

# Chapter 2

## Entrepreneurial Innovation

### 2.1. ENTREPRENEURSHIP – AN INNOVATION

#### 2.1.1. Introduction

Innovation and entrepreneurship hold the potential to create new value in the health sector by invention, dissemination and use of new products, as well as development and scaling of new business models. Most powerfully, these can be combined, where new technology links with formalised clinical practice patterns and new business models. India faces a dual challenge of low levels of expenditure and relatively ineffective and inefficient services. Innovative practices in existing businesses and organisations along with the creation of new ventures based on new business models and technology, hold the potential of creating much greater value for the resources expended.

‘Innovation’ refers to the ability of a person to develop something new based on his acquired knowledge. Here, ‘something new’ means it should be totally different from all the other existing things. Innovation plays a crucial role in almost every phase of life. It is usually related to various areas like business, technology or engineering and it can even be applied on a personal level. One of the key functions of innovation is problem solving. An entrepreneur needs to be creative in order to innovate. Innovation is considered as an important function in the process of entrepreneurship. Thus, it can be concluded that creativity is a preliminary requisite of innovation.

**According to Stephen P. Robbins,** “Innovation is a new idea applied to initiating or improving a product, process or services”.

**According to Peter Drucker,** “Innovation is the means by which the entrepreneur either creates new wealth producing resources or endows existing resources with enhanced potential for creating wealth”.

It is very important and challenging to manage the innovation process. It is important because it provides business opportunities to the entrepreneurs, and is challenging, as it contains a number of elements in its process. Therefore, for the success and survival of any business enterprise it is crucial to effectively manage the R&D and innovation practices. There are different approaches which are used by the companies depending on the size and type of business.

Innovation management is a part of top management of the company. It is the main source to integrate innovation with the corporate structure. According to the definition, this is related to the “development, introduction and, as the case may be, implementation and enforcement of technical and social technical initiatives of the management of the business”. In a common sense, innovation is a process through which entrepreneurs recognise business opportunities from the external environment and convert them into products or services in order to make profit.

#### 2.1.2. Innovation and Entrepreneurship

For entrepreneurs, innovation is a tool which helps them to apply change as an opportunity for developing a new business or service. Innovation has the ability of being represented as a discipline, being learned and being practiced. In order to grab an opportunity for successful innovation, an entrepreneur must carefully analyse and examine the potential sources of innovation, the changes and their symptoms. Alongwith this, they must also know and apply the principles of successful innovation. Entrepreneurs not only develop new ideas and convert them into products or services, but they also innovate. Innovation is an activity where new capabilities of available resources are identified to generate wealth. Thus, innovation produces a resource. In reality, a resource only finds its existence when it has a use for something in nature with an economic value.

The major objectives of innovation are:

- 1) To maintain the operations of existing business enterprise,
- 2) To make something better, and
- 3) To bring positive and desirable changes.

In an economy, the basic source of generating wealth is by increasing the productivity, effectiveness and efficiency of business enterprises which can be easily achieved through innovation. In case of businesses, innovation is often connected with the performance and growth which can be attained by improved efficiency, quality, market share, productivity, competitive position, etc. Innovation is not bound to single category of business. It can be practiced by all types of organisations such as private institutions, hospitals, universities, local government, etc. As per the traditional approaches to entrepreneurship, it is assumed that the business concepts and ideas have already been recognised and the main work of an entrepreneur is to draft a business plan and utilise the available resources, in order to implement them. However, in reality, the entire process of problem-solving includes identifying, evaluating and filtering a business idea and then transforming it into a business concept.

It is very important for an entrepreneur to know the exact way of managing creativity and translating the ideas into innovation. However, an idea needs a substantial creative leap in the beginning while the remaining process consists of numerous problem-finding and problem-solving activities each of which requires a creative input. In this process, an entrepreneur may require the skills of a particular person or may require inputs of different individuals for a constant time period. The development of an innovative product, whether a hydraulic vehicle or a baseball cap with fan, requires a combined effort of innovative individuals. There are three distinct perspectives through which the practice study of innovation and entrepreneurship can be approached. They are as follows:

- 1) Individual or personal, whichever highlights the role of entrepreneurship and innovation,
- 2) Social or collective, whichever stresses on the involvement of groups and teams, and
- 3) Contextual, which focuses on the environment, processes, tools and structures.

However, innovation and entrepreneurship can face a serious issue from these three different perspectives, that is, a need for relative effort between the individual, social and organisational contributions and also an interaction between them.

### 2.1.3. Entrepreneur as Innovator

**Joseph Schumpeter**, Austrian-born professor, is famous for focusing on the entrepreneur as the central figure in advancing the wealth of nations and creating dynamic disequilibrium in the global economy. In the process of “creative destruction” (of the market system), entrepreneurs play a central role by constantly assimilating knowledge not yet in current use and setting-up new production forms and functions to produce and market new products. He pointed-out that knowledge underlying the innovation need not be newly discovered and may be existing knowledge that has never been utilized in production. Therefore, the entrepreneur need not be an inventor and vice versa. He is the one who turns an invention into commercial exploitation. For **Schumpeter**, successful innovation requires an act of will, not of intellect. It therefore, depends on economic leadership and not mere intelligence. He felt that such a hazardous activity would not be undertaken by ordinary economic agents, but only by entrepreneurs with the vision, drive and commitment to survive the uncertainty and turbulence involved. When he succeeds, the entrepreneur will realize exceptional (be it temporary monopoly) profits and he may be able to fundamentally change existing or introduce new market and industry structures. Therefore, Schumpeter’s theory of “creative destruction” has sometimes also been known as “heroic entrepreneurship”.

While **Schumpeter** emphasizes technological innovation and improvement, **Ludwig von Mises**, declared that changes in consumer demand may require adjustments, which have no reference at all to technological innovations and improvements. He thought that the business of the entrepreneur is not merely to experiment with new technological methods, but to select those, which are best, fit to supply the public in the cheapest way with the things they are asking for most urgently. Whether a new technological procedure is or is not fit for this purpose is provisionally decided by the entrepreneur and finally decided by the conduct of the buying public. For **Mises**, the activities of the entrepreneur consist in making decisions and while decisions regarding innovation and technological improvement come under his purview, such decisions alone do not constitute an exhaustive set. This echoed the viewpoint of American economist, **F.W. Taussig** that although innovation is one of the activities performed by the entrepreneur, it is not the only one, and perhaps not even the most important one.

**Peter Drucker** notes that entrepreneurship can be defined as changing the yield of resources (seen in supply or production terms) or as changing the value and satisfaction obtained from resources by the consumer (defined in demand terms) and innovation to be the specific instrument of entrepreneurship. Like **Taussig and Mises**, **Drucker** asserts that innovation does not have to be technical and are often social as well. He argued that management (as 'a useful knowledge') is an innovation of the 20<sup>th</sup> century as it has made possible the emergence of the entrepreneurial economy in America and converted modern society into something brand new – a society of organizations. He therefore, prescribed a systematic form of entrepreneurship management, based on systematic innovation – "Systematic innovation consists in the purposeful and organized search for changes and in the systematic analysis of the opportunities such changes might offer for economic or social innovations".

### **Role of Entrepreneur as an Innovator in Economic Development**

As an innovator, entrepreneur performs the following roles:

- 1) **Bringing about New Combinations:** As an innovator entrepreneur brings about the new combinations in the following manner:
  - i) Introduction of new products;
  - ii) Introduction of new techniques of production;
  - iii) Opening up of a new market;
  - iv) Conquest of new source of supply of raw materials or semi-finished goods; and
  - v) The carrying out of new organisations of any industry like the creation of monopoly.
- 2) **Making use of Potential Technical Knowledge for Continuous Technological Progress:** According to **Schumpeter**, there always exists potential technical knowledge which entrepreneur can make use of. Continuous technological progress will spearhead towards innovation. Entrepreneur, in fact, depends upon the following two important things to achieve economic rewards:
  - i) The existence of technical knowledge in order to produce new products; and
  - ii) The power of dispersal over the factors of production in the form of credit.
- 3) **Emphasizing on Purposeful and Systematic Innovation:** Like **Schumpeter**, **Drucker** also emphasized on the role of entrepreneur as an innovator. He pointed-out that purposeful and systematic innovations begin with the analysis of opportunities and a successful innovation should aim at leadership. This quality is one of the most crucial attributes of the entrepreneur to bring about economic development. As entrepreneurship development and economic development are interlinked, changes in perception of the individuals are imperative. This will give rise to considerable innovative opportunities. Further, knowledge-based innovations are required for development of entrepreneurship.
- 4) **Implementation of Mechanical Skills:** According to Hoselitz, the founders of early industrial establishments in England, France, and Germany were men with mechanical rather than commercial and financial skills. These men came from the ranks of artisans, labourers, yeomen, and cottagers. A few of them were the sons of middle class parents. But the earliest entrepreneurs are men who worked with their hands, whose innovations were in the field of technology and who, in their majority, came from the lower, entrepreneurship and economic development.

#### **2.1.4. Factors Contributing to Innovation among Entrepreneurs**

Following are the factors causing innovation among entrepreneurs:

- 1) **Proximity Spurs Innovation:** Competitive regions are those that are able to encourage innovation to spread throughout the region. Innovation is most effectively undertaken when entrepreneurs are near each other, so that knowledge transfer occurs informally through interactions among businesses on a local level
- 2) **Networks, Collaboration and Projects Support Innovation:** Innovation is not limited to research and development efforts at universities and is not limited to high-tech firms. More often, successful innovation occurs when the institutions and entrepreneurs work together. Innovation is closely tied to organisation of business activity into projects or innovation networks. These short-term teams, which often include people from several different businesses and support organisations such as nonprofits or universities, work to develop a specific opportunity or perhaps a new product. Projects help businesses become more innovative.

Innovation requires the development of networking and knowledge transfer mechanisms that encourage the free flow of information between large firms, researchers, entrepreneurs, inventors, consultants, patent agents, intermediaries and local authorities.

- 3) **Churn is not Always Negative:** High rates of business births and deaths are closely linked to innovation and to economic growth. When there are few barriers to business entry and exit, this stimulates the supply of future entrepreneurs. It tends to be new businesses—whether they succeed or not—that introduce breakthroughs, which are then taken to market by others. Small firms produce eight times more successful new products per million dollars than large firms.
- 4) **Benefits from Diffusion of Innovations:** When new ideas move rapidly and when new products and services diffuse rapidly throughout the economy, a nation benefits. Often inventors are not the ones to take an innovation to market, so some countries assist this flow from inventor to other entrepreneurs. Regions where small firms are linked to each other, to universities and to larger firms benefit most from innovation.
- 5) **Market Enhancement Boosts Innovation:** The biggest return comes from helping entrepreneurs create new market space or redefine market or product boundaries. Innovation is founded on the entrepreneur's ability to recognise market opportunities and then react quickly to these opportunities. This requires external connections that often spark the network linkages to develop the product and take it to market.
- 6) **Diversity Builds Creative Environment:** Creativity thrives when the environment allows people of all lifestyles, cultures and ethnicities to interact. Countries that wish to encourage economic creativity must also encourage diversity. When a critical mass of entrepreneurs in a nation creates innovative products, that becomes the norm, and new entrepreneurs are likely to generate innovative products as well.
- 7) **Availability of Finance:** In today's environment the availability of finance is not a big problem. The various financial institutes, banks are ready to give the finance for the starting of a new business.
- 8) **Improvement in Technology:** With the increase in spread and use of technology one can easily collect the information regarding various new products and services.
- 9) **Customer's Requirement:** If the company want to be in the market, they will have to give the products according to the changing needs of the customers. If the company fail to do so, the customers will no longer loyal to them. **For example**, earlier it was keypad phones, now everybody likes touch screen phones, so the companies have to bring these changes and make these products more innovative.

### **2.1.5. Essential Ingredients of Innovation**

There are four essential ingredients of innovation which are explained below:

- 1) **Something New:** 'New' means a different and unique product which has never been created before. Everyone likes to own a thing which is distinctive in all ways. Hence, it can be said that 'newness' is the beginning of something.
- 2) **Better Than What Exists:** Innovation is not only creating something new, but also introducing a better version of a thing that already exists. It should increase the perceived value of a new product from that of an existing one. **For example**, new and improved office policies must have something better than the previous ones.
- 3) **Economically Feasible:** Along with new and improved features, a product must also be economically feasible. The entrepreneur should know whether the product is going to be productive enough to bring profit or not. **For example**, if an entrepreneur is launching a new and improved soft drink, he should make sure that the product is making more sales and earning profits.
- 4) **Widespread Appeal:** An innovation should have a basic appeal in the target market. An appeal can only be formed when a product has all the three elements which are discussed above, i.e., newness, better than what exists and economically viable. **For example**, a new soft drink can appeal the customers if it is better than others like it can be refreshing and have different flavours. But if it is not able to appeal anyone, then it cannot be called as an innovation.

## 2.1.6. Sources of Innovation

According to Drucker, an entrepreneur should observe **seven sources of innovation**. These sources provide business opportunities to entrepreneurs and are called as "symptoms" which are "reliable indicators of changes that have already happened, or can be made to happen with little effort". These seven sources of innovation are as follows:

- 1) **Unexpected Success, Unexpected Failure, or Unexpected Outside Event:** These are explained below:
  - i) **Unexpected Success:** Entrepreneurs cannot take credit for an unexpected success and thus, accepting this success will be hard for them, due to which they fail to exploit this opportunity. The unexpected success of the business neither identifies its qualitative aspect nor is countable in the quantitative financial reporting. Hence, an entrepreneur is advised to consider unexpected success as a symptom and generate an innovative business opportunity by continuously analysing the open market.
  - ii) **Unexpected Failure:** It is not possible for entrepreneurs to avoid an unexpected failure. Generally, it is not considered as a symptom that generates an innovative business opportunity. Entrepreneurs need to understand that this unexpected failure can occur due to the changes held in the value or application of a product, if there are no errors found in the product design and marketing strategy.
  - iii) **Unexpected Outside Event:** An unexpected outside event is an opportunity which may occur due to a market change. In this act, there is a need to replace the existing products and distribution channels with new products and their applications. Thus, it is considered as a symptom to create an innovative business opportunity.
- 2) **Incongruity in Reality:** In reality, incongruity or inappropriateness occurs when a person feels absurd and recognises that something is odd or out of control. **For example**, a dynamic gain or loss in weight can lead to issues related with the fitting of clothes. Incongruity indicates change and reveals opportunities for improvement where a small innovation can do wonders. These changes can be both qualitative and quantitative in nature, which are noticeable yet sometimes overlooked. For making incongruity an innovation opportunity, an entrepreneur should consider the following points:
  - i) **Change in Financial Performance:** Changes in the financial performance of products or services during the different stages of a business cycle, whether desirable or undesirable, can be potential indicators for analysing the performance. As a result, entrepreneurs can repeat the same cycle, if the changes are desirable or can modify and correct it, if the changes are undesirable.
  - ii) **Identify Things that do not Harmonise:** Entrepreneurs need to identify things that do not harmonise with new products, services, or activities. Often, due to wars, natural disasters or shortage of energy, a business cycle can go through abnormal phase, therefore an entrepreneur should also recognise these things and should take them as an opportunity.
  - iii) **Identify Long Lead Times, Combined with or Separate from Large Capital Equipment Investment:** Entrepreneurs should identify business situations that involve long lead times whether alone or combined with large capital investments. This situation can provide opportunities to the entrepreneurs. They can develop new individual parts that can replace long lead times with minimum set-up and lead time when combined with expensive equipment.
  - iv) **Search the Mismatch between Customers and their Beliefs about their Needs and Wants:** It is very important for an entrepreneur to find out the mismatch between the customers and their belief about their exact needs and wants. This difference acts a symptom and an innovation opportunity for entrepreneurs in order to make it a better match. If an entrepreneur is able to search the dislikes or the requirement or simply create a new and better product.
- 3) **Innovation Based on Process Need:** Processes and procedures are imperative for starting and running the businesses. According to Drucker, there are five criteria and two constraints for determining and formulating innovations in order to fulfil a process need. Following are the five criteria:
  - i) A self-sufficient process,
  - ii) A clearly defined purpose for the process,
  - iii) A weak missing link or step in the process,
  - iv) A solution that can be well-defined, and
  - v) A consensus from the process users that there ought to be a better way,

Following are the two constraints:

- i) A mismatch or that something is out of harmony with its purpose may not be accepted or understood by some of the process users.
  - ii) Even if one understands the need for a change in the process or procedure, one may not have knowledge to create the alterations so it will fit, or to change the notes to bring it back into harmony.
- 4) **Changes in Industry and Market Structure:** The changes in industry and market structure unexpectedly attract the attention of every customer and it creates a big innovation opportunity for the entrepreneurs. This change acts as a good source of innovation if analysed accurately. **For example**, the main street businesses were drastically affected by the formation of Wal-Mart's stores in small cities. Many businessmen view Wal-Mart as a threat for their businesses and for the city, thus, ignoring and overlooking the opportunity. But, at the same time, innovators will view change as an opportunity. They consider it as a reality which cannot be ignored with the fact that it creates large number of occupations. Except innovators, all business owners and political leaders look Wal-Mart as a threat and never tried to expand their industries by innovatively transforming their products and services into something that may fit in the changed market structure.
- 5) **Demographic Changes:** The changes occurring in the market demographics also act as a big source of innovation. In recent times, middle class is diminishing, family size is reducing, nuclear families and single-parent families are the trending customer segments. Other than this, changes in population size, employment, educational level, family structure, age structure, tastes and preferences, etc., can also create innovation opportunities. An innovative entrepreneur analyses all these changes in the market demographics and introduces innovative products or services as per the requirement of the customers.
- 6) **Changes in Perception, Mood, and Meaning:** The changes in the perception, moods, assumptions, attitudes and beliefs of the population also act as a big source of innovation. An innovative entrepreneur observes this change and forms a new product that suits the current needs of the customers.

**For example**, unlike, early days, where fatter persons were considered healthier than the thinner or fitter ones, the trend has changed in today's reality, where weight problems have increased to a large extent. In these circumstances, various companies are launching light-diet products with minimum fat percentages. Products like green tea, sugar free, and other substitutes are available in the market that are considered as the solution to the health-related problems.

- 7) **New Knowledge:** With the advancement of new knowledge, new products and markets can be created. It acts as a potential source for developing innovation opportunities. In the scientific area, development of new programming methods, micro-electronics, nano-technology, biotechnology, etc., are some of the major innovations which are held in the market.

### 2.1.7. Steps of Innovation Management: Innovation Process

The process of innovation is a nine-step process, which involves focussed and exploratory thinking. In this respect, concentrated thinking is a direct form of thinking which involves making decisions, evaluating alternatives, and monitoring quality in regard with the strategic goals of the enterprise. Exploratory thinking includes expanding thinking to look for new ideas, withholding judgment, seeking for a quantity of ideas through new connections and accepting all possibilities.

The nine-step process is divided into three main phases, which are further divided into three stages. These phases are as follows:

- 1) **Understanding the Problem:** This phase involves the following three stages:
- i) **Gathering Information:** It is the first step in the process of innovation. The activities performed at this stage are as follows:
    - a) Selecting a team to state the main problem.
    - b) Exploring the main reasons due to which the team thinks that it has recognised the right problem.
    - c) Collecting facts, figures and data from various viewpoints.
    - d) Applying "what/when/how/where/who/why" to the problem.
    - e) Exploring external business environment for more data and information.
    - f) Analysing and evaluating the problem for selecting the best data; this facilitates in the right understanding of the problem.

- ii) **Clarifying the Real Problem:** This stage involves the following activities:
    - a) Widening the awareness and clarifying the problem.
    - b) Recognising and enlisting the possible causes of the problem.
    - c) Creating alternatives for the problem statements.
    - d) Selecting the best problem statement that represents the most real or important problem.
  - iii) **Setting Innovation Goalposts:** This is the last stage in the phase of understanding the problem. It includes the following activities, that an entrepreneur performs:
    - a) Exploring the range of acceptability for alternatives and solutions towards a specific problem.
    - b) Identifying significant standards for decision-making.
    - c) Reviewing the previous standards.
    - d) Setting the goals of innovation.
- 2) **Imagination:** This phase involves the following three stages:
- i) **Finding Stimuli:** In this stage, an entrepreneur generates ideas for achieving the pre-defined innovation goals. It involves the following three actions that an entrepreneur performs:
    - a) Exploring the business environment for information and signals.
    - b) Researching the past, present and future.
    - c) Discovering various perspectives.
    - d) Exploring the marketplace.
    - e) Examining and minimising the stimuli.
  - ii) **Uncovering Insights:** In this stage, an entrepreneur performs the following activities:
    - a) Using the selected stimuli for identifying potential insights and findings.
    - b) Suspending decisions while uncovering these insights.
    - c) Making use of creative-linkages and power tools.
    - d) Selecting insights of more importance for further reproduction.
  - iii) **Identifying Ideas:** In this stage, an entrepreneur performs the following activities:
    - a) Exploring the important insights for potential ideas to resolve the real problem.
    - b) Comparing and choosing the best ideas based upon the pre-defined goals of innovation.
    - c) Transforming these ideas into full concepts.
- 3) **Actions and Implementation:** This is the last phase in the process of innovation and involves the actual execution and implementation of the ideas so as to achieve the goals of innovation. It consists of the following three steps:
- i) **Developing the Innovation Roadmap:** This step involves the following activities:
    - a) Considering the concepts and transforming them into plans.
    - b) Inspecting the needs, timing and responsibilities of the resource.
    - c) Recognising alternative plans.
    - d) Selecting the best ideal plan based on the goals of innovation and set criteria.
    - e) Considering the impact of plan on rest of the organisation.
  - ii) **Gaining Commitment:** In this step, an entrepreneur performs the following activities:
    - a) Exploring commitment to the ideal plan.
    - b) Recognising the factors responsible for supporting the plan.
    - c) Preparing the plan for presentation.
    - d) Presenting the plan.
    - e) Making necessary changes in the plan.
    - f) Testing the elements of the plan, if required.
    - g) Finalising commitment towards the final plan.
  - iii) **Implementing the Innovation Roadmap:** This is the last step in the process of innovation. The following activities, undertaken by an entrepreneur are:
    - a) Releasing the final plan into action.
    - b) Adjusting the plan, if required.
    - c) Monitoring the whole process and results.
    - d) Sharing the results and learning.

## 2.1.8. Challenges of Innovation

The challenges of innovation are as follows:

- 1) **External Challenges:** The possibility of not getting an innovation right with the external environment runs equally high as within the organisation. Companies need to identify, describe, and analyse external barriers. Different external challenges are described below:
  - i) **The Market-Related Barriers:** These refer to various types of market failure and other market induced innovation-hampering factors. One type of market failure refers to insufficient appropriability (i.e., ability of the innovating firm to capture rents or profits created through innovation). Other types include market risk, inadequate size of R&D that is undertaken by private firms, and externalities. Supply and demand deficiencies may also present barriers. **For example**, lack of skilled employees in the market or lack of innovative users. The nature and intensity of competition within the market affect the profitability and strategy of firms and are indirect causes of barriers.
  - ii) **Government:** Government and its policies and regulations are a frequent source of barriers to innovation. Many policies directly or indirectly related to innovation are designed to correct market failure. Problems may arise, however, due to unintended consequences of such policies and side effects of regulations. Bureaucratic procedures in getting licenses or grants and in other contacts with governmental organisations are also a frequent cause of barriers. Problems in policy communication may induce discrimination against some firms, e.g., micro-firms and small firms, preventing them from getting the support they are entitled to.
  - iii) **The ‘Other’ Category:** It includes technical, societal and inter-organisational barriers:
    - a) **Technical Barriers:** Technical barriers may originate from predominant standards, e.g., in telecommunications, or arise due to changes in technology. Risk of technology obsolescence, destruction of a firm’s competences with change of technology, and dangers from picking the wrong technology, are major considerations in some fields of high technology.
    - b) **Societal Barriers:** Societal factors may form important innovation barriers. Norms and values of a society and attitudes towards science, socio-economic change and entrepreneurship determine the innovation climate. The latter, if it is negative, has an adverse effect on innovation efforts and on the willingness of Government to assist innovation.
    - c) **Inter-organisational Barriers:** External barriers may also arise at the inter-organisational level when firms have to cooperate at a regional, national or international level.

**For example**, barriers to innovation occur during cooperation along the supply chain, when customers discourage product changes or access to distribution channels is problematic for a new firm. Although the latter example refers to vertical cooperation, there are similar problems in horizontal cooperation between firms of the same sector when there is no tradition of such cooperation or there is lack of trust.

- 2) **Internal Challenges:** Internal challenges relate to the characteristics of organisational members, the characteristics of the organisation, and the management of innovation as a change process. They can be conveniently classified into people related, and structure- and strategy-related.
  - i) **People Related:** They can be studied at the individual and the group level and, if necessary, separately for managers and employees. Management may be preoccupied with the current operations and have a conservative attitude, which may lead to perceiving innovation as being risky and difficult. Lack of commitment of top management to innovation, as indicated by not rewarding risk taking and lack of toleration of failure, is mentioned as a major innovation barrier. The decision-making process of managers, constrained by their bounded rationality, and its organisation regarding search procedures, information sources, and evaluation rules, is also a source of barriers.
  - ii) **Structure Related:** Structure affects the behaviour of organisational members during the innovation process and determines the problem-solving capacity of the firm. Structural obstacles include inadequate communication flows, inappropriate incentive systems, and obstruction problems by some departments. The latter is also referred to as lack of inter-functional integration. Collaboration between marketing and R&D, i.e., is vital, especially for product innovation. Problems in this collaboration, due to different values, motivations, and goals, have an adverse effect of innovation.

- iii) **Strategy Related:** Many internal barriers are related to strategy. Technical people may also be unaware of strategy and objectives, and cannot therefore persuade senior managers of the benefits and necessity of new technology, while senior managers – being technologically ignorant – cannot see these benefits themselves. Other barriers may be goal-related in the sense that senior managers may fail to appreciate the necessity for innovation or are too risk-averse to attempt to innovate.
- iv) **Resource Related:** Resource-related barriers include lack of internal funds (e.g., from cash flow), and lack of machinery, testing or other technical equipment. Important barriers may arise from the lack of an own R&D department, a low percentage of organisational resources dedicated to development work, and technical problems due to inadequate experience or knowledge.

### 2.1.9. Fostering Innovation and Entrepreneurship

As table ahead points out, firms with lots of innovation and entrepreneurship have a strategic direction, culture, and leaders that encourage creativity, learning, and risk taking. Steve Jobs, the legendary past CEO of Apple, was a master at inspiring innovation in his company. He believed in the power of vision and in changing the world. He would challenge managers, researchers, and employees to dream bigger and to sell those dreams to customers. Jobs also taught that one of the keys to creativity is to connect seemingly unrelated ideas, questions, or problems from different fields. Jobs' leadership kept Apple on the cutting edge of technological innovation.

| More Innovation and Entrepreneurship   | Less Innovation and Entrepreneurship   |
|--|--|
| A strategic direction (mission, vision) that incorporates a strong innovation and entrepreneurship theme.  | A strategic direction that puts top priority on financial returns or operating efficiency. |
| A culture that encourages creative thinking and risk taking.   | A culture that rewards conformance and discourages novel ideas.                            |
| Top management support of entrepreneurship through example and allocation of resources.                    | Top management that encourages maintaining the <i>status quo</i> .                         |
| Open communications among levels and areas within the firm, supported by an integrated information system. | Closed-door offices and disorganised and ineffective information system.                   |
| Valuing the ideas of every employee.   | Attention given mostly to researchers or managers.   |
| Large rewards for internal entrepreneurs who create new value for the company.                             | Harsh penalties for failures such as demotions, salary reductions, or termination.         |
| Teamwork and collaboration.  | Authoritarian leadership.  |
| A flat management hierarchy with an emphasis on decentralised decision-making.                             | A tall hierarchy with a lot of bureaucratic red tape and many approval levels.             |
| Organisational champions who can identify a good idea and gather resources needed to turn it into reality. | Approval process that makes it difficult to gather new resources.                          |
| Focus on learning.   | Exclusive emphasis on measurable outcomes.   |
| Slack resources available to invest in entrepreneurship.   | Tight finances (high debt, few liquid assets).   |

Information flows easily throughout innovative organisations, both in face-to-face interactions and through the firm's information systems. It is also helpful if the firm has slack financial resources, which are financial resources that are not completely committed to paying existing obligations. High liquidity reflected in higher-than-necessary cash balances and low debt levels allow a firm the flexibility it may need to pursue promising new ventures. Furthermore, human resources systems reward behaviour that leads to innovation and entrepreneurship. Also, systems are in place to facilitate the creation of new products, processes, or services that create value. These systems include a simple approval process for obtaining firm resources to pursue innovative ideas.

Innovative firms learn not only from their own internal R&D processes, but also from external stakeholders such as customers, suppliers, and venture partners. They can learn through communications and transactions with them, and they can pursue new collaborations with them. Collaborative innovation can be defined as "the pursuit of innovations across firm boundaries through the sharing of ideas, knowledge, expertise and opportunities". Collaborations can help smaller firms acquire the resources they need to pursue opportunities. They also help larger firms overcome the challenges they face in exploring new opportunities.

## Strategies for Fostering Innovation and Entrepreneurship

When it comes to fostering innovation and entrepreneurship, there is a big role for both governments and corporates. The key is finding ways to work together to foster an ecosystem where both sides of the equation are given a chance to thrive. A successful innovation ecosystem cannot be built without fostering both innovation and entrepreneurship. For this, government and corporate must adopt different strategies as described below:

- 1) **Strategies for Government:** There are three key ways governments can foster the intersection between innovation and entrepreneurship:
  - i) **Developing the Ecosystem:** Governments are in a unique position to drive attraction related to innovation and entrepreneurialism within a specific jurisdiction, whether the country of Australia, individual states like New South Wales, or cities like Sydney and Melbourne. One of the most foundational components of this is by lowering the risk of capital by providing a range of benefits – tax measures, grants or other incentives. These types of government initiatives can help attract a range of people and companies to a location, attract foreign capital and create a strong ecosystem where innovators, entrepreneurs and corporates can come together to create more value than any one might be able to do on their own.
  - ii) **Developing Talent:** Fostering talent is a significant role that governments must play in order to develop the talent necessary to support an innovation economy. From pre-school to university, governments can create and foster programmes that support science, technology and other key areas of learning, while encouraging students and those with a more entrepreneurial bent.
  - iii) **Shaping Culture:** While slow to change, the culture of a country provides the foundation for how people live, work and play. When it comes to building an innovation economy, governments need to foster a culture where innovation and entrepreneurship is encouraged, celebrated and rewarded. Fostering talents and showcasing success stories having an impact on a global stage can go a long way toward fulfilling this objective.
- 2) **Strategies for Corporates:** Companies can also do a lot to encourage both innovation and entrepreneurialism within their own organisations. As a starting point, corporations need to focus on three critical areas:
  - i) **Providing Leadership:** The way leaders act, talk and reward employees will determine whether innovation and entrepreneurship can take root successfully. For boards and leadership teams, this may require taking a longer-term view of investments, creating space for innovation to happen and developing rewards and KPIs that highlight and reward the successes they want to encourage.
  - ii) **Fostering Diverse Input:** Creativity often comes out of diversity – of vision, background, culture, working style and many number of other factors. Companies need to focus on creating an environment where as many people as possible are given an opportunity to share their voice, rather than one where unique ideas are stomped on the minute they emerge. By encouraging diverse opinions, companies can create an environment of creativity – where people can come together to examine ideas and possibilities without the risk of failure.
  - iii) **Thinking Inclusively:** Companies need to move beyond the ‘single way to do things’ mentality and create environments that are as inclusive as possible. This means creating ways to bring together both innovators and entrepreneurs and fostering those intersection points. This could include various forms of activities, from fostering internal innovation, to setting-up a branch or working directly with start-ups to explore how innovations can create value. Also, the established corporations can harness and develop innovative ideas from crowd sourcing.

### 2.1.10. Qualities of a Prospective Entrepreneur

Entrepreneurs are a different breed – they think different, act different, and live different than the rest of society. Entrepreneurs understand that the success of the business ultimately rests upon their shoulders. When one runs a start-up, whether or not rent is paid depends on how he/she runs the business. Because of this, all successful entrepreneurs take their work very seriously. Every decision has consequences, whether good or bad. Over time, those consequences shape our reality and tell the story of our lives. Entrepreneurs who are doing well take note and carefully identify the potential long-term effects of each decision, while seeking counsel before making major decision. Following the crowd only leads to where others have been before. Successful entrepreneurs are not afraid to venture out on their own with a company and blaze a new trail. That is their defining characteristic. Some of the best inventions and designs have come from the minds of those who were not afraid to be different. Very few successful entrepreneurs have made it without living through some failure, large or small. They realise failure is just information about what does not work, not the end of the journey. They continue trying long after most would have given up.

(Qualities of prospective entrepreneurs have been already discussed in the previous chapter (Chapter 1) under the head 'Traits of Entrepreneur').

### 2.1.11. Creativity versus Innovation

Creativity and innovation go hand-in-hand. But both acquire specific roles, which combine to form a new product. The difference between creativity and innovation may be summarised as follows:

| Table 2.1: Creativity vs Innovation: A comparison   |   |
|---|---|
| Creativity  | Innovation  |
| To come up with a "new" idea.   | Doing "new" things or doing things "differently".   |
| It is the process of generating the "idea" for new, useful and practicable products and services. | It is the process of transforming the "idea" into a "concrete reality".                             |
| It identifies the useful features of products or services.  | It searches out the advantages of innovative products and services, so as to satisfy the customers. |

Hence, it can be stated that innovation has no existence without creativity, as creativity stimulates innovation. Innovation is defined as the commercialisation of business ideas by altering the existing systems, processes, resources and products.

## 2.2. IDEA MANAGEMENT SYSTEM (IMS)

### 2.2.1. Introduction

An idea is the basic foundation of every new product, new service, new marketing strategy, new technology or a new business. It is a very difficult task to generate a new and original idea. Moreover, it is much harder to transform an idea into a reality. Ideas are present all around us, and one can easily generate and implement an idea. A thorough analysis and investigation of a particular market or customer requirements helps to develop an idea, while many times it is generated randomly. Ideas help the entrepreneurs to decide the nature of business they want to establish and the type of product or service they want to offer to a particular target market.

The process of generating, developing and sharing intellectual, visual and realistic ideas is known as ideating. It is the first stage in any start-up development process or activity. Idea management systems can be viewed as a structured support of the ideation phase. An idea management system (IMS) is a planned and controlled methodological procedure through which ideas flow from initiation and generation to execution and launch. An idea management system can be defined as a formal mechanism constructed to encourage employees to formally contribute new constructive ideas that would help in developing their organizations.

Idea Management Systems (IMS) came into existence to allow for a structured method to handle ideas from the gathering stage up to the initiation and development stage. The IMS seeks to evolve the innovation process from the fuzzy, undisciplined, and haphazard image engraved in the minds of the early generations, to a systematic and disciplined approach that has clearly defined stages, criteria, and metrics. It is expected to control and manage the crucial activities of idea generation and solicitation, idea capturing, idea archiving, idea assessment and evaluation, idea selection, technology portfolio management, project portfolio management, idea implementation, and idea execution monitoring.

### 2.2.2. Activities Covered Under IMS

IMS is expected to control and manage the following innovation activities:

- 1) **Idea Generations and Solicitation:** Idea generation and solicitation seeks to introduce creative tools and processes through which the organization may better generate, develop and capture ideas from its stakeholders with greater efficiency and effectiveness. Numerous methods and techniques have been created for the sake of capturing ideas and enhancing the process of creative idea generation and solicitation. These can be divided into idea submission techniques, idea solicitation techniques and idea campaigns. Idea submission and collection techniques such as suggestions boxes are passive techniques that only receive ideas and are usually characterized by idea overflow. Idea solicitation techniques seek to identify the potential sources of useful ideas from within and outside the organization, and reach out to these sources in order to capture the contributions that may be available.

- 2) **Idea Evaluation and Selection:** Idea assessment and evaluation is a very critical stage of the idea management process. At this stage, firms must be able to differentiate valuable ideas and select between several potentially valuable projects. Idea evaluation criteria usually include technical factors such as technical feasibility, and availability of required firm competences; marketing factors such as potential market size, probability of commercial success, and product life cycle; regulatory factors such as adherence to safety and environmental regulations; and finally risks associated with the particular stage of innovation whether discovery and invention, design and feasibility, prototype and test, or launch and commercialization.
- 3) **Technology Portfolio Management:** One of the main measures used when selecting the list of projects to be included in the project portfolio in the company's technology portfolio. This portfolio is one of the main tools needed to be able to strategically allocate the resources of the organization in projects that directly serve the technology strategy of the firm.
- 4) **Project Portfolio Management:** Organisations seeking to sustain their successful innovation efforts take into account the potential interactions between different projects, and how these interactions and the resource utilization may be optimized to achieve organizational economic, technical, or strategic goals. This could only be achieved through project portfolio management (PPM).

### 2.2.3. Features of IMS

An efficient Idea Management System should come with the following features:

- 1) **Gathering Ideas:** Each idea should be able to be contributed with no constraints, in less than 3 clicks. Evidently if it is difficult to contribute an idea, few ideas will be suggested. Management or the coordination team should ideally define the categories the ideas will be organised in.
- 2) **Enrichment of Ideas:** An IMS tool must help enrich the ideas of others. There are creatives, who come up with new ideas, and there are experts, who can take an idea and improve and develop it. It is therefore crucial to value every person in the company. This feature is part of the prerequisites for implementing the project, while refining it with the input of other collaborators (depending on their position, culture, etc.).
- 3) **The Search for Ideas:** The power of digital tools also lies in their storage capacity, capitalisation of the information and thus in research. Research capacity is one of the key features of the Idea Management System. An idea must be able to be found in just two clicks, using its key words, title, author or date of submission. Finding ideas means being able to rely on a good idea at the right time. An idea put forward two years ago could end up finally materialised thanks to new regulatory or technological developments.
- 4) **Flexible Idea Submission Form:** This is another big feature of IMS. Because campaign topics can cover a broad range from strategic support, cost containment, revenue generation, new product development, etc., it is absolutely critical that the submission form for an idea management system is variable and allows the campaign manager the flexibility to capture the information they need to successfully evaluate the ideas that are submitted. A title and description field are not enough.

### 2.2.4. Benefits of IMS

The benefits of IMSs are as follows:

- 1) **Focus Employees' Creative Efforts around Specific Organisational Goals and Objectives:** Research by two leading suppliers of idea management systems – Imaginatik and General Ideas – shows that when employees are asked to generate ideas or suggestions around a specific business problem or objective, the quantity and quality of ideas tends to increase significantly.
- 2) **Encourage Employees to Capture all of their Ideas:** In most types of businesses, employees rarely capture their ideas, and most of their "eurakas!" are lost forever. Idea management systems help to solve this problem. Employees can quickly jot down a the germ of an idea, and then return to the system later to add details to their new creation. In addition, many idea management tools help employees to share ideas, comment on, add to and further improve each other's ideas, and acquire knowledge by viewing others' ideas.
- 3) **Promote Greater Transparency:** By placing ideas in a shared repository, idea management systems promote greater transparency. Employees can see the outcome of all of the ideas they have submitted, which increases their enthusiasm for and participation in idea campaigns. Also, these database-driven tools make it easier to measure how much each implemented idea has contributed to the firm's bottom line. This makes it easier, in turn, to reward employees who have contributed winning ideas.

- 4) **Share Best Practices:** Idea management systems help companies to share best practices. For companies that have multiple offices or locations, idea management systems enable them to quickly and cost-effectively share ideas and best practices that have been used successfully at one location with other locations. This allows them to multiply the bottom-line benefit of a single cost-saving idea many times over. Usually, corporate locations or divisions operate like silos, rarely sharing information, ideas and best practices. Web-based idea management systems can be accessed via any computer with an Internet connection, from anywhere in the world, vastly simplifying the transfer of valuable ideas and best practices across geographical and organizational barriers.
- 5) **Cause Quick Speed to Market:** They help companies to increase their speed to market. Idea management systems help companies to capitalize on their best ideas faster. They do so by providing a structured process for evaluating ideas and selecting the best for implementation, and by providing a set of checks and balances to make sure all ideas are promptly reviewed and evaluated.

## 2.3. OPPORTUNITY IDENTIFICATION

### 2.3.1. Introduction

A business opportunity can be identified every time when there is a challenge, want, need, or problem that can be dealt with, resolved and/or fulfilled in a creative or novel manner. The situations in which new things like goods, services, production methods, raw materials, etc., can be introduced and sold at prices more than their actual costs, are termed as entrepreneurial opportunities.

There are many factors involved in launching a new business venture successfully besides having an ingenious business concept, arranging capital sources and presenting the good or service in the market. It is essential for the entrepreneurs to become proficient in studying the market and comprehend the business environments, in which they should function. Business opportunity makes the entrepreneur able to identify and execute several things which are out of control or difficult (like defaulting contractors and opening & closing of business niches). The limit to which probabilities for new business ventures prevail and the level of flexibility entrepreneurs have to impact their odds by their actions for achieving success is known as opportunity. Explaining it in simpler terms, opportunity is an ascertained mode of income generation that have neither been exploited at an earlier stage nor being exploited by others presently.

It is one of the major challenging tasks for the entrepreneurs to identify a suitable business opportunity for them. Generally, entrepreneurs use one of the following ways to start their ventures:

- 1) Offering new products or services to satisfy the unmet needs,
- 2) Offering the existing products or services into totally new market, or
- 3) Starting as a franchisee of a well-established business.

It is significantly noteworthy that in an ongoing process, opportunity identification is only the first step and is entirely different from feasibility analysis and economic evaluation of the opportunities. It is relevant to understand that how an entrepreneur finds out and determines a new business opportunity having the maximum possibility to attain success. Finding a solution to an unfulfilled need or want in the market is the most crucial part of all successful start-up enterprises. The products which add value always attract customers. The major concern for buying a product is need fulfilment or solution to a problem. Actually, there is no other option available for an enterprise rather than to fulfil the unmet customer needs.

### 2.3.2. Characteristics of Business Opportunity

The characteristics of business opportunity are as follows:

- 1) **Market-oriented:** A business opportunity is considered as good opportunity when it is market-oriented. It must be something receivable by others in exchange for money. It should be something which has a value and can be either bought by someone or sold by someone.
- 2) **Feasible:** An opportunity must be practicable, i.e., viable to be attained. It must be identifiable and exploitable by entrepreneurs.
- 3) **Profit-oriented:** A workable business opportunity should be sought by an entrepreneur. A business opportunity must be one which earns profit for the organisation as profit is indispensable for business's existence. This opportunity must be such which offers the entrepreneur that profit to sustain in the market.

- 4) **Specific:** A business opportunity should be such which has a meaning, name and scope. It should be observable, defined, explicit and precise to be a good business opportunity. It must necessarily be accurate and specific.
- 5) **Motivational:** A sound business opportunity is one which has the potential to encourage an individual to conquer his individual desires or attain his personal aims. In order to carry an business opportunity as an opportunity, it must have the ability to earn certain amount of profits.
- 6) **Legal:** A good business opportunity lies within the legal framework of the country. It is not against the rules and regulations of the government. In case, it is observed that it does not abide by such rules or regulations, the legal agencies can take necessary actions.
- 7) **Ethical:** Since each and every business has its own moral principles and ethics, a true business opportunity must be ethical. Every business has its set of do's and don'ts which are expected to be followed meticulously. Hence, a business opportunity should not be something that will have conflicting interests to the ethics and morals of the business. Advertising which are misleading or ambiguous, degraded food or drugs, cheating/defraud, manipulation and adopting wrong measures are few examples of unethical practices.
- 8) **Convertible to Product:** A business opportunity must be able to be shaped in a product. It may be convertible into goods or services. An entrepreneurial opportunity is meaningless until and unless it results in a product which satisfies the needs and desires of the customers.

### 2.3.3. Criteria to Assess Business Opportunities

In order to assess the opportunity, the following criteria can be used by the entrepreneurs:

- 1) **Industry and Market:** Entrepreneurs should identify the industry type and the nature of the market for their products or services. It is important for the entrepreneurs to determine whether the opportunity is promising in terms of the industry or market and whether a suitable market niche has been selected by them for their products or services which can fulfil the requirements of the customers and provide them high value-added benefits.
- 2) **Economics:** Another criterion for assessing the business opportunities is their level of economics. If the break-even point and positive cash flows are possible within the two years of execution, then it is an attractive opportunity otherwise not. Break-even point is the point at which a sufficient number of units of the products and services are sold by the entrepreneurs to recover the various expenses.
- 3) **Competitive Advantage Issues:** Competitive advantage is also a criterion for selecting the opportunity. It is quite beneficial to have or to gain the proprietary protection, some kind of regulatory or legal leverages, for e.g., exclusive right to distribute or market the product. It is quite significant to have the advantage in the form of response/lead time as these elements can be used for the creation of barrier to entry or to stop others to expand in the similar market or business as that of the entrepreneurs.
- 4) **Exit Issues:** Evaluating the exit issues is also important for assessing the business opportunities. Entrepreneurs selling their business either publicly or privately have an objective of earning the profit and leaving the business. Studying the exit aspects of the business is very crucial for the entrepreneurs as it is easy to get in than out for businesses.
- 5) **Management Team:** Analysing the management team required for the future business is also necessary. It is necessary to determine whether the potential management team for the desired business opportunity could be designed or not.
- 6) **Personal Criteria:** Every entrepreneur has his/her own set of parameters for assessing the business opportunity. On the basis of his/her parameters, the entrepreneur evaluates the opportunity.

### 2.3.4. Steps in Opportunity Identification

Business opportunities act as an economic idea. These ideas can be executed to establish a business venture and obtain profits. There are many sources which provide information regarding different business opportunities such as internet, magazines, commercial organisations, government, financial institutions, relatives, friends, etc., to an entrepreneur. A thorough and in-depth analysis is required to select the best business opportunity from the available information. Following are the three steps an entrepreneur follows for identifying new business opportunities:

- 1) Opportunity Search
- 2) Opportunity Analysis and
- 3) Opportunity Selection

## 2.4. OPPORTUNITY SEARCH: DIVERGENT THINKING

### 2.4.1. Meaning of Opportunity Search

Each and every business activity begins with the opportunity search stage. In this stage, a variety of new product ideas are generated and the unfeasible ones are neglected. Ideas which are selected for further assessment are those which optimally utilise the available resources.

A good opportunity should be in accordance with customer need and its time schedule, purchasing power, size and potential of the market, etc. The criteria used to evaluate the effectiveness of the opportunities include price versus performance, competitiveness, perceived benefits and risks, etc.

Creative ideas are developed with the help of divergent thinking. Divergent thinking refers to the thought process or technique employed to produce innovative concepts by reviewing several probable solutions. In divergent thinking, different logical ideas are developed spontaneously in a free-flow style. This thought process is usually employed jointly with convergent thinking, which includes a specific set of logical steps to reach at one solution. This one solution is in certain instances a "correct" solution.

Relatively, in a very short period of time, a number of opportunities and their relativity are explored via divergent thinking. On completion of the divergent thinking process, the convergent thinking is used to organise and structure the available opportunities.

Opportunity search involves the idea generation for new business or for the future growth of the existing business. As per **Peter Drucker**, there are three types of opportunities, which are described below:

- 1) **Additive Opportunities:** Such opportunities cause the decision-makers to use the existing resources in more productive and useful manner. These also cause the alterations in the prevailing strategies of production as well as marketing.
- 2) **Complementary Opportunities:** Such opportunities include incorporating new ideas in the existing products or businesses so as to satisfy the market demands. With such opportunity, risk is also associated. Ultimately the business attributes are likely to change.
- 3) **Breakthrough Opportunities:** Such opportunities result in new products, new locations or new technologies. Through following such opportunities the overall business structure, business value and business strategies are changed. These opportunities are able to provide highest gains and risks are also higher with such opportunities.

### 2.4.2. Objectives of Opportunity Search

The objectives of divergent thinking are as follows:

- 1) It helps in understanding the trends and needs of the market.
- 2) Preparing business plan of the organisation.
- 3) To create various ideas that helps in development of the organisation.
- 4) To recognise business opportunities.
- 5) To create business opportunities itself after market survey.
- 6) To create strong base for project, its scope and implementation.
- 7) To think about project and its various aspects.

### 2.4.3. Tools & Techniques of Opportunity Search

There are different methods to search for new opportunity. Some are as follows:

- 1) **Focus Group:** When a group of persons provide information in an organised manner, they are termed as a focus group. Generally, these groups consist of 8 to 14 members that are led by a moderator in a directive or a non-directive manner depending upon the type of discussion. These discussions are in-depth and open, where every member can put his or her views in an organised manner. These groups generate feasible business ideas by conducting in-depth discussions on various topics. Here, the members stimulate each other to involve their views in the discussion. This gives a proper direction to the discussion thus leading towards a feasible business idea. In this process, irrelevant ideas are dropped out and only relevant ideas are taken.

- 2) **Brainstorming:** One of the most common methods of business idea generation is brainstorming. It is a method in which a group of persons interact and stimulate each other into a creative and deep-rooted group discussion. The ideas generated under brainstorming sessions usually do not have further scope of development, but sometimes great ideas can be generated from them. These sessions are more effective when directed towards a particular market or product. Brainstorming sessions invites large number of ideas, whether feasible or impractical, from the group members. It opposes criticism or negative comments and encourages combinations or improvements in them for successful generation of ideas. This technique is used by many large organisations and commercial banks for developing a particular product for a specific customer segment.
- 3) **Reverse Brainstorming:** It is similar to brainstorming technique but in this, criticism of the ideas is permitted so as to reach the best idea. Identifying the shortcomings or negative points about the given ideas is the main activity in this technique. Thus, through thoughtful discussions and criticism, a useful idea is generated.
- 4) **Check List:** Discussions conducted on list of associated problems form the basis of generating new ideas for business. The entrepreneur enumerates a particular area of discussions and subsequently a checklist of queries, statements and recommendations is established for comprehensive talks. In this check list, following type of questions are discussed:
  - i) The very reason as to why the product is used. Who uses the product? The method followed while using the product.
  - ii) New possible ways of using the product.
  - iii) Any type of changes possible to increase the utility level of the product.
  - iv) Which substitutes are available in the market? Their level of competitiveness with our product. Is it possible to incorporate those attributes to develop a new improved product?
  - v) Check if modifications are possible.
  - vi) Is it viable to modify the shape, colour or packing of the product? Can we increase or decrease the size of the product, or increase frequency or add new ingredients in the existing list of ingredients?
  - vii) Is it possible to introduce a substitute product in the market?
  - viii) Can we alter processes, make it lighter or make it smaller?
  - ix) Change appeal, modify the intention with which the product is being offered, make use of different materials of construction and introduce additional positive features that can appeal and attract customers.
  - x) Find out which all products are being used in foreign countries and why?
  - xi) Identify new emerging products in a certain product range.
- 5) **Problem Inventory Analysis:** In this method, new ideas and solutions are developed in terms of the existing problems. These ideas are generated by the consumers of a particular product. A list of problems related to general product category is given to every customer or consumer and then they are asked to recognise the exact problem. Further, this process is followed by discussions in regard with the problems of a product, which finally leads to the generation of a new business idea. Since these ideas create a business opportunity, the results of this analysis should be evaluated carefully. Also, it is recommended that this analysis should be mainly used for generating ideas of new products from existing ones. By adopting this method, maximum results can be obtained.
- 6) **Synectics:** William J.J. Gordon coined the method of synectics used to upgrade the process of creative problem-solving. "Synectics" means combining distinct and seemingly disconnected and unrelated elements. Under synectics, the ideology of "making the strange familiar" is followed to define problems and "making the familiar strange" concept is followed to seek new ideas. The second concept aims at making the known strange, i.e., unknown by deliberately inverting, reversing or manipulating the problem to something unknown. General ways of perceiving and general expectations about the behaviour of others both are rearranged in this technique. In this process, synectics makes use of four types of metaphors which are as follows:
  - i) **Personal Analogy:** In using a personal analogy, decision maker actually imagine themselves as the object or problem. **For example**, if the purpose is to reduce the incidence of panhandling on city streets, then they might want to imagine themselves as a panhandler. This might sound unbelievable, but such an exercise probably will increase the number of ways that they think about the problem. As Gordon pointed-out that, even Einstein used visual and muscular analogies in understanding mathematical constructs.

- ii) **Direct Analogy:** The metaphor of direct analogy is identical to the problem with reference to the facts, technology or knowledge. Organisational theory can be an appropriate example here. Usually, organisational theory describes about organisation functioning as organic systems, employing a biological metaphor where there are inputs, a conversion process outputs, and a feedback loop.
  - iii) **Symbolic Analogy:** In this type of metaphor, a symbol or image is used to describe a problem. For instance, the role of a supervisor can be considered equivalent to the role of a coach, a conductor, a teacher, a gardener or a tug-boat, or creating a work team can be regarded similar to developing a collage with a usual theme.
  - iv) **Fantasy Analogy:** Under the fantasy analogy, the decision-maker can ask himself the question as to "What is the wildest imagination about how to resolve a problem?" The intention of the decision-maker behind asking such a question is to presume the best features of all possible outcomes. It prompts free-thinking about the issues and avoids becoming confined by current restrictions.
- 7) **Information from Publications:** Abundant information about various products and services are available in several publications of different organisations. Some of these sources of publication include sales brochures, advertisements, catalogues, publicity posters, etc. These sources are readily available for anyone and may sometimes, trigger new ideas and business concepts.
- 8) **Seminars and Conferences:** The emerging opportunities and challenges of business are discussed in various seminars and conferences held on a regular basis. An inexperienced entrepreneur will be able to acquire a lot of information and useful tips from such seminars and conferences dedicated to business.
- 9) **Discussion with People:** It is quite possible that if an entrepreneur is inattentive or careless, he may lose out important opportunities. A skilled entrepreneur is one who is an attentive listener with an analytical mind. Such an entrepreneur will be in a position to learn regarding the tastes, needs and preferences of people surrounding them by being a good listener. The information acquired from people will aid the entrepreneur to create products and services that indeed have the level of fulfilling consumer requirements.
- 10) **Day Dreaming and Fantasising:** Daydreaming is another useful method of generating business ideas as many inventions are born out of imagination. It is a thought process which allows a person to creatively and resourcefully think about a particular problem or issue. It enables a person to establish an emotional connect with the problem, which is beneficial in terms of coming up with great ideas. Business opportunities are developed automatically when someone dreams productively focussing upon a specific goal. In the past, several inventors have undergone daydreaming, thereby coming up with ideas that led to their life-changing invention. **For example**, an airplane invited by the Wright Brothers was just a daydream.
- 11) **Combination of Above Methods:** Methods of generating ideas do not necessarily involve choosing one method at a time. An entrepreneur can combine the above methods in order to generate innovative and feasible ideas. An idea can be generated from any source and does not have any boundaries or time frame.

## 2.5. OPPORTUNITY ANALYSIS

### 2.5.1. Introduction

Entrepreneurial opportunities refer to the economic ideas which can be implemented to form a business enterprise. The entrepreneur selects the business idea which is the most possible of all the opportunities and yields greatest rewards. This can only be done if the entrepreneur analyses all the opportunities and understands the demand-supply gap. The essential characteristic of an entrepreneur is that he is forever looking out for the opportunities. An entrepreneur, in the first instance, must identify a business opportunity, analyse its pros and cons and then select it on the basis of the identified attributes. Moreover, an opportunity must be understood as any business idea which is viable and feasible for a business venture. One of the pre-requisites of a viable project idea is that it should be capable of being translated into feasible and practical business application. As such, a favourable business opportunity has the following essential characteristics:

- 1) It has guaranteed scope in terms of market share.
- 2) It has a remunerative and attractive rate of return for the entrepreneur.
- 3) It is practical enough for application.
- 4) It is capable of being used by the entrepreneur as a business project.
- 5) It has potential growth prospects.

## 2.5.2. Ways to Assess Opportunities

There are several ways of assessing a business opportunity, some of which are discussed below:

- 1) **Needs and Wants:** The basis for recognition of opportunities in the market is analysis of the unsatisfied needs and wants of the market. However, an opportunity derived solely from the wants of the market cannot be regarded as a true business opportunity. The applicability and viability of the opportunity, in essence depend upon the determination of the fact that the idea or the product will serve customers' needs and will be acceptable to them, when it is finally launched. The product therefore, has less chances of survival when it is launched solely on the basis of perceived wants of the market. In such cases, the sales of the product will be adversely affected as product serves no need of the customers or may be unacceptable to them.
- 2) **Current or New Market:** Opportunities for new business are also analysed in terms of their relations with market being targeted, i.e., whether opportunities exist in the present market or in a new market. Also, the enterprise may already been conducting its business operations in a marketplace, known as present or current market. Whereas, a marketplace where the company wishes to carry out its business activities for possible returns is referred to as a new market for the company.

The firm may choose to enhance its performance in its present market itself. This can be achieved either through increasing the sales of the current product offering or by introducing a completely new product in the market. Such a strategy where the firm aims at increasing its revenue from its current market by increasing the sales of its existing product is referred to as market penetration. On the other hand, where the firm aims at increasing its revenue from the current market by introducing a new product is said to follow a strategy of product development. Thus, product development, in essence, involves introduction of a new product or offering a differentiated product from the one already in the market. **For example**, an old product may be launched in a new packaging or be incorporated with more features.

When the enterprise tries to sell its existing basket of products in an entirely new market segment, then it is called market development. Whereas, it is referred to as diversification when the firm tries to launch a new product in a new market.

- 3) **Target Market:** Another way of finding out the opportunities in a market is to research the trends in the growth of consumers. A new entrant will find it very difficult to enter a new market which is declining. Also, a mature market characterised by intense competitive rivalry will put up strong entry barriers for a new firm. While, it is almost impossible for a small-sized or medium-sized firm to enter a market segment which has a significant presence of big business houses or MNCs.

However, chances of survival are relatively greater when the competitors in the new market are weak in capacity and small in number. A small-sized firm has greater chances of survival in the new market if the product is one which the government has reserved for the small-scale sector and may even corner a significant portion of the market share, if the product is experiencing a rise in demand. A small firm cannot possibly choose a product category which is highly sensitive to price-wars. Such situations necessitates choosing a product which can profitably compete on parameters like quality, innovative design, packaging, delivery time, after sales services, replacement options, etc. It is easier for a firm to enter a new market which is witnessing demand surge and it is possible to introduce somewhat differentiated product which meets customers' needs.

- 4) **SWOT Analysis:** SWOT analysis is a unique technique used for evaluating the likely chances of success for a particular business opportunity. This aims to identify the four aspects of a venture in terms of its Strengths, Weaknesses, Opportunities and Threats (SWOT). The strengths and weaknesses relate to the internal dimensions of an organisation, whereas the opportunities and threats relate with the external environment of the organisation.

## 2.5.3. Tools & Techniques of Opportunity Analysis

Opportunity analysis can be done with the help of the following techniques:

- 1) **Trend Analysis:** Analysing a trend, especially a new one, offers a great business opportunity to the entrepreneur for creating a new venture. Also, if the entrepreneur analyses the trend at an early stage, it gives him plenty of time to make use of it. Trend analysis enables the entrepreneur to start a new business by making use of the idea behind the trend and successfully creating, developing and marketing it.

- 2) **Demographic Analysis:** Business opportunities can also be identified by looking at demographic variables and identifying any noteworthy shift. Demographic changes which are considered noteworthy for analysis include variables like households with dual incomes, increasing aged population, greater penetration of mobile and social tools, nature of jobs, etc. Increase in families with dual incomes has led to the increase in demand for products which economise on labour or for specific services which can be availed by them. Some of the services that have seen growth in their demand include laundry services, babysitting, day-care services, etc.
- 3) **Gap Analysis:** Another technique for evaluating business opportunity is gap analysis which is based upon identifying gaps in the market. These gaps or opportunities can be shown in the form of various ways which are enlisted below:
- Product Line Gaps**
    - Related to size
    - Related to alternatives
    - Related to style, colour, flavour, fragrance, etc.
    - Related to form
    - Principle or method of operation
    - Operation range
    - Format of the product
    - Composition of the product
    - Type of container
    - With reference to quality and price
    - Related to distributor brand
  - Distribution Gaps**
    - Gap in coverage or distribution
    - Intensity gap
    - Exposure gap
  - Usage Gaps**
    - Light user gap
    - Non-user gap
  - Competitive Gaps:** The most commonly used method is identifying the product line gaps. In this method, the existing products in the market are analysed on the basis of a variety of parameters like size, available alternatives, style, flavour, fragrance, quality, price, distributor brand, etc. By inspecting these variables, a gap can be identified in terms of a product feature which is not meeting the needs of the customers. This creates the opportunity for a new and better product or service. Analysing the gaps in distribution, usage and competition can also be used to identify new business opportunities.

## 2.6. OPPORTUNITY SELECTION: CONVERGENT THINKING

### 2.6.1. Introduction

The entrepreneur has to consider all the factors which have an impact on the selection of a business opportunity as the decisions regarding the selection of business opportunity is taken at the very beginning which is not so easy to change later. An entrepreneur needs to be careful regarding factors which may interfere the smooth functioning of the business in the future. As such, the entrepreneur needs to have all the relevant data for selecting the right kind of business line as a wrong decision taken at the beginning will affect subsequent decisions as well. Hence, it is necessary for the entrepreneur to study all the opportunities carefully before any one of them is selected. One should remember that all the businesses are built upon the solid foundations of carefully analysed business opportunities and entrepreneurial behaviour.

Right market conditions are required by the entrepreneurs to transform their business idea into a profitable venture. Further, it necessitates creation of beneficial situations wherein opportunities can be availed. Before the business opportunity is selected, the entrepreneur has to confirm that the product or commodity, which is going to be produced, has a ready market that will provide sufficient profit in return. Also an entrepreneur needs to collect all the important information regarding the chosen business opportunity before analysing it.

### **Finalisation of Opportunity or Product**

The finalisation of a product or an opportunity needs to be done after keeping in mind the following factors:

- 1) Total investment
- 2) Return on investment
- 3) Returns on equity
- 4) Expected sales volume.
- 5) Gains and Profitability

After going through the analysis, the selected product/service will be the most viable one to be used as a business idea. Besides, the whole volume of data collected above, an entrepreneur need to work out following additional data that enable him to take ground-level decisions. These data correspond to:

- 1) Total investment required in plant and machinery.
- 2) Possible sources of raw materials
- 3) Facilities for infrastructure.
- 4) Project size
- 5) Availability of requirement of manpower
- 6) Amount of finances required
- 7) Government policies and procedures regarding starting of a new venture
- 8) Government incentives, subsidies, exemptions, etc.

These factors play determinative role in selecting a project which is not only feasible but also financially viable. For a long term growth, it is necessary that the opportunity is capable of giving consistent and continuous returns over a fairly long period of time and can be diversified into other businesses if required.

#### **2.6.2. Divergent v/s Convergent Thinking**

| Divergent Thinking   | Convergent Thinking  |
|--|--|
| Activity that is flexible opportunistic and disregards established rules or conventions to strike out in new directions and that invent and plays with radical variants non-convergent and unorthodox. | Activity that conforms to social norms and conventions, enquiry that raises standard questions and produces orthodox answers.  |
| Divergent thinking involves some stimulus, which can take the form of a problem, and we can locate this at the centre, as we did with convergent thinking above.                                       | This is perhaps the more predominant style of thinking in contemporary technological society. we locate a problem at the 'centre' of our focus and then gather peripheral resources to bear down on the problem. |
| Divergence involves generating creative multiple answers for problems  | Convergent means aiming for single correct solution for a problem  |
| Divergence involves trying out new perspectives and making corrections across categories.  | Convergent involves narrowing down to a single best option.  |
| Divergent thinker lives in illusions and tends to live in that world.  | Convergent thinker believes in facts and follows them.   |
| Divergent thinkers are creative, cognitive and generated new ideas   | Convergent thinkers are exact literal and orderly.   |

#### **2.6.3. Objectives of Opportunity Selection**

Selection of any business opportunity should be guided by the following objectives:

- 1) To resolve the business problem by developing a conventional solution, agreed-upon consensually.
- 2) To achieve the external goals which are beyond the control of an entrepreneur and thus are dependent on his personal thinking.
- 3) To remove probable chances of vagueness in the selection of business opportunity.

## 2.6.4. Tools & Techniques of Opportunity Selection

Experts have, over the years, developed several tools and techniques for guiding the decision of opportunity selection. Some of them are as follows:

- 1) **Hits:** This is a very fast way of identifying best opportunity among alternatives. The idea is to hit (mark) the most attractive, interesting, feasible, creative alternative as dots or a hit mark by using a pen.
- 2) **Clustering:** In this method, similar alternatives are grouped together so that repetition can be avoided. After the hits are marked, clustering is done in a manner that not more than three opportunities occur in one group.
- 3) **Restating Clusters:** It is a tool which tries to capture the central theme of a cluster so that it can be expressed as a single statement. While doing this, it should be kept in mind that the original and interesting facets of the ideas are not lost.
- 4) **Point:** POINT is a four-stage approach used for the evaluation of an alternative. POINT stands for Pluses, Opportunities, Issues and New Thinking. Under this technique, a list of all pluses, followed by opportunities (business potentials), then issues (various problems, concerns, etc.) and finally new innovative thoughts for resolving such issues is prepared in that order.
- 5) **Card Sort:** This is one way of ranking or assigning priorities when faced with many attractive options. In a given set of opportunities, mark a 1 on the most attractive alternative and a 6 on the least attractive and put them aside from remaining alternatives. Next, mark 2 on the most attractive and an alternative 5 on the least attractive. Continue the same for the numbers 3 and 4. Although, this does not help in selecting an alternative but helps in ranking them on the basis of some criteria.
- 6) **Evaluation Matrix:** In this technique, the criteria for selection are listed column-wise and the options are listed row-wise in a grid matrix. After that, a rating scale (such as A-B-C or 1-5) is selected. At last, every alternative is rated against the selected criteria.
- 7) **Paired Comparison Analysis:** In this technique, every alternative is compared with other alternatives. All the options are listed row-wise and column-wise on a grid. Now, each option is rated against other options using a rating scale (e.g., 3 is preferred little 2 is preferred more and 1 is preferred the most). The final rating of the option is the total score that it gets.

## 2.7. EXERCISE

### 2.7.1. Multiple Choice Questions

- 1) Which of the following are sources of innovation?
  - a) Change in demographics
  - b) Change in perception
  - c) Change in financial performance
  - d) All of the above
- 2) What is the next step in the innovation process after imagination?
  - a) Understanding the problem
  - b) Analysing market structure
  - c) Action and implementation
  - d) None of the above
- 3) All of the following are the challenges of innovation EXCEPT:
  - a) Finding new idea
  - b) Responding to those who provides ideas
  - c) Beating competitors
  - d) Developing solution
- 4) Innovation is \_\_\_\_\_.
  - a) Doing "new" things or doing things "differently"
  - b) Coming up with a new idea
  - c) Generating idea
  - d) None of these
- 5) Which of the following are the tips before practicing ideation?
  - a) Developing ideas
  - b) Ensuring complete information
  - c) Merging duplicate ideas
  - d) All of the above
- 6) All of them are the type of opportunities EXCEPT:
  - a) Additive
  - b) Alternative
  - c) Complimentary
  - d) Breakthrough

- 7) The technique used for opportunity search is:  
 a) Clustering  
 b) Point  
 c) Brainstorming  
 d) Evaluation matrix
- 8) The tool used for opportunity selection is:  
 a) Hits  
 b) Focus group  
 c) Day dreaming  
 d) All of the above
- 9) Divergent thinking can also be named as:  
 a) Opportunity analysis  
 b) Opportunity search  
 c) Opportunity perspective  
 d) Opportunity selection
- 10) The finalisation of opportunity or product is based on the factors EXCEPT:  
 a) Government incentive  
 b) Size of the project  
 c) Amount of funds required  
 d) Motivation
- 11) The skills required for a successful entrepreneur are:  
 a) Interpersonal skills  
 b) Communication skills  
 c) Problem solving skills  
 d) All of the above
- 12) \_\_\_\_\_ thinkers are creative, cognitive who generate new ideas.  
 a) Divergent  
 b) Convergent  
 c) Entrepreneur  
 d) Manager
- 13) In POINT approach, what does I stand for?  
 a) Innovation  
 b) Intrapreneurship  
 c) Idea management  
 d) Issues
- 14) The creative process for divergent thinking that involves making the strange familiar in first step and then making the familiar strange in second step through personal, symbolic and direct analogy is \_\_\_\_\_.  
 a) Card sort  
 b) Synectics  
 c) Brainstorming  
 d) Expert advice
- 15) What are the four types of innovation?  
 a) Extension, Invention, Synthesis, Duplication  
 b) Invention, Duplication, Copying, Extension  
 c) Duplication, Invention, Creativity, Extension  
 d) None of the above

**Answers:**

- 1) d      2) c      3) b      4) a      5) d      6) b      7) c      8) a      9) b      10) d  
 11) d      12) a      13) d      14) b      15) c

**2.7.2. Short Answer Type Questions**

- 1) Define innovation. Highlight its relationship with entrepreneurship.
- 2) What are the sources of innovation?
- 3) Compare creativity and innovation.
- 4) Briefly explain idea management system and its benefits.
- 5) Write a brief note on convergent thinking and its objectives.
- 6) Distinguish between divergent and convergent thinking.
- 7) What are the qualities of a prospective entrepreneur? Explain in detail.

**2.7.3. Long Answer Type Questions**

- 1) Elaborate the challenges of innovation. What are the steps involved in the innovation management?
- 2) Explain Idea Management System in detail.
- 3) What are the various sources, tools and techniques of divergent thinking?
- 4) Describe convergent thinking in detail including its tools and techniques.
- 5) Highlight the qualities of a prospective entrepreneur.