

Innovation, Business Models and Entrepreneurship
Dr. Rajat Agrawal
Department of Management Studies
Indian Institute of Technology, Roorkee

Lecture – 32
Management of Innovation: Creation of IPR-II

Welcome friends. So, in the last session we discussed that intellectual property is very very important for success of any organization. We discussed that organizations have intellectual capital, which is knowledge and skills available with the minds of an employee, then you need to convert those intellectual capitals into intellectual assets by tapping by developing some systems. So, that you can document then you can index, you can distribute, you can augment, you can replicate that knowledge which is in the minds of employees so, that the intellectual capital becomes intellectual assets.

And when this intellectual asset is protected under some applicable law of your country, then this intellectual assets are known as intellectual properties; and time and again I am mentioning that patent is one of the most popular type of intellectual property. Now because patents are very very popular, we use IP and patent these words interchangeably, but we will see soon that there are different types of different forms of IP. And if you remember in the last session very quickly we discussed that there are two broad categories of intellectual property rights one is industrial property and another is the copyright.

So, we will deal with different types of intellectual properties in our coming sessions also, but in this particular session we are going to focus more on creation of intellectual property rights; why do we create IP, what are the benefits of IP, why organizations are putting lot of money in creating intellectual property rights, why it is debated all over the world? There are people who favor creation of IPRs and there are people who have a different type of voice those are countering the creation of intellectual property rights.

So, in this session we are going to discuss the different aspects related to creation of intellectual property rights. Let us see first that what is intellectual property rights. We discussed in our last session that, intellectual property is those intellectual assets which are protected under some applicable law and therefore, when intellectual property is available with you, when you have some intellectual property your assets are protected

by some law. So, that intellectual property gives you some rights; some rights are available with you rights means you can use that for like you have a piece of land available with you, then you can sell that piece of land because you are owning that piece of land.

So, either you can sell that piece of land to somebody else, you can give that piece of land on some rent to somebody else for a limited period, you can lease that piece of land to somebody else for longer periods or you can use that piece of land for constructing your own plant and machinery, your own house or for any other purpose which you deem fit. So, depending upon your interest since you are owning that piece of land you can use it as you want. You have some money in your pocket you have some cash available with you, some dollars are with you and in that case whether you want to buy a pizza with that money, whether you want to go to a movie with that money, whether you want to purchase a Nike shoe with that money.

So, that is up to you what do you want to do with that cash available in your pocket because you are owning that. So, because you are owning. So, you have right to use money as per your choice, you are owning that piece of land. So, you have a right to exercise your power the way you want to use that piece of land. Similarly since now you are owning intellectual property. So, therefore, intellectual property rights are like any other property.

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The slide features a blue header with the title "What are IPRs?". Below the title is a bullet point: "Intellectual property rights are like any other property right. They allow creators, or owners, of patents, trademarks or copyrighted works to benefit from their own work or investment in a creation." The words "patents, trademarks or copyrighted works" are circled in red. To the right of the slide, the handwritten text "Types of IPRs" is written in red. At the bottom of the slide, there are logos for "IIT ROORKEE" and "NPTEL ONLINE CERTIFICATION COURSE", along with the number "2".

What are IPRs?

- Intellectual property rights are like any other property right. They allow creators, or owners, of patents, trademarks or copyrighted works to benefit from their own work or investment in a creation.

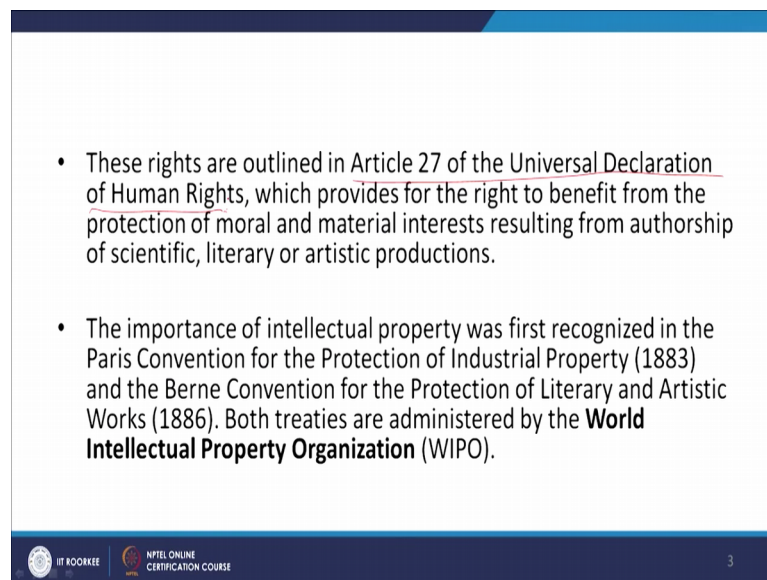
Types of IPRs

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Right rights of plant, machinery, land, cash, building whatever properties you have. So, the right which you can exercise in those cases similarly you can exercise rights in case of intellectual property. They these rights allow creators or owners of patents trademarks copyrighted works these are some of the forms of IPR. These are different forms of IPR patents, trademarks, copyrighted works these are types of intellectual property rights. To benefit from their own work or investment in a creation because you have put your efforts, you have put your intellectual capital or sometime your other resources, your monetary resources, your land resources your other material resources, in creating a new product, in making a new process, in developing a new kind of material, in developing a new kind of design.

So, for all those things in which you have invested your efforts your other resources. So, now, you have full right to take benefit of your resources on your investments. So, like any other rights you have any other rights in case of other properties intellectual property rights, also give you the right to take benefit from your investments in creating in developing those intellectual properties.

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- These rights are outlined in Article 27 of the Universal Declaration of Human Rights, which provides for the right to benefit from the protection of moral and material interests resulting from authorship of scientific, literary or artistic productions.
- The importance of intellectual property was first recognized in the Paris Convention for the Protection of Industrial Property (1883) and the Berne Convention for the Protection of Literary and Artistic Works (1886). Both treaties are administered by the **World Intellectual Property Organization (WIPO)**.

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Now, going into slight history of creation of IPRs, you see that these rights are outlined in article 27 of the Universal Declaration of Human Rights. So, what is very important that these are globally accepted as human rights it is the part of human right. Your knowledge, your creative idea, your ability to think better than others or your ability to

think differently from others not better than, but differently from others is a type of a human right, which provides for the right to benefit from the protection of moral and material interest, resulting from authorship of scientific literary or artistic productions.

So, since this is a type of fundamental right, it is a type of basic human rights, it becomes a kind of a globally accepted. So, nowadays you have a maximum voices in favor of IPR, and very little debate you will find which say that IPRs are not human friendly rather it is presented as part of human rights. So, this is something very very important that we need to understand that intellectual property rights are the part of a human rights in the universal declarations.

The importance of intellectual property was first recognized in the Paris convention for the protection of industrial property, which took place in 1883. And the Berne convention for the protection of literary and artistic work, it is in 1886 just after three years of industrial property. And more treaties are now presently administered by WIPO that is World Intellectual Property Organization. So, WIPO has become the international agency which is administrating all the treaties all agreements related to intellectual property at the global level. Because as you go deeper into this subject you will see that large number of conflicts will arise, because some of the intellectual property rights are specific to a particular geographical area.

So, when a particular right like patent for an example, which is limited to a particular geographical area. Now, when it is limited to a particular geographical area, there are always some type of issues because now we are living in the globalized economy. So, if something is patented in India. So, you obviously, cannot take the benefit the other party cannot take the benefit of that patent in India, but can that party take the benefit of this patent which is in India in some other market? Producing different market and sell in different market nothing to do with India.

But Indian company is also looking to sell the same product in that market. So, that type of conflicts are in increasing number and in our course of discussion when we will discuss is specifically patents in a particular session, we will see that what are the myths and what are the facts. So, that with the help of some of the popular cases also we will see that what is actually the reality and what is the perception of people about those types of intellectual property rights.

But over a period of time WIPO has become a very powerful international agency and WIPO has administered the issues related to IP in a very nice manner, because lot of conflict of interests are involved. So, and everybody is looking for having a strong economy. So, in that case it is very much likely for the infringement of the breaching of patent issues and WIPO has become a very important active body, proactive body to handle issues related to intellectual property.

Now, the other important issue as I said in the beginning of this session that why promote and protect intellectual property; Sometime it looks that some of the people those who voice against IP, they say that intellectual property or intellectual property rights particularly are helping in creation of a monopolies; because I am an inventor and only I can use this technology now since this technology is very much required I have developed a life saving drug. Now, this life saving drug should be available to all the masses.

But since, I have invented I got the patent of that drug I will like to sell the drug on a very premium price because I want to take the advantage of that. Now, since I want to take the advantage of my discovery, my research and development patent which I got I will not like or I will not let anybody else doing that business and therefore, people will say that since only I will be doing the business in that particular life saving drug, it is kind of a monopoly of that particular organization.

So, it is not favoring the individuals. So, let us see, why we are favoring or what is the fact behind promoting and protecting intellectual property? The progress and well being of humanity rests on its capacity to create and invent new works in the areas of technology and culture.

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Why promote and protect IP?

- The progress and well-being of humanity rest on its capacity to create and invent new works in the areas of technology and culture.
- The legal protection of new creations encourages the commitment of additional resources for further innovation.
- The promotion and protection of intellectual property spurs economic growth, creates new jobs and industries, and enhances the quality and enjoyment of life.

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Without new inventions it is very difficult to survive the growth of the society, growth of the civilization is very much dependent on these two things technology and culture with development in your wheel over a period of time, we are now into a different kind of environment.

With the development in our literary work, we used to write on [FL] and now I am writing on this tablet. So, over a period of time the technology and cultures evolution the development in these things are very much required. And if this is not taken care the human race will not survive. So, progress is essential I think nobody can debate that progress is not required. We used to have classroom lectures where we had one to one discussions in the classes. But nowadays we are having this kind of MOOC classes where you all are sitting at different locations and I am at a different location.

And with the help of technology, we are able to take benefit of this lecture. So, this is actually the requirement of modern era and somebody says that you are a human as long as you are developing yourself. If you are not developing; that means, you are not human being then you are animal. So, progress is directly related with the capacity to create and invent new things in technology, new things in culture. Here culture I am particularly meaning with the literary work, paintings, designs, music, drama, stories, poetries all these things are my understanding of culture at the moment.

Now, legal protection of new creations and courageous the commitment of additional resources for further innovation. When I have invested some resources my intellectual capital I have invested I have invested my other resources for development of intellectual property; now if some legal support is available where that legal support legal protection helps me that nobody else can take away my idea, I am protected against theft of idea I am protected against theft from my property.

So, therefore, I will be more motivated. I will be encouraged to put more resources so, that more and more benefit can be developed more and more benefit can be achieved. So, that is the reason why we look for legal protection. And the promotion and protection of intellectual property, spurs economic growth creates new jobs, industries and enhances the quality and enjoyment of life. When new technologies are developed so, new industries will come up, we all know that if you talk to your parents you talk to your grandparents.

So, before 1995 there were no mobile phones in India, we all used to have landline phones and those landline phones were normally available from department of telecommunication. Hardly we used to purchase handset the mobile that telephone set from the private retailers, normally we used to get that telephone set from government office that is department of telecommunication. So, the telephone industry of making the handsets making the telephone sets were not a very developed kind of industry.

Only few retailers you used to find selling the electronic products were selling the telephone sets. But with the development of technology with the development of mobile phones, the cellular communication technology wireless communication technology, you see so many new companies in India are there. It is no more simply department of telecommunication or BSNL. It is Vodafone it is Reliance Jio, it is Airtel it is idea and in all these companies we know that thousands of people are getting employment and not only in these companies, then you have another industry of making the mobile phones.

And one of the company Apple making mobile phones is one of the top brands of the world at the time. So, the development of technology is spurs the economic growth by giving more employment, more businesses and more avenues to take benefit out of that and then in sequence from this mobile industry, because of development of technology you can access internet on your mobile phones, now it is no more voice communication

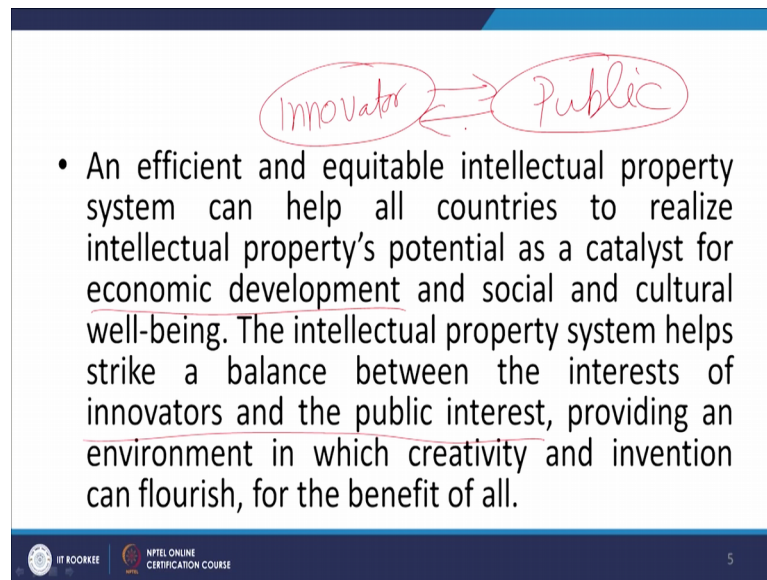
it is data communication also which is taking place at a very fast rate nowadays because of 4G technologies. And it has given growth to another industry that is development of mobile applications and this whole course is around the development of mobile application, because that is where most of the new startups are coming.

New startups are not coming in the area of developing a tangible product, most of these are in the area of developing non tangible products, they are into the service sector giving information to the customers. So, you see and this all became possible because of more and more efforts are put into the development of new technologies; and anybody will put more efforts, more investment in development of new technology only when he or she is protected legally with that kind of investment.

So, it is very important that this particular issue is not possible creation of new jobs, new industry, the quality of life, we have a much better life, we can communicate all times anywhere to anywhere. So, it is it very different kind of lifestyle we all are living and that is only possible because we are continuously investing in technology and continuously investing in technology is only possible, when you have a kind of support system which is protecting you.

So, therefore, promotion and protection of IP is very much necessary if we want to develop economically, if we want to create more jobs, if we want to have more industrialization of any nation is good an equitable intellectual property system can help all countries to realize intellectual properties potential as a catalyst for economic development and social and cultural well being.

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The slide features a handwritten diagram at the top with the word "Innovator" in a red oval on the left and "Public" in a red oval on the right, connected by two red arrows pointing in opposite directions. Below the diagram is a bulleted text point. At the bottom of the slide, there are logos for IIT ROORKEE and NPTEL ONLINE CERTIFICATION COURSE, and the number 5 in the bottom right corner.

- An efficient and equitable intellectual property system can help all countries to realize intellectual property's potential as a catalyst for economic development and social and cultural well-being. The intellectual property system helps strike a balance between the interests of innovators and the public interest, providing an environment in which creativity and invention can flourish, for the benefit of all.

So, it is the requirement of WIPO. In the WIPOs agenda it is being proposed that all countries should have a very good efficient and equitable system of IP creation in their countries. So, that it can become a very important enabler in the process of economic development and as well as it also helps in social and cultural well being.

The intellectual property system helps strike a balance between the interest of innovators and the public interest. Even WIPO has also recognized that it is a myth to say that intellectual property creation or intellectual property rights lead to monopolies rather a good system of intellectual property creation is actually trying to create a balance between innovator and the public; providing an environment in which creativity and the innovation can flourish for the benefit of all.

So, we have two parties one is innovator and other is public. So, a good innovation system actually takes care of interest of both these parties because innovator will take money innovator will take profit from the public. So, if public is accepting. So, it must be of public interest, then only public will inter public will take benefit of your innovations and for that purpose you need to have a balance between the interest of public and the interest of innovator.

So, a good system because normally this intellectual property systems in different countries are under the law, and law is developed by the government and therefore, the government on one side need to take care the interest of your public the citizens of the

country, and at the same time they have an objective in mind of more and more economic development, more and more industrialization to create more employment all these things. And for that purpose they need to have a sound intellectual property system.

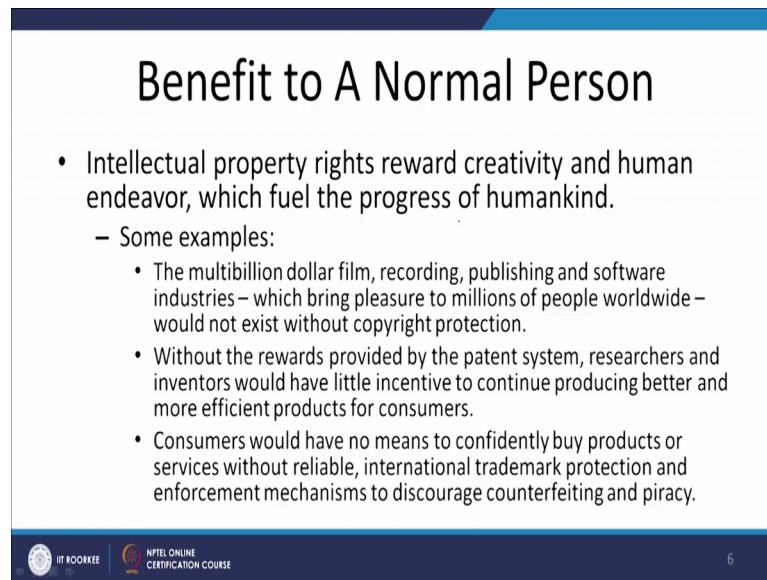
So, it becomes a very interesting balance between the direct benefit to public and direct benefit to the society. However, it is very interesting to understand that more these things are interrelated the interest of society and interest of industry is not decoupled they are linked, but sometime we are not able to understand the relation between these two things. So, therefore, you need to see that you can provide the short term benefits also and long term benefits also with the help of an efficient and equitable intellectual property system in your country.

Now, we see that ah; obviously, when you have intellectual property right. So, you can use it as per your choice, you can if you have a patent for an example. So, either you can transfer the technology to somebody so that that company can like in our educational institutes if as a researcher I develop a patent. So, I have multiple options to use that patent. I can either develop my own company using that technology using that patent. So, that is the first possible I can give license of using the technology to somebody else that you can make so many products and each product you will pay this much amount to me for using my technology.

Or I can transfer that technologies to somebody else, I can sell my technology to some customer on some price and then that customer will use the technology. So, there are different ways in which I can leverage I can take the benefit of my intellectual property, but what are the benefits to a normal person of having intellectual property system in the country? So, there are different types of benefits which are available to a normal person with the intellectual property, because it is intellectual.

So, intellectual means it is related with mind and related with mind there are two things one is creative side another is analytical side. So, it actually takes care of both the parts; the creative side is taken care by the copyrights and the analytical side is taken care by the industrial property.

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The slide is titled "Benefit to A Normal Person" and contains the following text:

- Intellectual property rights reward creativity and human endeavor, which fuel the progress of humankind.
 - Some examples:
 - The multibillion dollar film, recording, publishing and software industries – which bring pleasure to millions of people worldwide – would not exist without copyright protection.
 - Without the rewards provided by the patent system, researchers and inventors would have little incentive to continue producing better and more efficient products for consumers.
 - Consumers would have no means to confidently buy products or services without reliable, international trademark protection and enforcement mechanisms to discourage counterfeiting and piracy.

At the bottom of the slide, there are logos for "IIT ROORKEE" and "NPTEL ONLINE CERTIFICATION COURSE", and the number "6" in the bottom right corner.

So, it rewards creativity and human endeavor which fuel the progress of humankind, and that is the first important benefit you have with the intellectual property system; because for any inducer I as an inducer whatever lecture I am delivering. So, I am protected by the law of copyright I am getting copyright on my lectures. So, that is the protection of IP and if I am protected by this copyright system, you are also protected for your creative thing. So, that is the first important benefit to a normal person.

Now, how will I take the benefit of this copyright, even if I get copyright that we will discuss in a session which is solely dedicated to copyright issues. Now, some of the examples you see of benefits of intellectual property to normal persons. Like the multibillion dollar film recording publishing and software industries which brings pleasure to millions of people worldwide will not be possible without copyright protection.

So, you see we get CD's DVD's of good music and if copyright is not there. So, these companies cannot exist and therefore, some of you must have heard about terms like pirated CD's. If pirated CD business increases to a very large level, it will be a direct threat for the survival of a music industry survival of industry which is creating DVD's. So, that is one simple example that how it is going to help a normal person, when that industry will not there. So, as a normal person we will not be able to get new music, new songs, nothing creative will come.

So, if you want to listen good music, it is my humble request that you all should purchase original CD's not the pirated ones. The other thing is without the rewards provided by the patent system researchers and inventors would have little incentive to continue producing better and more efficient products for consumers. As consumers we regularly want better and better products, now when we want better and better products that is only possible when companies do more and more research.

Now, when companies are doing research, they will also like to have benefit from their research and that benefit will come by positive cash flow in supply chains by the customers. So, as a customer if you are desiring better products, more efficient products, more efficient services then that is only possible when you have a good patent system where your research, your other kind of creative activities are protected and you get proper benefit of those researches because that is the incentive to a researcher. The other example is consumers would have no means to confidently buy products or services without reliable international trademark protection and enforcement mechanism to discourage counterfeiting and piracy.

You buy Nike shoes because it conveys, some bundle of quality to you drink coca cola because you have a different type of pleasure. So, when coca cola is printed on the bottle, you take it as a source of authenticity. When Nike symbol is made on shoes you take it as a source of authenticity, that it is going to give me the comfort par excellence. Now when these type of trademarks are not available it will be difficult for any company to make more investment into creating into producing better products. So, that is the examples related to copyright, we discuss example related to patent, we discuss example related to trademarks.

So, these are the different types of IPR and if as a human being we want better music, we want efficient products we want some kind of authenticity reliability while purchasing a product. So, we look for the trademarks all these things are only possible if you are having a proper enforced IP system in your country, without that these benefits are not available to a normal man.

So, while IP system is helping innovator, but at the other side it is also helping the normal man so, that we get better products we continuously upgrade our quality of life, and IP plays a very important role in improving our lifestyles. So, with this we come to

end of this session and in our next session, we will discuss that how IPRs are created we will discuss the creation process of patents, and then we will also discuss the registration of trademark we will discuss.

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How are geographical indications protected?

- Geographical indications are protected in accordance with national laws and under a wide range of concepts, such as laws against unfair competition, consumer protection laws, laws for the protection of certification marks or special laws for the protection of geographical indications or appellations of origin.
- In essence, unauthorized parties may not use geographical indications if such use is likely to mislead the public as to the true origin of the product. Applicable sanctions range from court injunctions preventing unauthorized use to the payment of damages and fines or, in serious case imprisonment.

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The geographical indicators we will discuss about the copyrights.

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Copyright

- Copyright and related rights protection is obtained automatically **without the need** for registration or other formalities.
- However, many countries provide for a national system of optional registration and deposit of works. These systems facilitate, for example, questions involving disputes over ownership or creation, financial transactions, sales, assignments and transfer of rights.

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So, all these are the different forms of IPRs as I mentioned. So, in our next session we will discuss all these different types of IPRs one by one, and we will see that different

types of IPRs offer different types of benefits to the innovators as well as to the public with this we come to end of this session.

Thank you very much.