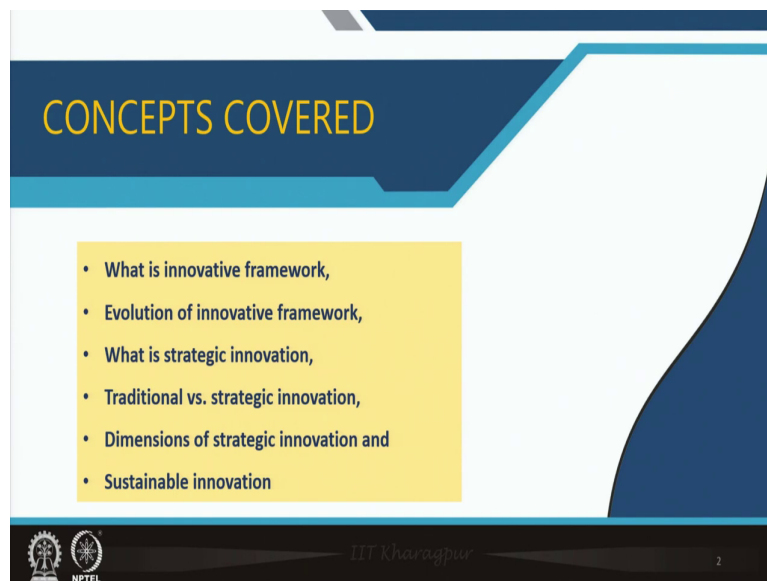


Organizational Design Change and Transformation
Prof. Susmita Mukhopadhyay
Vinod Gupta School of Management
Indian Institute of Technology, Kharagpur

Module - 11
Lecture - 52
Innovation Framework Model



Welcome back to the discussions on Organizational Design Change and Transformation, we are now on week 11, we are discussing on the Innovation Framework Model. In the last session we have discussed about the different types of innovation. In this session we are going to look into the frameworks of the innovation and the like models of innovation. So, let us see what are the concepts covered in this discussion.

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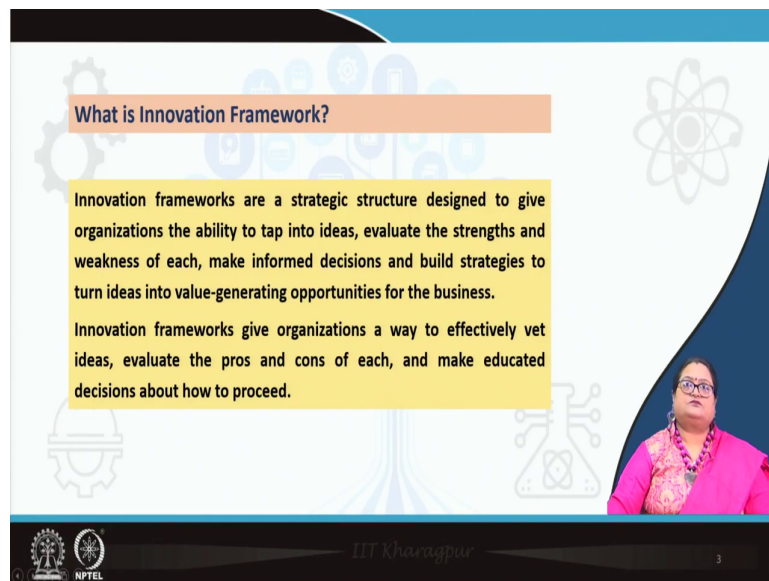
CONCEPTS COVERED

- What is innovative framework,
- Evolution of innovative framework,
- What is strategic innovation,
- Traditional vs. strategic innovation,
- Dimensions of strategic innovation and
- Sustainable innovation

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So, in this we are going to cover the concept of what is innovation framework, evolution of innovative frameworks, what is strategic innovation, traditional versus strategic innovation, dimensions of strategic innovation and sustainable innovation. So, let us see what is an innovation framework?

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The slide features a light blue background with various icons representing innovation, such as gears, a lightbulb, a microscope, and a network diagram. A central yellow box contains the following text:

What is Innovation Framework?

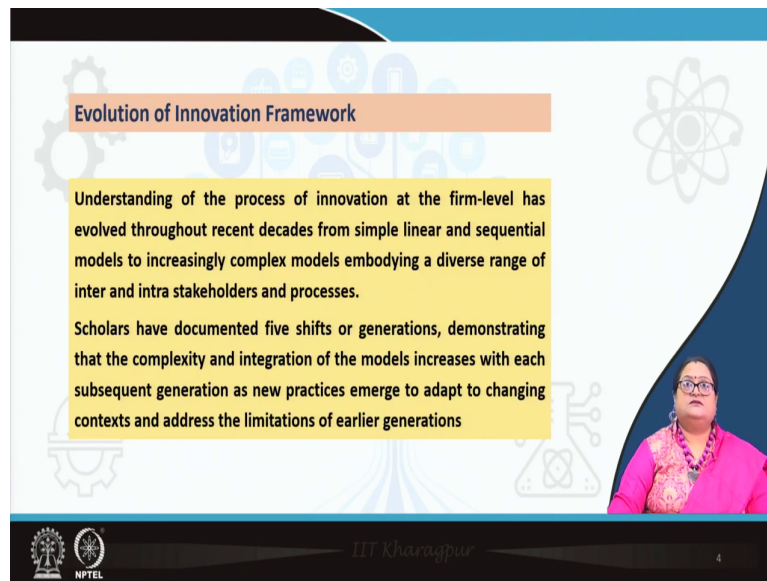
Innovation frameworks are a strategic structure designed to give organizations the ability to tap into ideas, evaluate the strengths and weakness of each, make informed decisions and build strategies to turn ideas into value-generating opportunities for the business.

Innovation frameworks give organizations a way to effectively vet ideas, evaluate the pros and cons of each, and make educated decisions about how to proceed.

In the bottom right corner, a woman wearing a pink jacket and glasses is visible, likely the presenter. The slide footer includes the IIT Kharagpur logo and the NPTEL logo on the left, and the text 'IIT Kharagpur' and the number '3' on the right.

Innovation framework are strategic structures which are designed to give organizations the ability to tap into ideas, evaluate the strengths and weaknesses of each, make informed decisions and build strategies to turn ideas into value-generating operation opportunities for the business. Innovation framework give organizations of way to effectively vet the ideas, evaluate the pros and cons of each, and make educated decisions about how to proceed.

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Evolution of Innovation Framework

Understanding of the process of innovation at the firm-level has evolved throughout recent decades from simple linear and sequential models to increasingly complex models embodying a diverse range of inter and intra stakeholders and processes.

Scholars have documented five shifts or generations, demonstrating that the complexity and integration of the models increases with each subsequent generation as new practices emerge to adapt to changing contexts and address the limitations of earlier generations

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Now, here we are going to discuss the evolution of the innovation framework because the concept has evaluated throughout the timeframe. So, understanding the process of innovation at the firm-level has evolved throughout recent decades from very simple linear and sequential models to increasingly complex models embody which embodies a diverse range of inter and intra stakeholders and processes.

The scholars have documented like five shifts or generations, demonstrating that the complexity and integration of the models increases with each subsequent generation as new practices emerge to adapt to changing context and address the limitations of the earlier generations.

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The slide, titled "Evolution of Innovation Framework", features a table with three rows and three columns. The columns are labeled "Model", "Generation", and "Characteristics". The first row is "Technology Push" (First Generation), described as "Simple, Radical innovation". The second row is "Market Pull" (Second Generation), described as "Simple linear sequential process, emphasis on marketing, the market is the source of new ideas for R&D". The third row is "Coupling" (Third Generation), described as "Recognizing interaction between different elements and feedback loops between them, emphasis on integrating R&D and marketing". The slide also includes a small video inset of a woman in a pink top and a footer with logos for IIT Kharagpur and NPTEL.

Model	Generation	Characteristics
Technology Push	First	Simple, Radical innovation
Market Pull	Second	Simple linear sequential process, emphasis on marketing, the market is the source of new ideas for R&D
Coupling	Third	Recognizing interaction between different elements and feedback loops between them, emphasis on integrating R&D and marketing

So, here we are going to discuss in details about the evolution of the innovation framework. So, it will be like we will discuss about the model, the generation and the characteristics. So, the first generation model is a technology push model which is simple, radical innovation.

The second generation model is market pool model which talks of a simple linear sequential process, emphasize on marketing, the marketing is the source for new ideas or research and development for research and development. Third idea, third generation is that of coupling. So, whenever we are talking of coupling it is recognizing the interaction between different elements and feedback loops between them, emphasis on integrating R and D and marketing.

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The slide is titled "Evolution of Innovation Framework" and features a table with three rows. The first row is for the "Interactive" model (Fourth Generation), the second for the "Network" model (Fifth Generation), and the third for the "Open" model (Sixth Generation). A presenter is visible in the bottom right corner of the slide area.

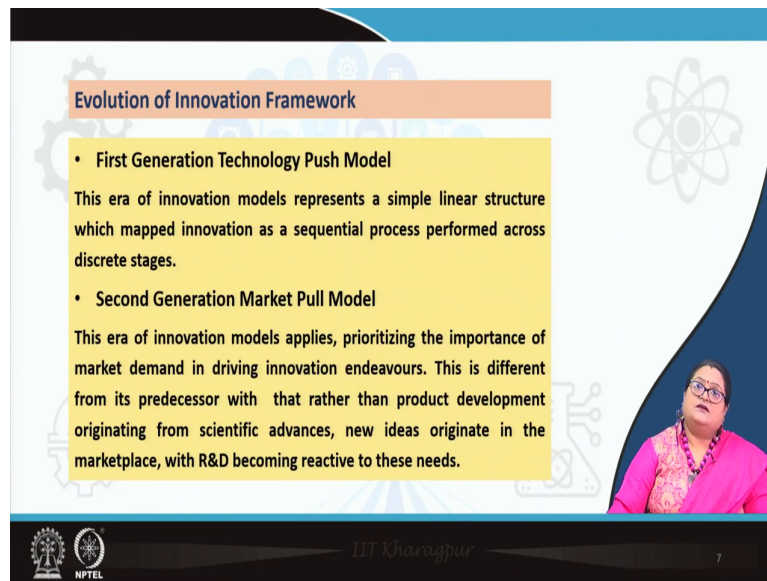
Model	Generation	Characteristics
Interactive	Fourth	Combination of push and pull models, integration within firm, emphasis on external linkages
Network	Fifth	Emphasis on knowledge accumulation and external linkages, systems integration and extensive networking
Open	Sixth	Internal and external ideas as well as internal and external paths to market can be combined to advance the development of new technologies

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The fourth generation is interactive where, which is a combination of push and pull models, integration within the firms, emphasize on external linkages also. The fifth generation model is the networking model, which emphasize the fifth generation model is the networking model, which emphasize the knowledge accumulation and external linkages, systems integration and extensive networking.

The sixth generation model is an open model. It is an internal and external ideas as well as internal and external parts to, market can be combined to adverse the development of new technologies.

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Evolution of Innovation Framework

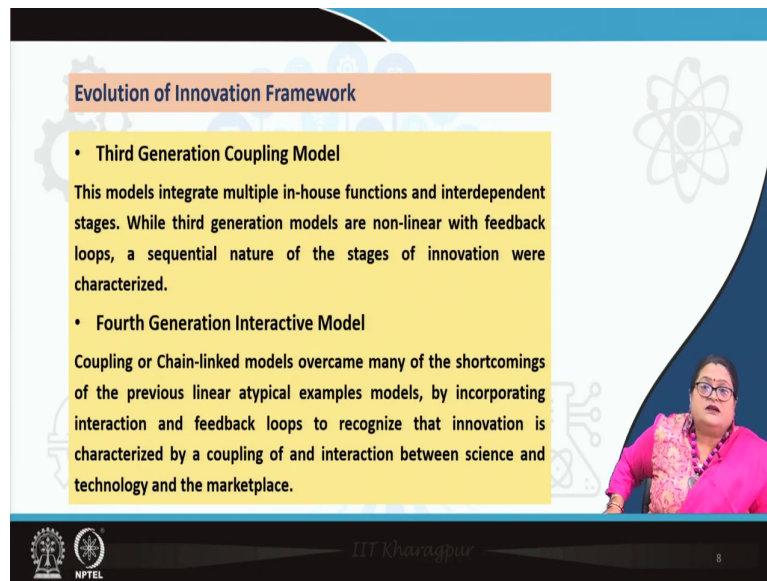
- **First Generation Technology Push Model**
This era of innovation models represents a simple linear structure which mapped innovation as a sequential process performed across discrete stages.
- **Second Generation Market Pull Model**
This era of innovation models applies, prioritizing the importance of market demand in driving innovation endeavours. This is different from its predecessor with that rather than product development originating from scientific advances, new ideas originate in the marketplace, with R&D becoming reactive to these needs.

The slide features a blue and white background with a gear and atom icon. A video inset in the bottom right shows a woman in a pink sari. The footer includes the IIT Kharagpur and NPTEL logos, the text 'IIT Kharagpur', and the number '7'.

Now, we will discuss this in some details. The first generation technology push model. This era of innovation model represents a simple linear structure which mapped innovation as a sequential process performed across decreased like discrete stages. Second generation market pull model: This era of innovation model applies, to prioritizing the importance of market demand in driving innovation endeavours.

This is different from its predecessor with that rather than product development originating from scientific advances, new ideas originate in the marketplace, with R and D becoming reactive to these needs.

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The slide is titled "Evolution of Innovation Framework" and is presented by a woman in a pink top. It contains two main bullet points:

- **Third Generation Coupling Model**
This models integrate multiple in-house functions and interdependent stages. While third generation models are non-linear with feedback loops, a sequential nature of the stages of innovation were characterized.
- **Fourth Generation Interactive Model**
Coupling or Chain-linked models overcame many of the shortcomings of the previous linear atypical examples models, by incorporating interaction and feedback loops to recognize that innovation is characterized by a coupling of and interaction between science and technology and the marketplace.

The slide footer includes the IIT Kharagpur logo, the NPTEL logo, and the text "IIT Kharagpur" and "8".

The third generation coupling model: This generation models integrates multiple in-house functions and interdependent stages. While third generation models are non-linear with feedback loops, a sequential nature of stages of innovation where characterized. Fourth generation interactive model: coupling or chain link models over the many of the shortcomings of the previous linear atypical example models, by incorporating interaction and feedback loops.

To recognize that innovation is characteristic characterized by coupling of an interaction between science and technology and the marketplace. So, if science technology marketplace and also gradually operations HR they are not communicating with each other then innovation is not possible.

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Evolution of Innovation Framework

- **Fifth Generation Network Model**
This model is characterized by the introduction of ICT systems to accelerate the innovation processes and communications across the networking systems in terms of raising both development efficiency and speed-to-market through strategic alliances.
- **Sixth Generation Open Model**
Open innovation is considered as a paradigm shift whereby competitive advantage can result from leveraging discoveries beyond the confines of a single internal R&D unit and can equally benefit from relying exclusively on their own internal paths to market through engaging with external organisations that may be better positioned to commercialize a given technology

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Fifth generation networking model: this fifth generation networking model. This model is characterized by introduction of ICT systems to accelerate the innovation process and communications across the networking system in terms of raising both development efficiency and speed-to-market through strategy alliances. So, again with the development of IT ICT based techniques how it is how you are able to connect to each other reduce the time in communication get feedback properly.

So, that is called the fifth generation network model. Sixth generation open model: open innovation is considered as a parallel shift whereby competitive advantage can result from leveraging discoveries beyond the like scope or confines of a single internal R and D unit and can equally benefit from like exclusively on their own internal paths to market through

engaging with external organizations that may be better positioned to commercialize a given technology.

So, you are like open to collaboration and open to like collaborate with an outsider and like with engaging in external organizations and like who may be helping you with the technology. So, it is about your openness to learn.

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What is Strategic Innovation?

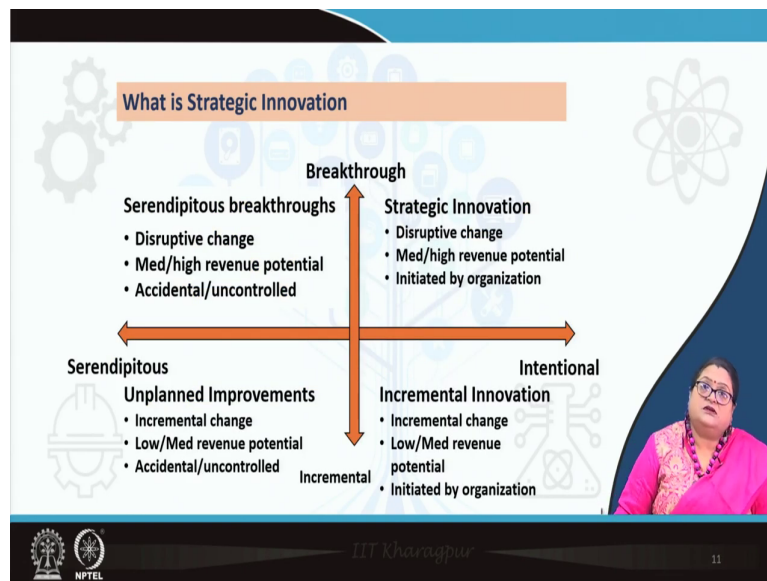
Strategic Innovation is a holistic, systematic approach focused on generating beyond incremental, breakthrough or discontinuous innovations. Innovation becomes “strategic” when it is an intentional, repeatable process that creates a significant difference in the value delivered to consumers, customers, partners and the corporation.

The slide features a blue and white background with various icons: a gear, a lightbulb, a network diagram, a chemical structure, and a hard hat. A video feed of a woman in a pink top is visible in the bottom right corner. The footer includes the IIT Kharagpur and NPTEL logos, the text 'IIT Kharagpur', and the number '10'.

Now, we will move on to the definition of what is strategic innovation. Strategic innovation is a holistic approach systematic approach focused on generating beyond incremental, breakthrough or discontinuous innovation. Innovation may become strategic when it is an like intentional repeatable process that creates a significant difference in the value delivered to consumers, customers, partners and corporation.

So, it is like you can like understand what is happening then it somewhat repeated process. So, you can plan for it and even like develop a systematic way of understanding what can be like delivered to the value addition that can be delivered to the customer's consumers and the corporations.

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Now, we will look into the model of strategic innovation. If you see like whenever we are talking of like breakthrough in like innovations or we are talking of like incremental innovations what happens like. If you see this line when it is intentional and when this is scientific does also, we will find intentional innovation or like incremental innovation where, you find it is initiated by the organization and then it is low or medium revenue potential is there and incremental change is there.

But intentional and again when you talk of like the breakthrough happening then you find like in strategic innovation there is also disruptive change medium and high revenue potential and it is also initiated by the organization. When you see something happening accidentally then we call it to be serendipitous in nature.

So, serendipitous nature innovation is sometimes unplanned improvements. So, it is incremental change low or medium revenue potential and this accidental or unquote accidental or uncontrolled. When you talk of serendipitous breakthroughs it is again disruptive change high or medium revenue potential is there and it is again accidental and uncontrolled.

So, what you see the similarity between serendipitous breakthroughs and strategic innovation is that both are disruptive in nature, more are both are having medium high revenue potential. But in terms of serendipitous breakthroughs, it is an accidental uncontrolled and in strategic innovation it is initiated by organization.

So, we can understand like if you have to like get a breakthrough kind of innovation, which has the quality of being bringing in like redefining your identity and bringing in newer ways of doing things then it needs to be like initiated by the organization and that is how you talk of strategic innovation. Like innovation when like assimilated in the organization and the organization promoting that innovation. So, like initiating the innovation it leads to strategic innovation.

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Traditional approaches	Strategic innovation approach
Adopt a 'present to future' orientation taking today as the starting point	Starts with the end in mind
Assume a rule maker/taker	Assume a rule breaker/posture
Accept established business boundaries/product categories	Seeks to create a new competitive space
Focus on incremental innovation	Seeks breakthrough, disruptive innovation while continuing to build up core
Follow traditional, linear business planning model	Marries process discipline with creative inspiration

The slide also features the IIT Kharagpur and NPTEL logos at the bottom left, the text 'IIT Kharagpur' at the bottom center, and the number '12' at the bottom right. A small video inset of a woman in a pink top is visible in the bottom right corner of the slide.

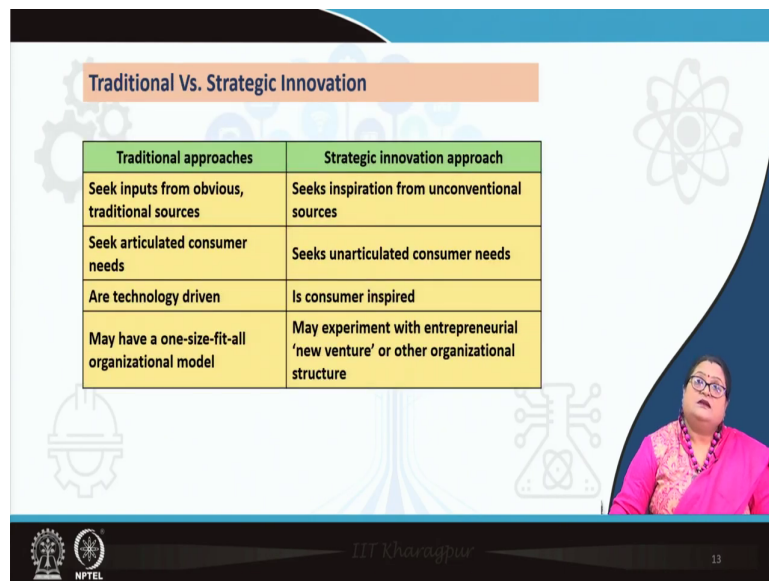
So, there are some traditional versus strategic innovation difference. So, whenever we are talking of traditional approaches it is adopt a present to future orientation taking today as the starting point. Whenever we are talking of strategic innovation approach it starts with the end in mind like where we have to reach what we have to do.

In traditional approaches we assume a rule maker or a taker. In strategic innovation we assume a rule breaker or posture. In traditional approaches it is accept all established business boundaries product categories and it is on the like strategic innovation approach it is seeks to create a new competitive space for itself.

When it is a traditional approach, it focus an incremental innovation where it is strategic innovation approach you find seeks through break through disruptive innovation while continuing to build up a core. So, in traditional approaches it follows a linear business model.

And here it Marries process discipline with creative inspiration like when you talk of creativity is full of ideas, but how to translate that idea into action you need certain process variables related to it and strategic innovation tries to connect to those like processes and tries try to see like how creativity can be nurtured in the organization. So, here you see these are more or less when we talking of the like in traditional this part is more of like whenever we talking of traditional like innovations.

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The slide features a comparison table between traditional and strategic innovation approaches. The background includes icons of a gear, a lightbulb, and a brain, along with a portrait of a woman in a pink sari. The NPTEL logo and 'IIT Kharagpur' are visible at the bottom.

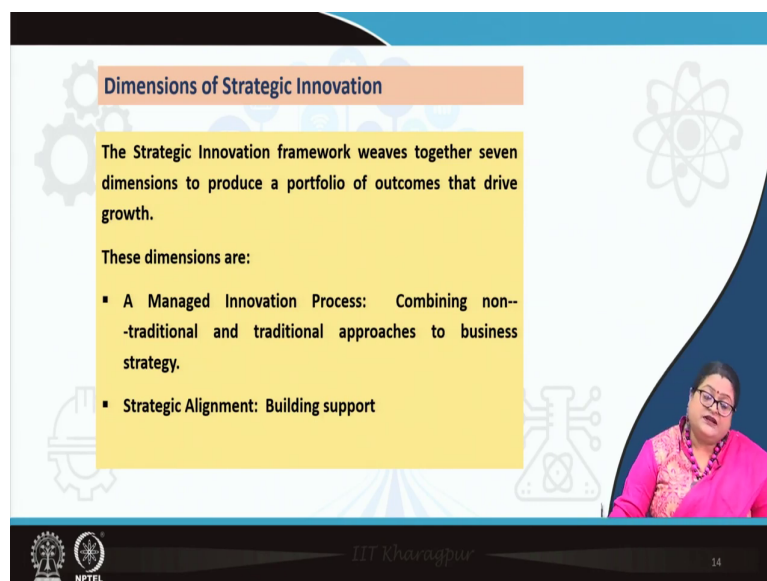
Traditional approaches	Strategic innovation approach
Seek inputs from obvious, traditional sources	Seeks inspiration from unconventional sources
Seek articulated consumer needs	Seeks unarticulated consumer needs
Are technology driven	Is consumer inspired
May have a one-size-fit-all organizational model	May experiment with entrepreneurial 'new venture' or other organizational structure

Now, in traditional approaches now in traditional approaches we seek inputs from obvious traditional sources in strategic innovation approaches seeks information from unconventional

sources also. Traditional approaches seek articulated consumer needs in strategic innovation approach like it is unarticulated consumer needs. Then in traditional approaches it is technologically driven in strategic innovation it is customer inspired what my customers are telling me to do.

In traditional approaches we have a one size fit all organizational model in experiment with entrepreneurial new ventures or other organizational structures. So, it is trying to whenever you talking of strategic innovation it is trying to experiment with entrepreneurial new ventures or other organizational structure. So, that they can different they can form different ways of attacking all a problem looking at the problem from different different perspectives and obtaining the best solution for it.

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Dimensions of Strategic Innovation

The Strategic Innovation framework weaves together seven dimensions to produce a portfolio of outcomes that drive growth.

These dimensions are:

- A Managed Innovation Process: Combining non-traditional and traditional approaches to business strategy.
- Strategic Alignment: Building support

The slide features a blue header, a yellow text box, and a presenter in a pink top in the bottom right. Logos for IIT Kharagpur and NPTEL are at the bottom.

Now, what are the dimensions of strategic innovation? The strategic innovation framework weaves together seven dimensions to produce a portfolio of outcomes that drive growth. These dimensions are: managed innovation process: combining non-traditional and traditional approaches to business strategy. Strategic alignment is where, it talking of building support.

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Dimensions of Strategic Innovation

- **Industry Foresight:** Understanding emerging trends
- **Consumer/Customer Insight:** Understanding articulated and unarticulated needs
- **Core Technologies and Competencies:** Leveraging and extending corporate assets
- **Organizational Readiness:** The ability to take action
- **Disciplined Implementation:** Managing the path from inspiration to business impact

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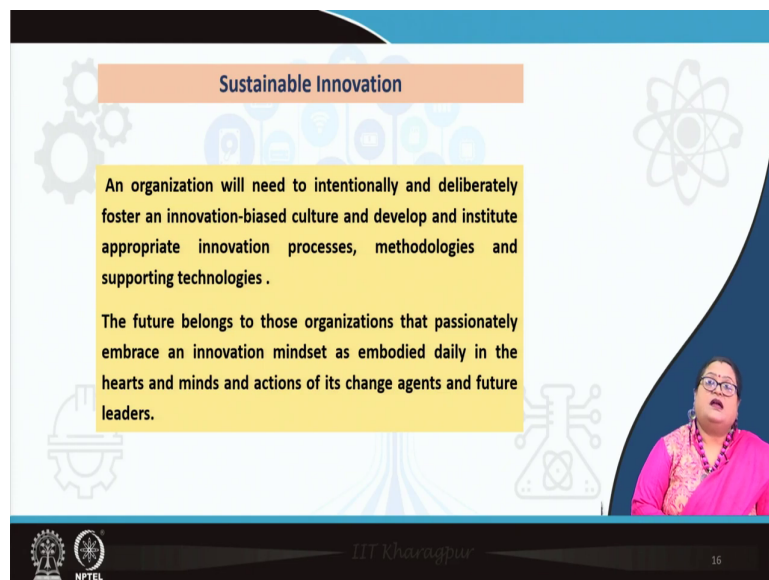
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Then industry foresight: understanding the emerging trends. Consumer insight: understanding the articulated and unarticulated needs of the consumers. Core technologies and competencies: leveraging an extended corporate assets. Organizational readiness: the ability to take action. Discipline implementation: managing the path from inspiration to business impact.

So, these are the like important points about like how to develop strategic innovation what are the like what are the functions and processes the qualities required for strategic innovation.

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Sustainable Innovation

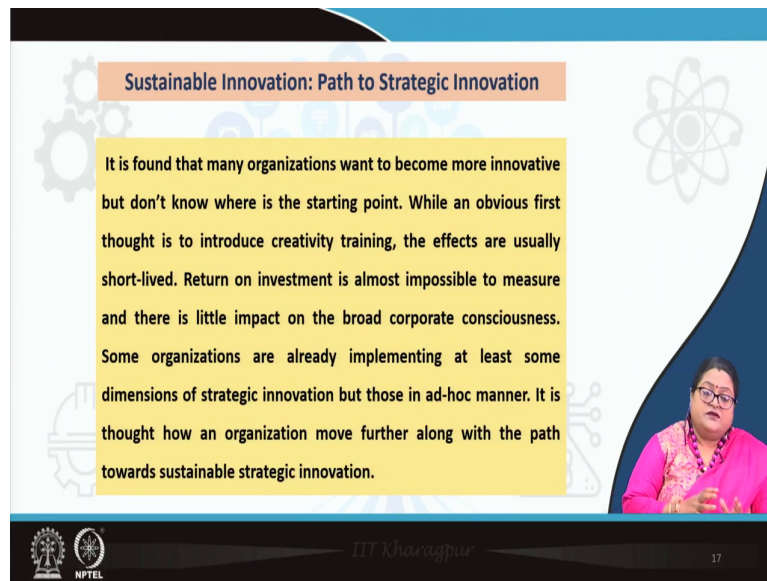
An organization will need to intentionally and deliberately foster an innovation-biased culture and develop and institute appropriate innovation processes, methodologies and supporting technologies .

The future belongs to those organizations that passionately embrace an innovation mindset as embodied daily in the hearts and minds and actions of its change agents and future leaders.

The slide features a blue and white background with icons of gears, a lightbulb, and a molecular structure. A speaker in a pink sari is visible in the bottom right corner. The footer includes the IIT Kharagpur and NPTEL logos, the text 'IIT Kharagpur', and the number '16'.

Sustainable innovation: an organization will need to intentionally and deliberately foster an innovation-biased culture and develop and institute appropriate innovation processes methodologies and supporting technologies. The future begins to the future belongs to those organizations that passionately embrace an innovation mindset as embody daily in the hearts and minds and actions of its change agents and future leaders.

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Sustainable Innovation: Path to Strategic Innovation

It is found that many organizations want to become more innovative but don't know where is the starting point. While an obvious first thought is to introduce creativity training, the effects are usually short-lived. Return on investment is almost impossible to measure and there is little impact on the broad corporate consciousness. Some organizations are already implementing at least some dimensions of strategic innovation but those in ad-hoc manner. It is thought how an organization move further along with the path towards sustainable strategic innovation.

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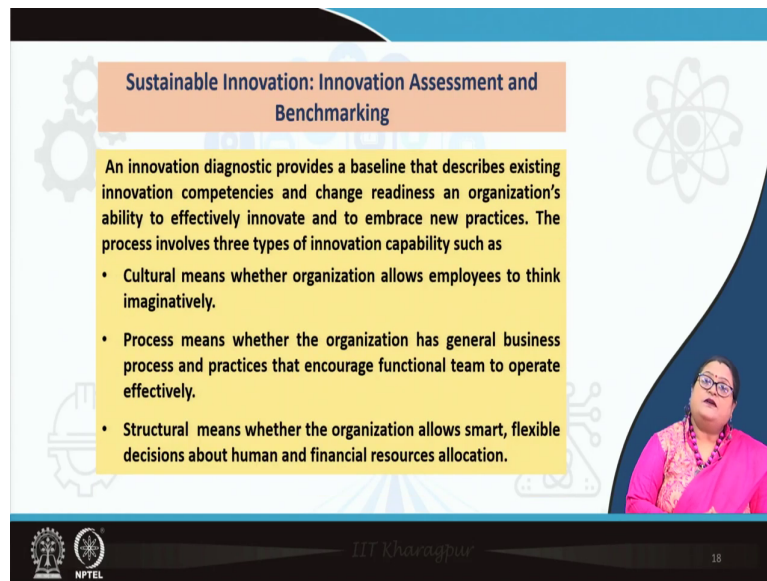
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Whenever we are talking of sustainable innovation it is a path to strategic innovation. It is found that many organizations want to become more innovative, but do not know where is the starting point. While an obvious first thought is to introduce creativity training, the effects are usually very short-lived.

Return on investment is almost impossible to measure as there is little impact on the broad corporate consciousness. Some organizations are already implementing at least some dimensions of strategic innovation, but those are in very ad-hoc manner. It is thought how an organization move further along with the path towards sustainable strategic innovation.

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Sustainable Innovation: Innovation Assessment and Benchmarking

An innovation diagnostic provides a baseline that describes existing innovation competencies and change readiness an organization's ability to effectively innovate and to embrace new practices. The process involves three types of innovation capability such as

- Cultural means whether organization allows employees to think imaginatively.
- Process means whether the organization has general business process and practices that encourage functional team to operate effectively.
- Structural means whether the organization allows smart, flexible decisions about human and financial resources allocation.

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Now, if you are talking of sustainable innovation, it is very important to like do the assessment and benchmarking because whom first is whom we are going to follow and at what level we are what we need to develop for this the knowledge of benchmarking and assessment is essential.

And in innovation diagnostic provides a baseline that describes existing innovation competencies and change readiness in an organization's ability to effectively innovate and to embrace new practices.

The process involves three types of innovation capability such as cultural means whether organization allows employees to think in an intuitively. Process means whether the organization has general business process and practices that encourage functional team

members to cooperate effectively and point through structural means whether the organization allows smart flexible decisions about human and financial resources allocation.

So, you can understand like you know three types of capabilities one is the cultural capability. So, you are where you are try to develop a culture which is open culture where there is a lot of trust where people are free to think and allow employees to think imaginatively. There is no like if you are even if you are failing there is no fear of failure etcetera.

Process means whether organization has general business processes and where it encourages the functional team to operate effectively. And in terms of structure capability that you talk of is whether it allows for the group to develop, team to develop flourish and like to share the resources. So, that they come up with like innovative decisions.

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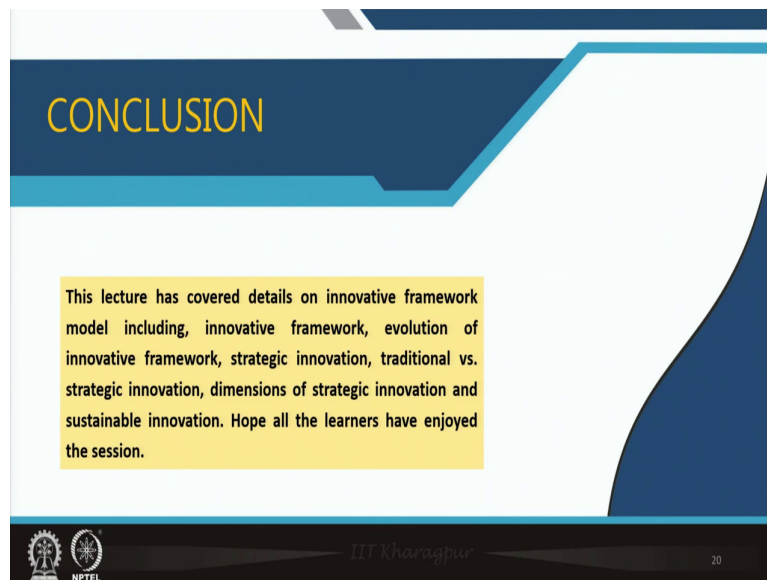
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So, these are the references that we have.

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So, we can understand this lecture has covered details on innovation framework model including, innovative framework, evolution of innovative framework, strategic innovation, traditional versus strategic innovation, dimensions of strategic innovation and sustainable innovation.

Hope all the learners are enjoyed the session. So, we will come back again with an exciting discussion on innovation where we are going to discuss on entrepreneurship which is entrepreneurs showing innovations within the organizations, in organizations how they can nurture and the quality of entrepreneurship with like a nurture like the innovations going on

and we will also discuss on the creativity and the issues related to creativity in the organization in the upcoming sessions.

So, please stay tuned with us you if any problem we are there we will be happy to interact with you in the discussion forum. So, try like you try to see try to map the importance of like the innovation in different phases of life cycle of an organization how it helps to understand or the come out of the chasm part and enjoy reading enjoy the lecture sessions meet you again for the next discussion session.

Thank you.