

IP Management and Technology Transfer
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Lecture - 22
IPM and Competitive Intelligence

A very warm welcome in the course Intellectual Property Management and Technology Transfer. The title of this module is IP Management and Competitive Intelligence. Now, as name suggests here, you think what is this competitive intelligence and how it is related to intellectual property and its management ok.

So, let us try to understand the relationship between competitive intelligence, intellectual property management and how this competitive intelligence help businesses to take a certain decisions when they are launching products or when they are deciding on the R and D project selection.

And there are few more things related to it. So, next 30 minutes we will try to understand how exactly this competitive intelligence helps organizations to manage IPM. So, as you can see here, this IP management and competitive intelligence, which is one of the part of a patent analytics actually.

And this patent analytics, when we are talking about patent analytics, there are many benefits of that and there is a separate, you can say that domain or a branch that pat informatics, which deals with this patent analysis and the various applications of that patent analytics in various fields. So, a few examples of that we can just go through and then we will focus on a competitive intelligence.

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Now, you can see here that this creative thinking and a problem solving and how that is related to patent analytics actually. So, when we are talking about this creative thinking, you can just go through the previous patent a prior art actually.

And this prior art by using that you can do the analysis and that will give you the idea, the state of the art in that particular domain and then you can decide on what are the kind of problems or what are the areas which are unaddressed or which are the different areas which are still not explored.

And probably that will help you to give you the new areas which probably are having a promising solutions to different problems which society is specific and definitely patent analytics or patent informatics helps you to understand that thing.

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The next application if you can see here, it is a R and D and business strategy. So, just in the starting I have said that your business decisions your R and D related decisions you can take with the help of a patent analytics yes, it is a one of the parameter you can say to take such decisions.

So, what how exactly it is helping? So, just take an example in your domain and you are doing the patent analytics in that domain. So, what will happen? You will get the idea how exactly the research is progressing in your domain that is one thing. Second when we are talking about the business you can just do the market intelligence and you get the idea how exactly the business or a market is growing or what is the demands in the market.

When you related back with the technology obviously, when you go through this patent analytics you can relate it very easily that yes, this technology growth will be probably in this

way. These are the areas they are growing maybe the pace you can gauge by doing the patent analytics and then based on that you do the further decision making related to R and D and your business. And lot many things are there just I am giving you the glimpses of that. So, this is the R and D and business strategy.

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The next you can see here that there is a technology, trends and white space mapping actually. So, as I just mentioned that when you are going through that R and D whatever is the patents filed in that particular domain you can project it.

You can see the projection of that probably what technology further will come into the market that gauge you can do and that technology trends and then the that the areas which are unexplored you can easily map out and that probably help you for the further decision making.

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Moving further you can just check here that next area is like a patent infringement and a litigation. Now, you will see how this patent infringement and litigation and patent analytics is related. The classic example I can give the many of the times organizations are using invalidity of the patent as a strategy to handle the litigation. So, if there is whole mess and somebody maybe they have copied that they have already increased they know that.

So, what they will they will try to invalidate the patent that is one of the strategy I just mentioned that and there are few more claim mapping than evidence of use where again here like being infringement analysis by using the claim tree and all. So, this patent infringement is and litigation where we are doing the claim mapping at that time this patent analytics is definitely helping.

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Moving further then the next is like a you can see here mergers and acquisitions. Now, this mergers and acquisition again the question how patent analytics is related to that. Classic example I can give you that when we are dealing with a say for example, acquisition what we do a due diligence. In due diligence what exactly we are looking into we are going through the patent portfolio overall IP portfolio I am just focusing on the patent portfolio.

Now, in that we check that which are the patents in that patent portfolio and how many of them are promising and obviously, probably because of that also or that is one of the reason to take that decision related to acquisition. There are many other factors, but that can be one of the reason to do the do this merger or acquisition activity ok. So, I am just giving you again the simple one example and then let us move further because our focus is competitive intelligence actually.

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Technology transfer you can see and the licensing. Now, when we are talking this technology transfer licensing is one of the way we can say of a technology transfer. What exactly happening there? That in license somebody have already developed that technology they are holding the IP rights and other related rights of that particular technology.

They know how and other tacit knowledge related to that particular technology and then they are licensing what they are doing that transferring that knowledge to the another party and in that turn obviously, some consideration they are getting and that may be dependence on a the negotiation whatever their two parties have done. So, when you are doing this licensing activity and technology transfer activity how patent analytics is coming into the picture here.

So, when you are doing this technology transfer when you are probably for example, if I take a simple example that you have developed a technology which is a very unique and you own

somebody who can take it further and you are lacking in that particular area it may be supply chain it may be marketing it may be some complicated technology which require further resources for a further building up whatever it may be.

So, you have to analyze and you have to find out who is the best especially when patent analytics is the when you are using that for that development further development of technology you try to do the analysis you try to understand the capability of the other party.

And probably patent portfolio of that another organization that helps you to give the idea that whether that the patent portfolio will reflect the R and D capability or the resources which are available of that organization and probably that will help you to take a decision related to technology transfer ok.

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This is a simple one example I am citing here and let us move further to the next that is a bridging the gap technology gap actually. So, you will say how technology this mapping or a patent analytics is useful here. So, again if you just try to understand that two different domains are there totally different sectors. Say, for example, one is a arrow dynamic with aero aeronautics and all that and another is say automobile industry.

And these are different totally different sectors the demands are totally different considering the technology. Now, we are talking about a technology gap, sometimes what happen that a crossing over of ideas may help to bridge the gap in the technology wherever you are putting. Suppose you are focusing on automobile industry and you have idea about that aeronautics and the details about that particular industry.

Then probably the usage whatever the usage is there or the ideas which are used here probably you can utilize it during development of automobile simple example I can give the main purpose when you are talking about this aeronautics and all the weight is very important there and the study studyness. So, the material which you are using there it should be light, but it should be strong and sturdy.

So, that technology you can use it if you want to make automobile seats and all that thing in the internal structure or internal arrangement of that any automobile structure it may be the car or it may be any other kind of a vehicle. So, you can utilize that technology here something like that then you can use this patent analytics for that particular things. So, few patents analysis will give you ideas that yes probably there will be the crossing of ideas and you can use that particular thing.

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Let us move further and then you just see that there is a prevent duplication of a research, its very clear that unless until and literature you will review generally every new project whenever you are starting you do that literature review and that literature review patent review is also important if you are dealing with any technology.

And whenever you do that prior art search this is a standard word in short which is used for a patent review actually that prior art search you are doing. So, if you do the prior art search actually, we get the idea what how exactly the technology is developed and at what stage that technology is there and many times this happens that we feel that our technology is new, but probably it is already developed it is already patented. So, it is better to do this to avoid that duplication we should do the patent analytics.

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Now, we will focus on this competitive intelligence. Now, when we are talking about the competitive intelligence here also, we are doing a patent analytics. Now, what is special about that when we are talking about a competitive intelligence when we are using a patent analytics to do a competitive intelligence. Now, what is the meaning of competitive intelligence actually? So, you have probably have used word or hear about the word like a business intelligence or market intelligence actually.

So, what is the meaning of that market intelligence or a business intelligence? So, the meaning is like that you have done some search some study about that particular domain and now you are using that understanding of that field for the application of that particular thing in your work actually, market intelligence. You have you have understood something through that study and now you are applying it for your product delivery or service delivery ok.

So, here what is what is we are doing? We are controlling or we are trying to control competition or we are trying to understand the competition. That will be the right explanation that yes, I am trying to understand the competition and then I will utilize it after understanding the scenario I can utilize that understanding for my different strategic moves in my organization. So, how it is done or how this competitive intelligence is carried out?

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Now, if I want to focus on this competitive intelligence, I will focus on a four points actually. So, what is this? That objective then business strategy, then there is a IP strategy and a competitors. Now, all this thing whatever we are we are now talking about this patent analytics something we are analyzing.

Suppose I want to give you example as a layman or a normal practice whenever we are doing simple thing also means for example, if you want to buy something from the market or you

are studying something and you are participating in examination at that time also, we are doing such kind of activities.

That ok or how the study of others going on or what are the earlier papers, how I should perform in the examination, all this kind of a study background study we do or if something whenever we want to buy from the market that time also, we do all this kind of a study. Now, here this is a very focus when we are talking about competitive intelligence, it is very focused and we can focus on the four point like first objective.

So, generally when we are doing a competitive intelligence objective is generally you want to keep a watch on the competition generally general, I am talking that ok. I want to keep watch on the competition whatever my offerings in the market are there. I have to just check which are the other companies which are providing this service, providing this product and I just do not want to focus on that particular thing.

I want to check in the background that what will be the next move of that particular organization and how I should be prepared, you got the point. So, we are trying to check the future by using patent analytics ok. So, its like a data analytics actually and here a data is patent data. So, objective is very clear when we are talking about the competitive intelligence my competitors what and where they are focusing on.

So, what they are doing, which is their domain and what is their focus and probably what will be the next move in the market by my by my competitors and whether that will affect my R and D, whether that will affect my market everything I have to check and for that we are doing the competitive intelligence.

So, that is something about the first point. The next point you can see here a business strategy. Once we know about how exactly my competitor is planning the further activity and you will say how I will come to know about the technology which is developed in that particular organization. So, what I will do? I will just check the patent feature filed by the organization which I know the competitor is.

So, for example, when I was actually working in the organization, we have three companies always we know that these are our competitors and our job was like every six months we have to do the competitive intelligence report. So, what was our task, what exactly we were used to do? So, we will do the check the patent portfolio of that organizations. So, three organizations we will kind of focus one person will focus on only one organization, then we will download whole patent portfolio of that organization.

Generally, we will focusing on the patent portfolio only because we want to check the technology development. So, we will download that thing we will analyze that particular patent portfolio. And then we will try to give the prediction that in which domain the further development is going on, in which sector probably the competitor may move next, which product or which service probably competitor is trying to offer in the market and all this based on only patent analytics ok.

So, now once I know that thing I can modify my business strategy, I can make my business strategy full proof. So, that I will not face the issues when my product is launched in the market. So, that way this will help you to design define, modify your business strategy.

The next thing you can say that IP strategy here. So, there are various IP strategies like fencing is there, ticketing is there right. So, you will take a decision that suppose both competitors you are in a same direction going, then how one how you can be a leader. And at that time, you have to protect your technology very carefully.

So, probably you will use you will change your IP strategy, you will make a very tight kind of protection for your core technology and that fencing or ticketing whatever you want to call or then you will take the that modifications we can do and we can bring that change in immediately in our patent filing and we can save the surprises in the future.

The last one that competitors that we have already discussed that is we should know who are the competitor that is one thing. And if we are not doing probably if you do the technology analysis someone which is unknown upcoming competitor is there, maybe some startup,

maybe some kind of spinoff maybe there and probably they have started working on that particular domain that also you come to know during this analysis.

So, generally what happens? If such kind of a scenario is there that some startup or some spinoff is coming up and they are building up or coming up with a very promising product. Generally, at that time again the strategy changes if you are a giant in the market you may go for the acquisition of that particular startup.

Or you can think about if it is a spinoff you can think of who is who is which is the academic if it is supposed to academic organization, academic institution and spinoff is there you may try to strategize. Now like for example, you will say that ok we will give project to that academic institute, so that you can get the readymade research.

So, win-win situation obviously, but and saving of a time; obviously, because somebody has already started working on that particular domain that is useful to you. So, maybe even say if I want to give you just little idea in this small time, we can just focus on this four points and accordingly you can plan the competitive intelligence activity to get the idea. Now, you will say how? So, how I can use it for my purpose? So, suppose you are a academic institute and you are working on some project.

So, at that time probably you are you and if you are intelligently suppose you are a PhD student you are investing five years or four years in that research actually and that focus is very in depth you are studying that particular technology.

So, probably I and if you are a entrepreneur entering into the entrepreneurial activity all this kind of scenario is there how will you use this competitive intelligence? Actually, there you can use the patent analytics to understand the who is working in that particular area and you can save yourself actually.

From that competition by knowing ok this is the scenario these are the organizations which are working in the domain. So, if I am on to build up my product build up my service, I have to make sure that I will not get hampered by this giants that is a one thing, second thing you

can think about the licensing or collaborating with that organizations probably that will help if you are a small player in the market actually.

Competitive intelligence actually big players they are doing all these activities to safeguard themselves. But if we are like a small player like we are working in academic institute and a small development we are bringing up you can utilize this this competitive intelligence or in short it is a patent analytics for your marketing means marketing in a sense your entrepreneurial activity and then your technology transfer.

So, that is the one way you can utilize. If you are already the organization if you are industry definitely you probably are doing all these practices and yes definitely this is very useful and you can use it effectively to control the competition or to manage the competition there is a difference. So, you can do that particular thing ok.

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Let us move further and here if you see that the next one that is we will watch one video actually and let us see that how IP management and this competitive intelligence you is used effectively by the organizations, let us watch this video.

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The Brussels bus company had a problem it was costing them too much money to keep their fleet on the road.

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And they thought they knew what the problem was cowboy bus drivers not that they were not safe, but they were just too aggressive too hard on the gas too harsh on the brakes.

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And it was causing their buses to break down faster than they should have done and that cost money.

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They wanted to understand what steps can we take to lower the cost of maintaining our fleet.

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So, they did some analysis to figure out is it really cowboy bus drivers is that really the problem we have.

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If we do not understand how decisions are made if we cannot influence how decisions are made then we can do all the data and all the end use all the analysis in the world, but it is not really driving business impact and that is what we want to make sure our clients are able to do.

Decision intelligence is a business discipline of understanding how and why decisions are made and then seeking to improve. A lot of organizations they do not want to change and if you do not want to change why are you thinking about decision intelligence because the whole purpose of decision intelligence is to change.

Some organizations really struggle to apply decision intelligence if they are incredibly successful. Everything I do just turns to gold why would I need to change everything I will doing is working really well. So, I think the fundamental starting point for decision

intelligence is am I willing to change and what would make that change compelling for my organization.

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We asked people how they judge good decisions and we gave them two choices. You can say a good outcome determines a good decision well that worked out well it must have been a good decision that worked out badly it must have been a bad decision.

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Or we said was it the good decision one that was made with the best available information.

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The best available knowledge and the right insights at that time was that a good decision even if it turned out badly.

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50 percent of people said a good decision is defined by its outcome.

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50 percent of people said a good decision is defined by its process and I just love that dichotomy because it means no matter what you think the answer is there is literally a 50 percent chance the person you are talking to defines a good decision in a fundamentally different way than the way that you do. You have to take the view that a good decision is one that was defined by a good process with good inputs because you can control that in a way that you cannot control the outcome.

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This is the really important thing about the Brussels bus company example they went in with a hypothesis it is cowboy drivers, but when they looked at the data and they found out actually it is not cowboy drivers.

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It was the terrain and geography of the city.

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That was wearing out the buses faster in some parts than in other parts nothing to do with the drivers.

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Route Number	Fare
N9190	X4.9081 Y1.5067 Z-.367
N9200	X4.9424 Y1.4724 Z-.367
N9210	X5.006 Y1.4088 Z-.367
N9220	X5.1382 Y1.2766 Z-.431
N9230	X5.1969 Y1.2179 Z-.447
N9240	X5.2557 Y1.1591 Z-.456
N9250	X5.2948 Y1.12 Z-.452
N9260	X5.3242 Y1.0906 Z-.4639
N9270	X5.3536 Y1.0612 Z-.4801
N9280	X5.3732 Y1.0416 Z-.4976
N9290	X5.383 Y1.0318 Z-.5123
N9300	X5.3927 Y1.0221 Z-.5309
N9310	X5.3976 Y1.0172 Z-.5483
N9320	X5.4025 Y1.0123 Z-.5517
N9330	X5.4716 Y.9441 Z-.5536
N9340	X5.403 Y1.0126 Z-.5517
N9350	X5.403 Y1.0175 Z-.5483

It was the city itself by understanding that it was where the bus was running that was the problem not the driver of the bus.

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They were able to make sure that the buses were wearing out evenly.

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And that meant that they were able to do a better job of maintaining them and keeping them productive and on the road.

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The thing that I think is so special about the Brussels Bus Company is they were honest enough to take a step back and say well what is and they pivoted to take action and use that new data that new insight for a better decision.

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The biggest thing to be successful with applying decision intelligence is to have a willingness to change.

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Change is painful there is a couple of things to do to really get better at the way you make decisions as an organization. The first thing is you need to track the outcomes of your decisions and everyone says well we always track the outcomes of our decisions.

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But actually, we do not we have survey data that says the fewer than 20 percent of organizations actually consistently track the outcomes of the decisions they make.

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And fewer than 20 percent of organizations actually use the right metrics to track the outcomes of the decisions. So, when you look at it holistically about ten percent of organizations consistently track the outcomes of their decisions and actually do that in an effective meaningful way. So, you know how can you possibly improve the quality of your decision making if you have no way of tracking whether or not the decisions you make are actually good decisions or bad decisions.

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The second one I would really focus in is understanding how the decision is made today right. Is this decision made using data and analysis? Is it made by getting a group of smart people together and saying you guys figure it out and you guys make a decision? Is it by applying business principles or ethics? Is it made with instinct or is it made on principle?

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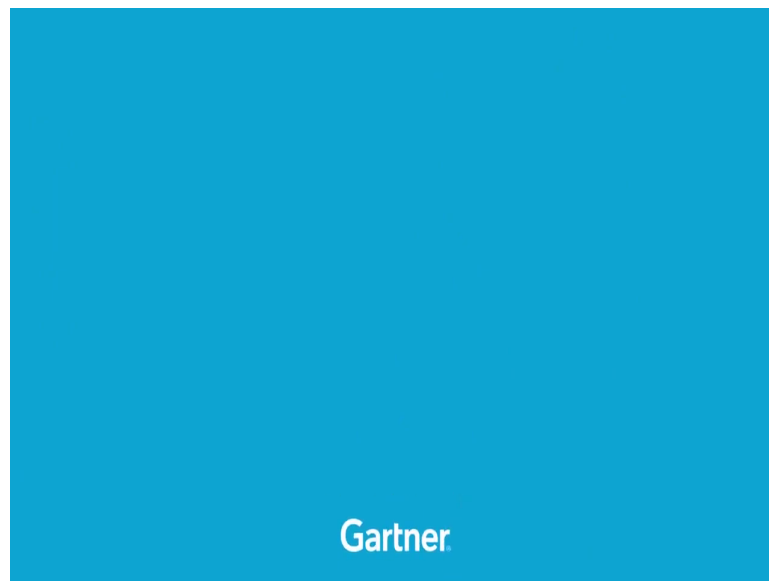
We need to understand this in order to improve it.

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Decision intelligence is a universal concept, but the way it manifests is going to be variable depending on the culture of the organization the needs of that organization and the dynamics of their industry.

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Ok so, now let us move further and just summarize the what we have just understood here that when we are talking about this IP management and competitive intelligence and we are talking about the that competitive intelligence with the four points actually we focused on objective we focused on business strategy, IP strategy and competitor and we have also seen before that the different benefits or different applications of a patent informatics or a patent analytics.

Now, all this these benefits or advantages or utilization of patent analytics probably help you and the focus was on competitive intelligence especially you are focusing on the competitors technology ok. And you are utilizing patent analytics to manage that competition ok.

So, and that is very important because if we want to develop a sustainable business; obviously, we have to see what is going on in the market, who is our competition, who is our

competitor and what competition probably we are facing because for example, simple example I will give and then we will close the session actually

So, we know the Kodak and Polaroid case actually that probably Kodak was not aware or probably they have neglected the development about the digital technology and you know the result of that particular thing. So, if probably they have the given they have put the watch on the competition if they have taken care of that patent analytics carefully if they have taken that competitive intelligence very carefully probably they would not have faced the issues which they have faced because of that development that is a digital technology ok.

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And now the quiz time actually so, that we can take care of that particular suggestions or queries which are very specific to the video we can that all videos; obviously, in the discussion forum.

So, quiz which is related to this only this this chapter or this module actually only you just write down what do you understand by competitive intelligence that is it. So, we have just learned it in this thirty minute what exactly competitive intelligence is. So, try to under try to write down in your own word that what is competitive intelligence ok.

So, please write down in the chat box what is competitive intelligence we do not require any theoretical and bookish definition in a simple layman language you can write down that particular answer.

So, please use this comment box effectively for answer this question and other queries please put into the discussion forum and of course, there will be a live session and in the live session you can have the queries about the course ok. So, with this we are coming to the end of the session see you in the next session.

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Thank you.