

**Innovation, Business Models and Entrepreneurship**  
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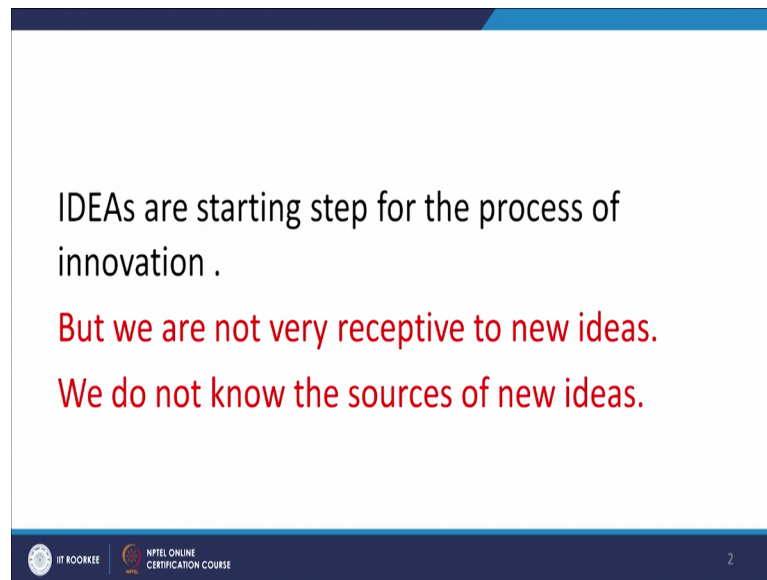
**Lecture - 08**  
**Idea Management System**

Welcome friends, in this 8th session of this course. Today we are going to discuss the first step of innovation management program that is the idea management system. In our last session we discussed that we can have five main steps in overall innovation management program. The first is collection of idea the second is selection of idea. So, collection of idea is the most important, because that is the starting step in the process of innovation management and this idea management system, which is the theme of this session this is revolving around the connection of ideas.

We want to have as many ideas as possible and to have more ideas from your employees, from your faculty members from your researchers or from your stakeholders. You need to create that enabling environment the conducive environment, where they can give you more and more ideas and for that purpose this idea management system provides you a stepwise process or this provides you the tool which can facilitate collection of more number of ideas.

So, now let us see that how do we collect the ideas for the innovation management program.

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As I am mentioning that ideas are starting step for the process of innovation. This we have agreed in last many sessions, we are continuously focusing on more and more ideas, but the line in red says, we are not very receptive to new ideas, but because of our resistance to change, we are not very much comfortable in receiving accepting new ideas.

We discussed in one of the session on challenges of innovation that [FL] approach and because of that we are not very much receptive we are not accepting new ideas. So, that is a problem and therefore, how do you create that environment, where you get more and more ideas because that is the key for sustainability of the organizations also in previous session we have discussed this point. And the other problem is, what is the source of new ideas. Is idea available on mango tree, we go and pluck some ideas do ideas available on a shop in the market we go to that shopkeeper and buy some ideas, do idea available on Google we search for ideas and take a printout of those ideas unfortunately no. You cannot take ideas from a mango tree, you cannot go to a shopkeeper in the market to purchase ideas, you cannot go to Google to take printout of new ideas.

So, you need to see what are the sources of ideas and if you can go to write source, if you can go to write source then the problem will be simplified, you will start getting ideas. So, all these things are the broad context of our, this discussion of idea management system.

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**Objective of Idea Management System**

- Overcoming resistance to change
- Overcoming prediction disability

Elephant  
↕  
Rider

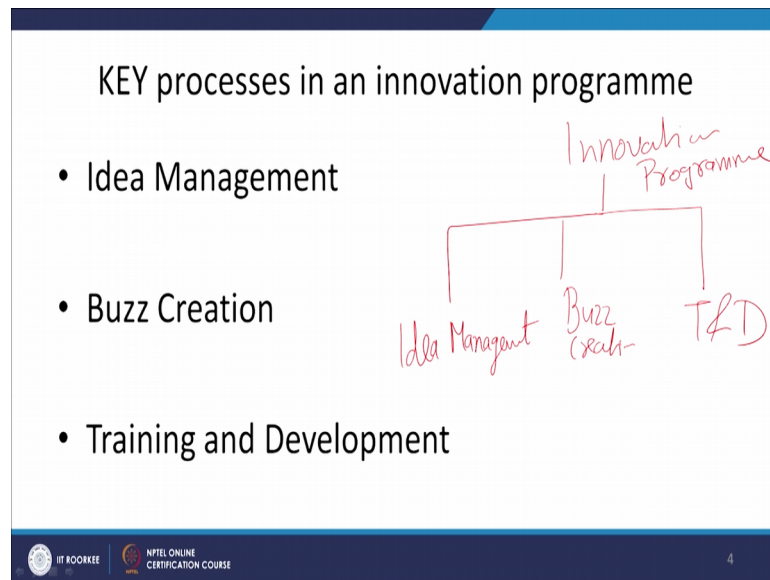
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Now let us see; what are the broad objectives of idea management system. The broad objectives of idea management system one is, overcoming resistance to change that is one important objective of idea management system and the second is overcoming prediction disability.

If you recall both these are major challenges of innovation program, resistance to change and prediction disability. Therefore, the objective of this idea management system is to overcome both these challenges of innovation program. And therefore, we will see that how can you use that, elephant rider a story to create a better synergy in your organization. Because rider is expected to give new ideas and elephant is expected to follow those ideas.

So, if your idea management system can help us that elephant is following rider and rider is able to give new ideas. So, you are able to achieve the objectives of idea management system. Now what are the key processes in an innovation program and three key processes are being told?

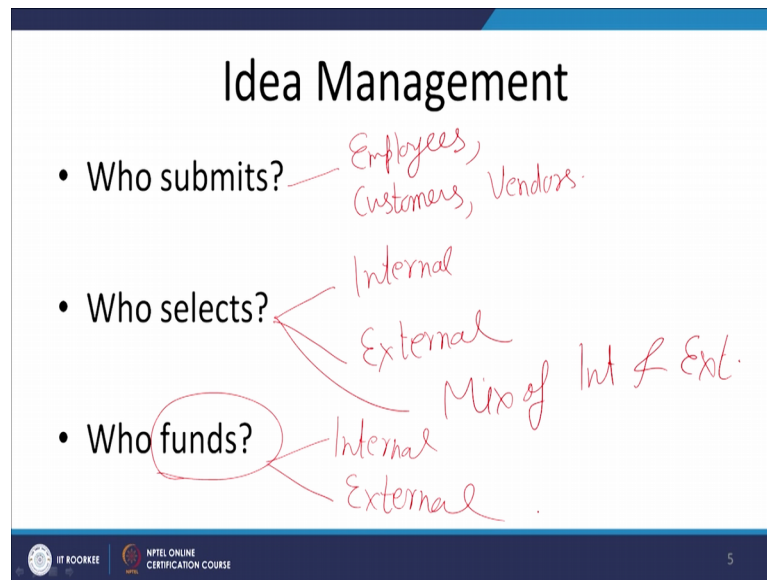
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One is the process of idea management, which we are calling as idea management system the other is buzz creation. What type of rewards, what type of campaigns, what type of publicity what type of awareness program you can create that is the buzz creation. And third is training and development; what can you teach, how can you analyze what type of tools techniques, softwares you are going to use in the innovation program.

So, these are three main pillars of innovation program, you can make a diagram of this type to understand that this is idea management, then this is buzz creation and this is training and development and this is innovation program. So, all three are equally important processes in an innovation program, idea management, buzz creation and training and development. And we will see in this session particularly the process of idea management.

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Now, in idea management three important things are there, one is who is submitting the idea if I talk of an organization if I talk of a manufacturing organization. So, who submits the idea it is all employees it may be my customers, it may be my vendors, they are possibly the prime sources for submitting the ideas then who selects? You can always have internal external experts and then a mix of internal and external experts.

So, they may be involved in selecting the ideas, you may have depending upon your organizational capabilities; if you find that sufficient internal experts are available you may have one internal committee to select the idea. If you feel that internal members may be biased because of variety of reasons you may hire external experts for selection of ideas. And sometime which is normally more popular, you make a team of internal and external experts so that there is proper balance in selection process so, that is also there.

And finally, who funds who funds that idea because it is not only the idea only, you need to go to the next step that is the implementation stage and for these two steps also, there may be some cost involved. So, who is funding this idea management system? That is also a very important question, because if this funding is not appropriate. If this funding is not appropriate it is very difficult to lubricate your system funding helps like lubrication. And therefore, proper lubrication is necessary for a smooth flow of this idea management system.

And some time funding may be available from the internal resources and sometime funding is available from the external sources like just to give you the example in India since government of India is focusing a lot on innovation programs. So, government of India is providing lot of funding for various higher educational institutes IITs, NITs, central universities IIMs and various other research organizations for promotion of innovation in those organizations. So, that is a kind of external funding; internal funding the funding which is available within your own resources.

So, from your own internal resources since you want you feel that these ideas management system can help me to get a competitive advantage. You may fund the process from your internal resources. In most of the commercial organizations in most of the commercial organizations the funding is from the internal resources. But in the educational system the funding may be available from the external sources, DST DBT ministry of MSME. These are some of the very common name we all know which are used as external source of funding in higher educational institutes.

So, these are the important things, with respect to idea management in the questions, which we want to answer in our idea management system, if we have the proper answer of these questions. That means our idea management system is ready to receive ideas to select those ideas and to sponsor those ideas.

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The slide features a title "Idea of a Challenge Book" where the word "Challenge" is circled in red. Below the title is a bullet point: "Identify the right problem to solve". To the left of this bullet point, the word "Curiosity" is written in red cursive and underlined. To the right, the words "IDEA BANK" are written in red capital letters and underlined. A red arrow points from the circled "Challenge" down to the bullet point. The slide footer includes the IIT ROORKEE logo, the NPTEL ONLINE CERTIFICATION COURSE logo, and the number 6.

Now, for developing the ideas in our one of the session, we coined a term that is idea bank. Now how do we develop that idea bank and for that purpose, it is told that you can apply the concept of challenge book. This concept of challenge book will help you in developing the idea bank.

Now, what is this challenge book? Now challenge book is a kind of you can say diary you have, and in that diary you are writing the various problems, which you are facing which you are able to see, and here your element of curiosity is very very important to get entries to write something in that challenge book. You just make a diary, but diary is empty there is no word written in that diary that is no use of challenge book you have just titled that diary as this is my challenge book. This is the challenge book of Rahul this is the challenge book of Shivani that is of no use you need to make entries into that and those entries will come because of your curiosity.

And here it is very well known to all of us it is told to us in childhood that identifying the right problem to solve, automatically will lead you to a super solution. If you do not have a good problem to solve, then your solution will also be of inferior quality. You cannot have a superior quality solution of inferior quality problem. So, you need to have good problems challenging problems to fall and if you have challenging problems to solve, then your innovation will be your solution will be accordingly of superior quality.

So, we want to have right problems to solve and that will lead you to good fame success and satisfaction.

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• According to Ratan tata

- “If there are challenges and those challenges are difficult, then some interesting, innovative solutions will come.”

*Higher Challenges → Better Solutions:  
Tougher*

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Now, one of the most popular one of the very successful businessman of this country Ratan Tata in one of his speeches he mentions. That if there are challenges and those challenges are difficult, then some interesting innovative solutions will come. So, he also emphasizes higher challenges or we can say tougher challenges higher and tougher challenges will lead to better solutions.

If your challenges are not of good quality, you will not have good quality solutions. So, therefore, it is important it is important to understand that you keep identifying quality challenges, you keep identifying higher challenges and those challenges which you feel yes I have achieved something in solving this challenge. And if like we have discussed two three times in this course that the problem of hygiene in India. The clean India, the [FL] is one of the desire it is a dream for all Indians, can we have same level of cleanliness which European countries have the same level of cleanliness on the stations of India, same levels of cleanliness in the schools of India which European or American schools have.

Now, if that is a challenging problem, how can we make River Ganga pollution free that is a very dream kind of DVD for all of us? So, if I come with the solution because this is a challenging problem, it is not so easy. The whole machinery of government of India is behind finding a solution of cleaning the River Ganga. The whole machinery of Government of India is behind making India in better place. So, this is a challenging



problem and if you come up with a very innovative solution how you improve the air quality in Delhi that is a challenging problem. And if you come with a good solution for that; obviously, the solution will also be very very exciting, it is going to give you more satisfaction and it will be a true pleasure of joining this course.

So, what are the sources for my challenge book? Now for my challenge book there are three very important sources and I request all my participants today, that after this lecture you please make a challenge book and at the end of this course, we will like to see that how many entries, we have in that challenge book with respect to these three categories.

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**Challenge Book**

- Feel the pain
- Sense the wave
- See the waste

*Sources*

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In challenge book these three are the sources. Ideas will come from these three sources. Ideas means right now I am making problems in my challenge book I am writing problems in my challenge book.

And after this course we can have just a plain count that I have 50 problems related to feel the pain. I have 30 problems related to sense the view and I have 25 problems related to see the waste. So, I request all my participants that please make a diary please make a challenge book and start working on this challenge book and end of the course in our forum, you all should mention that how many entries you could have, and that is the practical part of this course because this is a course which cannot be just a theory course.

So, you need to have some kind of practical along with this theory and in that you will be the first exercise is, you need to make a challenge book and over a period of time we will review the entries in the challenge book and we look forward your response with respect to the challenge book.

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- Feel the Pain
  - Customer (current) → High Quality Low Cost
  - Customer (future) → To moon
  - Employee → They want 15% hike per year.
  - Partner
    - Safe drinking water.
    - A Clean Rest Room
    - Transportation.

Now, feel the pain what does it mean? The feel the pain is you need to feel the pain of your customers, who are your existing customers and who are your potential customers what do they want. So, that is the first important information that is the first important source of entry in your challenge book that you need to find the pain what are the important pain points for your customers for your potential customers.

Then another important source with respect to pain is your employees, what are the challenges what are the problems your employees are facing and then your partners that who are involved in business with you. So, the investors your vendors they all are your partners. So, so what are their pain point like just we discussed in our previous sessions also. One of the pain which is always expressed by the current customers, that you want high quality low cost products. This is a very simple statement that all customers look for high quality low cost products.

So, this is a pain point that my customers want high quality low cost products. My employees the pain point maybe they want 15 percent hike per year in their salary. I am giving them 8 percent hike per year right now, but my employees want 15 percent hike

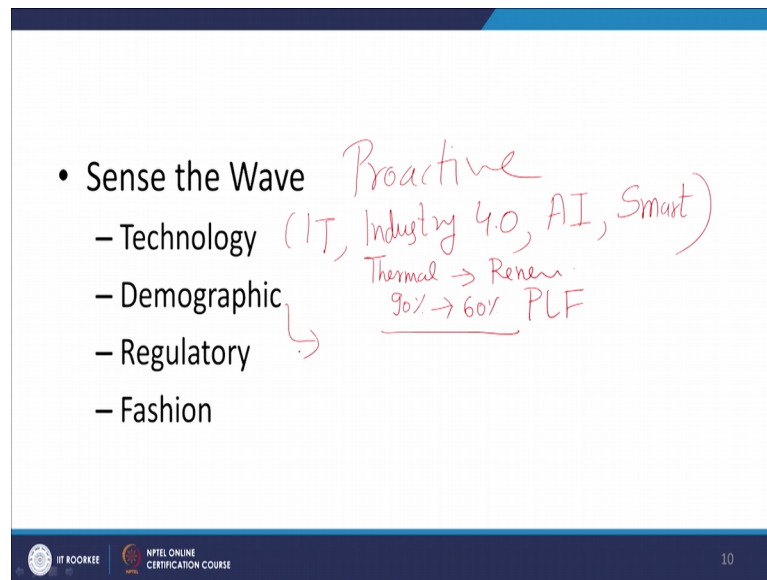
per year that is a pain point for them. So, now, I need to see that how innovatively, I can fulfill these expectations of my employees. My employees want safe drinking water in the plant. My employees want restroom which are clean these are a small small examples, which I am just sharing with you that these types of examples you will find that are there in front of you.

And you just need to have curiosity you just need to have your ears and eyes open that what are the things maybe it is possible, my employees are living 10 kilometers 15 kilometers away from my place of work. So, they want some kind of a transportation facility. So, you need to see that what is the pain point for customers employees partners etcetera and future employees future customers and accordingly you need to see that that those all things. Right now I am looking not looking for the solution, please be very careful that even you note down the problems as good as that my employees want to go to moon they want to go to moon every Sunday.

So, some of you will laugh that this is a problem or this is a joke, that you want to go to moon, but even this you write in your challenge book. It should be the part of your idea bank that employees want to go to moon, whether we select this idea whether we select this problem to solve in our next step that is a separate matter. But at this stage the point is do not evaluate whether this is worth doing or not worth doing, at this stage we want collection at this stage we want to have that number that how many pain points, you have identified and we need to note because we cannot remember all those pain points all the times.

So, as soon as we realized that this thing is a pain point for my employees, immediately note it in that diary.

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The slide displays a list of factors under the heading "Sense the Wave". The list includes Technology, Demographic, Regulatory, and Fashion. Handwritten red notes are present: "Proactive" is written above the list; "(IT, Industry 4.0, AI, Smart)" is written next to Technology; "Thermal → Renew" and "90% → 60% PLF" are written next to Demographic; and a red arrow points from Demographic to Regulatory. The slide footer contains the logos for IIT ROORKEE and NPTL ONLINE CERTIFICATION COURSE, along with the number 10.

- Sense the Wave *Proactive*
  - Technology *(IT, Industry 4.0, AI, Smart)*
  - Demographic *Thermal → Renew*  
*90% → 60% PLF*
  - Regulatory *→*
  - Fashion

Next is sense the wave because lot of development is taking place lot of development is taking place. So, you have to be proactive you need to see what type of changes are coming, what type of new things are going to happen. Like with respect to IT technology, when I am saying it is it we are continuously talking of industry 4.0 that is new technology which is emerging.

We are talking of artificial intelligence; we are talking of the smart phones, a smart city, a smart medicines everything becoming a smart. So, you need to see that what type of changes, what type of wave is there with respect to technology and you should be proactive to adopt those technological changes. So, you should be writing in your challenge book that this technology is moving into this direction this technology is moving into this direction, this technology is moving into this direction.

So, that you can identify that we need to align ourself to take the advantage of those changing technology, if the world is moving from thermal to renewal energy. So, this is a change you need to see that because of carbon emission because of green energy issues, the whole world is shifting from thermal energy to renewal energy. And to give you the idea in India also because the company is based on thermal systems thermal power plants, could not realize this movement of technology, could not sense the wave that the focus is towards the renewal.

So, now the plant load factor of popular thermal companies in India has reduced from 90 percent to 60 percent. So, the plant load factor PLF we call it that is reducing from 90 percent to 60 percent because focus is moving from thermal to renewal. And our overall energy requirement of country we are having more share of renewal as compared to two three years down the line similarly what type of demographic changes are possible in near future, whether you are going to have more younger population or more adult population or more old population in your society like we proud to say that in India. We are among the youngest countries in the world because of our average age is on a lower side.

So, how to use the potential if you have some European countries, where you do not have young population and most of the population is in the bracket of 50 plus. So, that is a kind of demographic profile, the gender ratio, the income distribution all these are the part of demographic issues and you need to see that the whether there is some kind of changes at what type of future with respect to different dimensions of demographics are there.

The regulatory environment is also evolving continuously changing and sometime it is possible to predict that what type of regulatory environment will be there and sometime it may not be possible. So, you also need to keep your close eye on the regulatory environment, that how the regulatory environment is going to work in next few years, because that is also a very important source of innovation. We all were knowing that GST is going to happen.

So, some of the companies they were very very proactive in India and they were ready with their softwares, they were ready with their other assistive tools for effective implementation of GST. And these companies took the advantage of GST implementation because they could sense the wave that these regulatory changes are going to happen. Fashion is another very very simple common example that those companies which are into fashion related products. They continuously need to monitor that from where the fashion wave is coming and accordingly keep ready with the latest trends of fashion, because that is the only source of competitiveness in that industry.

So, these are some of the sources for understanding the future waves. The third important source of ideas source of problems in your challenge book is to see the waste.

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• See the waste

- Human effort
- Natural resources
- Technology resources

*CA but doing of accountant  
Prog. but doing work of DEO.*

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There are different types of waste I have mentioned three types of waste one is the waste of human efforts. You are having a CA, but CA doing the work of accountant. Simple example of waste of human efforts, you have a programmer, but doing work of data entry operator. So, these are simple examples of wastage of human efforts.

You are not doing work as per your potential the wastage of natural resources you waste energy, you waste water, you waste air, you waste land resources. So, how you can optimally use all these natural resources, because environmental sustainability is a big issue and otherwise also these are the precious gift of nature, and by your innovation program you need to develop some very competitive solutions for effective utilization of these natural resources.

The technology resources we use computers, we use mobile phones we use so many other technological products whether we are using those products up to their full efficiency or not, that is also a waste of resources. And there may be many more other categories of wastages also you waste your money, money is available in limited quantity, but you waste that money also, you waste food very common, you take in your plates more than what you eat and then finally, you waste food.

So, there are large number of wastages of different types, you are single person in your building going to office in a car and three seats are empty and all the person in your building are going to same office, but everybody is driving their own vehicle. So, you are

wasting the space on the road, you are wasting fuel, you are wasting so, many things. So, there are different types of wastes around you.

So, the request is that we need to see these three important sources of various types of problems around us pain future wave and the waste. And if you are curious you will find so, many problems related to each of these points, I have just given you some of the possible pain points possible future waves and possible waste, but you can add many more things into this I do not want to restrict your creativity, your curiosity into this.

And with this, we come to end of this discussion and this is the starting of idea management system, where we are collecting large number of ideas by the way of making a challenge book.

Thank you very much.