Entrepreneurial Skills

**Introduction**

All entrepreneurs are different but there are some characteristics and qualities that have been observed to be common among successful entrepreneurs over the years. Along with the qualities and traits, the motivation to choose the path of entrepreneurship as well as the journey to success is also different for each entrepreneur. However, one thing that drives all entrepreneurs is the sense of purpose behind their venture as well as willingness to take the leap and implement their ideas. More than anything, most entrepreneurs follow a basic process of entrepreneurship to kick start their ventures.

**Barriers to Becoming an Entrepreneur**

Recognizing a need and having an idea of how to fill the gap or need, are rarely a strong enough basis for launching a new venture, particularly if the entrepreneur needs to borrow capital. Most successful entrepreneurs also create a business plan, a formal document that contains a statement of purpose, a description of the products or services to be offered, a market analysis, financial projections and some management procedures designed to attain the firm’s goals. Before they can write a business plan, though, entrepreneurs must be aware of the barriers to entry.

**Unsupportive business environment:** Lack of supportive and market-augmenting governmental regulations serve as a barrier to entrepreneurship. For example, Russia leads all other large nations in having an unsupportive business environment because they lack rule of law, enforce regulations inconsistently, allow rampant corruption and bribing, allow regulatory authorities and inspectors to act in a predatory nature which therefore requires friendly ties with government officials and bureaucrats to smooth the way for businesses to operate.

**Employee related difficulties:** Building an employee asset base for the enterprise is one of the more daunting and sometimes overlooked tasks. Entrepreneurs must find and select the best-qualified employees who are motivated and willing to grow with the venture. Then they must ensure the employees do not leave. This task becomes a barrier when employee expectations increase, governmental regulations related to labor employment are hardened, and employee costs grow.

**Market entry regulations:** Governmental rules, taxation, environmental regulations, lending requirements and licensing are all barriers to entrepreneurship. Most countries license market entry and the creation of new firms to protect incumbents in certain industries and professions. Other barriers to entrepreneurship are predatory tax behavior of authorities, lack of property rights and tax disadvantages.

**Shortage of funds and resources:** Finding the money to start up an enterprise is a leading barrier to entrepreneurship. Without funds, any person cannot begin to organize, train, develop and sell product.

**Lack of Entrepreneurial Capacity:** Entrepreneurial capacity is the existence of people with entrepreneurship qualities, willingness and motivation to initiate new ventures. Opportunities
go untried until someone comes along with an eye for possibility and a can-do attitude. Some cultures may discourage entrepreneurial capacity resulting in a low rate of new firm entrance.

**Lack of Adequate Entrepreneurship Training:** Training and education can be a robust incubator for new ventures. This includes training in technical skills, managerial skills, entrepreneurial skills and entrepreneurship.

**Lack of Appropriate Technical and Practical Skills:** People tend to use the skills they have acquired to pursue entrepreneurial initiative. Lacking the appropriate skills and knowledge inhibits economic development.

**Fear of Failure:** Entrepreneurs have to decide whether to take action so they don’t miss the boat, while knowing that hasty action may cause them to sink the boat.

**Aversion to Risk:** A psychological barrier closely related to the fear of failure is aversion to risk. Entrepreneurs must take initiative, create structure with a social-economic mechanism and accept risk of failure. Entrepreneurs have to be risk takers while those who are risk averse will seek the security in an existing establishment.

**Fear as a barrier**

Fear is defined as an unpleasant feeling triggered by the perception of danger, real or imagined. It is a fundamental part of human psychology. Our brains are wired to feel fear because it helps us avoid calamity; it keeps us safe. But fear can also hold us back if we let it. Fear feeds on fear, meaning the more we try to avoid something we’re afraid of, the bigger and deeper our anxiety grows. To overcome this, we must face our deep-seated misgivings and worries. We have to acknowledge our fears and find ways to move beyond them.

In the process of entrepreneurship, many fears serve as obstacles in taking action. If entrepreneurs don’t confront them, the fears can ultimately consume them. Some common fears seen in entrepreneurs are as follows:

**Fear of failure:** The fear of failure is like a tiny voice whispering into your ears that everything could go wrong in the business. The best way to overcome this fear is to accept that failure is possible, even for the most gifted entrepreneurs. With every failure comes an added value in strength, courage, wisdom and knowledge. Whenever you experience any setback, do a little soul searching to find out what mistakes were yours, why you made them and what you learnt.

**The Fear of not being an expert:** Even though you probably know enough about your business or product to make important decisions or solve most of the nagging issues that may arise, many entrepreneurs still face the fear of not being considered as experts in their line of business. This fear, however minor it may seem, has a way of limiting your potential as an entrepreneur. For the things about a business one might not know, there is no shame in constantly learning and finding answers to them. Learning about the business is a continuous process that will surely lead to perfection in the long.

**Fear of being pushed into uncomfortable situations:** Many people fear public speaking more than death. Just the thought of it puts us on edge and makes us anxious. With practice, however, we can become comfortable pushing ourselves outside our comfort zones. But it
won’t happen without getting into the right mindset and prepping to take on this challenge. One can start by taking small steps and doing things just outside of their comfort zone.

**Fear of taking risks:** A risk can pay off with amazing success, or it can lead to a downward spiral and failure. But there is an important difference between dangerous, unmitigated risk and thoughtful, calculated risk. Dangerous risk takers are like gamblers, betting it all on something that isn’t proven. With a calculated risk, you have strategized each step of the way. One must move incrementally towards their goal, carefully assessing their level of investment and overhead. Calculated risks are key to every success.

**Fear of the unknown:** Uncertainty registers in our brain like a blaring alarm. We often avoid the unknown because we fear change. We are afraid of losing control and being unable to manage potential outcomes. Allowing ourselves to take a massive leap into the unknown is terrifying because we have no guarantees of how things will turn out. The unknown will certainly lead to change of some kind.

**Entrepreneurial Competencies**

Entrepreneurial behavior requires certain knowledge, skills or personality profile. Generally, it is called entrepreneurial competence or traits. A competence may be defined as underlying characteristics of a person which results in effective and/or superior performance in a job. Entrepreneurial competencies play a key role in the success of an entrepreneur and in achievement of entrepreneurial goals.

**Common Entrepreneurial Competencies**

In a study conducted by David C. McClelland, a reputed behavioural scientist, and Entrepreneurship Development Institute of India (EDII), certain competencies were identified that were found in successful entrepreneurs who exhibited superior performance. These competencies can be developed through training, experience and guidance in a budding entrepreneur. Some of these competencies include:

1. **Taking Initiative:** It is an inner urge in an individual to do or initiate something. It is the entrepreneur who takes the first move towards setting up of an enterprise. Most innovative entrepreneurs have this urge to do something different. An entrepreneur basically is an innovator who carries out new combinations to initiate and accelerate the process of economic development.

2. **Seeking and Acting on Opportunity:** An entrepreneur is always on the look-out or searching for opportunity and is ready to exploit it in the best interests of the enterprise.

3. **Persistence:** An entrepreneur is never disheartened by failures and keeps trying, adapting and iterating to overcome obstacles that come in the way of achieving goals.

4. **Information Seeking:** A successful entrepreneur always keeps his/her eyes and ears open and is receptive to new ideas which can help in realizing his goals. He/she is always open to consult with experts and mentors to get the right guidance and advice.

5. **Concern for High Quality:** Successful entrepreneurs are seen to be not satisfied with moderate or average performance. They set high quality standards for themselves and then
put in their best for achieving these standards. They believe in excellence, which is reflected in everything they do.

6. **Commitment:** Entrepreneurs exhibit high level of commitment towards their work and decisions. For an entrepreneur to succeed, they have to stay committed to their venture and their goal.

7. **Concern for Efficiency:** Many entrepreneurs are always keen to devise new methods aimed at promoting efficiency. They try and create new methods that aim at making working easier, simpler, better, and economical.

8. **Systematic Planning:** Successful entrepreneurs decide future course of action keeping in mind the goals to be achieved. They believe in developing relevant and realistic plans and ensure proper execution of the same in pursuit of running a successful enterprise.

9. **Problem Solving:** An entrepreneur takes each problem as a challenge and put in best for finding out the most appropriate solution for the same. He/she will first of all understand the problem and then evolve appropriate strategy dealing with the same.

10. **Self-confidence:** Entrepreneurs are not cowed down by difficulties as they believe in their own abilities and strengths. They have full faith in their knowledge, skill and competence and have the confidence to handle future uncertainties.

11. **Assertiveness:** An assertive person knows what to say, when to say, how to say and whom to say. Entrepreneurs exhibit assertiveness in situations around decision making to ensure that interests of the organization are aligned with decisions and actions of the entrepreneur and its team.

12. **Persuasiveness and Influencing Others:** Entrepreneurs have to persuade different cohorts of people at different stages, such as employees, customers, clients, suppliers etc. Through sound opinions and logical reasoning, an entrepreneur manages to convince others about what he/she wants.

13. **Effective Strategist:** A successful entrepreneur possesses the ability to formulate relevant strategies, aimed at safeguarding or promoting the organization’s interests and goals. Strategy may be with respect to facing future uncertainties or challenges posed by competitors etc.

14. **Effective Monitoring:** Entrepreneurs monitor that everything is carried out in their organizations as per their decisions but at the same time give some flexibility to the employees. They ensure regular monitoring of the working so that the goals of the organization are achieved in best possible manner.

15. **Concern for Employees Welfare:** Future of the organisation depends on its employees. If the employees are dedicated, committed and loyal, the organisation is bound to perform well. A successful entrepreneur tries to promote organisation’s interest through promotion of interests of the workers. He/she takes personal interest in solving problems confronting workers and generates the feeling that there is interdependence of the interest of workers and the management.
16. Adaptability: Adaptability refers to the capacity to adjust one’s thoughts and behaviours in order to effectively respond to uncertainty, new information, or changed circumstances. In business, adaptability becomes a survival skill as the nature of businesses is dynamic. Uncertainty around globalization, new technologies, market trends, etc., poses a tremendous challenge for applying the right business strategy. Entrepreneurs learn to disrupt, pay the price and bring change. It is impossible to accomplish this without developing the skill of adaptability.

17. Decision Making: One of the most important traits of being an entrepreneur is being able to take decisions that more often than not, decide the fate of the company. At the helm of the company, entrepreneurs often have to take that one decision at the right time which can define the future of their company. And then they also have to quickly act upon their decisions.

18. Goal Setting: Goal setting refers to establishing short or long-term objectives, usually along with incorporating deadlines and quantifiable measures to indicate if they have been achieved. For a business, the ultimate goal is to make profit. For a social enterprise, the ultimate goal might be to sustain itself and create the impact that it aims to. Entrepreneurs set various goals with different timelines. Each action and decision is taken to achieve a certain goal.

19. Team Building: Team building is any action or method that brings a group of individuals together and motivates them to work cooperatively as a team. It refers to the various activities undertaken to motivate the team members and increase the overall performance of the team. Teams are formed when individuals with a common interest come together on a common platform to achieve a predefined target. The main goals of team-building are to improve productivity and motivation.

20. Interpersonal Skills: For smooth functioning of a team, each member must be consistent and clear in their communications and interpersonal skills. Clear communication helps everyone in the team to understand what’s expected and how it’s measured. It must also be ensured that no member offends the other.

21. Creativity: Creativity is a process of continually improving ideas and solutions by making gradual alterations and refinements. Entrepreneurs exhibit creativity by applying the process of design thinking, thinking of alternatives, trying unconventional ways to do things and continuously improvise and iterate.

22. Risk Taking: Entrepreneurs take enough risk but it is a calculated risk. They use risk management principles to assess the loss and return of the risk.

23. Perseverance: It is important to be perseverant and patient and ready to continue even if the first battle is lost. Entrepreneurs need to stay put, be patient and believe in their vision. It is only by trying different things and ways to do them, that a solution can be found.

24. Negotiation skills: Negotiation skills for entrepreneurs are critically important to business success. There a number of scenarios where an entrepreneur's negotiation skills come into play such as supplier relations, customer sales, employee hiring, securing investors etc. Some essential negotiating techniques that can be applied to nearly any business situation include - inviting the other person to share their perspective, clearly stating your own needs,
and considering options in advance can all play an important role in helping your business run more smoothly and profitably etc.

25. Organizational skills: Organizational skills for entrepreneurs are not just about structuring and prioritizing their daily work, but mainly about managing teams, delegating, setting targets, continually reviewing and leading and motivating the people around them.

26. Stress management: Entrepreneurs have a hectic work life and thus, it is important for them to manage and handle stress. This refers to taking systematic brakes, maintaining work-life balance, setting achievable goals, connecting with other like-minded entrepreneurs etc.

27. Valuing service and diversity: Diversity is about how an organization treats its people authentically down to the roots of its business model. It is key for an entrepreneur to remember that a person working for him/her is actually providing their service. At the same time, people of all cultures, race, religion, gender etc. have to be treated equally and with respect, such that they mutually flourish and grow together.

Benefits of Entrepreneurial Competencies

- Taking actions to implement your ideas.
- Understanding the need or the problem your offering is fulfilling or solving.
- Strategizing and planning the steps that need to be taken.
- Preparing an action plan and timeline.
- Networking with stakeholders.
- Interacting with customers.
- Gaining and analyzing insights.
- Looking for alternatives and adjusting plans according to analysis and feedback.
- Evaluating and calculating the risk involved.
- Building and motivating a team.
- Being patient and staying motivated to overcome and work around various obstacles.
- Showing the value that the business is creating for stakeholders and customers.
- Gaining the know-how of creating, building, launching, sustaining, managing and growing a business.

Activity I – Self Reflection

Self-reflect and check if you relate to the statements given below:

I like to give myself challenges when I take on a new project.
Where others see problems, I see possibilities.
I do not worry about what others will think before doing something important.
I am fairly curious and I am continually in search of discovery.
I want to build something that will be recognized publicly.
When I take on a project I have confidence that I will carry it out successfully.
I feel that am capable of seeing many solutions to a problem.
I always try to learn lessons from my failures.
I am not afraid to take on initiatives.
I manage my stress well in ambiguous and uncertain situations.
After some self-reflection, consider the competencies of entrepreneurs given above. Self-evaluate yourself on these competencies by giving a rank number to each.

For example:

Self-confidence – 1
Commitment – 4
Problem Solving – 6

According to the above ranking, one thinks that self-confidence is their strongest competency. Commitment comes at the 4th rank and problem solving at the 6th. Thus, problem solving as a competency is weaker than commitment for the person in the example given above.

Activity II – Understanding competencies

Let us look at the example of Byju Raveendran, who started the famous education platform, Byju’s. He took some action steps that helped him develop these competencies and make Byju’s a successful startup.

Example: Byju’s learned English, Math and science on his own during his school years. Especially, he learnt English by listening to commentaries. With this, he realized how for many students in the Indian education system, learning is involved rote learning and then reproducing the learnt information in the exams, with bare minimum application. With Byju’s, he successfully tackled the root of the problem of learning.

Which competency did he develop?
Ans. Problem Solving

Please write the competencies, among the competencies given below, that you think match with the action step taken by Byju Raveendran in the section below.

When Byju’s started, it was in the offline format. With classrooms with a large capacity, interaction was limited and rather not really possible. Thus, Byju Raveendran started to think of ways to solve this problem, by predicting what kind of doubts a student could have and visualized and conceptualized the teaching material beforehand.

In 2003, Byju’s helped a few friends study for the CAT exam, which is the common entrance exam for Indian business and management schools. With his tutoring, his friends did well in the exam, after which he wrote the exam and ended up scoring in the 100th percentile. However, he returned to his job in the UK, but came back to India two years later, and helped some more people with the CAT exam. By this stage, he got immense positive feedback and had coached enough number of people who got good results. This made Raveendran realize that he actually felt passionate about teaching. He quit his IT job in the UK, took an entrepreneurial path and stayed committed to it.

Teaching for entrance exams such as CAT, Raveendran realised that the problem was much deep rooted. The insight he gained was that students were not learning basics and fundamentals at the school level, and this led to Byju’s expand into subject-wise coaching for classes 6th to 12th.

Raveendran started by conducting workshops on the weekend. Once he got to a stage when one classroom wasn’t enough to accommodate students, he booked an auditorium with a seating capacity of 1,200. From a classroom of 40, he was confident enough to the leap of going 30x but did not worry about whether it would fill in. It was only by the sixth or seventh week the auditorium was full.

Once Byju’s started targeting 6th to 12th standards, they had to reach out to students directly. Not just by engaging children, but even by convincing parents that an app is suitable for real-world coaching, Byju’s started to make some progress. Raveendran had to influence all stakeholders of education such as students, parents, tutors, educators and schools to communicate his vision and make them trust the product.

Interacting with some of the brightest students and taking feedback on Byju’s courses, Raveendran realised that most of them, unfortunately, studied only because of the fear of exams. They are taught to solve a problem but aren’t enabled to find a problem. He realised
that if his strategy of self-learning was adopted in early years at school, it could potentially create a huge impact.

Byju believes that it is important to execute things in a business, keeping the pace faster than slower. In the initial stages, there is a need of a strong idea and a team. Byju’s made a dynamic and detailed business plan in the initial stages, in order to avoid making any huge mistakes. At the same time, he was flexible to making quick or midway changes, throughout the plan. However, he thinks it is best to try out multiple things and keep making changes, but some clarity should be there about the core idea.

Raveendran started his education career as a teacher tutoring for CAT. The initial workshops were free and students paid for advanced workshops once they liked it. From there, once his classes started being recognized as “Byju’s classes”, he thought of turning it into a venture. With great perseverance, he overcame challenges, especially in entering the school space. In this highly regulated system, marketing to students was difficult, but he kept moving forward taking one step at a time.

Initially, Raveendran didn't have any drive or passion to start a business, but when he started teaching, he realised that it was his passion and it gave him a lot of satisfaction and enjoyment. When his classes started creating an impact, he turned it into a business proposition and launched Think and Learn, the parents company of Byju’s.

As a teacher turned entrepreneur, Raveendran not only has to create and deliver good courses, but also build and manage the team, strategize marketing campaigns, ensure quality, get continuous funding and scale the company.

**Activity III - Taking Initiative**

Have you taken initiative towards anything? Consider the following statements to think about it:

- Think about a time you went above and beyond what was expected of you.
- Think about a situation when you were creative. What did you do?
- Can you remember a situation when you took responsibility for something and had negative consequences? What did you learn from it?
- Have you ever noticed and raised issues in a project/activity/discussion?
- Think about a time when you worked on a group project and made improvisations in it.
Write a situation when you took initiative. Mention what you liked/disliked about it. Share your learnings (if any) from the experience.

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**Activity IV - Taking Initiative**

Are there any activities/ideas/events/projects etc. that you want to try and have not got the chance to?

In the space given below, make a list of things you want to take an initiative for, in the next 1 to 5 years.

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Activity V – Information Seeking

Read the situations below and write answers to the questions given below:

- Who should the entrepreneur seek information from?
- What information should the entrepreneur acquire?

Simaya has started a company which makes bags and wallets using fish leather. Fish leather is made by using the waste material from the fishing industry. Simaya is trying to understand who her customers are. She is not sure if she should start selling the products online or supply to offline stores or do both. She does not know what will be the touch points where people could buy the products she is planning to design. She wonders what preferences and choices people would have.

Dhruv has started a brand that customizes kid’s shoes. While he has made sales on some online websites selling kids products, he is unable to make a sustainable profit. He is also looking for ways to raise some capital to start selling from his own website and retail store.

Janvi is thinking about starting a business that conducts training workshops for working professionals. She plans to teach business-related topics and develop employability skills through the workshops. However, Janvi does not know what kind of competition will be there. She wonders if she will be able to get enough customers to beat the competition in such a crowded space.
Activity VI – Goal Setting

SMART Goals

S.M.A.R.T. is an acronym for the 5 steps of specific, measurable, attainable, realistic, and timely goals. It’s a simple tool used by businesses to go beyond the realm of fuzzy goal-setting into an actionable plan for results.

Specific: Great goals are well-defined and focused. The moment one focuses on a goal, the goal becomes a magnet, pulling resources towards it. The more focused one’s energies, the more power one generates.

Measurable: A goal without a measurable outcome is like a sports competition without a scoreboard or scorekeeper. Numbers are an essential part of business. Concrete numbers should be put in the goals to know if one is on track.

Attainable: A goal must be achievable. Far too often, small businesses can set goals beyond reach. No one has ever built a multi-crore business overnight. Venture capitalists and angel investors discard countless business plans of companies with outlandish goals.

Realistic: Achievable business goals are based on the current conditions and realities of the business climate. One may desire to have the best year in business or increase revenue by 50%, but if a recession is looming and three new competitors open in the market, then the goals are not as per the realities of the market.

Timely: Business goals and objectives just don’t get done when there's no time frame tied to the goal-setting process. Every plan or project must follow a timeline. Whether the business goal is to increase revenue by 20% or find 5 new clients, a time-frame or deadline to accomplish the goal must be set.

Let us do small exercises to understand SMART goals better.

Specific:
Look at the examples below. Underline the goals that are specific.

Get in shape.
I will go to the recreational centre Monday, Wednesday, and Friday at 6:00 a.m. and walk around the track for 30 minutes.
Get good grades.
I will sit at the table every day at 3:30 p.m. and work on assignments given that day in school until 4:30. Upon completion, I will place the assignments in the correct folder, take to school and turn in before class starts.

Get rich.

I will save 25% of my paycheck every month and invest in mutual funds until I am 55 years old.

**Measurable:**
The above examples give good indications. Write in the measurable outcomes from the above examples of #2, #4, #6.

#2. __________________________________________________________

#4. ______________________________________________________________________

#6. ______________________________________________________________________

**Attainable:**
Which of these goals seem attainable?
Earn 10 times the money I make compared to this month.
Exercise daily for one hour.
Eat an apple a day.
Watch television for all night but wake up early every morning.
Live in Antarctica for a year, after I have lived in Mumbai all my life.

**Realistic:**
If I wanted to run a marathon and I haven’t done any training, which goal would better represent my reality?

I will walk every day for 30 minutes for one week, jog for 30 minutes for two weeks, add five minutes to my work out every week until I reach 60 minutes and continue training for three months.

I will run the marathon on Saturday.

**Timely:**
Give yourself a deadline. When you have an end date, you will finish your goal. Look at the above examples (all of them). Write the goals that have a time frame.

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Activity VII – Goal Setting

Write an academic or personal goal below in the SMART manner:

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<thead>
<tr>
<th>S</th>
<th>My SPECIFIC Goal</th>
</tr>
</thead>
</table>

Goal
Activity VIII – Decision Making

Decision Making…….. The Lunar Disaster

On April 11, 1970 astronauts James Lovell, John L. Swigert, and Fred W. Haise blasted off from Cape Kennedy aboard Apollo 13. At 54 hours and 54 minutes into the mission a large explosion crippled the spacecraft. Four days the attention of the world was riveted on the disabled spacecraft. Because of quick thinking and the use of computers, mission control was able to get the crippled spacecraft safely back to Earth.

In this activity, you are a member of the crew of a spaceship scheduled to rendezvous with the mother ship, located on the lighted surface of the moon. Due to mechanical difficulties, your ship is forced to land on the dark side of the moon, 200 miles (~ 322 km) from the mother ship. During the emergency landing much of the equipment aboard was damaged and since survival depends on reaching the mother ship, only the most critical items must be chosen for the 200 mile trip. Below is a list of 15 items left undamaged by the crash. Rank each of these items in order of importance from 1 the most important to 15 the least important.

Here is some background information, which may be useful. There is no atmosphere or water on the moon, and the moon has almost no magnetic field. A FM transmitter uses straight-line communication and has a range of less than 100 miles on the Earth, so on the moon the range would be considerably less. The gravity on the moon is 1/6th that of the Earth. The items below are in no particular order.
<table>
<thead>
<tr>
<th>Item</th>
<th>My Ranking score</th>
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<th>Group ranking</th>
<th></th>
<th>(group score)</th>
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<tbody>
<tr>
<td>Box of matches</td>
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<td>Food concentrate</td>
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<tr>
<td>Nylon rope, 50 feet</td>
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<td></td>
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<tr>
<td>Parachute silk</td>
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<td>Portable heater</td>
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<td>Two 0.45 caliber pistols</td>
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<tr>
<td>Dehydrated pet milk, One case</td>
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<td>Two 100-Pound oxygen tanks</td>
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<tr>
<td>Star Map-Moon Constellations</td>
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<tr>
<td>Life raft</td>
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<tr>
<td>Magnetic compass</td>
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<tr>
<td>5 gallons of water</td>
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<td></td>
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<tr>
<td>Signal flares</td>
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<td></td>
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<tr>
<td>First-aid kits, injection needles</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Solar powered FM transmitter</td>
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</tbody>
</table>

After ranking each item 1-15, get together with another student and re-rank the items. Remember 1 is the most important and 15 is the least important. With your partner(s) agree on a ranking (Do not change your individual score) and place the number under group rank (each person in the group should have the same GROUP rank). After completing both individual and group ranking your teacher will give you the actual ranking determined by NASA.

To score subtract the difference between the number written with the actual number given by your teacher. Place the difference in the column labeled score (Individual and group).

After completing the scoring add up the numbers in each score column and place the total in the spaces below.

**Individual score** ______________ **Group score** ______________

Reflect on the decision-making process you followed.
Discuss why the scores increased or decreased after working together.
Discuss ways of thinking critically in the future.

*Note: The answer key of actual ranking/score is given at the end of the chapter.*

**Activity IX – Team Building**
For this activity, you have to work on the following problem:

How can the problem of waste generation be solved? This could include e-waste, plastic waste, greenery/kitchen waste, hazardous waste etc.

Get into groups of 7.
Take a piece of paper.
Any one member has to start with writing an idea to solve the problem on the paper.
Then, pass the paper to the next person in the group.
The next person has to build on the idea written by the first person and then pass it to the third person. The third person will then build on the idea written by the second person and so on.
This will continue once all people in the group have built on the idea of the previous person.
The final idea will then be discussed and refined by the group and shared with the class.

Activity X - Adaptability

In this activity, we will make a story using other classmates’ inputs. To do this, please follow the steps given below:

Get in groups of 10.
Any one person in the group has to start a story from “Once upon a time…..” and stop after speaking for around 1 minute.
As the first person stops, the second person has to continue the story started by the first person.
Similarly, after the second person speaks for 1 minute, the third person has to continue the story from where the second person stopped and so on.
This goes on until the story is completed by the tenth person.

After doing this exercise, reflect on the following questions:

Did you find challenging to adapt to someone else’s story? Why?
What did you learn about yourself from this exercise?
One a scale of 1 to 10, how would you rate your skill of adaptability?

Activity XI – Problem Solving

Read the statements below about different startups of India and how they define themselves. Based on that, and your own research, enlist the problems that these startups are trying to solve:

1. Interview Bit is an interview preparation platform, especially designed for software engineers. It provides support to job candidates via a range of practice questions and on-demand mentors.

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2. **Cure.Fit** is a startup in the fitness and healthcare industry. It has a chain of fitness centres which offer different types of fitness activities and classes everyday. It also has an part of called Eat.fit, where a customer can order healthy meals everyday.

3. **1mg** is India’s leading consumer health platform by offering an online pharmacy network and generic medicine engine. It aspires to be the trusted health partner for all Indians and its mission is to make healthcare accessible, understandable and affordable for all Indians. Users can find information about medicines based on ailments, class, companies, and brands, and buy them.

4. **EduKart** is an online marketplace for education that aims to democratize education and bring more flexibility into the system. It offers both short certification courses and degree programmes for which it has partnered with renowned institutions.

5. **Recyclebank** is encouraging people to recycle household waste by using gamification. The methods around gamification include rewards in the form of discount coupons on daily goods and services, points for making progress and a competitive element to encourage people to recycle household waste. Currently, Recyclebank has improved the process of recycling in more than three hundred communities and has more than four million members.

**Activity XII – Problem Solving**

Read any daily newspaper of the last three days and make a list of problems that you think can be solved by starting a business or through an entrepreneurial project. Which problems did you come up with?
Activity XIII - Creativity

Scamper is a technique that guides you to think creatively about any existing product or service. It was created by Bob Eberle, an author of books about creativity for children. Scamper is a set of seven thinking techniques meant to assist those who utilize them in discovering atypical solutions to problems. SCAMPER is an acronym, with each letter representing a different technique that can be used to trigger creative ideas:

**Substitute**: Take one thing or part away and add something else.

**Combine**: Put one or two things together to create something completely new.

**Adapt**: Change something so that it can be used in a specific situation.

**Modify/Minify/Magnify**: Change size, shape or colour or any specific trait and reimagine it.

**Purpose/Put to Other Use**: Use it in a way that it wasn’t meant to be used. Change the purpose it is used for.

**Eliminate**: Remove any unnecessary element that might create an issue or a problem.

**Reverse/Rearrange**: Change the direction or orientation. Look at it differently. May be moved upside down or use it backwards.

**Example:**

- **Adapt** to local country/regional flavours
- **Substitute** Bun with Avocado
- **Eliminate** sauce inside the burger with dip
- **Put to Another Use** by creating “Burger Candies” or “Burger Pizza”
- **Rearrange** by creating “Open Burger” or “Burger flavoured chips”
- **Combine** with ice cream cone to create “Burger Cone” (Savoury) or “Burger Ice cream” (Sweet)
- **Modify** sauce with salad dressing or make “Mini Burgers”
Use S.C.A.M.P.E.R. to build a better school desk/table or chair. Feel free to draw or write your ideas!

1. What will you substitute? Can you change any parts? Can you change its shape, color or thickness?

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2. What will you combine? Can you combine any materials, parts or ideas?

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3. What will you adapt? What else is like this? What other ideas does it suggest? Can you incorporate something?

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4. Will you modify, minimize or maximize? Can you make something higher, bigger or stronger? Can you simplify something or make it smaller?

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5. What else could I use it for? Can it be used in an unconventional way?

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6. What will you eliminate? Can you think of something unnecessary that can be removed or omitted?

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7. Will you reverse or rearrange any parts? What if you moved or turned it upside down? Can you imagine another layout or sequence? Can you interchange components or patterns?

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Activity XIV - Creativity

Think of 10 unconventional uses of the following objects….

1. Paper Clip

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2. Tennis Ball

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3. Clothes Hanger

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4. Feather

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5. Water bottle

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Skill-based Activities:

- Research and administer a self-rating questionnaire and score responses on entrepreneurial competencies.
- Collect a small story/anecdote of prominent successful entrepreneurs.
- Identify entrepreneurial competencies reflected in each story and connect it to the definition of entrepreneurial competencies.
- Prepare a competency profile of yourself.
- Participate in games and exercises on changing entrepreneurial behavior and development of competencies for enhancing self-confidence, problem solving, goal setting, information seeking, team building and creativity.

Answer Key for Activity VIII

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<tr>
<th>Item</th>
<th>Actual Score</th>
<th>Score</th>
<th>(Individual score)</th>
<th>Actual Score</th>
<th>(group score)</th>
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<td>Food concentrate</td>
<td>4</td>
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<td>Nylon rope, 50 feet</td>
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<td>Parachute silk</td>
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<td>Portable heater</td>
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<td>Solar powered FM transmitter</td>
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