product processing - Use of computers and other automations - Receptiveness on the part of the industry
Social and cultural sector	- Population trends, shift in population among regions - Age shifts in population - Educational profile - Employment of women - Attitude towards consumption and investment - Changes in ethnic composition - Customs, beliefs and values

Micro – External environment

The micro external environment is also known as Task environment. The micro – external environment is mainly concerned with industry, market, competitors, etc. and the major factors to be studied consists of:

Competition sector (analysis of the industry and the market)	- Number of firms in the industry and the market share of the top few - Degree of homogeneity and differentiation among products - Exit and Entry barriers - Comparisons with substitutes in terms of quality, price and functional performance - Marketing policies and practices - Capacity utilization - Product life cycle - Foreign opportunities
Supplier sector	- Availability and cost of raw materials and sub-assemblies - Availability and cost of energy - Availability and cost of money - Exit and entry of suppliers - Power of suppliers

3.4 Corporate Appraisal

A realistic appraisal of corporate strengths and weakness is essential for identifying investment opportunities, which can be profitably exploited. The

broad areas of corporate appraisal and the important aspects to be considered under them are as follows:

Market and distribution:

- Market image
- Product line
- Market share
- Distribution network
- Customer loyalty
- Marketing and distribution cc

Corporate resource and personnel:

- Corporate image
- Clout with governmental and regulatory agencies
- Dynamism of top management
- Competence and commitment of employees
- State of industrial relations

Production and operations:

- Conditions and capacity of plant and machinery
- Availability of raw materials, sub-assemblies and power
- Degree of vertical integration
- Locational advantages
- Cost structure

Finance and accounting:

- Financial leverage and borrowing capacity
- Cost of capital
- Tax situation
- Relations with shareholders and creditors
- Accounting and control system
- Cash flow and liquidity

Research and development:

- Research capability of the firm
- Track record of new product development
- Laboratories and testing facilities
- Coordination between research and operation

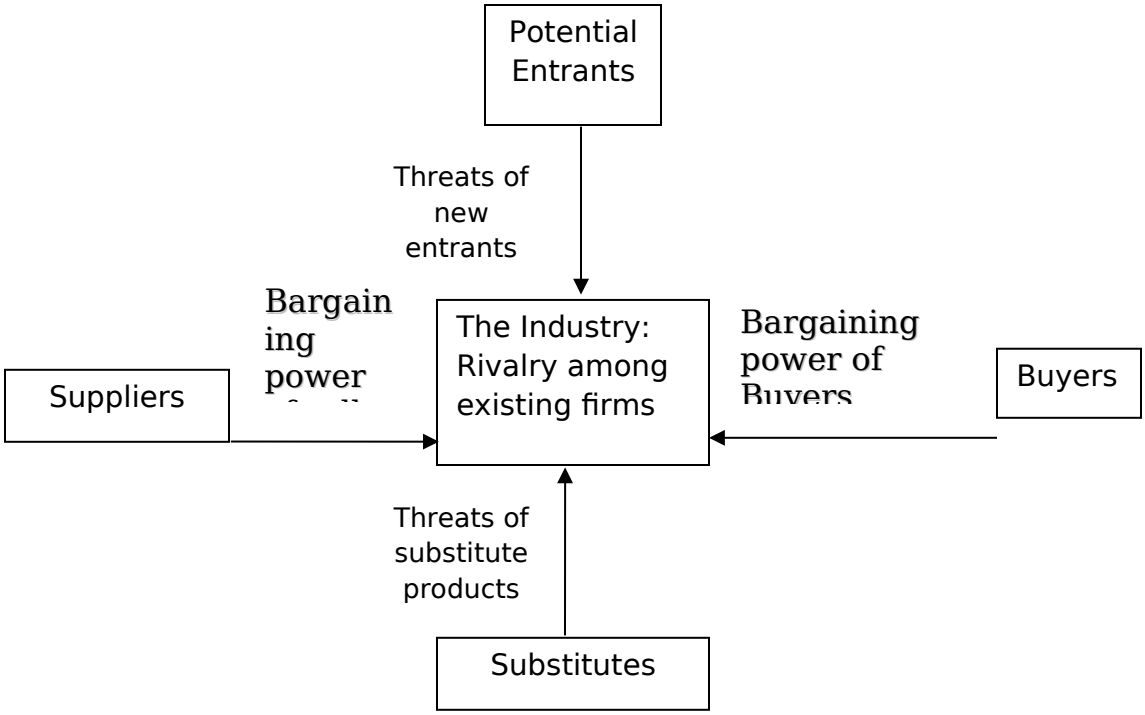
3.5 Profit potential of the industry/Industry Analysis

Michael porter has argued that the profit potential of an industry depends on the combined strength of the following five basic competitive forces:

1. Threat of new entrants
2. Rivalry among existing firms
3. Pressure from substitute products
4. Bargaining power of buyers

5. Bargaining power of sellers/suppliers

These five forces are depicted in the following diagram.



Each of the above forces will be explained in the section that follows:

1. Threat of New Entrants

If an industry faces the threat of new entrants, its profit potential would be limited. New entrants have the following effects on the industry:

- Add (increase) capacity
- Inflate costs
- Push prices down
- Reduce profitability

The entry barriers may limit the number of new entrants and the effect as well. If it is not easier to entry an industry, the threat from new entrants is low. Entry barriers are high when:

a) Entrance requires substantial resources to invest
b) Economies of scale are enjoyed by the industry
c) Control of the distribution channels by existing firms

d) Product differentiation by existing firms in the form of brand image and customer loyalty
e) High switching costs
f) The government policy may limit or even prevent new entrants.

2. Rivalry between Existing Firms

There could be stiff competition among existing firms in terms of price, quality, promotion, service, warranties, and so on. This is the case when one firm attempts to improve its competitive position, other firm may take counter action. Strong completion in the industry reduces the average profitability of the industry. The intensity of rivalry in an industry tends to be high when:

- The number of competitors in the industry is large
- The level of fixed costs is high
- There is chronic over capacity in the industry
- The industry's product is regarded as a commodity or near – commodity
- The industry confronts high exist barriers.

3. Pressure from substitute products

Substitute products are those products that perform the same function as the original products. Substitute products may limit the profit potential of the industry by imposing a ceiling on the prices that can be charged by the firms in the industry. The threat from substitute products is high when:

- the price-performance trade-off offered by the substitute products is attractive
- the switching costs for prospective buyers are minimal
- the substitute products are being produced by industries earning superior profits

4. Bargaining power of buyers

Buyers, the competitive force, can bargain for price reduction, ask for superior quality and better service, and induce rivalry among competitors. Buyers have high bargaining power when:

- the purchase is large
- switching costs are low
- it poses a strong threat of backward integration.

5. Bargaining power of suppliers

Like buyers, suppliers can exert a competitive force in an industry because they can increase material prices, lower quality and reduce the range of services that they provide. Powerful suppliers can reduce the profitability of the buyer's industry. Suppliers have strong bargaining power when:

- few suppliers dominate
- the supplier group is more concentrated than the buyer group
- there are hardly any viable substitutes for the products supplied
- the switching costs for the buyers are high
- their strong threat for forward integration

3.6 Scouting for Project Ideas

Good project ideas – the key to success – are elusive. So a wide variety of sources should be tapped to identify them. Here are some suggestions in this regard.

- Analyze the performance of existing industries
- Examine the inputs and outputs of various industries
- Analyze possible extension of existing lines of manufacture by backward or forward integration linking
- Analyze inter-linkage with other industries, indigenous or transnational
- Review import and exports
- Study plan outlays and governmental guidelines

- Look at the suggestions of financial institutions and developmental agencies
- Investigate local materials and resources
- Analyze economic and social trends
- Study new technological developments
- Draw clues from consumption abroad
- Analyze sectors successful in other countries with similar economic background and levels of development, capital, labour and natural resources.
- Study new technological developments
- Explore the possibility of reviving sick units
- Identify unfulfilled psychological needs
- Attend trade fairs
- Hope that the chance factor will favor you
- Brain storming

3.7 Preliminary Screening

By using the suggestions made in the preceding sections, it is possible to develop a long list of project ideas. Some kind of preliminary screening is required to eliminate ideas which are not promising. For this purpose, the following aspects may be looked in to:

- Compatibility with the promoter’s objectives
- Consistency with governmental priorities
- Availability of inputs
- Adequacy of market
- Reasonableness of cost
- Acceptability of risk level

Project preliminary screening is like pouring all the ideas into a filtering funnel. In the first instance, all possible project ideas are listed (identified). Then some of them are eliminated and few projects are screened for further

analysis. After detailed study of few limited projects, one project will be selected at the end.

3.8 Project Rating Index

When a firm evaluates a large number of project ideas regularly, it may be helpful to streamline the process of preliminary screening. For this purpose, a preliminary evaluation may be translated into a project rating index. The steps involved in determining the project rating index are as follows:

1. Identify factors relevant for the project rating
2. Assign weights to these factors (the weights are supposed to reflect their relative importance)
3. Rate the project proposal on various factors, using a suitable rating scale. (Typically a 5-point or a 7-point scale is used for this purpose.
4. For each factor, multiply the factor rating with the factor weight to get the factor score.
5. Add all the factor scores to get the overall project rating index.

Example of project rating index

Assume that the following factors are identified to be relevant for project rating

Factors	Factor weight
- Technical know-how	0.20
- Input availability	0.15
- Reasonableness of cost	0.20
- Adequacy of market	0.05
- Stability	0.10
- Dependence of firm's strength	0.20
- Consistency with government priorities	0.10

If the firm uses five rating scale, determine the rating index for the project

Factor	Facto	Rating	Factor

	r weight	5	4	3	2	1	Score
Technical know-how	0.20		✓				0.80
Input Availability	0.15			✓			0.45
Reasonableness of costs	0.20	✓					1.00
Adequacy of market	0.05		✓				0.20
Stability	0.10	✓					0.50
Dependence of firm's strength	0.20				✓		0.40
Consistency with gov't priorities	0.10	✓					0.50
	Rating index						3.85

What is the purpose of rating index? Project rating index enables to identify (from the list) the project(s) that can be studied further in detail. If the policy of the firm is to further study the projects whose rating index is 3.50 and above, the above project will enter the next phase of the project.

3.9 Being an Entrepreneur

What qualities and traits are required to be a successful entrepreneur? While it is difficult to answer this question definitively, it appears that a successful entrepreneur has the following qualities and traits:

- Willingness to make scarifies
- Leadership
- Decisiveness
- Confidence in the project
- Marketing orientation
- Strong ego

3.10 Managing Risk

Risk is an inherent property of any change activity and is considered exclusively as a future phenomenon. Risks may happen in project work but it is very difficult to write down any specific universal rules for managing all risks. Risk management, however, is important because it enables to minimize or even avoid the 'show-stoppers' that can cost huge money to correct. Besides, risk management is important for the following:

- Predict the serious threats to the project before they happen

- Enable mitigation actions to be implemented immediately
- Enable contingency plans to be derived in advance
- Improve decision making in managing the project portfolio
- Help to create a ‘no surprise’ environment for the project

Risk management of a project is not a utility; it is a vital and fundamental part of the project management process that impacts the probability of success.

3.10.1 Project Constraints and Risk

Constraints are those things that are imposed on the project knowingly or unknowingly. The project has three major constraints; namely,

1. **Cost**. It refers to the overall cost of the work
2. **Schedule**. It refers to the time the project will take
3. **Scope**. It refers to the project deliverables or outputs and the quality of the work.

Project constraints and project risks are not the same. Constraints exist throughout the project life. The project will be operated under these constraints.

3.10.2. The Risk Management Process

The identification and management of risk involves several phases. These phases are described below:

1. **Identifying Risk**. Risk identification is the first step in risk management process. The approaches to risk identification process include:
    - Brainstorming session
    - Checklists developed from data generated from past projects
2. **Assessing the Risks.** All projects have risks at the outset because of the many unknown factors. Risks may disappear and new risks appear as the project progresses. Risk assessment requires answers to the following questions:

- What exactly is the risk?
- How serious it is as a threat to the project?
- What could be done to minimize its impact on projects success?

For each risk an attempt should be made to establish the following two characteristics:

a. What is the probability of it happening? The probability of occurrence is on a scale of 1 to 9. 1 is low which means most unlikely to happen whereas 9 is high which means very high probability it will happen.
b. What is the likely impact on the project if it happens? The impact on the project could be high, medium or low. High impact means the risk has significant effect on the schedule and project costs. If the impact is medium, the risk has less serious effect on the schedule and some effect on costs. If the impact is low, the risk has some effect on schedule and little effect on costs.

3. **Ranking of Risks**. The ranking of risk is based on the impact and probability of occurrence. Risks can be ranked using either a qualitative or quantitative approach. The approach used should rank the risk as high risk, medium risk, and low risk.
4. **Record the ranking on project risk log and derive action plan**. All the risks must be recorded in the project risk log. To derive action plan, the following should be recorded:
   - A Short description of the risk;
   - When t is expected to occur;
   - The probability assessed;
   - What consequences are expected;
   - What actions will be taken if it happens
   - Who will take the actions
   - Who is responsible for monitoring the risk

5. **Monitoring Risks**. Once risks to the project have been identified and action plans derived, then these must be monitored to make sure that prompt action is taken when appropriate. Risks change with time so careful monitoring is essential as the project proceeds, achieving success is dependent on effective risk monitoring.