

INTELLECTUAL PROPERTY PORTFOLIO MANAGEMENT

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Week : 05

Lecture: 22

Welcome friends, in our earlier videos we were discussing about various aspects of our intellectual property portfolio management and in our last video we discussed about generations of idea and we discussed that innovation has come from multiple generations first generation, second generation, third generation, fourth generation, fifth and currently we can say that we are into the sixth generation of innovation. We discussed that how earlier whatever science we used to have we were pushing that science to the market and then we also saw that how market is pulling innovations. We started recognizing the needs and then we went to get for hybrid kind of innovation models where role of knowledge science which we have and the role of customers what they need

that combined and then with that combination we were doing the innovations. Now, the present environment of innovation which we discussed as sixth generation of innovation is largely about getting new ideas and based on those new ideas we will develop some kind of intellectual property asset and that we will keep in our portfolio and we will do the management of that asset. Now, for that purpose generation of new ideas around which your intellectual property assets will be developed. These assets may be in the form of patent, these may be in the form of design, these may be in the form of trademarks etcetera. So, let us see how we are going to generate ideas which will be ultimately converted or used in the form of our IP portfolio.

And therefore, in this particular session, we are going to discuss about process, sources, what are the important characteristics of generating the ideas. Because, if you generate the idea, I consider it is 50 percent success of your IP portfolio. Whatever IP portfolio you have, the first important thing in the management of this IP portfolio is size. If you have only 100 IPs in your portfolio and then you have 1 lakh IPs in your portfolio, the better management will only happen when the size is bigger.

Many a time, I used to say that we are going into the asset light organizations in the current business environment, but that asset light is more in terms of physical resources, tangible resources. We are moving from tangible resources, physical resources to intangible resources and therefore, the role of IP portfolio becomes more important. So, we want to increase the size and this becomes a major source of our competitiveness. Now, for increasing the size of my portfolio we need more IPs and more IPs will only come when you have more ideas more ideas of innovation then only more IPs will be possible.

So, more IPs and more IPs are coming from more ideas. And therefore, this discussion of idea generation becomes important in our this particular course. Now, idea is basically the starting step in the process of innovation. But it is not easy to get new ideas. We are used to some kind of situations and we are unable to think beyond those situations.

So, you need lot of out of box thinking for getting new ideas and out of box thinking is not so easy because we have inability to see many things. We are not so competent to recognize the signals which are coming from every side. Those who recognize the signals they can be better competent for generating more ideas. Let me give you just one simple example to start our discussions. At this time in 2024 in India general elections are going on and in institutions like IITs, NITs and various other educational institute in our country large number of students are also studying.

Like at IIT Roorkee we have around 10,000 students who are coming from different parts of the country. Since they are not Resident of Roorkee, so they do not have voting rights at Roorkee. They have voting rights at their different places. But they are unable to exercise their voting rights because they are unable to go to their respective hometowns to cast their votes.

And for that purpose, large number of youth of our country, they are unable to use this very important power given to them. The system of postal ballot is not available for them. Now, this is a good opportunity for making our electoral system more robust that how we bring all those youth who are studying in various engineering, medical, law, management colleges in other cities so that they can use their rights in this important activity to strengthen the democracy of our country. and I think it can be a good idea, now it is a problem. Now, if you start thinking about that problem, many good ideas, many good solutions will come which may be related to policy also, which may be related to tech also and some of these ideas can be part of your IP portfolio management.

So, we have to be very very alert, vigilant about recognizing the problems around us and that is the starting step for the process of innovation. Now, for generating the ideas which are leading to IP towards idea generation for IP creation, we need to initiate the process of idea generation. Now, we need to decide the concept to develop and identify improvement reasons. that voting rights are there, but people are unable to exercise their voting rights because they are located at a different location.

Now, how are we going to improve so that more and more people can give their votes in this election process? Then you have to engage all the possible stakeholders. And we will see that there are so many different you can say sources from where you can get ideas for the innovation journey. And we have identified five such important places from where ideas can be taken in your innovation journey. The first of them is your customers.

Customers or consumers both you can put in the same category. These customers consumers they are the most important source of new ideas. Particularly in the service sector your customers consumers are co-producers also and without active involvement of your co-producer. it is not possible to generate good ideas. When you are going, when you are talking, taking feedback, doing the action research, then only you will understand what type of problems are there and how you are going to solve with some new innovative solutions.

So, better understanding there are large number of organizations, they are continuously involved in action research. They make it a point that all their employees they spend some time with the customers and when they spend time they understand different perspective of the customers and those perspectives help them in developing new products and those new products may have various IP components also. So, customers pain point, customers pain point or in simple language customers need. that you need to understand and take the needs of the customer very very seriously and see that how you are going to solve those needs with your innovative ideas.

In these elections again going back to the same example in Uttarakhand state some 25 villages they boycotted the election process. This is not a big deal. Every election there are few colonies, few societies, few villages. They boycott the election because of one reason or other. But this time government of Uttarakhand took this very seriously.

It is a kind of a feedback that why people are not voting, why they are boycotting the elections. And then they are developing a plan that, okay, we need to solve their problems

so that they also become the part of mainstream development. So, customer's involvement is very important. Second is your internal customer. That is your employees.

Employees are the internal customers. They may also have a lot of innovative ideas about improving the organization's work. We have examples coming from companies like Maruti, where they developed a very strong idea management system. They started taking these ideas from their own employees and Mr. R.C.

Bhargav who was for many many years CEO of the Maruti in his autobiography he mentioned that how they saved huge amount of money around 400 crore rupees plus they saved because of the innovative ideas given by employees of Maruti Gurugram plant. So, taking the employees in ideas, employees perspective will also help you in getting new ideas and employee are very important source of creativity and in fact, in multinational organizations, they create some kind of incentive systems for their employees, so that they can contribute in this idea generation process more effectively. Third important thing is public.

So, there can be employees, there are customers, but there are people who are neither employee nor customer we are putting them under the public. They are a large amount of people who are yet to get into your direct involvement. So, they have the indirect involvement. And public can also give important feedback to your organization because how public is

giving perception to various products, policies of your organization and you can also understand various challenges which public is facing. And by understanding those challenges, you can provide some solutions for improving the status of the public or by solving the problems of the public you can get new ideas and that will become your part of IP portfolio. So, they can become your future customers if you are understanding the various issues of the public and solving those issues with your IP activities. So, not only customer employees but public can also be important source of new ideas.

Then your members of the supply chain. You are a manufacturer on one side you have customers and on the other side you have suppliers. So, suppliers are also very important source of new ideas. Sometime what happens this manufacturer is let us say OEM, original equipment manufacturer.

So, this manufacturer is a big company big multinational company the size of supplier is much smaller than this manufacturer. So, therefore, you may ignore this suppliers role in

giving you new ideas, but that is a huge mistake if you do that because these suppliers they may also be important source of new ideas. They know their work very effectively, they are expert in their particular product or their activity and that is important source of new ideas for this manufacturer. So, you need to get some kind of channel through which you can get inputs, suggestions from your suppliers also and then competitors also.

that is another very important source of new ideas because competitors are also doing some new activities. You need to continuously keep an eye what your competitors are doing and sometime they are ahead of you. For example, if I see Apple versus Samsung, Apple is continuously watching what Samsung is doing and Samsung is continuously watching what Apple is doing. So, in this way because of new R and D activities which are undertaken by your competitors, you can see that I also need to go into similar kind of things.

Unfortunately, sometime it goes into the negative direction also. For example, at the global level if you see nuclear weapons. So, if my enemy is having nuclear weapon I am also promised to go for that kind of nuclear weapons. So, that is slightly into the negative side, but generally if I see that

because of continuous watch on your competitors R&D activities, you will also get similar kind of ideas and you will also like to strengthen your IP portfolio by following the same kind of ideas. Now, after understanding these five important sources in this process of idea generation, in this innovation activity, these are the three very important processes. One is you have to do proper idea management in which idea generation. In fact, I used to say that IMS organization should have a proper innovation idea management system, how ideas will be generated, how ideas will be filtered, how ideas will be selected, all those things are the part of your idea management system.

When you have a proper transparent documented idea management system, it will facilitate everybody in the organization and more and more people will like to participate in that activity. If transparency is not there, people do not know I am giving you some idea, you are my senior manager. Whether my idea will be further pursued or not, then probably I will lose interest. So, I know that how ideas are selected, improved, worked upon and what type of benefit will come to me. So, a proper idea management system which is transparent is very very important for the innovation programs in your organization.

Second is buzz creation. Only idea is not sufficient. This idea needs to have lot of followers. It has to have some critical mass. Then only this idea will be possible to get you some kind of monetary or the kind of objective you have.

And for that purpose, buzz creation, that is part of our IP portfolio management. That if I have some IP, how I will like to monetize that. In that case, buzz creation will also come important thing. You need to make a lot of promotional activity with respect to your ideas so that people start following your idea.

And third is trading and development. It is not possible that everybody is having the same level of creativity. But there are certain tools, techniques which are available. For example, I want to, I can teach lateral thinking and there are well documented courses are available on lateral thinking. That is one way.

I want to teach design thinking. So, lot of exercises are available on design thinking. I can teach you TRIZ, T-R-I-Z. These are all possible tools which we need to see that how we are going to impart training to our employees, to our customers, to all the important stakeholders so that they become more proactive in developing the ideas. So, that is the third important part of our innovation program activity.

Now, as first important activity in this case is idea management. So, in idea management, there are so many important components who are submitting the idea. You need to continuously track how many ideas are being submitted by your employees, by your suppliers, by your customers. So, you can create a template and you can see the performance of different groups over a period of time. let us say if ideas are not coming from your employees you need to see that why employees are not coming forward why are they not giving ideas that is how data will help you in tracking the performance of various sources of your ideas who selects how the ideas submitted by employees vendors customers public etc are filtered to the next stage so can

It is entirely be by the internal members, there can be external members and there can be a mix of internal and external members. So, you should have a well defined policy that how ideas are selected for the next level of implementation. How these ideas are funded? You have idea, but converting that idea into IP requires lot of experimentation. lot of data collection, lot of analysis.

Now, for all that purpose whether you are going to provide internal resources or you need to generate external resources. If I say in the educational institutions it is generally the

external funding we need to have for our ideas. While if I say for a business organization it can be the internal funding which is there for improving the idea so that it becomes important IP assets. So, these are various elements of my idea management activity.

In developing the idea system and even before that for developing a proper system of getting many ideas there are different types of concepts, but we advocate a very simple concept which is known as challenge book. I request all the participants to develop habit of keeping a diary. This challenge book is nothing but a diary kind of a thing or a notebook or a digital notebook also these days. Where we have to create inventory of like you have a IP portfolio, you can also have a portfolio of problems to be solved. So, this is like creating a portfolio.

portfolio of ideas and the ideas are basically problems to solve. So, in this case we particularly identify three very important sources. We discuss that ideas are possible from five different type of elements. customers, employees, public, suppliers and in that case everybody may be searched for ideas on the basis of these three aspects. One is feeling the pain, second is sensing the wave and third is seeing the waste around you.

These can be the three important sources for all five sources of idea generation. What is the meaning of feeling the pain? Now, feeling the pain means you are having some kind of needs and I am not able to identify those needs and then when I identify those needs this is known as feeling the pain. And in this case your customers, your employees, your partners, even public

even investors, they all can have different types of challenges, different types of problems. So, understanding their problems is basically the feeling the pain. So, whether you are able to feel the pain of all of them, what type of problems they are having. For example, I just mentioned about voting. So, not able to vote

due to higher education. So, this is one problem I identified and it is possible or it may not be possible that I on my own develop the solution of this problem. But this becomes one entry in my this challenge book the diary which I was mentioning. So, it can be one entry in my challenge book that how can we solve this problem of people are not voting for the higher education. The day when we are doing this recording of this particular video today is Earth Day and the theme of this Earth Day is

earth and plastic. So, the problem is how to reduce use of plastic. This is the problem of current customer or maybe the problem coming from the public. Can I develop some good solutions for packaged water bottles.

These days lot of packaged water bottles are used. So, can I develop a solution where the water can be packaged but without the use of plastic? This is a very important pinpoint and it is a important idea. Similarly, these examples can be extended to hundreds and not only hundreds to thousands and more than thousands also. The second important point is sensing the wave that is future. How future is going to unfold? What type of changes may happen in the future? And you can divide the future discussions that immediate maybe these changes are happening in next 1 or 2 years, maybe in 5 years, maybe in 10 years, and then so on.

And these changes are possible with respect to technology, like we are using 5G, then 6G will come. So, when we are expecting 6G, when we are expecting 7G, how we are moving from normal internet to IoT, that is also a technological wave. How we are moving from IC engine based vehicles to EV electric vehicles, All these are the possibility and maybe very soon from immediately we are moving into EV and maybe in 5 years we will move to let us say hydrogen cells. All these things are quite possible.

Maybe in 10 years we will not use lithium ion batteries, we will start using sodium ion batteries. So, all these possible changes may happen. Changes may happen with respect to demographic. Right now, we have a particular level of literacy. How the literacy level will change over a period of time?

How the average age will change over a period of time? How the average income is going to change over a period of time? All these are the demographic related changes. We need to have eye on that also. How the regulatory changes will happen?

We are committed towards net zero. And for our commitment to net zero, how we will discourage fossil fuel based energy and we will encourage renewable source based energy that is may be possible because of and for that regulatory changes will happen. Fashion etc. easy to understand. Then the third important element of generating the idea that is you can see waste around you.

which is non-value adding activities. And in this non-value adding activities, it can be with respect to human efforts, make things more automated. You identified that we are wasting the human efforts in these things. Can we do something, can we develop some

solution so that the wastage of human effort can be minimized and we see that example of

from cycle rickshaw, paddle based rickshaw to these electric rickshaws. That is one example that lot of human efforts were involved when we were paddling the rickshaws and income of the rickshaw was also limited because of the paddling system. Now, we have electric vehicles and because of the electric vehicles we have improved the condition of the rickshawala. Now, no back pain, no ankle pain and at the same time the income is also increased.

Natural resources wastage is also possible. Natural resource like water, the way we irrigate our fields in India where we are putting excessive water in the agricultural activities and this is the direct example of wastage of natural resource like water. and not only wastage of water but it is also resulting into huge amount of methane production which is creating our entire agricultural system quite anti environmental. we need to see that how we minimize the use of water in the agricultural activities so that on one side our rivers will have more water and when rivers will have more water the issues of pollution in the river will automatically be resolved and at the same time agricultural activities will become more environmental friendly, less production of methane will take place. So, identify that natural resource wastage and try to develop solutions around that.

Technology resources, we are having all these computers and high end peripherals whether we are using these technological resources for the appropriate purpose or not. You can add more into the list monetary resource money wastage. Whether we are wasting the money and can we do some solutions. Now you have large number of mobile apps which are there to manage your wealth. So what is your income and how you are splitting your income in various activities.

So you have a good solutions for wealth management also. Because we are not able to see the waste of many things. We are not able to develop solutions to minimize the waste. So, you have to feel the pain, you need to sense the wave and you need to see the waste and you need to do these things with respect to customers, employees, public, suppliers, etc. And then large number of ideas will be developed and when you have that pool of ideas, you can convert that pool of idea.

In fact, I will say that that pool of idea is also a subset of your IP portfolio management. IP portfolio is not simply the registered and patented IPs. All those IP, all those intellectual property which is yet to be registered that is also the important component of

your IP portfolio. So, all these ideas which we are generating the entire challenge book is also the part of your IP portfolio. So, with this we have understood that how idea generation is very important part of my strengthening the IP portfolio and with this we come to end of this video.

Thank you very much.