

Entrepreneurship and IP Strategy
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Lecture No. 09
Open Innovation and IP

A very warm welcome in the fourth module of week 2 of the course Entrepreneurship and IP strategy. Now in the first week what we have seen that is a, what is entrepreneurship? Then what do you understand by IP? Whether entrepreneurship and IP are related? What is the role of IP strategy in entrepreneurship? And then we have seen one case study. Then in the second week that is which is completely dedicated to Innovation, then we have seen the differences between what is innovation? What is invention? And what is creativity? Then what are the different types of innovation then what is the that innovation market and IP, how they are related.

And now we are concentrating on Open Innovation and IP you will say that why I should know about open innovation and what did exactly the open innovation is and what is the role of that open innovation in my entrepreneurial activity. So, let us see how that may be useful to you that is a one angle we will look into, second is that if you are not started your entrepreneurial activity and if you are a student and if you are taking some part in the competitions, you will understand the logic and what cautions you should take when you are participating in such competitions.

So, that particular thing that is a innovation and entrepreneurship you have to just appreciate how exactly it is related to your entrepreneurial activity. Now after that means after the second week, we are completely entering into the dedicated they are like dedicated to IP and then we are entering in to see the different types of IP's in very detail.

So, here we start with the that innovation thing. Now we have appreciated that IP is a integral part of a technology and innovation management that we have the clearly accepted. Now, you know that legal rights are what we can say they are given to the creator and IP is an instrument for that particular thing. Then we have also seen that innovation and technology management and this IP management all these 3 are overlapping in nature.

So, we cannot differentiate between technology and innovation and intellectual property all these are working together and they are overlapping in, what we can say each other. So, when we are developing means as a entrepreneur when you are developing technology, when you are in that

innovative mode, you have to concentrate on potential IP at that time only. So, that aspect also you have appreciated, then we have seen that this IP is a that is intangible property and it is like a we have to it is asset and how you can protect it.

Now this innovation, invention and ideas that are captured and protected through maybe patent maybe trade secret maybe trademark or even publication that gives you a copyright that is a one of the type of IP. Now effective IPMS is that is intellectual property management system when you are starting your entrepreneur activity, you will have just like a technology management just like you are R&D management you may develop your own department as a intellectual property management department, which will take care of your IPMS.

Now this IPR you know now that these are the different types of IPR like we have seen 8 types patent, copyright, industrial design, trademark, protection of plant varieties and farmers rights then we have seen that there is a trade secret as one of the what we can say intellectual property and we have seen the different types of Acts which are related to that particular IP. So, up this you have clearly appreciated ok innovation, technology, intellectual property and intellectual property as an instrument to protect your technology and your innovation.

Now, we will try to concentrate the simple example that in your in what we can say entrepreneurial activity what exactly is there and how it is related to IP. Ok. So, now what we will do we will try to just understand your day to day activities as an entrepreneur what you are doing and I will just give you how it is a type of a IP, so that you can appreciate daily you are dealing with one or the other type of IP in your entrepreneurship.

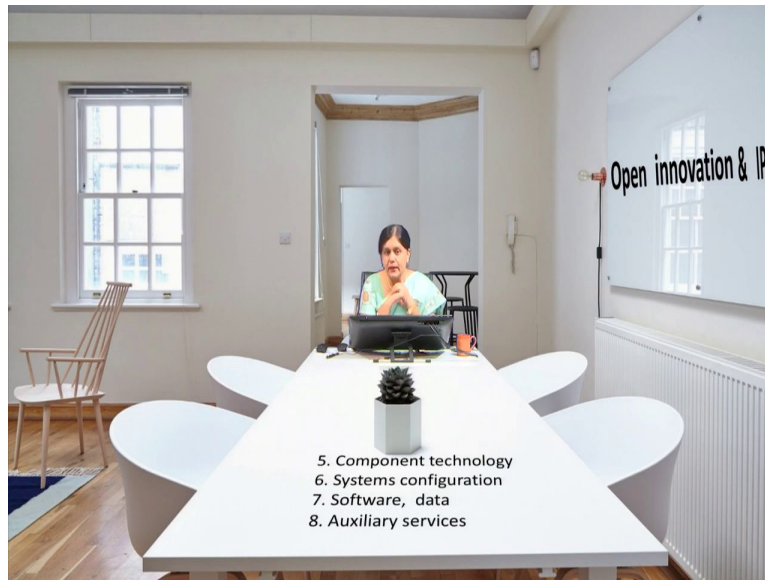
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So for example, if you take a business idea. Now business idea it is a trade secret. So, when we are talking about a business idea it is better as it is a trade secret you will take a at most precaution to protect that particular thing, keep it confidential. Next is business plan and a method again that is a trade secret and if you are doing something in USA probably you can protect it by patent and therefore we can consider it as a patent as a what we can say IP, which is related to business method.

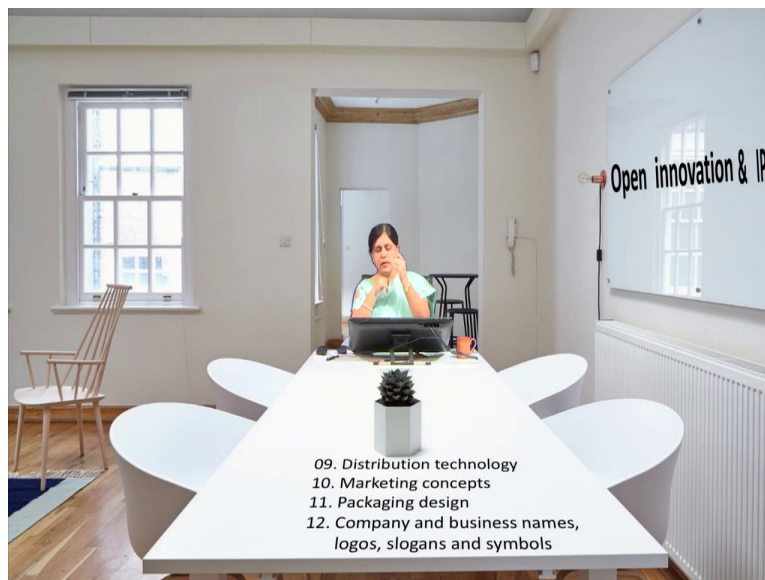
Then there is a product technology now can clearly appreciate that this product technology it is a clearly a patent aspect. So that particular type of IP that is patent is related to product technology. Now, the next is a production now if you say production there can be a trade secret and there will be a knowhow that no how is a very very important and that will be associated with that.

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Now next like a component technology. If you take a component technology that may be a mass work protection will be required). So, something like a semiconductor related semiconductor industrial that layout design Act is there you can use that particular thing to protect that particular thing particular what we can system configuration then software or data is there now what is related to that software if it is their trademark and trade secret is related to that particular thing. Now, then there is an auxiliary services that can be protected by trademark and trade secret.

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Then there is a, what we can say distribution related technology is there. Now this can be protected by a patent or it may be a trade secret then if you consider marketing concepts are there that concepts you have to keep control means you can control it or protect it by a copyright or you can have something like a open public relations information and you can measure with measure that information. The next is the packaging design, there is an industrial design protection, we will see that industrial design.

So, when we are talking about a packaging, industrial design plays a very very important role and then the last one that is a company and business name is their logos there slogans are there all thing you can protect from protect by using a trademark especially and then trade dress concept is also there and the copyright design is there.

So, now you can appreciate here that yes there are these different kind of components, I am telling with it as a my entrepreneurial activity and everything you can see that protected by some or the other type of IP. So, we have to take caution as a entrepreneur that this type of what we can say activity is going on in my entrepreneur activity I will protect it by using this particular type of IP.

Now if we share the open innovation related concept. So, what exactly that is, it is started long before in 1960. Ok! Now this a typical company like outsource less than 5 percent of their research and development that was the scenario in 1960 you can imagine that they people were not ready to share their R and D activity or anything with a outsider and it was like you can say closed innovation it is restricted to that particular organization

Even, today there are many organizations which are not ready for open innovation because maintaining contracts and what we can say all legal processes, whatever they have to follow that are a little bit tedious and they have to follow it very carefully and therefore many organization prefer to be like innovation to keep internal as a close. But if you see I will give you some examples of big organization they have converted this what we can say R and D activity and they have accepted the approach that is 20 percent up to that kind of what we can say innovation activities are done by this concept like an open innovation.

In US, 1980 only 40 percent of the industrial R&D came from companies with more than 25,000 employees compared with a 70 percent in a 1960. Now what happened that globalization or a

democratization of information technology, competitive policies then mobility of people that new financing system all this created an ecosystem and sources for the innovation and traditional exclusive control that kind of a mind set or that kind of companies approach is completely what we can say tried that ok we will not follow that traditional exclusive control approach, but we can move towards the open innovation that kind of approach came into the practise and many organizations are trying.

Now if I give you the example that IBM everybody is aware about IBM, which is a top IP filing in the world and it is maintaining its position almost more than a decade. They have launched open collaborative research program it was designed to facilitate collaboration between IBM and research institutes in the field of open source software. An open source software is a very fantastic we can say the activity and here many many people who are completely not related, but they are working together and they are bringing some what we can say very innovative product and that is a collaborative research and IBM has launched that particular thing.

Microsoft also tried that particular activity and they have created what we can say they have such layer such platforms and try to connect with a firms. Apple, that is a what we can say that they have that rigid reservations of licensing and mac operating system cost but they have also taken a what we can say chance to do that particular open innovation, Microsoft offered their windows operating system through a license and thus making them a dominant player in the market.

So, you can imagine that Apple, this Microsoft then IBM they have already tried this particular thing and it is continuously what we can say, they have found it very promising and therefore they are obviously what we can say following that particular open innovation approach. Now, it is not necessary that open innovation is like a completely everybody it is completely what we can say open to all public and all the things sometimes it may be like limited to a certain what we can say firms or it may be limited to certain institutions.

So, there are different types of that open innovation approaches, which are followed, we will see that in a few minutes. But we have to just understand that what the open innovations is that as an entrepreneur, an entrepreneur if I am starting my activity I should not remain as a what we can say a closed kind of approached a traditional approach I can just think of 5 percent to 10 percent of open innovation. I can involve what we can say a related what we can say your customers or you are a institutions and maybe you can think of an innovation related activity in collaboration

with that by giving some particular maybe perks all some other facilities and obviously taking a proper precaution, legal activities are there and that you have to follow.

Now that what kind of a legal activities you have to take care or you have to take caution when we are entering into the open innovation is like this that we have to keep a record properly that ok who is contributing that particular aspect of that innovation that record, record keeping system must be proper when we are talking about innovation, then when exactly that activity happened, if you could able to do that time stamping or registration of that activity who has contributed that particular thing.

So, if you develop some platform some software something like that for that particular thing, obviously what will happen that record will be kept and that will be very useful if you want to handle any legal issue if by what we can say any unfortunate legal issue if arises that will be helpful for you to handle any that legal matter.

Now licensing is one of the important thing that if you are doing that particular open innovation ,contract you are entering into some contract and maybe you have to execute that contract there then licensing in a such one of the type of contract only and you have to take caution when you are doing that particular activity because you are giving your licensing means you are giving your technology to someone to further development of that particular thing. SOk. o, that is the next thing.

Then non-disclosure agreement if it is necessary yes you have to execute that non-disclosure activity, then you may have to control a access. So, probably you may give what we can say restricted access to a particular group and you will decide that who will who can access what information. So, that kind of things like a contracts, non-disclosure agreements, time-stamping, registration, record keeping, access control all these things we have to keep when we are thinking of a open innovation.

Now, further that if you want to what we can say that many corporation now if I give you the I have given you the example of IBM or Apple, now we will just look into a little bit deeper into that so that you can relate it with a your entrepreneurship. So Samsung, it is operating that is a 4 categories of collaboration Samsung is doing. So, you just now relate your activity and whether you can apply that particular 4 collaborative categories are there you can choose any of that.

There are a few more up, few more but what Samsung is considering partnership, it is very limited only two or three firms or people or institutes they can be involved then ventures are there then accelerators are there is very important then acquisition is there. So, any of that particular activity is taken into consideration when they are talking about a collaboration. Now, I can give you the best example Samsung has done. Samsung they have acquired IoT company smart things and this is a very common practice this big organizations are doing.

For example, Reliance is doing that particular thing that it is funding to many start-ups which are doing activity related to and this this you please note that they are doing this activity they are keeping watch on the market they are keeping watch on the start-ups and if they found that ok this particular activity is related to my particular business, then they are approaching themselves to start-ups and they are trying to acquire that particular thing.

So, that after acquisition obviously they are giving you fund and then you can work in collaboration with them to develop particular what we can say whatever the technology or software or whatever it may be. Now here, Samsung has what Samsung has done acquired a smart things, IoT company.

Now, you can imagine that home appliances whatever we are using they are completely based that automation is based on IoT only. So, you can imagine the acquisition of that particular start-up and if you are start-up you just imagine you are getting acquired by a big company like a Samsung, what you are getting? You are getting fund and you are giving service in what sense your technology will be acquired or applied by company like Samsung and you can reach that products are reaching all over the world that is, that is a benefit for you as a start-up what Samsung is getting a on behalf of because of this activity?

They are getting a ready-made solutions and there they have not to not to develop such R& D for that particular activity and they are getting ready made solutions to them to apply to their what we can say the products which are already they are developing. So, that is a win win situation here. So, same thing is happening obviously with a the examples which I have given you earlier that everybody is getting one or the other benefit. Now, here I will give you one example of a local motors.

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You can watch this video and you can realize that here what they are doing it is automobile organization. Now, there are developing some what we can say a car with a particular feature. Now, what they have done? They have given a challenge. Now what that kind of challenges that they have defined that we are looking for this particular kind of outcome and what is the solution with you?

So, that is a open challenge given to what we can say community and then community and they have created a platform where you can give the solutions. Now here we will watch this video and then I will give you a little bit information about how cautious you should be when we are entering into this particular type of open challenges there. So, here we will watch this video.

Here you just go through that video so that you can get an idea of how that that they are placing the challenge to the community you will enjoy that thing. Now, what I was saying that if you are a student, I am not talking about you are as an entrepreneur now I am talking if you are a student in your college you are doing your studies and if you are participating in any of a competition, which is organized by organizations, and you are giving solutions to that particular what we can say problem there may be a good prizes for that particular thing.

But, I will suggest you that you will take a caution that when you are doing thing please make sure that you will because you are giving your intellectual input that is your intellectual creation and that you are sharing with what we can say that particular organization and if you are

planning any of your entrepreneurship activity based on that particular domain I will suggest to please do not participate in that particular competition. Because what will happen you are sharing your ideas there to that particular organizer and probably that will be utilized and you are already what we can say creating competition for you or already you are giving your ideas and somebody is using that particular thing.

I am not asking you to do not participate in the competition, but you will take a caution what to share and what not to share that is very important. And if you are entering into entrepreneurial activity in that same domain, I will suggest no, you will not participate or you will not share your ideas what you are thinking about that particular domain. Ok. So, this is a caution as a student and planning as an entrepreneur. Now as an entrepreneur how how you can look into that open innovation that is again important. We have seen examples, we have seen that is they are the related that innovation, IP, technology they are related.

Now, how you can use this particular open innovation and what are the different ways. We will see that in a few minutes, but I will give you a simple example one example so that you can relate it very easily. Samsung I have given you the example. Now I will give you another a few examples and then we will see how you can use it.

So, Schlumberger is there now this Schlumberger rebound product centre they have developed this organization has created SRPC as a separate entity in the France and then they have expanded that particular thing across world I will say because they have units at a different places, especially now in Europe in France that particular is SRPC is there. Now what exactly SRPC is doing?

This SRPC is identifying potential partners. Now what that potential partners may be it may be academic institution or it may be a firm or it may be a start-ups kind of thing. But they are keeping watch they have the dedicated team to do the mapping of the organization probably which can be helpful in their development of their R and D and what they are doing they are trying to collaborate with that particular organizations.

Now, this SRPC is doing collaboration, but obviously they are taking caution now that all legal what we can say procedures are there and that we have to follow that is the external innovation they are what we can say are doing, what internally they are doing internally they have their

R&D in place. Now along with that they have an internal innovation space that is an innovation hub they have created separate innovation hub.

So this is something a very good idea if you are thinking of your venture, you can have innovation hub and who will participate in the in that innovation hub? Your employees your staff then any external company which is involved in your what we can say activity vendors or maybe what we can say your customers you can allow them to give your but that customer will be external thing.

But here when you are talking about internal you can just closely keep that particular innovation club to your staff your employees and that particular representatives of your collaborators probably that kind that kind of innovation hub you also can create for your entrepreneur activity. So, this is example of a (Schulmber) Schlumberger. Now next is like United Genome Project is there.

Now this is United Genome Project that it is a collaborative medical related project it is a medical R&D and this is a very good example of a collaborative project for the related to genome. Android you are very well aware about that it is a completely open source activity and that helped in the development of that particular kind of a product which is developed in a short time with a better what we can say assets or aspects to that particular what we can say app.

So that is one, the other example is like a you probably have seen that there are like Lego is a very good example, they have the keep competitions and they have their own site and they have that idea site they are calling it as idea site only and you can contribute give ideas I remember here that there is a Innocentive it is a one of the platform and they are giving you the problem they have a very defined problem and then if you give solution to that problems, they are giving you some what we can say in if they select your idea they are giving you some what we can say award or some money money, it is a very good amount of money is there.

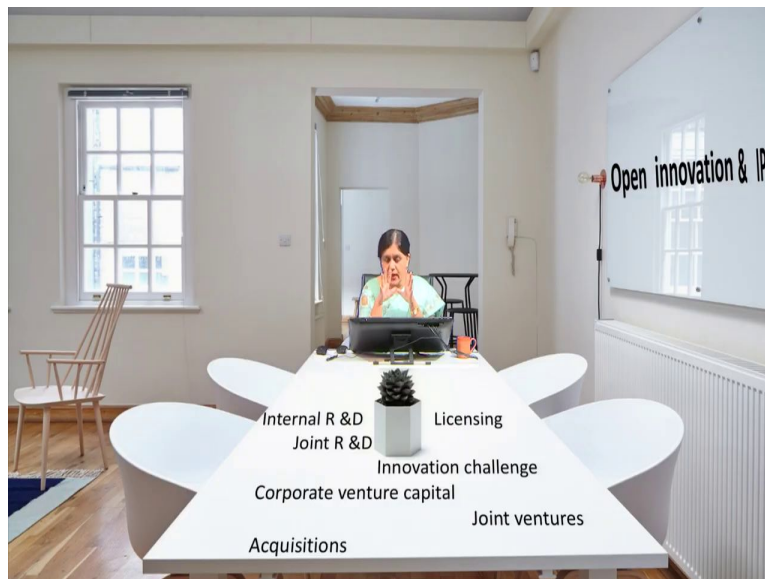
So, that is a very interesting platform. So, that kind of activity organizations are pushing because ideas are important you can appreciate and that how ideas are important and how they it can be helpful for the organization and organization organizing such competition and developing such platforms to get the or what we can say to get that ideas from the their customers or external

agents also. Then Mozilla is a very good example of open source software, which we are using Facebook, you know, they are using hackathons to generate a fresh ideas.Right?

So, GEs another example so they have their open innovations so we can just name a big organization and everybody have that particular open innovation platform where they are allowing people to contribute. Phillips is another example and they have a high tech campus kind of what we can say, they have dedicated activity and they are doing that idea hunting I can say and open innovation and this what we can say activity is helping them to get that particular ideas and based on that they will run their project and create the IP and obviously IP will give them monopoly. Right?

Now, I was just talking about the various kind of ways by which you can develop your innovation.

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So there are a few ways like internal R&D internal spaces there like innovation hub is there then licensing is there like you can develop a contracts and develop that particular activity. Then joint R&D is there you can it will be a slight open kind of activity. Here you can identify say, academic institute or another firm and you can execute some contracts between them and you can define what will be the collaborative activity. It is not necessary everything you will keep as a collaboration, a small part of your activity you can just share with them and you can have a what we can say joint activity there.

Then innovation challenge is such what we can see different kind of competitions are I have just shared with you. So, you can just think of that kind of thing. Corporate venture capital is there. That is another way, joint ventures is the that come together with a some another firm and develop some product it is not necessary. You can have a product range one of the product you can develop with a joint venture that is another way.

Acquisitions, if you are well what we can say settled organization, then you can think of acquisitions but you can think acquisition in a different ways just like I have given you example, Samsung is looking for the so Samsung for example, acquisition you can think in a different way in a sense like this that if you are a start start-up you can just think of example of a Samsung or a Jio so they may think of ok acquiring you that will be a win-win situation if you are thinking in that direction that is if you are thinking that I will develop particular thing and it will better if I can attract such big organizations.

So, you can use this or what we can say internal R&D, licensing, joint R&D, innovation challenge, corporate venture capital, joint ventures and acquisition. So in short, if you see that innovation, invention, creativity all things are going on you are already doing that thing but IP component is missing probably. So, now you will start looking that I have given you a list of 12 what we can say components, business components try to relate the IP which is involved there and try to secure that IP rights.

And look into that open innovation how you can use it for your entrepreneurial activity by this various ways just these are in front of you and you can what we can say in short time achieve a major goal if you go for an open innovation, I guess this is good enough for you as an innovation because this whole week was about the innovation.

In the next session we are seeing one case study related to innovation and an IP and that will help you to appreciate the innovation management and IP management and how they are going together or how they are overlapping each other. I hope you all enjoyed this session. See you in the next session. Thank you.

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