

Ethics in Engineering Practice
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Lecture – 35

**Key Questions – relating to Rights and Responsibilities regarding intellectual
Property rights (Contd.)**

Welcome back, now we will be continuing with the session of the discussion of the key questions on the intellectual property rights. We will discuss now about the key question which is like how does one know like what knowledge or information is proprietary? So, what are the considerations which are required in deciding or how a computer engineer can base keep the knowledge of like confidential as they are like proprietary knowledge of a client or employer?

Why going to discuss this issue over here, is sometimes what happens for computer professionals there is a frequent job changes and also maybe for other professionals, but this is more ingenious. But mainly for the computer professionals and sometimes like it so, happens like for the computer professionals maybe the civil engineers, the organization that they are joining next is a direct competitor of the earlier organization that they worked for.

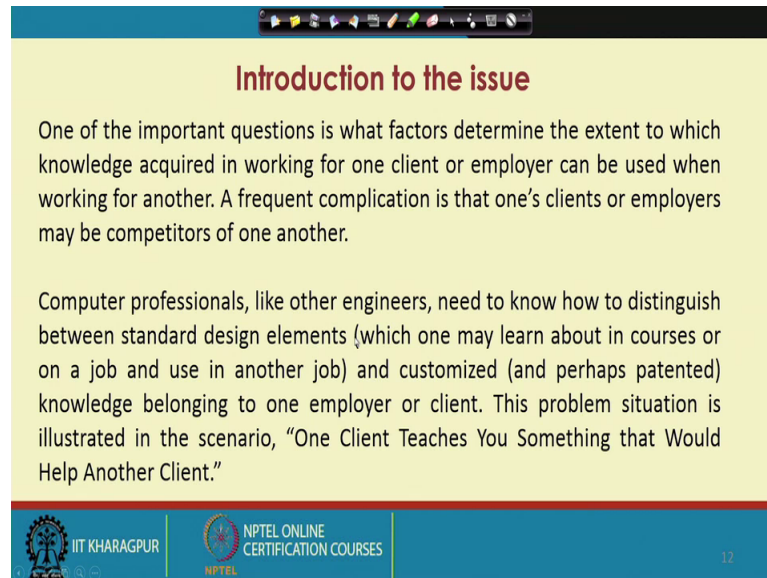
So, that like puts the engineer and a point of dilemma, in the sense like what is the part of the information that could be shared and what is the part of the information that could not be shared with the new employer, because sometimes it, what happens like they are getting the employment in the new, new organization, the competing organization only to understand, because the competing organization wants to understand from them the workflow of the other, its competitors, because they have worked they know some inside stories, they know the inside functioning.

And when they join in the new organization they never expected to like share or like do things in certain ways putting their previous knowledge into practice which will help the competitor to understand maybe the strategic moves of its earlier employer.

So, that makes a point of dilemma in regarding like what can be done, what is correct to be done? What part of the information was like very cool, patented kind of information and what is a general information? So, that is why we have chosen to discuss this in

details with the help of a case in this module as a part of a key question and let us see how it (Refer Time:03:10) through.

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Introduction to the issue

One of the important questions is what factors determine the extent to which knowledge acquired in working for one client or employer can be used when working for another. A frequent complication is that one's clients or employers may be competitors of one another.

Computer professionals, like other engineers, need to know how to distinguish between standard design elements (which one may learn about in courses or on a job and use in another job) and customized (and perhaps patented) knowledge belonging to one employer or client. This problem situation is illustrated in the scenario, "One Client Teaches You Something that Would Help Another Client."

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So, what we are going to discuss over here, this is a very critical issue where one of the ones clients are employers may be competitors of one another.

So, computer professionals, also like other engineers need to know how to distinguish between something which is a light standard design element? So, which one we learn about in courses or on a job which is something general or using another job and something which is customized maybe perhaps patented knowledge belonging to the employer or client.

So, here we are going to discuss about a problem scenario which is where a case called one client teaches you something that would help another client. And we see, what unfolds in that scenario? One client teaches you something that would help another client, you are the lead software developer working for a small software developing company.

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The slide features a yellow background with a blue header and footer. The title 'Continued' is centered at the top in a red font. Below it, a black box contains the title 'One Client Teaches You Something That Would Help Another Client*'. The main text describes a software developer's dilemma between two clients, Company A and Company B, regarding a software update. It asks for morally relevant facts and how to handle confidential information. A small video inset in the bottom right shows a woman in a pink and white sari. The footer includes logos for IIT Kharagpur and NPTEL Online Certification Courses.

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One Client Teaches You Something That Would Help Another Client*

You are the lead software developer working for a small software developing company. You develop a specific type of software for several companies that are maneuvering for market share in a competitive industry. In your job as lead developer you work with clients to assess their specific needs and implement patches and updates to the software that you have developed for them. It is a big job to update the software in response to complex requests. Therefore, if a solution can be found without needing to update the software, resources are saved for all parties.

A few weeks ago Company A came to you about a major difficulty with your software. You were busy resolving another issue with Company B at the time and the Company B project had priority. Before you got back to Company A, its IT person called to inform you that he solved the issue by using a very specific configuration of Company A's network. He described the configuration to you in detail and you were satisfied that the issue was solved without the need to update your software.

Now, Company B contacts you with the same issue. What should you do?

What facts in this situation are morally relevant to deciding whether (or how much of) Company A's configuration solution is confidential information? For example, does it matter whether Company A volunteered its configuration solution or you asked for it? Does it matter if part of the configuration solution is something you learned about elsewhere but had not thought about in this application? Do you know how much, if any, of what you learn from Company A in the course of delivering services to it is proprietary and therefore confidential? If you do not know, how could you find out?

*Adapted from a scenario by Kyle Kaliebe (CWRU '05).

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So, like we were discussing the case there are certain key points that we need to follow, that we need to highlight, because those are again situational variables present within the case which may affect like, which move your decision making for a particular topic. So, whenever we are discussing, there are certain like key points which needs to be focused on.

So, what you find over here light as the key is given, you are a indeed software developer working for a small software developing company. So, you develop a specific type of software so, for several companies that are maneuvering for market share in a competitive industry. In your job as a lead software developer you work with clients to assess their specific means and implement patches and updates to the software that you have developed for them. It is a being job to update the software in response to complex requests.

Therefore, if a solution could be found which without needing to update the software, a major like, it without needing to update the software resources are saved for all the parties. A few years ago company A came to you about a major difficulty with your software. You were busy resolving another issue with company B at the time and the company B project had priority. Before you got back to company A, its IT person called to inform you that, he solved the issue by using a very specific configuration of company

as network. He described the configuration to you in detail and you were satisfied that the issue was solved and without the need to update your software.

Now, company B contacts you with the same issue. What should you do? What facts in this situation are morally relevant to decide whether or how much of company A's configuration solution is confidential information? For example, does it matter whether company A volunteer did configuration solution to you or you ask for it? Does it matter if part of the configuration software configuration solution is something you learned about elsewhere, but had not thought about in this application? Do you know how much, if any, of what you learn from company A if the course of delivering services to its proprietary and therefore, confidential? If you do not know, how we could find it out?

So, these are certain questions relevant to it, we will take up one by one. So, what you found over here like you are a lead software developer for a small software developing company. So, when you are a lead software developer, it means you are working in a responsible position and you have many responsibilities also. And me, you are working for a number of clients and you are maybe answering to their different problems.

And your clients maybe and, because you are a lead software developer you may have access to the like very important information about each of your clients. And as your clients maybe one competitor with the other, they in demands a lot of trustworthiness on your path integrity, on your part not to share ones information with the information of one company with the information with the other company. This are stuff and you are expected to be efficient and knowledgeable.

So, that you are, like you become trustworthy in the sense you have the capability to perform. So, if your lead software developer, then you must have the capability, you must have the competency to solve the problems that are addressed to you by your clients. So, here what is you are doing. So, you work with different clients to assess their specific needs and so, and implement patches and updates to the software that you have developed for them.

So, it is a big job for you to update their software and then you are thinking of like if, because you are working like for each party and you are trying to solve their issues and you are putting patches to your original developed software based on as when needs are arising. You are thinking of, if a solution can be found out without needing to update the

software then resources are said. So, your intention till here is fine in the sense, like you want as a resource saving on all parties.

So, then instead of like updating a software for something solution can be found out. So, it becomes life, becomes easy for you also. And it is like the clients are able to like, update also the, your software does not require update and they can their problems get solved also. So and if, there are certain issues and according to their specific needs and it saves resources to intention here is fine. Next, comes the second part of the case very fine, like a few weeks ago. So, from here we need to concentrate about it like few weeks ago, company A came to you about a major difficulty meter software, you were busy resolving another issue with company B at the time and company B project had priority.

So, here what we find like company B project was priority to you. So, you are busy at that point of time, but company is difficulty is also important. So, what we find like, before you got back to company A so, your moral dilemma starts from the fact that whoever is the client. And company B's problem is a priority to you and company B had its project as priority does not mean like the company's A difficulty you can ignore or you can tell it is less important. It was a part of the responsibility also to answer to it. If not immediately, but again we understand company B's thing is priority, but you could have like got back to the problem of company A, I try to listen to it.

So, we are not exactly clear here from the case like whether you have given equal importance to both the companies, you treated them also as your important customers or you have neglected company A to certain extent while prioritizing for company B. So, that is not clear from here and we assume maybe that you have done it, but that issue needs to be checked also.

So, before you got back to company A, its IT person called to inform you that he had solved the issue by using a very specific configuration of companies A's networks. So, this he described the configuration to you in details and you were satisfied that the issue was solved without need to update your software, here lies again a gap. So, because before you got back to them may be the IT professional who person was there, he called to inform you that he was, he has used a very specific software, a specific configuration of companies A's networks. So, what is this by using a very specific configuration of company A's network?

Now, again the case here does not mention like how much was it like, sort of knowledge which is patented, which is very like, it is the company A's own type of property which can or cannot be shared with the outside party. Like, even if you are a lead software developer, you are not the person who is working, you are not employee for company A and you have the access like you have your network with other competitors also. So, the IT person, like he told like, he has used a very specific configuration of companies A's network.

So, till here fine, but we do not know exactly here from the case like to what extent was it a proprietary like knowledge of the company A and which if shared with you as a person, who is outside the company and is like ethical. So, can the software in, like the IT person do it exactly or not? It is written like he described the configuration to you in details. The case does not mention over here, like whether he like mentioned about the details to you, the configuration in details to you voluntarily or you ask for it and then he share it.

Question here if you see like, so, like for example, does it matter the company A volunteered it's configuration solution or you ask for it? Definitely, it matters. If I volunteered to share part of knowledge, they may be I take it to be a very standard knowledge and I do not feel any sense of threat, harm, if I share that knowledge with you. But if it is not something that I have volunteer to share with you and you have asked for it, maybe then you have to be like, you have asked for it, they not have been only on the base of trust that I have on you, I have shared knowledge with you, then even if the company B faces the same problem, because they have trusted me, company have trusted me and shared some solution with me.

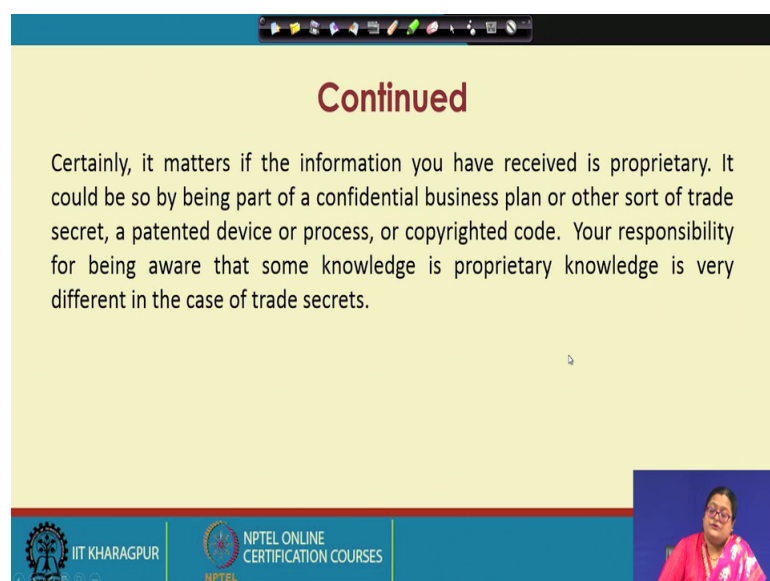
Can I share it with the company B? Even, if they are facing the same problem maybe, no, because company A has not volunteered that knowledge to me, I have asked for it then only they have shared it to me based on the trust that they may have on me. So, I need to keep that trust also and on the basis of that trust, if it is something which is like a knowledge, which is very core to company A and which me lead to threat to the company A's network or not, because if I share similar kind of information to company B, I do not know like where the companies A's network will be under threat or not. So, even if company B is facing the same kind of problem, maybe I will not be able to share the exact like configuration of company A's network. So, he described the configuration to

you details and you are satisfied that the issue is solved without the need to update your software.

Now, when company B contacts you with the same issue, then their dilemma starts. So, like, here is another like, if there is a configuration which is something that you have learnt about elsewhere, but if you have not thought of it, an application over here. So, then what happens? You, if you want to deliver then same kind of thing to company B, then you have to like decipher that configuration and find out like what part of that configuration is a standard knowledge which you may have learnt elsewhere. And which part of the knowledge is like proprietary to the like, company A and that is what you have learnt about company A in as a way of delivering services to them.

Now, if company B is having simple kind of problem then, because of your relationship of the come with company B, you may also have some knowledge about the configuration of like the company B's network. And then again, some part of it may be general and some part of it may be proprietary to company B. So, in that case you have to like understand like which is very specific to company B, then whether you can say, use your standard knowledge and then use your expertise and find out what are the specific points in present in company B's network that can help you to solve the problem.

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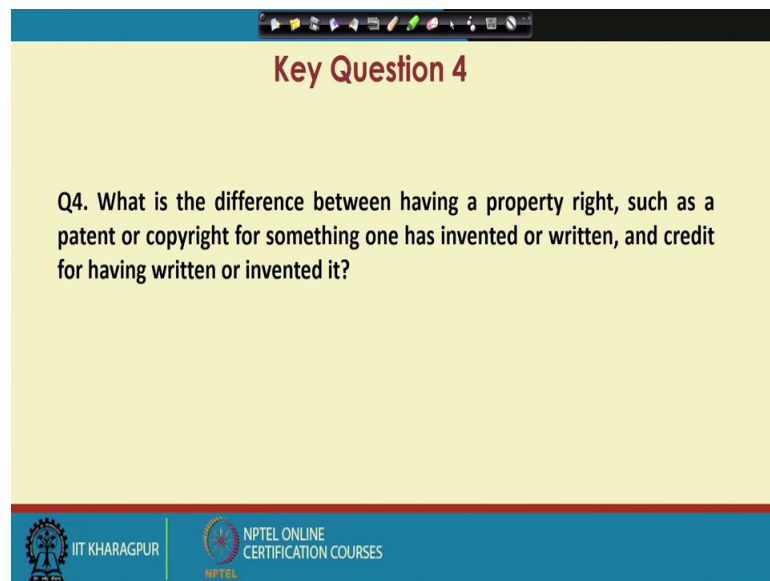
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Certainly, it matters if the information you have received is proprietary. It could be so by being part of a confidential business plan or other sort of trade secret, a patented device or process, or copyrighted code. Your responsibility for being aware that some knowledge is proprietary knowledge is very different in the case of trade secrets.

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So, it really matters that what you have received, if that knowledge is proprietary. It could be done so, like we you, you can get that knowledge by being a part of a business plan or other kind of trade secret, or you have gone through a copyrighted code you have gone through a patented device. So, you need to understand like some part is the proprietary knowledge and some is like operated code and some part of it may be general. And while helping company B, you can use your that power of discretion to like how much of that we can use and how much of the thing we cannot use.

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Key Question 4

Q4. What is the difference between having a property right, such as a patent or copyright for something one has invented or written, and credit for having written or invented it?

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We discussed some small interesting topics in key question 4, like what is the difference in having prorated property right, such as a patent or copyright or something one which is invented or written, and credit for having written or invented it? We will discuss this in the next upcoming session till, then.

Thank you.