

**Strategic Management for Competitive Advantage**  
**Professor Sanjib Chowdhary**  
**Vinod Gupta School of Management**  
**Indian Institute of Technology, Kharagpur**  
**Lecture 49**  
**Entrepreneurship and Intrapreneurship**

(Refer Slide Time: 00:41)



Welcome to the course Strategic Management for Competitive Advantage. In the last two sessions, we have talked about the innovations for survival and growth, what it needs and all. Today we will be discussing entrepreneurship and intrapreneurship. What are the differences?

(Refer Slide Time: 00:49)



So, in this lecture, the concepts that will be covered are these we have already done it. Now, what are ideograms, entrepreneurship, and intrapreneurship? what are the differences between these? Then we will talk about key elements of the entrepreneurship process in an organisation and then intrapreneurship that what are the enabling factors for success? So, all these will be covered in today's lecture.

(Refer Slide Time: 01:27)

**What is ideagoras?**  
(e.g. Colgate-Palmolive; Toronto-based Goldcorp; Novartis – genetic basis for type 2 diabetes; Oil Spill Recovery Institute in Alaska)

- Crowdsourcing, Open Innovation
- Risk of open type innovation  
(Cisco and Google use “acquiring innovation” approach)

*web-enabled virtual marketplace which connects people with ideas, talent, resources, or capabilities with companies seeking to address problems in quick and competent manner.*

The slide features a blue and white background with various icons representing technology and innovation. A small video inset in the bottom right corner shows a man in a suit speaking. The NPTEL logo is visible in the bottom left corner.

So, what are ideagoras? Ideagoras is a web-enabled virtual marketplace that connects people with ideas, talent, resources, or capabilities with companies seeking solutions for addressing their problems quickly and competently. This is called Ideagoras. I will write it for you.

It is a web-enabled virtual marketplace that connects people, ideas, talent, resources, or capabilities with companies seeking. So, here you see that essence; the internet and web-enabled leverage it. As a result, you have access. Any company has access to hear vast numbers of professionals and scientists, and they can pose their problems put on the web so that talented people, say hundreds of thousands of people, can participate and give you a solution for that.

For example, Colgate Palmolive they were trying to find out an efficient method for putting toothpaste in the tubes, but their R&D team and internal R&D team could have been more successful. They came empty-handed then the company put it in that. There are some websites there for such purposes. One of them is called InnoCentive, and they put it on the InnoCentive, where they got many responses. One of the responses was from a Canadian engineer, who gave a solution based on simple physics fundamentals.

As he says, you put some positive charge on the fluoride powder and ground the tubes this way, and they got the success of the simple one, which even the internal R&D team could not get. Then in the process that Canadian engineers earned 25,000 dollars. So, that engineer (that person) has spent a few hours on this problem and earned 25000 dollars, and the company got an efficient method that their internal department could not do. So, these are leveraging the internet.

So, also another example is Toronto-based Goldcorp. Goldcorp is a gold mining company. So, they were facing huge problems like they had an enormous debt problem company and they were facing labour unrest. Their company was about to close down. Their CEO, out of desperation is what he did he put all that mining prospecting, you know, geological prospecting data on the website because they were not getting any good way for prospecting and those gold and the exact positioning.

So, no mining company in the world will part with such sensitive or secret data because many competitors are there. So, he put 400 megabytes of data on the internet, and he gave a challenging sort of thing, that reward will be given if anybody can give good solutions and 575,000 dollars.

So, he got several submissions from different parts of the world for those, and quite a few rewards were given, and those things were accepted, and they pursued those methods for prospecting and all. Within a short period of a few years, this company on the brink of closing down, selling its revenue is 6 billion dollars from the selling of gold. So, the company's share, valued at 100 dollars in 1993, has crossed over 6,000 dollars.

So, you can see this is the ideagoras where the professionals come in, and they quickly go through it and offer their talents, ideas, resources, capability, shares, and earn money. So, similar is the case of Novartis. Novartis is a Swiss pharmaceutical giant, and they have spent hundreds of millions of dollars developing for researching a generic basis for type two diabetes.

But they found it too complex a subject, and even after spending hundreds of millions of dollars, they decided to put their proprietary research findings on the website and ask for solutions from the ideas of these open scientists. This is quite unlikely in the pharmaceutical industry because their secrets and everything are very guarded, and they also expect a similar response.

Then another example I will give you is the Oil Spill Recovery Institute in Alaska. In Alaska oil fields, you know that those spillages and all, some of those oils are settled at the bottom of the ocean. So, the problem is to take it out. They can take it out up to the surface of the water of the ocean, but when it reaches the surface, whether that environmental temperature is so low that it becomes solidified, oil becomes solidified. As a result, they can bring it from the bottom of the ocean to the barge, and at the barge at the surface, it solidifies. So, it cannot be pumped. So, this was the problem. They were helpless.

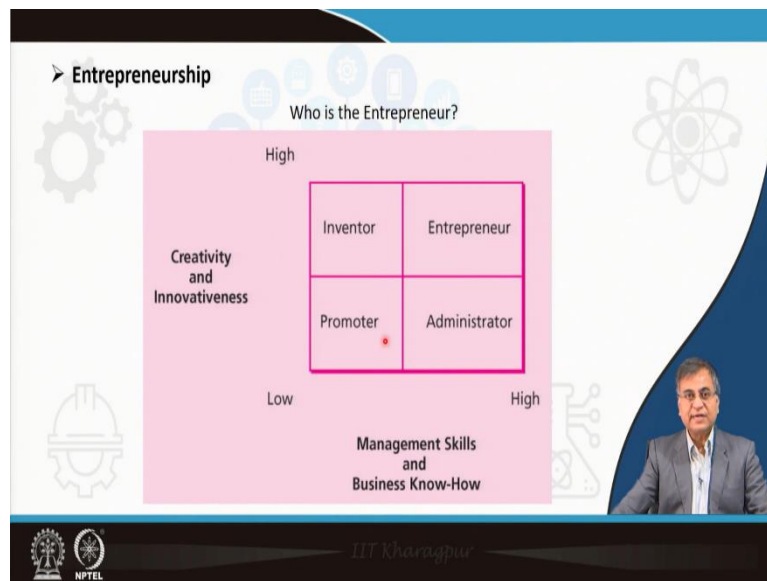
So, what did they do? They put it on this, you know, InnoCentive that websites and all and then one engineer from the Midwest America, he had proposed that he was in the construction industry, he found it that this problem is similar to there is cement slurry, for a cement slurry, it has to be kept in liquid form. So, if they do, what do they do? they use vibrators and all. So, the same thing he proposed, and it worked. those solidified things become oil with the vibrators, and all of it becomes the liquid form, and it can be pumped through. So, these are the say examples of ideagoras.

This ideagoras is also called crowdsourcing. It can also be referred to as open innovations, you are getting it from the pool of talented scientists and all technicians, technologies, and everyone is there. So, it is you who have enormous talent pools at your hand who are willing to support you and solve your problems. So, this is all about ideagoras but there is some school of thought. Some quarters feel there is a risk of open-type innovations.

What is this risk? This risk is like if you are getting everything in open type and all your secrets like patents and all will be known to others known to your competitors. So, you will lose the competitive advantage in the long run. So, these are the risks.

So, companies try to guard, that you know, to avoid these companies like Cisco and Google. What do they do? They use the acquiring innovation approach, as I told you in the last session, that is acquiring innovation, that is to lower the risk do you take this approach. So, Google and Cisco follow this path; this is one way to get things done. So, this is ideagoras.

(Refer Slide Time: 13:59)



So, now we will be moving to entrepreneurship. So, all of you are aware of what entrepreneurship is and all. So, now I will ask you who the entrepreneur is. So, we have talked about innovations, so you know the difference between invention and innovation. So, who is an inventor? An inventor is basically who has a high degree of creative ideas and innovativeness. He, with his or her new set of knowledge, can create a new product or new processes or new service. They are inventors, but inventors have low skills in management and business aspects of it. They are not that good at it. So, they are only in technology and science. those things are high.

But the entrepreneur is equally adept in creativity and innovativeness for developing the product as well as they have the management skill and business know-how to run the business, how to make it commercialise, and how to get profit out of that innovativeness; those are the entrepreneurs like Bill Gates, Steve Jobs. They are great entrepreneurs, and they both have high competence in innovativeness and high competitiveness in this managing skills and business know-how.

You know, entrepreneurs also require the finance aspect of it like cash flow, then the debt structuring, how to get the debts and all, all those things he has to know. So, here who are the administrators? Administrators have the opposite of inventors. They have a high degree of management skill and running a business, business know-how, and all are high, but their innovativeness and creativity are low. So, they are dealing with or managing the change; who are the promoters? Promoters are low in innovativeness and have low management skills.

(Refer Slide Time: 17:06)

➤ **What is Entrepreneurship?**  
is the process of bringing together creative and innovative ideas and actions with the management and organizational skills necessary to mobilize the appropriate people, money, and operating resources to meet an identifiable need and create wealth in the process

➤ **Three Elements Central to Entrepreneurial Process**

- Opportunity
  - Marketing orientation
  - Identify specific need of customers
  - Bring customers into the innovation process
- Entrepreneurial Team
- Resources

IIT Kharagpur  
NPTEL

Now, we will go for what entrepreneurship is now. We have seen who entrepreneurs are, these entrepreneurs are, and we have explained that. So, entrepreneurs combine these creative and innovative ideas and actions with management and organisational skills. We have seen that creativity and innovativeness are linked with the management and organisational skill necessary to mobilise the appropriate people, money, and operating resources to meet the identifiable need and create wealth in the process.

You are creating wealth, a product or service which will give you the major revenue stream for the future that you are trying to do, and that is entrepreneurship. So, now, three elements are central to the entrepreneurial process. What are these three elements? These three elements are one is called opportunity, another is an entrepreneurial team, and the other is resources.

So, I will write it down and show it to you. It is entrepreneurial three elements that look like this. This is an opportunity, an entrepreneurial process, not a process team, and this is the resources. what is this opportunity? Opportunity is that you should have the entrepreneurial opportunity you have to look for.

So, what are they mean? You will be a successful entrepreneur if you have a marketing orientation; it is not only that technological competence is not necessarily what the business, or product you want to produce, it is necessary to have identified the specific need of the customers like marketing orientation identify the specific need of the customer and these are more important for the success of your entrepreneurship.

So, then, if possible, bring customers into the innovation process and then take their feedback to take them to the service industry. you will find the customer is a co-producer because in the service industry, whatever your product is, the service is consumed simultaneously when it is produced. So, the customers are co-producer.

Similarly, here in the manufacturing and all, if you take the customers in the design innovation process like BMW, they have sent the toolkits to 1000 customers then zeroed in there, what prototypes will they go for? it is you are bringing customers into that design process, these are the opportunities, and the rate of success will be higher if you develop the new product as per the customers' needs, not the company's needs okay. This is called opportunity.

(Refer Slide Time: 21:41)

The slide is titled "Three Elements Central to Entrepreneurial Process (contd.)". It features a background with a stylized tree and various icons representing business and technology. The content is organized into two main bullet points:

- Entrepreneurial Teams
  - Technical competence
  - Business management competence
  - Behavioral and psychological characteristics
- Resources
  - Debt financing
  - Crowdsourced lending
  - Equity financing: friendly sources, Informal venture investors, Professional venture capitalist
  - Crowdsourced equity investment

In the bottom right corner of the slide, there is a small inset video of a man in a suit speaking. At the bottom of the slide, there are logos for IIT Kharagpur and NPTEL.

Then next is the entrepreneurial teams; you should have a good team. these teams will be based on various competencies. they should have technically competent in business management competent, debt financing, and all those things will be debt structuring. they should be aware of it, and besides that, they should also have behavioural and psychological characteristics there are many are there. If you are also mentioned in the process, you can consult the books and all you will find. We are skipping it for the one top time.

Anyway, then next is the resources. What you require are the resources. This how to get entrepreneurship is that the resources, what are the sources of resources, one resource sourcing is debt financing. Debt financing, you generally get it from where? You get it from the banks, from the public institutes, and all they give it to you and but you have to repay it regularly; whatever the terms and conditions are there, those debts have to be repaid.

Here the benefit for the entrepreneur or the innovators is that you retain your ownership of your innovations and all, and you only pay out the debt. Still, you know, this is during the initial stage of innovation, and you require a huge amount to buy equipment, to make the process to develop and all everything, but you do not earn much. So, the payout is a problem to repay. Many companies falter to repay. So, these are the disadvantages of debt financing.

So, another thing is the crowdsourced lending, like many companies do small-small companies, they get to generate money from the general public that says 100 dollars or 500 dollars to a maximum, say 10,000 dollars that way, you can huge, and here the crowdsourcing you repay it in some other form, you know, it may be many other forms and all when you start getting the earnings and all you start doing that.

Then another is equity financing. This equity financing is here being buying the securities from your company. So, you are diluting your entrepreneurship stake; you are diluting it. So, that is many people do not want that also, but what are the sources of equity financing? It can be your friends, your friendly sources, informal ventures, investors like angel investors, and all. Then it can be a professional venture capitalist. So, these are the sources of equity financing. So, there are advantages and disadvantages both.

Then another source of resources is crowd-sourced equity investment. So, these are the three elements of entrepreneurial processes.

(Refer Slide Time: 25:44)

➤ **What is Intrapreneurship?**  
(e.g. Google products: Gmail, Google Earth, Google Apps, Google AdSense, Google Adwords etc.;  
3M's "post-it-note" (Arthur Fry); Sony developed "PlayStation" – gaming system (Ken Kutaragi);  
WL Gore's experimenting with ePTFE (Teflon) coating with guitar string; Caterpillar Logistics etc.)

The slide features a central graphic of a tree with various icons on its branches, including a gear, a lightbulb, a person, and a network. In the bottom right corner, there is a small video inset of a man in a suit speaking. The bottom of the slide contains the logos for IIT Kharagpur and NPTEL.



So, next, what is intrapreneurship? Intrapreneurship is entrepreneurship in large organisations; it is the way to attempt, identify, identify, encourage and enable and assist the individuals or the people in the organisation in creating a new product or process, or service so that it becomes mainstream for the organisation in the future. So this is called intrapreneurship.

So, for example, Google. Google encourages employees to have new ideas for 20 percent of their work. they should devote themselves to creating new ideas for the product or processes or services related to the organisation, and as a result, what happens? Gmail, Google Earth, Google Apps, Google AdSense, Google AdWords, etc., were developed by the employees for those, and they got handsomely rewarded for this. This is an example of intrapreneurship.

Similarly, 3M's engineer there, Arthur Fry, had found that whenever he goes to the church, he finds the hymns, and all lose those papers, and all always get separated and all. So, he was thinking about how to fix this problem. So, he realised that one of their scientists was trying to go develop a better quality glue, but it turned out to be a very, very low-quality glue.

So, what he did, he tried to put those low-quality things with the small papers, those sticky pads and all, and he came out with that post-it note. you know, that yellow notes and post-it notes, and he distributed it to all the secretaries in the 3Ms and all. The secretaries were delighted that it was a very nice thing, and this post-it note was developed. So, this is the 3M's encouraging that 15 percent of that time, the employees should think of new ideas, new projects, new for their own. So, this was Arthur Fry's new project, and it was successful so and soon, it is within a few years that that post-it note and 100 million. More than 100 million dollars for 3M.

Similar is the story for Sony, you know, one Sony engineer, his name is Ken Kutaragi. He was in Sony Sound Systems he was associated with. So, he bought a Nintendo for his daughter. But he was appalled that the quality of the sound was so poor. So, he tried to improve the sound systems of Nintendo with the permission of Sony's bosses and all the authority. So, he developed it and, then, gave it to the Nintendo, and Nintendo with coming up with super superior sound quality and with those games in CD ROM. He proposed some more ideas to them to carry on, but Nintendo decided not to follow that approach.

Then he did this, Ken Kutaragi, so he took the permissions of Sony's authorities and started developing the gaming system. Sony's gaming system and the way PlayStation was

developed the first PlayStation was good, and then when the second PlayStation came, it became one of the largest gaming entities in the world. So, this is what intrapreneurship is.

Then similar the WL Gore's experimenting with ePTFE that is ePTFE is a close these things close cousin of Teflon, is a coat that is used in, say, the interior of your kitchen wares and all and those, and they wanted to experiment with that ePTFE coating with a guitar string; they thought that their guitar strings to the guitar players and all the play it, it hurts their finger. So, with this coating, this problem will be solved, but they found that they put those coatings and all on the string, and they found that it was a marginal improvement as far as hurting the finger is concerned.

There are no appreciable changes, but what it did was the sound system's quality of sound improved, and that sound became longer and longer. So, it was the so they capitalised this and introduced those ePTFE-coated guitar strings, and soon they became the number one entity for this in the world. So, this is intrapreneurship.

Similar was Caterpillar Logistics; Caterpillar itself had problems managing its logistics and all. There is a huge logistics requirement and all. So, they developed their logistics with intrapreneurship, and now they also employ Caterpillar Logistics in 25 countries. So, this was developed, and this was encouraged by the company to develop a new product and services and all to capture the market.

(Refer Slide Time: 33:23)

**Intrapreneurship**

**Pinchot's 10 Freedom Factors**

1. Self-selection
2. No hand-offs
3. The doer decides
4. Corporate "slack"
5. End the "home run" philosophy
6. Tolerance of risk, failure, and mistakes
7. Patient money
8. Freedom from turfness
9. Cross-functional teams
10. Multiple options

IIT Kharagpur  
NPTEL

So, how to improve entrepreneurship in a company? That Gordon Pinchot is one of the founders of that school called intrapreneurship, and where he has proposed 10 factors for improving the intrapreneurship ventures in an organisation. These are self-selection, no hands-off like a person who is giving those ideas for intrapreneurship and all. So, he should be encouraged to do it. Further, he has to encourage them to get it done. So, sometimes what happens is the bosses take those ideas and pass them on to some other people to do it. So, that is not to be done, no hands off.

Then the doer decides, as I told you, those whose ideas and all he will decide what to do in the next step, the next course of action. Then corporate slack, you have to give some slackness in corporate to absorb those any the those it may be a big fail, it may be not successful. So, those things have to be given. End the home run philosophy, similar. So, then tolerance for risk failure and mistakes should be given in the organisation's culture has to be made. So, people should not be very that for fear of losing their job, and all should not be there.

The seventh one is the patient's money. Patient money is equity financing and investment; patient money sources are generally your friendly sources, informal investors sources, and the venture capital that professional venture capital sources are the patient care.

Then freedom from turfs, cross-functional teams always are better to form that will, you know, give you better results than a single person or individuals and all, and there should be multiple options to choose from. These are Pinchot's 10 points that factor into entrepreneurship.

(Refer Slide Time: 36:29)

The slide features a dark blue header with the word 'CONCLUSION' in white. Below the header, there are two bullet points. The slide is decorated with geometric shapes in shades of blue and white.

- Further to the previous lecture, this session illustrates Ideagoras, and explains the differences between Entrepreneurship and Intrapreneurship, and their importance for firms to remain competitive.
- To remain competitive in today's world, firms need to look for new avenues for growth and development in a continuous manner. Innovation and entrepreneurship are potential means to enhance firms strategic and competitive position.

Now, to summarise, what we have discussed in this session, we can tell that we have illustrated what is ideagoras and explained the differences between entrepreneurship and intrapreneurship and their importance for firms to remain competitive and this intrapreneurship will help the company to develop new products, new processes, new services which will become the mainstream products in the future.

So, further, we can summarise that to remain competitive in today's world, firms need to look for new avenues for growth and development continuously. Innovations and entrepreneurship are potential means to enhance a firm's strategic and competitive positions.

(Refer Slide Time: 37:41)

The slide features a dark blue header with the word 'REFERENCES' in white. Below the header, there is a list of four references. The slide is decorated with geometric shapes in shades of blue and white.

1. Strategic Management – Planning for Domestic and Global Competition, John Pearce, R.Robinson and Amita Mital, McGraw-Hill Education, 14<sup>th</sup> edition.
2. Operations Strategy, Nigel Slack and Michael Lewis, Pearson Education
3. Strategic Management – Text and Cases, Dess, McNamara and Eisener McGraw-Hill Education, 8<sup>th</sup> edition.
4. Exploring Strategy – Text and Cases, Gerry Johnson, Richard Whittington, Kevan Scholes, Duncan Angwin, and Patrick Regner, Pearson, 10<sup>th</sup> edition.

These are the reference books. We have already shown it to you in the earlier session. So, you go through it and enrich yourself. Thank you very much for attending.