

**METHODIST COLLEGE OF ENGINEERING &
TECHNOLOGY
HYDERABAD
DEPARTMENT OF MECHANICAL
ENGINEERING**



**LECTURE NOTES
FOR
ENTREPRENEURSHIP
UNIT-II**

Unit-II

Identification and characteristics of entrepreneurs. Emergence of First generation entrepreneurs, environmental influence and women entrepreneurs. Conception and evaluation of ideas and their sources. Choice of Technology – Collaborative interaction for Technology development.

Development in any walk has depended to some degree or other on individual qualities of entrepreneurship.

Small enterprises are usually initiated, managed and developed by one or few individuals of these qualities of entrepreneurship. This constitutes one of the major resources in the promotion of small enterprises.

Identifying entrepreneurs has led to both plain and scientific regarding the characteristics of potential entrepreneurs.

Earlier conception of entrepreneur was described as a man engaged in military expedition.

1.0 Emergence of first generation entrepreneurs:

A first generation entrepreneur is one who starts an individual unit by innovative skills. He is essentially an innovator combining different technologies to produce a marketable product or service.

- Entrepreneurship did not grow early in India due to various reasons like lack of capital, lack of political unity, network of custom barriers, colonial power etc.
- East India Company probably gave new stimulus to Indian business people, especially Parsis, by accelerating the export of raw materials and import of finished goods. The first ship building company was started in Surat where from 1673 onwards Parsis built vessels for East India Company. Lowjee Nushirvan belonging to Wadia family led many leading ship builders for East India Company.
- The managing agents, the businessmen operating in the Agency houses, are the real entrepreneurs of India.
- The first cotton mill was set up by a Parsi- Cowasjee Nanabhoy Davar in Bombay.
- J N Tata gave lead in steel industry in the last quarter of 19th century.
- In Ahmedabad a second largest textile mill was started by Ranchhodlal Chhotalal belonging to a Brahmin family.

- After First World War cement and sugar industries experienced fast progress. A group of self made entrepreneurs began to emerge who by ploughing back their profits into their small workshops, built up larger industrial establishments.
- During Second World War entrepreneurs got many incentives for setting up new industries.
- After independence Government of India devised schemes for balanced and mixed economy. Under the five year plans the government laid emphasis on the growth of small scale industries in cities, towns and villages which led to the rapid emergence of many entrepreneurs.
- Public sector undertakings contributed to the maximum extent to the growth of economy and development of many ancillary industries.
- The advancements in the fields of electronics, communications and computers stimulated many first generation entrepreneurs.

Characteristics of 1st generation of Entrepreneurs:-

(The Entrepreneurs who are entering for the first time into the business world are called 1st generation Entrepreneurs)

1. High need for achievement
2. High need for power
3. Independence
4. Propensity to take risk
5. Personal modernity
6. Sense of efficacy
7. Support
8. Business experience
9. Leadership
10. Mental ability - intelligence and creativity
11. Clear objectives
12. Maintaining business secrecy
13. Human relations ability
14. Communications ability
15. Technical knowledge
16. Emotional stability
17. Self confidence
18. Motivating skills
19. Long term involvement
20. High energy level

Identification of potential entrepreneurs:

Based on the belief that potential entrepreneurs can be identified and trained, financial institutions in Gujarat have established the Entrepreneurship Development Program (EDP) to promote small enterprises by tapping this latent talent.

Effective psychological-behavior testing can identify potential entrepreneurs and careful guidance in the selection of suitable entrepreneurs and appropriate practical training can develop successful entrepreneurs.

Feature of SIET (Small Industry Extension Training Institute) selection test programmers are psychological tests like TAT, Risk-taking, Personal efficacy; 2) Finding out the socio-economic/educational background of the candidate and 3) personal interviews.

Techniques of identification:

Analysis of application Blank: - Application comprises of the questions related to educational background, family background, previous experience, social participation and level of aspiration of the individual. Applications elicit basic information about the back-ground and experience of the candidate. At successive stages, applications are evaluated on the basis of behavioral science techniques. Testing is meant to measure candidate's motivation to achieve, the capacity to take risks and resolve problems, the extent of their positive self image and their interest in setting up business.

A rigorous screening is being done on the basis of the analysis of the application blank.

TAT (Thematic Appreciation Test): -It is a semi-projective test in which six selected pictures are shown to the individual for a short period of 30 seconds each. He is then asked to write a story about each picture within a time limit of 5 minutes. It is assumed that careful analysis of this test may give a clear indication of his need for achievement, power and motivation.

Ring toss game: - The ring toss game is played with 3 rings and 1 peg. The distance from the peg is marked and the respondents are asked to select any distance for throwing all the 3 rings. The success is that at least 2 rings should be pegged. The risk propensity of the respondents is scored according to the distance chosen and the amount of risk perceived by the respondents from that distance.

Locus of control: - This test gives about the Personal efficacy. The locus of control is measured by administering a questionnaire consisting of 29 pairs of statements representing external and internal locus of control. The respondents are asked to choose one from each pair. They are given scores for their choice. It is assumed that a high score on internal locus of control is indicative of entrepreneurial behavior.

Group Planning Exercise: - Stimulated exercises can be used to observe the

group behavior of an individual. A task is given to the candidates and the objectives to be accomplished are explained to them. Resources available are described and a time frame is provided to perform the task. The task in the simulated exercise is so designed that its performance elicits observable behavior of the participants. While the task is performed, two observers score the observed behavior as related to leadership, team spirit, commitment to tasks, planning and organizing ability and decision-making ability.

Personal Interview: - The personal interview is conducted to assess the knowledge, interest and skill required by the potential entrepreneurs. There are some drawbacks in this selection process and procedure. In the actual practice has to undergo further refinement, while the principle of entrepreneur selection has found a foot-hold.

Above training programs are conducted by SISI, TCO (Technical Consultancy Organization like APITCO (Andhra Pradesh Industrial Technical Consultancy Organization), KITCO, UPITCO etc., in collaboration with SIET Institute, SBI.

Punjab experience: - The survey revealed that 50% are motivated by their own ideas. 80% were happy with their ventures and ready to convince other persons to become entrepreneurs.

Gujarat experience: - In 1970 Gujarat Entrepreneurship Development Programme was started by the State government. Basic assumption was that the entrepreneurship can be induced or developed. Potential entrepreneurs are identified by industries certain tests designed by Behavioral Sciences Centre, New Delhi. 66% were successful in setting up enterprises.

2.1 Entry barriers:

Entry barriers are those forces limiting access to identified business opportunities and capitalization on these opportunities. These are:

1. A cultural bias in identifying and managing the entrepreneurial development process.
2. Insufficient market information and industry data
3. Limited effectiveness of infrastructural base
4. Existence of visible and invisible obstacles to entry of specific social group (ex. Women) into business.
5. Hostile environment
6. Limited access to technology

2.0 Environmental influence:

Modern business is treated as a social and economic institution and is affected by the political, social and economic forces. It is the

environment which regulates the entrepreneurial activities. The environment can be classified as

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <p>1. Political</p> <ul style="list-style-type: none"> • Political atmosphere • Leadership | <p>2. Economic</p> <p>Economic policies</p> <p>Labor</p> <p>Trade</p> <p>Tariffs</p> <p>Incentives</p> <p>Subsidies</p> |
| <p>3. Social</p> <ul style="list-style-type: none"> • Consumer Labor • Attitudes profitability • Opinions • Motives | <p>4. Technological</p> <p>Competition & risk</p> <p>Efficiency</p> <p>Productivity &</p> |
| <p>5. Legal</p> <p>Rules & regulations</p> | <p>6. Cultural</p> <p>Structure</p> <p>Aspirations & values</p> |

3.1 Factors influencing entrepreneurship:

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1 Socio-demographic variables</p> <ul style="list-style-type: none"> • Educational & technical qualifications variables • Emigration property • Family background income • Previous occupation investment | <p>2. Economic</p> <p>Ancestral</p> <p>Prior</p> <p>Initial</p> <p>Profit utilization</p> <p>Level of living</p> |
| <p>3. Variables of system linkages characteristics</p> <ul style="list-style-type: none"> • Contacts at higher social & govt. levels qualities • Availability of technical advice • Mutual help • Political affiliation • Social participation to evaluate | <p>4. Latent</p> <p>Leadership</p> <p>Innovativeness</p> <p>Risk bearing</p> <p>Self reliance</p> <p>Eagerness</p> <p>Personal training</p> <p>enterprise & fix</p> |

long & short term
goals

Development of women entrepreneurs:

- Women constitute about 50% of the world population.
- Women have been victims of social prejudices and assumptions.
- In traditional societies, women had been confined to the four walls of home, children, household affairs and family rituals and customs.
- In recent years, women have been in the forefront in different walks of life and competing successfully with men despite the social, psychological and economic barriers because of education, political awakening legal safe guards, urbanization, social reforms etc.
- In the 7th five year plan, a special chapter on women's development has been included giving the plan of action for "integration of women in development".
- The new industrial policy of Govt. of India has specially highlighted the need for conducting training programs for women.
- The training programs should be reoriented to include imparting new skills in various areas rather than emphasizing only on female oriented courses like stitching, embroidery, household decoration etc.
- With the spread of education and new awareness, women entrepreneurs are entering the fields of higher levels of 3 Es – Engineering, Electronics & energy. Today no field is unapproachable to women.
- The Govt. of Kerala provides a lot of assistance to women entrepreneurs in Kerala through agencies like KITCO, DICs. The areas of assistance include
 - Preparation of project reports
 - Meeting the cost of machinery and buildings
 - Training & hiring managerial personnel
 - Sales tax exemption for 6 years
 - Meeting 100% cost of technical expertise
- The factors encouraging women to become entrepreneurs are:
 1. Pull factors
 - Women choose a profession as a challenge and adventure
 - Urge to do something new
 - Liking for business and to have independent occupation

2. Push factors

- Takes up enterprise to get on financial difficulties
- Thrusted responsibility due to family circumstances

4.1 Problems of women entrepreneurs:

1. Being a woman she has to fulfill her responsibilities towards her family.
2. Bear the attitudes of the society towards her and work under the constraints despite the constitutional and legal equality.
3. Lack of proper training for improving or acquiring the necessary skills.
4. Difficulty in rising finances as they are dependent on men
5. Procedures, rules and regulations discourage them.
6. Difficulty in interacting with government departments
7. Difficulties in marketing and exploitation by middlemen both in purchasing raw materials and selling finished goods.
8. Psycho-social barriers
 - Poor self image
 - Inadequate motivation
 - Discriminating treatment
 - Faulty socialism
 - Cultural values
 - Lack of courage and self confidence
 - Lack of freedom

Sources of innovation:

1. Unexpected success, Unexpected failures, Unexpected outside events
2. Incongruity (discrepancy between what is and what it ought to be)
3. Process need
4. Industry and market structure
5. Demographics (Changes in population)
6. Changes in perception
7. New knowledge

Principles of innovation:

Principles of innovation require a few Dos and a few Don'ts.

Dos:

1. Purposeful, systematic innovation begins with an analysis of opportunities
2. Innovation is both conceptual and perceptual. The second imperative of innovation is to go out to look, to ask, and to listen.

3. An innovation to be effective has to be simple and has to be focused.
4. Effective innovations start small. They are not grandiose. They try to do one specific thing.

5. A successful innovation aims at **leadership**.

Don'ts:

1. The first is simply not to try to be clever.
2. Do not diversify. Innovations that stray from core are likely to become diffuse. They remain ideas only.
3. Finally do not innovate for the future. Innovate for the present.

Conditions:

1. Innovation is work. Needs knowledge. Requires great ingenuity.
2. To succeed, innovators must build on their strengths.
3. Finally innovation always has to be close to the market, focused on the market, indeed market driven.

Project *ideas* and Technology

PROJECT: - A project can be defined as a scientifically evolved work plan devised to achieve specific objectives within a specified period of time.

A. project can be considered as a proposal involving capital investment for the purpose of developing facilities to provide goods or services. A project is a specific activity on which money is spent in the expectation of returns.

The project involves allocation and consumption of resources on one hand and generation of resources, goods, or services on the other hand.

The work plan must lay down clearly

1. Manner in which the pre-determined project objectives are sought to be achieved.
2. The resources which will be consumed in the process of achieving the objectives.
3. The time required for achieving the objectives.

Project classification:

Project can be:

1. Production of goods/services.
2. Increasing the capacity of the existing projects (modernisation).
3. Increasing the productivity of the existing means of production.

Projects may be classified to help in graphically expressing and highlighting the essential features of the project. Generally the projects include all activities which are aimed at

1. Production of goods and services
2. Increasing the capacity of the existing projects

Conceiving the Idea/Sources of Ideas:-

The entrepreneur has to first search for a sound and workable business idea and must give a practical shape to it. He should be convinced that the idea is sound and likely to give a reasonable return on his investment.

Project ideas originate from the various sources or due to different reasons like

1. The success story of a friend/relative,
2. Experience of others in manufacture/sale of product,
3. Demand for certain products,
4. Chances of producing a substitute of an article imported for which there is good demand,
5. Visits to trade fairs,
6. Study of Project profiles and industrial potential surveys,
7. Meeting government organizations
8. Review of imports and exports
9. Suggestions of financial institutions and development agencies
10. Possibilities of reviving sick units
11. Unfulfilled psychological needs of customers
12. Economic and social trends
13. Study of outlays of government expenditure
14. New technological developments etc., and of course the motivation, background and skill of the entrepreneur and his associates.

The first and foremost problem of an entrepreneur is to find out a suitable business which can give him a reasonable profit. So, entrepreneur has to first search for a sound or workable business idea and gives a practical shape to his idea of the business. He confronts number of problems and his ultimate success will depend upon his ability and foresight to tackle the various problems with which he will be faced from time to time. Therefore problems before starting his new enterprise.

- Marketability of the product
- Its use (industrial use, domestic use, ancillary)
- Its buyers
- Demand and supply over the last few years to estimate its future demand

Demand of the product to be decided after considering of the anticipated changes in technology.

- Levels of incomes of the people
- Throughout the country
- One or two states or a particular region
- Repeat product (like soap* tooth paste etc.)
- Durable article (like watch, refrigerator etc.)
- Low priced to take advantage of large sales/ fix high price so that he can get fair margin even on a smaller volume of sales. In addition dealers' networks or distribution channels to be

properly planned.

The entrepreneur should probe the various consequences of giving a practical shape to his ideas with an analytical mind. He should not only draw upon his past experience but also take advice from his reliable business friends. In addition, it may even be advisable to obtain experts advice from professionals, like bank managers, dealers, commercial consultants, advertising agencies and even auditors.

- I. Prospective consumers
- II. Items reserved for small scale units
- III. Attending motivation campaigns
- IV. Industrial Potential Surveys
Government organizations like S.I.D.C., S.I.S.I., District Industries Centre, S.I.E. Centers, F.D.C. both at all India and State levels have identified viable projects and prepared District Industrial Potential Surveys.

Some abbreviations

- D.C. (SSI) - Development Commissioners - Small Scale Industries
 T.C.O. - Technical Consultancy Organization
 I.D.B.I. - Industrial Development Bank of India
 (TAF - Technical Assistance Fund)
 I.I.G - Inter Institutional Groups
 TCO - Technical Consultancy Organization in various states (like APITCO - Andhra Pradesh Industrial Technical Consultancy Organization)
 I.C.I.C.I. - Industrial Credit and Investment Corporation of India
 (Established in 1973)
 MDI - Management Development Institute
 established in 1973
 SIET Institute - Small Industry Extension Training
 Institute
 SISI - Small Industry Services Institute
 SSIDO - Small Scale Industrial Development
 Organization
 NPC - National Productivity Council
 NCAER - National Council of Applied Economic Research
 TECSOK - Technical Consultancy Organization of Karnataka
 ISIC - International Standard Industrial Classification of UNIDO

Difference between a Trade Fair and an Exhibition:-

The word fair is used to describe a general and large international event which admits a wide range of goods, which the exhibition connotes a national event or a specialized fair. Significance of Trade Fair:-

1. Meeting a large number of buyers from different countries at one place, and exchanging views on business environment
2. Assessing the market trend i.e., market in terms of demand potential and type of products required
3. Assessing attitudes of the competitors in a particular product or marketing area
4. Comparing the prices and quality of similar products
5. Establishing personal contacts with the dealers/importers/customers of the product and organizing trade negotiations
6. Assisting the exhibitors to acquire knowledge of the latest scientific techniques of production and marketing, particularly by their competitors
7. Publicity economic achievements of a country and expand export.

Types of Trade Fairs:-

These are theme based and purpose based and categorized on the basis of general and specialized fairs.

Some of the trade fairs are HANOVER Engg. Fair, COLOGNE Fair for international clothing machines, MUNICH Fair for cosmetics ANUGA Food Fair at COLOGNE held in West Germany annually. About 2000 trade Fairs and exhibitions are held annually all over the world.

Trade Fairs in India:-

The concept of trade fairs in India may be traced back to the institution of melas in ancient times. A true beginning towards the promotion of a fair-culture in India started with Asia 1972 held at Pragati Maidan (an area of 120 acres of garden land located in the centre of the city) in Delhi. It had impressive halls, restaurants, shopping arcades, auditoriums, museums, art gallery, cinema, administrative offices, including banks, telex and postal facilities, customs clearance arrangements, travel agencies, railway sidings, warehouses and a comprehensive, security and public address systems. India International Trade Fair 1981 and over 40 countries took part.

Trade Fair Authority of India (TFAI) established in 1976 by Government of India not only helps Indian exporters to participate in international trade fairs/exhibitions but organizes wholly Indian exhibitions in several countries with participation by Specialized Commodity Boards, the Trade Development Authority and even some industry and trade associations in collaboration with various agencies. On the recommendations of the Trade Fair Authority of India the RBI releases necessary foreign exchange required by export promoters to visit/participate in international trade fairs.

2.1 Stimulating the flow of ideas:

To help conception of ideas which can be turned into a profitable product, the following steps may be useful.

1. SWOT analysis:

The introspection into the organization's Strengths, Weaknesses, Opportunities and Threats facilitates the generation of new ideas.

2. Clear articulation of objectives:
 - Cost reduction
 - Productivity improvement
 - Increase in capacity utilization
 - Improvement in contribution margin
3. Fostering a conducive climate:
 - Providing unconstrained environment
 - Introduction of suggestion schemes

2.2 Evaluation of ideas:

Evaluation and preliminary screening are needed to eliminate ideas which prima facie are not promising. The following aspects will be helpful in evaluating the ideas in the initial stages.

1. Compatibility with promoter
 - Interest
 - Personality
 - Resources
2. Consistency with government priorities
 - Consistent with national goals and priorities
 - Environmental effects
 - FE requirements
 - licenses
3. Availability of inputs
 - Capital requirements
 - Technical know-how
 - Raw materials
 - Power requirements
4. Adequacy of market
 - Competitors and market share
 - Export market
 - Price profile
 - Sales and distribution system
 - Consumption patterns
5. Reasonableness of cost
 - Cost material inputs
 - Labor costs
 - Economies of scale
 - Overheads
6. Acceptability of risk level
 - Vulnerability to business cycles
 - Technological changes
 - Competition from substitutes, imports

- Government controls over price and distribution

2.21 Project rating index:

Preliminary evaluation may be streamlined by a rating index which can be worked out as follows.

Steps:

1. Identify factors relevant for project rating
2. Assign weights to these factors reflecting the relative importance
3. Rate the project proposal on various factors using a suitable scale say 5 point scale
4. For each factor multiply the factor rating with factor weight to get the factor score
5. Add all the factor scores to get the over all project rating index.

Construction of rating index

Factors	Factor weight	Rating				Factor score
		VG VP 5 1	G 4	A 3	P 2	
Input availability	0.25			X		0.75
Technical know-how	0.10		X			0.40
Reasonableness of cost	0.05		X			0.20
Adequacy of market	0.15	X				0.75
Complimentary relationship with other products	0.05		X			0.20
Stability	0.10		X			0.40
Dependence on firm's strength	0.20	X				1.0
Consistency with govt. policies	0.10			X		0.30
Total	1.0					4.00

3.0 Manufacturing Process / Technology:

For manufacturing a product, often two or more alternative technologies are available. For Example:

Steel: Bessemer process or open hearth process

Cement: Dry process or wet process

Hence it is necessary to select an appropriate technology suitable to local economic, social and cultural conditions. Technology

selected must also be suitable for the utilization of local raw materials, manpower, and catering to the basic needs.

3.1 Choice of Technology:

Factors influencing the selection of technology:

- | | |
|----------------------------------------|------------------------|
| 1. Plant capacity | 5. Product mix |
| 2. Principal inputs | 6. Latest developments |
| 3. Investment out lay and product cost | 7. Ease of absorption |
| 4. Use by other units | |

3.2 Acquiring Technology:

Technology may either be developed internally or acquired from others who have successfully implemented and been using profitably.

The various methods of acquiring technology are

1. Technology licensing
 - License to use the patented technology on mutually agreed basis
 - Package has to be disaggregated into its components
 - Clear terms and conditions like extent of technology, cost, guarantees provided, duration of license, purchase of intermediate products, components and other inputs, use of trade name etc.
2. Purchase of technology (Transfer of technology)
 - Suitable where technology is stable in the future
 - No further assistance is needed from the seller of technology
 - Capability to absorb technology and maintain study growth.
3. Joint venture arrangement (Collaboration)
 - Technical collaboration
 - Technical and Financial collaboration
 - Buy back arrangements
 - Equity holding motivates the supplier in transferring the improvements promptly.

3.3 Collaborative interaction for Technology Development:

- Sharing investment costs
- Exchanging expertise and technological knowledge
- Joint Research and development efforts for mutual benefit
- Expanding market share and competitive advantage