

INTELLECTUAL PROPERTY PORTFOLIO MANAGEMENT

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Welcome friends, in a portfolio management when we are taking stock of the situation that we have certain assets with us and we need to manage them. So, like various other fields in the field of innovation also because all these IP assets are coming as a system of innovation in your organization. So, a system of innovation management system which is known as ISO 56000. is also going to be there very soon.

Like we know a very popular system of ISO 9000, we know another system 14000, we know another system of 26000 which are related to whether you are talking of quality management systems, you are talking of environment management system, you are talking of safety and health management system etc. There is a system known as 56000 which is about innovation management system and it is very appropriate to discuss about this ISO 56000 in our class of portfolio management. Why? To take collective stock of the situation and how we can strengthen our portfolio as well as manage our portfolio. The knowledge of 56000 system will be really very very helpful for all the practitioners.

Now, in this particular session, we are going to discuss what we mean by the innovation management system. We will be talking about various elements, and components of this innovation management system, and its global recognition. the various you can say components because ISO 56000 is a series and under that series you have 562002, 56003 and 56000 also. So, what are the differences between these different series and the basic principle of the Plan, Do, Check, Act (PDCA) that will also be discussed in this particular session? So, let us first start.

with the basics of innovation management system on which this entire ISO series is based. So, when we are talking of an innovation management system, it is basically providing you the ability to manage uncertainty. In this knowledge economy era, when

we are talking, so on one side, it is knowledge economy, but at the same time a lot of uncertainty is there in the environment. Many of us call it as VUCA, where you have volatility, you have uncertainty, you have complexity and you have ambiguity in the environment.

Now, when you have a structured system, the very purpose of the ISO system is to define a proper protocol for doing everything in your organization. Now, here comes a debate also that can you have a systematic innovation process in your organization? Because many people may feel that creativity, innovation, these things cannot come in a very systematic process. You cannot have one, two, three, or four systematic steps for doing innovation in the organization. So, yes, most of us are correct also.

that it is a random activity also, but random activities may not happen regularly. So, there has to be a system also where you can harness the potential of your employees, when you can do something in a very systematized manner and therefore, you need a proper protocol, you need a proper system of doing something in your organization. This IMS provides you with the opportunity where you can manage the uncertainty. Otherwise, it is quite possible that in one year you are two new products and for next two years there is no new product if there is no Innovation Management System (IMS) in your organization. Sometimes some employee thinks that, okay, there is an opportunity for new product development, and a new product comes.

But if there is a system, you know that every 6 months, every 4 months, every year, you need to introduce a proper system, and therefore, you see a very good example of the iPhone. Apple has a proper innovation management system and therefore, know that at what frequency they have to introduce new versions of iPhone. A large number of software companies also have product-based software companies. Particularly they also follow this IMS very religiously; therefore, on a very regular interval, they keep introducing new versions of their software. it basically helps you in handling the uncertainty in a better way. So, we do not say that with IMS you will not do random innovations.

You will also do random innovation, but you will systematize the normal innovation management process in your organization. So, that is number one. Second is, it helps you in increasing the growth, revenues, profitability and competitiveness of your organization. That is very obvious because you will have more innovations, more

innovations will meet your ability to get more competitiveness, and more competitiveness will bring more growth, more revenue, and more profitability.

There may be some innovations which are around By reducing costs and reducing waste, you can also increase productivity and resource efficiency. Please remember that if you can reduce the cost and waste, it will directly help you improve the productivity and efficiency of your organization. There may be innovations that are around the sustainability and resilience of your organization. how far you are able to take care of that uncertain environment, whether you are able to register them or you are able to adjust how much flexibility you have. That is an interesting part, which is possible because of IMS.

Then, there will be increased satisfaction among all the stakeholders, users, customers, citizens, and other interested parties. And the sixth is sustained renewable of the portfolio of offerings. So, that means a portfolio of offerings here. I can say either it can be in terms of products or in terms of IP also. Our interest in this particular session, in this particular course is more about IP portfolio. So you can continuously update and renew your IP portfolio.

Sometimes, you see that you have a portfolio of huge IPs. let us say 5 years back; at 5 years back, you had a portfolio of, let us say, 1000 IPs. But since you do not have any systematized process in your organization, it is still 5000 even after five years. Otherwise, some old IPs can be abandoned, new IPs can be added. So, renewable of your portfolio by addition of new IP is very important thing.

If I understand all these things that IMS is going to provide, now I will be able to give a proper definition of IMS, that innovation management system guides the organization to determine its innovation vision. strategy, policy, and objectives and to establish the support and processes needed to achieve the intended outcomes like handling uncertainty, increasing competitiveness, reducing waste, increasing productivity, efficiency, sustainability, resilience, satisfaction of all the stakeholders and giving new entities in your IP portfolio. This diagram gives you very clear elements of the innovation management system because there are three terms in this IMS. Innovation is one, innovation management is second, and then we are adding a system to this so it becomes an innovation management system.

So, there are three terms we need to understand Innovation (I), Innovation Management (IM) and Innovation Management System (IMS). Innovation we understand what is

innovation we have already discussed in one of our earlier videos that it is the successful exploitation of new ideas to realize value. We you may remember that in our class we discussed it with the help of three "I" idea, implementation and impact. In fact, in my language, I call it as impact but it is in a lot of literature they call it with the name of realization of value.

So, realization of value is nothing but impact which you are going to create with your idea. So, idea is already here in this definition successful exploitation means implementation. So, generally There may be a change of vocabulary, words, whenever we are defining innovation, you are free to use your own vocabulary, but in a nutshell, you have some new idea, you are using that new idea and in uses of that new idea, you are generating value, you are generating some kind of impact etc. Now, some ideas may be small, some ideas may be big, and some may be

Within the organization, there are some ideas. Some ideas may also go outside the boundaries of the organization. Some ideas may be impacting a particular region. Some ideas may impact a particular country, and there may be some ideas that may be impactful at the global level also. So, for example, in India, we have an idea of a midday meal scheme.

Now, this mid-day meal scheme is impacting the national level. This is the idea that because we will provide food to our children in the schools, in primary education, they will come to school because they will love to have food in the school. Because their parents are under below poverty line, they are not able to provide enough food, nutrition to their children. So therefore, this idea of a mid-day meal scheme is having a double impact. On one side, it is providing a good quality food to these children.

Second, because of food, the enrolment in primary education is also improving. But this idea is India-level idea, and it is peculiar to India. Yes, other countries with issues related to low nutrition and low enrolment in education can also copy a similar idea. And if they copy this idea, then it becomes a global idea in that way. That is one example.

On the other hand, there may be some ideas, for example, how to promote more green vehicles and green mobility on the IIT Roorkee campus. This is one idea that is limited to the IIT Roorkee campus only. So, this is a small idea. The midday meal scheme idea is a much bigger idea than this green mobility within the campus idea. But,

it is very important that these ideas are novel and they are going to make a difference in their particular level, local level or a much bigger level. The second issue in this case is innovation management and that innovation management is about defining, planning, executing the steps that are required to progress ideas into innovations. So, how your idea will be implemented, how this implementation will create impact, what all you need to plan for that purpose and then execution is also part of innovation management. Idea comes to me that we should have a system of meals in the schools. Now, for providing meals to the school, who will procure the food grain?

who will cook the meals in the school, how this system will be without any kind of corruption, whether we need to hire additional staff for cooking the food from where the utensils will come. So, all these things are part of implementing the idea from the conceptual stage to the practical stage. That is the stage of innovation management. Now, in this case, Sometimes, we may do some very innovative things also in the implementation itself.

So, it combines the freedom and creativity of generating ideas with the formality required to manage risk, investments and project implementation. And after that, we reach to the stage of innovation management system IMS and it is a set of interrelated interacting elements and activities that enable the organization to develop and enhance its innovation capabilities. Now, IMS is about to enhance innovation capabilities. Now, when I say to enhance innovation capabilities, one meaning you can understand

getting more ideas. How many more ideas you can get? Let us say in 2010, I am getting two ideas per employee in my organization. With a proper innovation management system, in 2024, I should expect that there is some 2 plus (+)delta per employee.

This delta maybe 1, this delta may be 2, 3, 4 but there has to be more number of ideas per employee coming in these 14 years that is the purpose of innovation management system that yes I have enhanced the capability of my employees. Another example can be implementation related. The average time to implement the idea Let us say in 2010, the average time to implement one idea is 10 (ten) months per idea. That is the average time to implement one idea.

When I am saying that I am increasing my innovation capability, it should take, let us say, 10 minus (-) delta time per idea. I should be able to implement ideas in 9 months, 8 months, 6 months, 7 months on an average if I have a good innovation management system. So, these are the ways through which you can understand whether my innovation

capabilities are increasing or not. And I will certainly recommend to use some measurable agenda in this.

Otherwise, on a qualitative basis it isn't easy to measure your improvement or your performance. So, you need to identify some such criteria that on the basis of these criteria I will be able to check my innovation capabilities and I just gave two examples there can be similarly many more. One another example can be cost. Let us say the cost of implementing the idea, though it is not a very good measure, but still let us say earlier it was X rupees per idea.

Now, when my innovation capabilities have improved, it is rupees X minus again some beta amount per idea that I can implement new ideas with some lower cost. So, it is about the organizational context and leadership commitment, realization of value, formal and systematic planning, support and operation of innovation activities, sustained monitoring and measurements to drive continuous improvement. All these things are important contributors to our innovation management system.

So, you have to increase your innovation capability, and this system will help you to determine those interrelated activities through which you are going to improve your innovation capabilities, which is an innovation management system. Now, since most of the organizations these days are multinational organizations. They are operating in multiple locations across the globe. Their design office is in the USA, manufacturing is in India, and the market is in Europe.

So, it is a very common phenomenon. So, therefore, there has to be some global agreement on this system of innovation management system. And so, therefore, the role of this ISO system. You should know that ISO stands for International Organisation for Standardization. So, in the International Organisation for Standardization, this is helping us in getting the global agreement.

So, if you are following a particular ISO system, it means that a particular protocol is applicable across the globe. And therefore, the companies, organizations can adopt this systematic approach to address their innovation challenges and because you are going to have this systematic approach, you will be better equipped to handle the challenges of uncertainties and it will help us in improving the likelihood of our success. So, like in the case of innovation. This series ISO 56000 is under the development and very soon it will be practically used by the organizations that is standard for innovation and where large number of experts they are working around from 50 different countries to establish this

common understanding of innovation and support organizations across all industries to improve their ability to survive and grow in this uncertain world.

And as I already told you there was a lot of debate in the beginning whether this is possible or not possible. Because every organization has a unique way of doing innovation. The way you understand innovation and creativity and the way I understand innovation creativity, there may be a lot of difference. How you want to facilitate innovation, how I want to enable innovation. But then after a lot of deliberations, some basic idea is agreed upon that yes, innovation

if we want to have a good portfolio of intellectual property, we can have some basic checklist items that, okay, we need to follow these minimum things. You can always do lot of add-ons on these, but this is the bare minimum thing that you should have in your organization for facilitating, for flourishing the creation of more intellectual property. So, there are different types of standards within this 56000 series and these standards are like the basic one is about the fundamentals and all the vocabulary which will be used in this innovation management system. The first standard, 56001 is about the requirements of IMS, and 56000 is about requirements of IMS.

Two is about the innovation management system, particularly it will be talking about how registration will be done. Then three is about tools and methods for innovation partnerships because innovation is a teamwork So, for engaging the team, what are the protocols you need to follow? How are you going to measure whether you have active partnerships or not? So, to ensure that you have enough partners in your innovation journey, you need to follow the protocols of three.

Then, standard four is about the assessment of your innovation management. what are the parameters through which you can assess like I mentioned about these two things that how you are getting more ideas or average time to implement the idea, the cost of implementation of the idea. So, you can think of and let me also tell you one more important thing that innovation management system gives you complete flexibility that you can decide on your own your criteria of assessment and then you need to create a regular record that yes how are we assessing our performance over a period of time. So, they will not prescribe the assessment standard is not prescribing that you have to follow 1, 2, 3, or 4 criteria.

But you need to mention that I am going to follow these criteria, and then you need to create templates. So, that if I want to see I want to check or any top management of your

company wants to check whether we are following this template or not, whether we are improving on the innovation systems or not, our capabilities are improving or not. So, just by checking that record over a period of time, you can find that yes, we have improved or we have not improved. So, that is the standard number four.

Standard five is about the methods for intellectual property management, IP. Six is with respect to strategic intelligence management. It is all about as we have discussed in one of the sessions about patent landscaping report PLRs. So, that is the strategic intelligence system. The tools and methods of idea management.

In one of the sessions, we discussed that getting more and more ideas is the starting point, the seed of our innovation management system. So, how we are going to create a system for inviting and getting more ideas is the seventh standard. And the eighth standard is about innovation. Innovation operations measurements. So, the operational measurement of your innovation system is one separate standard.

So, this makes the entire series of innovation management standards. So, the first out of that is released in 2020 and as we just discussed that it is about the vocabulary. So, all types of innovations, sectors, etc So, there are complete types of, you can say, definitions, which are given in this 56000, which is the first in this series. Then 56002 how you are going to register.

So, the guidance, establishment, maintenance and continuous improvement of the innovation system and innovation management system in the organization. So, it is there. the basic type of IMS standard generally, as you see in the 9000 series also, the most popular one is 9002. It is also expected that in series of 56000, 56002 will become the most popular one. Then 56003, which is about the

particular things related to innovation capabilities and it is various organizations that on what basis we are going to have innovation capability, innovation management system methods, partnerships particularly. Then, as we have already discussed, the details of 2, 3, and 4 are the same things we have given in the details in the further slides. Coming to the innovation management principles, as we discussed at the beginning of this session, the eight principles this IMS ISO system is establishing. First is the realization of value. The value is in terms of the impact. It can be financial or non-financial.

So, what is the profit, and what is the market share, that is, in terms of financials? Whether literacy is increasing or not, whether health is increasing or not increasing, that

is non-financial. Future focus leaders, so it is also very important to understand that leaders at all levels, whether it is the top management, middle management or lower management, should have the element of curiosity. Only when they have curiosity will lead to innovations. Otherwise, it will remain a status quo in the organization.

There will not be any strengthening of your IP portfolio. So, IP portfolio strengthening is only possible when you have this element of curiosity, and you need this curiosity at all levels of your organization. The third important element is strategic direction. That what should be the strategic direction? Whether the innovation is aligned with the strategic direction of your organization or you are doing innovation in X direction, the strategic direction of your organization is in the Y. So, there is a mismatch, and alignment is not there.

The fourth element is culture. What is the value that your organization has? there is a culture of every organization we say, generally we talk in terms of positive culture, and negative culture in the organization, but every organization has a typical culture and your innovation management system should be in alignment with the culture of your organization because it is very difficult to change the culture of the organization for something. It should help enable the coexistence of creativity and effective execution because of the culture of your organization. Exploiting insights are another very important element, like a diverse range of internal and external sources, which are used to build insightful knowledge systematically.

to exploit the stated needs of the customers, employees, etc. So, whether you are able to exploit and use those insights or not. Managing uncertainty we have already discussed that it is the time of high uncertainty and this IMS should help us in handling or managing the uncertainties in a better way. Seventh is adaptability like flexibility. whether your organization is able to change whether your organization is agile or not whatever requirements whatever changing requirement because of the competitors because of the customer expectations whether you are able to meet those uh requirements or not and finally it is the systems approach innovation is a teamwork therefore one of the one full standard three

that is focusing only on the collaborations and partnerships so it is a systems approach if there is some innovation happening in one of the subsystem areas there are various interacting elements in any organization element one two three now if something happens here because of this systems approach this will impact two and two will impact three also

so systems approach is working because of the interrelated elements in the organization. So, that also you need to see that whatever impact you are going to create at a system A, it will not remain at A rather it will travel to other subsystems also because of interrelations between those elements. So, these are the eight important elements of our innovation management system and this PDCA cycle. which generally, we talk about in terms of the quality management damming cycle we all know.

This PDCA cycle can very well, therefore, be applied in our innovation management system also, where we will see that PDCA is like a cycle: Plan, Do, Check and Act. Similarly, in innovation management also because you need to see what you are going to execute, and for execution purposes, you have to plan, then you have to implement, then you have to monitor. and then you have to ensure that consistently you are able to do things in the same manner acting like that continuously. So, this PDCA cycle is a continuous improvement process, which is also a requirement of our innovation management system. This is another diagram through which you can understand that eight different elements which we discuss that how it is going to create a PDCA system.

You can see that this is "Planning", this is "Do", this is "Check" and this is "Act". So, you have to continuously and this is in the circle so it is never ending loop continuously it is a process of innovation which will become the culture of your organization and continuously you will be driving this thing and we will be explaining this diagram in one of the sessions separately also. So, this diagram becomes one of the core elements of your innovation management system. The entire IMS is basically can be understood if you understand this diagram correctly, and all the elements that we discussed are also mentioned in this diagram clearly in the

intent, opportunity intent and what innovation values you are driving from your innovation management system, that is also clear. So, this PDCA cycle is very well related to, though this concept is not as such from innovation management literature, this concept is from the literature of quality management, but it is very aptly applicable in the process of innovation management system also. So, with this, we come to the end of this particular session, where we discuss the role of 56000 and how it is going to promote the innovation management system in our organizations. Thank you very much.