Strategic Management for Competitive Advantage
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Lecture: 53
Strategic Importance of Knowledge and Organizational Learning

Welcome to the course Strategic Management for Competitive Advantage. Today we will start a new module, Strategic Enabler, which is knowledge management; we have discussed technology management previously. Before that, we had discussed innovations and entrepreneurship and the strategic enablers of knowledge management we will be discussing today. So, in this lecture, we will discuss the first session's strategic importance of knowledge and organisational learning.

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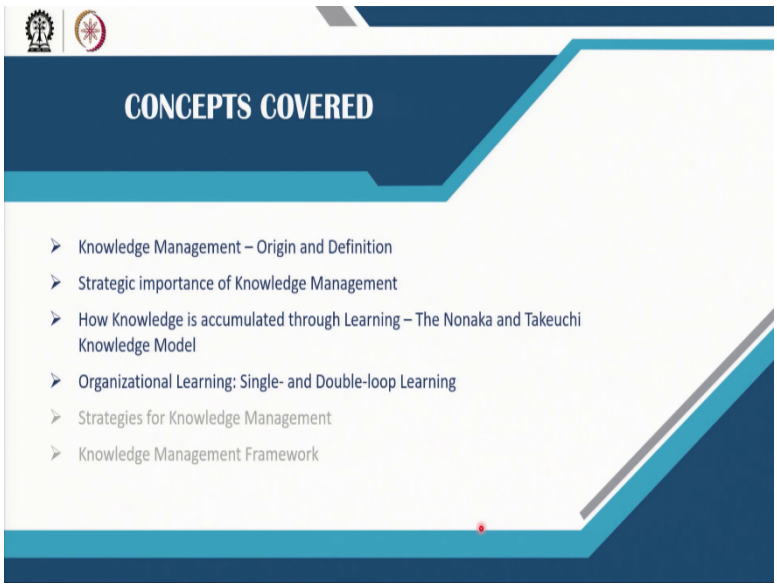

So, to start with today, the concepts covered here are what knowledge management is, its definitions, and how it originated in the industrial sector. Then, we will also discuss the strategic importance of knowledge management. Then, how knowledge is accumulated through learning in an organisation, is propounded by Nonaka and Takeuchi, and it is known as by Nonaka and Takeuchi knowledge model.

Then, we will also discuss organisational learning and the importance of single-loop and double-loop learning, this we will be discussing in this session, and in the next sessions, we will be discussing the strategies for knowledge management and knowledge management framework.

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Now, to start with, what knowledge is first to start with that, that knowledge is defined as fact, information and skills acquired through experience or education, the theoretical or practical understanding of a subject; this definition is given in a New Oxford English Dictionary. So, here if you observe, two sources of knowledge are shown here. One is through experience, that is, by doing something, and another is through education, that is, by learning from books or manuals or other documents.

So, there are these two sources are very also known as said tacit knowledge and explicit knowledge. So, there are two types of knowledge known as this. So, what is tacit knowledge? Tacit knowledge is the experiential knowledge that you learn with the experience of doing something and all that this is very, very difficult to articulate or write it down; you cannot learn, for example, how to ride a bicycle; it is a tacit knowledge, no amount of you know, explaining you do this way that way and all will help you unless you ride a bicycle.

And once you can do that, and only the knowledge can be transferred, who is on the same level, who also knows how to ride a bicycle, say those are tacit knowledge. It is very difficult to articulate or put it on records, it cannot be so easily codified, and another is explicit knowledge.

Explicit knowledge is what you learn from books, learn it from manuals, learn it from which can be codified, which can be written it down, so that others can learn from it; those are explicit knowledge. So, this will be further discussed later on. So, up to now, you hold on to this description level.

Then now, we will be discussing the advent of knowledge management; knowledge management in industrial sectors is; it came in a big way in the early 1990s with the advancement of, you know, that internet, then your telecommunication, networking improvement and then your computing power and computers became more powerful, relational database or their real-time exchanges of information, sharing of information, all those things happen.

So, with that, the first professional services that use this knowledge management is the management consultants or other consultants in other fields; what they found with this internet and all they can communicate with their counterparts with their colleagues were also dispersed geographically within different time zones, and that way they can speed up the work, they can get a competitive advantage over the rivals, because the learning curve is time is becoming very short. So, whatever a consulting job, some problems they are doing it those jobs, a similar type of job work has been done by some other consultant in the organisations in different continents, but different countries that can be shared.

So, the productivity of the organisation increases, the productivity of the consultant increases and the performance as a whole of the organisation increases. So, they realised that the main resource of the consultant is intellectual capital, which is the main resource. So, they can utilise it at a tremendous speed and with a more enriched form. So, soon, this was still with the consultancy node.

It pervaded all sectors, all types of industries, even the maintenance engineer, you know, they share many companies have their knowledge management platform, they utilise those platform. They do the work in a faster way. A more efficient manner, says Otis Elevator, they are Maintenance Engineers, they are given a tab that those tab and all they carry to the site, they see the symptoms, what are the breakdown history, what are the breakdown and all those symptoms, they put it there the solution comes in the likely solutions they work out with that. They can complete things very faster.

Similarly, the companies' world-famous companies like Schlumberger, those are in they are in the pioneering oil field services; they do it. They have their Eureka knowledge management system, and they have a Eureka system in that 125 specialists always manage 24 hours. So that anything any problem comes in all any oil fields, any oilfield services across the globe, they those engineers or the specialists, they can get the problem solving. All those

tips or the knowledge and all that they can do the perform their work in a better way an efficient way and that satisfy not only them, their customers are also happy.

So, these are how knowledge management has grown, and pre-initially, many people thought of it as a fad, you know, a fashion. Nowadays, knowledge management is not a fashion, it is a necessity to get a competitive advantage over your rivals, and it helps you to do a job speedily and your performance improvement. So, definitions what is the definition of knowledge management definitions? Say you can define it as capturing, distributing and effectively using knowledge.

So, here you can remember that is collecting the knowledge collecting or capturing, then distributing before that, you have to make a repository, and you have to classify that knowledge, you have to make the knowledge in such a way evaluating and all so, that it can be made different groups need.

So, you can put it that way, then you distribute and effectively use it anyway; we will be talking about more on this a little later. So, now, knowledge management nowadays is driven by several technologies, it is the, IT technology is its driver, and there are many types of technologies, which it is being driven by, so we will be talking about those who will be showing it to you.

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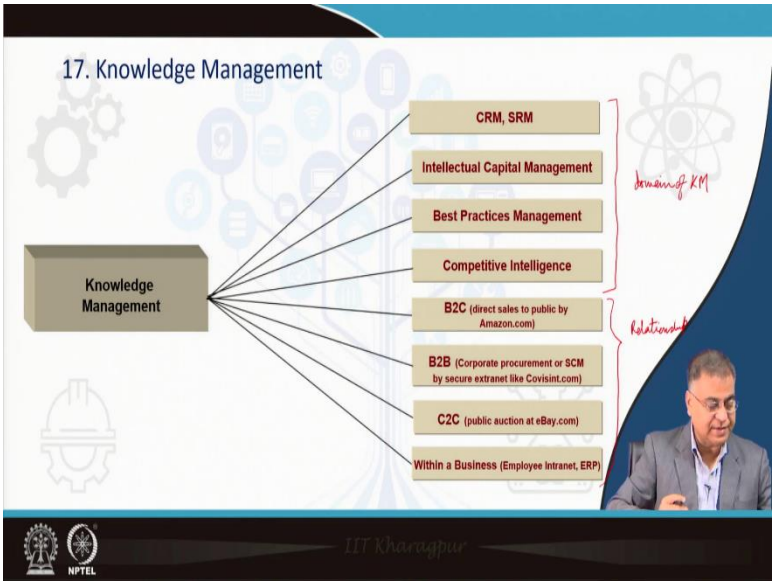

So, next, you come to this this is knowledge management. See, if you see the domain of knowledge management, as I told you, it is driven by several technologies, say customer

relationship management. Supplier relationship management is also so, then your intellectual capital management, best practices management, competitive intelligence, and intelligence all these fall within the domain of knowledge management. So, these are all within the domain of knowledge management.

Now, if you see here, knowledge management also depends on the relationship that is established a relationship as well as maintaining the relationships on online with different categories of entities. If you see B2C, that B2C business to the customer is direct sales of the public by the public to the public like the example, amazon.com.

Then B2B is corporate product procurement or supply chain management by secure extenuate like covasitn.com. Then C2C, like customer to customer, is a public auction like ebay.com. Within a business within an organisation that is employee internet, then enterprise trainers, resource planning ERP are required for your online relationship establishing and maintaining these also a part of relationships, maintaining relationship online. So, these are on the entire gamut of knowledge management.

So, here you can see that all these require you to configure or re-engineer your processes within the organisation which will speed up your processes and enhance your productivity. So, these are some of the uses of that knowledge management domain and all and CRM, SRM, you all know there is a different technology required or the special software type of software's required. These are all applications of entrepreneurial resources.

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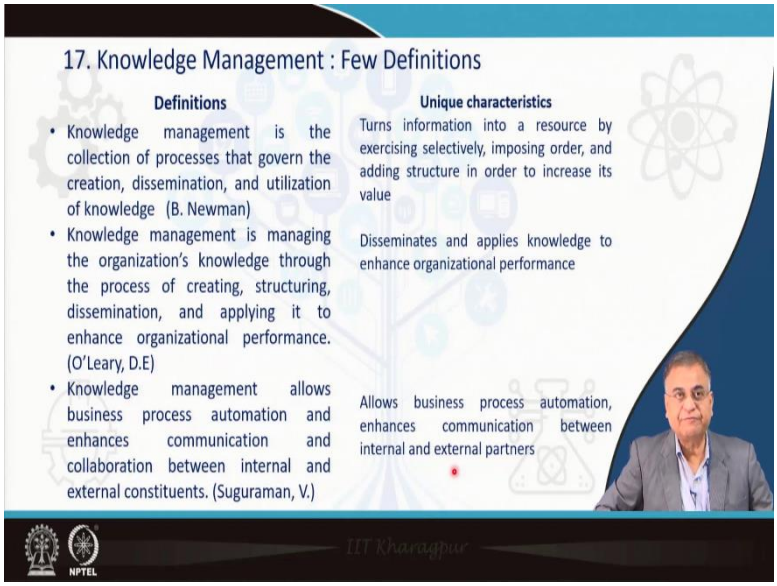

So, next, we will discuss some more definitions of knowledge management given by different authors. This is this gives this definition is Newman has given knowledge management as the collection of processes that govern the creation, dissemination and utilisation of knowledge.

So, you have to create the knowledge this then you disseminate and utilise the knowledge. So, here is a unique characteristic, it turns information into a resource by exercising selectively imposing order and adding structure to increase its value. So, you add value to the knowledge you capture and disseminate to your others for their use.

So, then, this is given by O Leary; knowledge management is managing the organisation's knowledge through creating, structuring, dissemination and applying it to enhance organisational performance. Similarly, what is the unique characteristic that disseminates and applies knowledge to enhance organisational performance?

Then Sugarman says knowledge management allows business process automation and enhances communication and collaboration between internal and external constituents. So, what is it that allows business process automation enhances communication between internal and external partners? So, here you see nowadays that knowledge management and business intelligence are being converged to make knowledge management more powerful. And these are some of the definitions.

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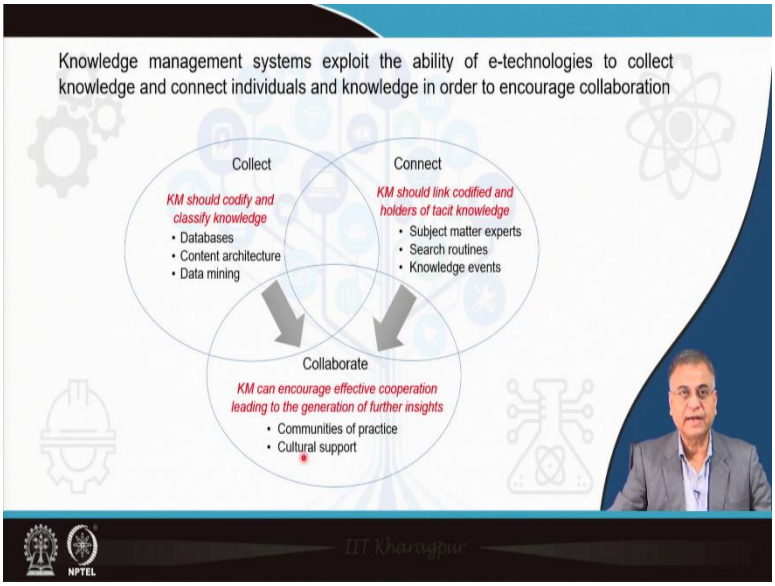

Now, as I told you, knowledge management is driven by different technologies, and it requires several technologies. Now, here we have talked about tacit knowledge and explicit knowledge. So, here you see the knowledge management system exploit the ability of E technologies to collect knowledge and connect individuals and knowledge to encourage collaboration. Now, the first thing is you have to collect and gather the knowledge, and how do you do it? Say tacit knowledge, and all each is within the individual. So it cannot be readily documented.

So, what do you do? So, care knowledge management should codify and classify knowledge, they will try to get that tacit knowledge, and all gather and the explicit knowledge that is much more easily can be gathered; you collect that knowledge, and then you have to make a repository. So, that is the database, and, with the advent of computers and the internet and all those networking, communication technologies and all that, the databases and all you can depository making have become more powerful.

So, first, you have to make a database. Nowadays, these databases are real life, you know, relational data databases, then you connect the content architecture, that you have to make that whatever the data is are available. All that architecture of the content has to be made. After that, that data mining, how quickly you can retrieve the information that you are searching for all these are in the data that collect phase, that is the gathering phase, and all one has to look at all these aspects.

Then what happens is that connect phase, connect phase means, say, tacit knowledge, how the people there are many peoples and all those experts and all you connect with them and connect those people with yours with your system with the data as which has already been gathered because tacit knowledge cannot be fully transferred or fully codified, it can only. So, that is why the tacit knowledge holders must meet each other; they connect.

So, what happens in that becomes more enriched tacit knowledge, things become more enriched because many people, many experts, maybe having some mental block or some shortcomings, that when they meet the same people, a group of people have tacit knowledge holding the similar experience and complementary experience. All that can be removed, that block can be removed, and it can become more enriched.

So, they must be connected not only with the individuals to individuals but with your system. So, knowledge management should link codified co-codified and re-holders of tacit knowledge. Here what you do with subject matter experts, you connect with them, search routines, knowledge, and events, and all these will help you to connect.

Then the next phase is to collaborate. Now, these bases data collection bases are there you have connecting people. Knowledge management can encourage effective cooperation leading to the general generation of further insight because it is a learning process like tacit pip knowledge people explicit knowledge and always when they meet that becomes further you discuss further you who experiment with your new knowledge acquired it becomes further enriched.

So, it generates more and more profound knowledge levels. So, your knowledge level becomes higher. So, that is like you develop communities of practice that best practice communities and all, many organizations have it, they are that those tacit knowledge people experts, subject matter experts, you know, it is not necessarily from within the organisation’s it may come from the members may be from the outside the external people like supplier’s representative, customer’s representatives, that your partner's representative that enriches your knowledge.

So, communicate those are the communities of practice you do it, although there are critics also say critics from academics, especially say that those are they hold in the whatever these communities of practice they have, generally add to the general context knowledge and all it is not very that contextual, because different contextual knowledge is that different anyway,

those are critics and all, and also they require cultural support that doing because when you are gathering the knowledge and all going deeper and deeper the or the higher level of knowledge and all to a that requires the encouragement of or the conducive ambience of the organisation. So, this is all about that collect, commenting and connecting and collaborating.

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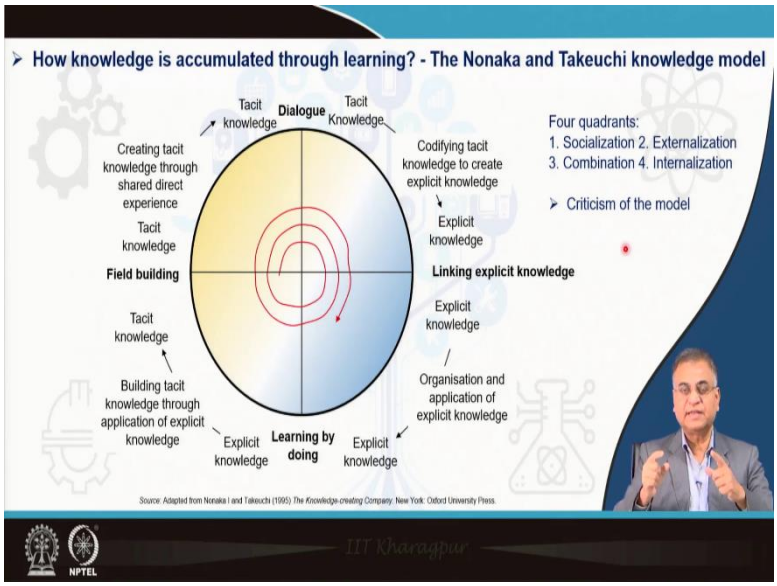

Now, next, we will be discussing how knowledge is accumulated through learning; this was propounded by, as I told, no Nonaka and Takeuchi's knowledge model. So, you look at this diagram, I will explain that Takeuchi the Nonaka and Takeuchi say knowledge grows not in the cycle, but in a spiral, you know, it is a spiral way it grows from tacit knowledge to explicit knowledge and back again, and it grows in it moves in the clockwise it is a clockwise spiral. So, what is said first is the tacit knowledge that tacit knowledge to there are four quadrants. These are the call this knowledge accumulation that follows a four-stage progression process.

These four stages are socialisation, externalisation combination and internalisation. Now say tacit knowledge to tacit knowledge. This is to say, the holders of tacit knowledge meet each other, and they socialise. So that the knowledge can be transferred to each other and, in the process, it gets enriched because when the same tacit knowledge experts all meet each other, then what happens? They work at a certain level, and many things cannot be codified or articulated.

Suppose take the case of those, say, cricketers, suppose that Sachin Tendulkar gives some tips to some budding cricketers. So, you have your batting grip like this and all. So, we

cannot understand that, but a cricketer at that level, that international level, can quickly get it those subtleties, and they can improve them. Those are the tacit knowledge to tacit knowledge. River swimming, say washing up from used to give that tips to Indian bowlers. So, at that level, they can only understand and that way, many, many fast bowlers and all they got enriched. So, this is how your socialisations and all you increase your tacit knowledge levels.

So, what do you do in the first quadrant through socialisation, the socialisation can be formal can be informal, anyway. So, creating tacit knowledge through shared direct experience. So tacit knowledge in the organisation, those experts subject matter experts and all they meet each other socially, they either formally or informally and enhance that knowledge that is it tacit, this is called the socialisation process of the first quadrant. Then from this tacit knowledge, what you do is the externalisation you try to document it; you try to codify this tacit knowledge to create make it explicit knowledge so that others can also benefit from that.

So this process is called externalisation. You take it that it is very that you document, and it may not be possible to document all but something can be done. So, this is the second quadrant or the second stage of progression; then, for what you do from this tacit knowledge, it is tacit knowledge that has become explicit knowledge.

Now, this explicit knowledge you exchange with the organisation, different people, different groups, and different experts. So, in organisations, you organise this explicit knowledge and apply an application of explicit knowledge. So, this is explicit to explicit this is called combination. This stage of progression is the combinations stage.

So here, you use the maximum of the IT technology or any other technology what you do is you, the group, that knowledge, you make it a value added to it to make it customising the knowledge according to the need of different groups or different people then you disseminate the knowledge all those things maximum use, suppose that wiki. Blogs, you know, they these are what these are, you are collecting that explicit knowledge there so that others can also join and also others can learn from that.

Then from explicit knowledge, you have the third. Our last progress is stage of progression is internalisation. Here, these organisations have is having now this explicit knowledge base. So, you build tacit knowledge through applications of explicit knowledge. Now, with the explicit knowledge you have gathered, you try to apply. So as a result, many people will

apply, and they will gain or build tacit knowledge. So those tacit knowledge becomes further, you can again improve it.

So, here explicit knowledge or by thorough application through some you are again becoming a tacit knowledge, this tacit knowledge again will go to the with socialisation will be further improved, this is the way how the spiral goes on this spiral is not only one cycle and all it is goes on deeper and deeper the means, your you can say knowledge becomes deeper and deeper or you attain a level of a higher and higher level of knowledge management this is that how your knowledge is accumulated through learning.

But, there is criticism of this model also; this criticism mainly comes from the academics; they say this model was developed in the Japanese management culture, which has a particular type of culture, and it cannot be applied to the way different cultures in the different countries or the globe all across.

And they also say that say, in the global context, in many countries, many organisations most of organisations nowadays have employees from different parts of the world from different countries; they have different religions and different cultures, different ethnicity, and different value systems. So, it cannot be applied to all, but these are the criticisms.

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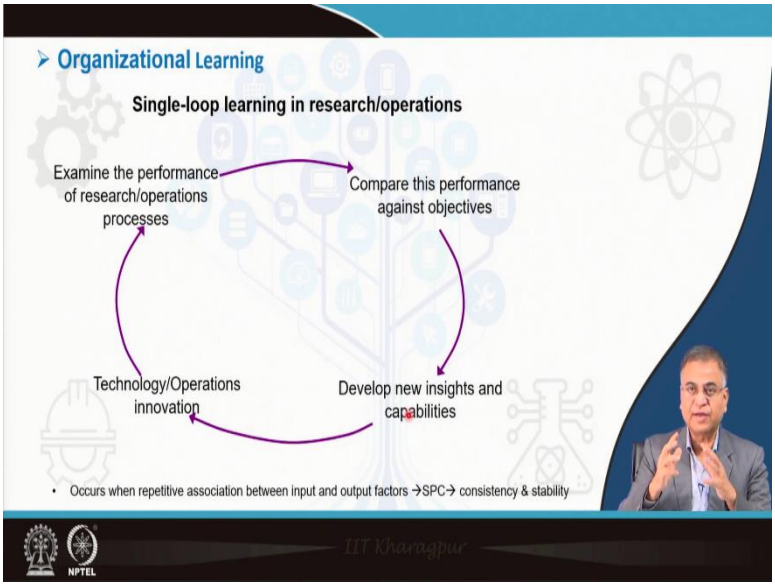

So, next, we will move on to organisational learning; you know, there are single-loop learning and double-loop learning. This single-loop learning, single loop learning in research or operations, these are a single loop learning is mostly applicable in repetitive operations. So, in that, single-loop learning is very important for an organisation because in single-looping, what you do, you improve your capability, you improve your consistency, and you improve your quality and stability.

What happens to suppose the operations are repetitive and all the process is repetitive? Like what then you what you? Happen you can say those processes, you can improve the quality through statistical process control; they are supposed to the weight of your product or the performance and many other things that your performer process performance means and all that can be whether it is varying in much and not you can measure it. In that, you can make a case for statistical process control that will further improve your processes and all process means and all that will improve.

So, what happened to say you examine the performance of your research or the operations processes? Then you compare this performance against your objectives, what is your targets and objectives, and then the differences and will give it to you to develop new insights and capabilities and which will further improve your technology or operations innovation. This will lead to this being a single loop, but a single loop also has limitations; I will talk about that. So, this is called a single loop is important. As I have already mentioned that is I will

reiterate once more that it improves the quality improves your performance, stability, consistency and capability of the organisation. So, that is why it is important.

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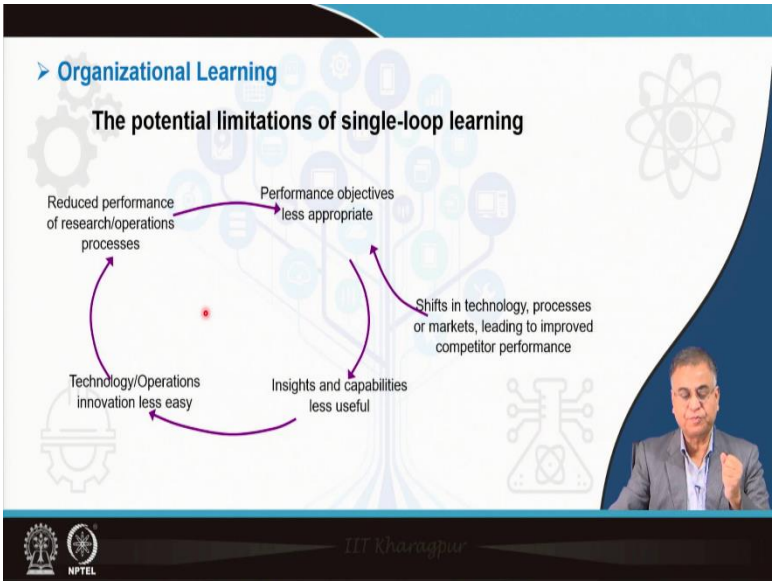

But it has limitations also what are the limitations; single loop supposes that performance objectives suppose there are shifts in technology in the changing technology, the processes or markets leading to improved competition performance, competitor performance your competitors have gone for improved technology and all then your performance objectives what is your organisation's you have said it becomes less appropriate.

So, these will give you insights and capabilities that are becoming less useful to you. So, as a result, technology and operations innovations are less easy, you know, it will become very tough for you. It will give you what leads to reduced performance of research or operation processes.

So, these are the limitations of a single loop. So, if it does not take, it is internal to the organisation. That way, it improves your performance and capability, but it needs to consider the environment; what if the technology changes and all you are these things become less appropriate?

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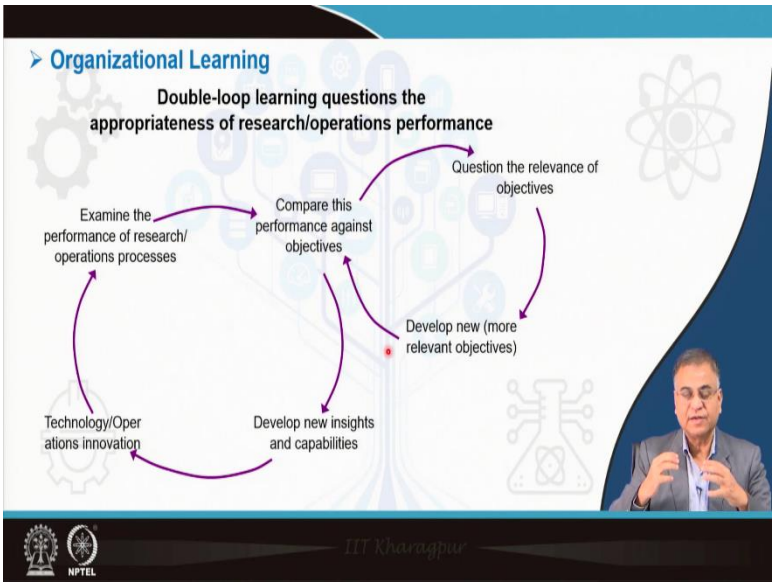

So, to overcome this, that is the view that double-loop learning is more appropriate for an organisation. What is double-loop learning? What does it do? It questions the appropriate nature of research or your operations performance; what are you doing? So, what does it do?

Say it examines the performance of research or operation processes; these are the single loop things going on, then compare this performance against objectives, the single loop developing new insights and technology operation innovation. Now, what happens like the double loop, what questions the relevance of the objectives, challenges the basic assumptions, premises and status quo, it challenges.

So, as a result, what happens, you develop new or more relevant objectives. So, with new and more relevant objectives, you compare this performance against the objectives. So, with this, you are comparing, you develop new insights and capabilities, and you develop new technology or operations innovations.

So, if you are this, double-loop learning is more comprehensive that takes into account the environment, and you become relevant the in the business world. So, as I told you already, I have created questions, the objectives, and the relevance of the objectives, and it challenges the basic assumptions, premises and status quo. That is why it is more pertinent for development, knowledge management development.

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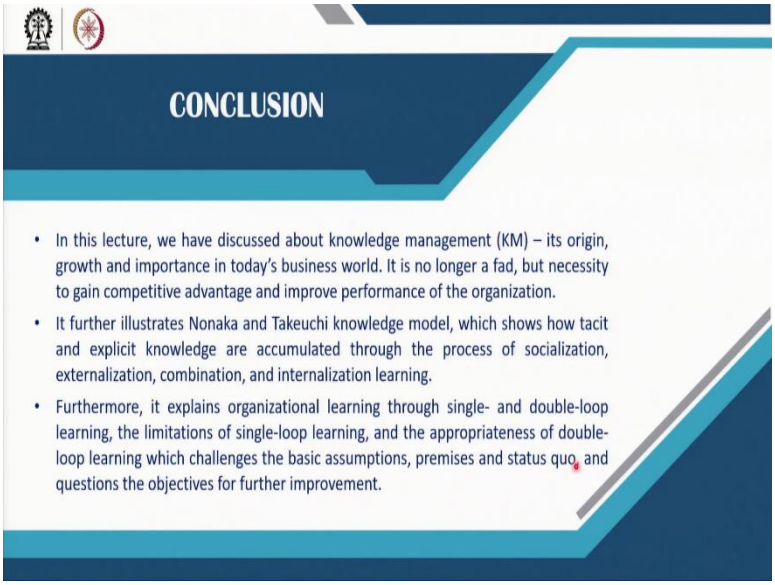

So, to summarise, what we have learned now, in this lecture, we have discussed knowledge management, its origin, growth and importance in today's business world. It is no longer a fashion or fad but a necessity to gain a competitive advantage and improve the organisation's performance.

It further illustrates Nonaka Takeuchi's knowledge more model, which shows how tacit and explicit knowledge is accumulated through socialisation, externalisation, combination, and internalisation of learning. Furthermore, it explains organisational learning through single and double-loop learning. The limitations of single-loop learning and the appropriateness of double-loop learning challenge the basic assumption premises and status quo and question the objectives for further improvement.

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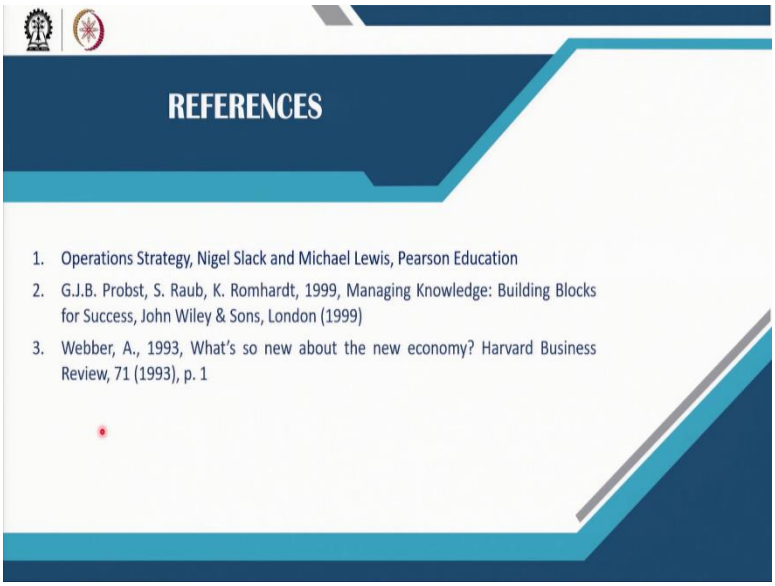

Now, these are some of the reference books, operations strategy, Nigel Slack, Michel Lewis, GJB Probst, S Raub managing knowledge and building blocks, and Webber. These are some reference books you can go through and enrich yourself further. Then thank you very much for attending this lecture.