

Organizational Design Change and Transformation
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Module - 02
Lecture - 07
Organizational Environment

[FL]. We will now be continuing with our discussion on Organizational Environment.

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The slide features a blue header with the IIT Kharagpur logo and the text "NPTEL ONLINE CERTIFICATION COURSES". Below this, the course title "ORGANIZATIONAL DESIGN, CHANGE AND TRANSFORMATION" is displayed in large, bold, black letters. The instructor's name, "DR. SANGEETA SAHNEY, PROFESSOR, VGSOM, IIT KHARAGPUR", is listed below. The slide is divided into "Module 2" and "Lecture 2". A central diagram shows a circular model of the organizational environment with "Internal Environment: Entrepreneurs, Managers, Workers, Customers" at the center, surrounded by "External Environment" segments: Technological, Economic, Political/Legal, Demographic, Social, and Competitive. A yellow box at the bottom contains a list of topics: Organizational environment; Forces affecting the organizational environment; Environmental uncertainty, and sources of uncertainty; Changing environment, and adaptation; Framework for responses to environmental change; Resource dependence theory; Inter-organizational strategies for managing resource dependencies; Transaction cost theory; Organization-Environment Integrative Framework; Inter-organizational relationships; E-Org.

This is week 2, lecture 2. In the previous lecture we have spoken about the organizational environment and forces affecting the organizational environment and environmental uncertainty and the sources of environment.

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**ORGANIZATIONAL DESIGN,
CHANGE AND TRANSFORMATION**

Organizational Environment

- Changing Environment, and Adaptation
- Framework for responses to Environmental Change

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Dr. Khosla

Today we will be speaking about the changing environment and adaptation and the framework for responses to environmental change.

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CHANGING ENVIRONMENT AND ADAPTATION

- Organizations will perform effectively if they learn to manage uncertainty.
- Emery and Trist (1965) carried out a detailed investigation of the organizational environment.
- They proposed that meaningful knowledge of an organization requires comprehension of its environment, and they termed this as – *the causal texture of the environment*.

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To start with changing environment and adaptation. Now organizations will perform effectively if they learn to manage uncertainty. In the previous lecture I have spoken about the fact that organizations operate in highly uncertain environments. I spoken about how there is there are that they how organizations operate in an complex environments, in rich or poor environments, in dynamic or stable environments.

And we have spoke and we have seen how uncertainty is something which organizations which must learn to manage. This is even more important in today's day and age because organizations today face a VUCA world right and we as individuals should learn to manage with uncertainty similarly organizations must learn to manage uncertainty. And in today's day and age only and only those organizations would be able to survive and succeed who are able to manage or deal with this uncertainty in the best possible manner.

So, organizations will perform effectively if they learn to manage uncertainty. Now there were two researchers Emery and Trist who in the 1960's carried out a very detailed investigation on the on organizational environment and their pioneering and seminal work is something which holds a lot of relevance even for today's day and age and a lot of research has been further conducted on their work.

Their work acts as a foundation for a lot of researchers who are continuing to work on aspects of organizational environments and uncertainty. Now Emery and Trist basically proposed that the meaningful knowledge of an organization requires a understanding of the environment and they call this as the causal texture of the environment.

They said that is when organizations operate you know it is very important that the managers comprehend the environment or they understand the environment. And a meaningful knowledge of an organization requires this comprehension and they termed it as the causal texture of the environment.

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• Emery and Trist (1965) identified four distinct types of environments, ranging from extremely certain to extremely uncertain:

- Placid
- Ordered
- Reactive
- Turbulent

• According to Emery and Trist, there exist four 'ideal types' of causal textures of the environment, viz., placid, randomized environments; placid, clustered environments; distributed-reactive environments; and turbulent environments.

Nature of Business Environment (Emery and Trist)	
Many	Complex Ordered
Few	Simple Disordered
Slow	Fast
SPEED OF CHANGE	

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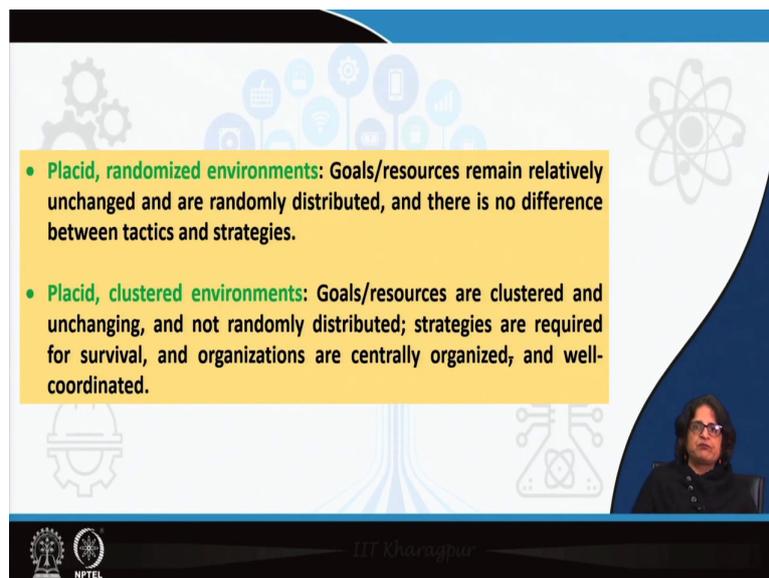
Now according to them organization environments can arrange between certain to extremely uncertain you know degrees. In the sense that on a continuum of certainty to uncertainty you have different ranges you know you could have environments which are placid or ordered or reactive or turbulent you know. So, in this way what Emery and Trist were doing was that they identified four distinct types of environments ranging on the continuum between extremely certain to extremely uncertain.

So, they said that if we actually try to you know scale down the level of uncertainty you know if we scale the level of uncertainty there will be on one hand absolutely certainty on the other hand absolute uncertainty. And you we on in on this scale on this continuum we can have four distinct types of environment placid, ordered, reactive and turbulent.

Now, according to them there exist four ideal types of causal textures of the environment ok four ideal types of the causal textures of the environment which is placid randomized environments, placid clustered environments, distributed reactive environments and turbulent environments. So, on a range on a continuum you have extreme certain to extreme uncertain and you have these four distinct types of environments placid, ordered, reactive and turbulent.

And according to Emery and Trist the four ideal types of causal textures of the environment could be placid randomized environment, placid clustered environments, distributed reactive environments and turbulent environments.

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The slide features a yellow background with two bullet points. The first bullet point is titled 'Placid, randomized environments' and describes a state where goals/resources are relatively unchanged and randomly distributed, with no difference between tactics and strategies. The second bullet point is titled 'Placid, clustered environments' and describes a state where goals/resources are clustered and unchanging, not randomly distributed, requiring strategies for survival, with organizations being centrally organized and well-coordinated. The slide also includes a small video inset of a person in the bottom right corner and logos for IIT Kharagpur and NPTEL at the bottom.

- **Placid, randomized environments:** Goals/resources remain relatively unchanged and are randomly distributed, and there is no difference between tactics and strategies.
- **Placid, clustered environments:** Goals/resources are clustered and unchanging, and not randomly distributed; strategies are required for survival, and organizations are centrally organized, and well-coordinated.

So, what are these now according to them a placid randomized environment is one where the goals or the resources remain a relatively unchanged and are randomly distributed. So, there are no difference, there is no difference between tactics and strategies the goals or the

resources remain unchanged they are randomly distributed and so there is no difference between the tactics and the strategies ok.

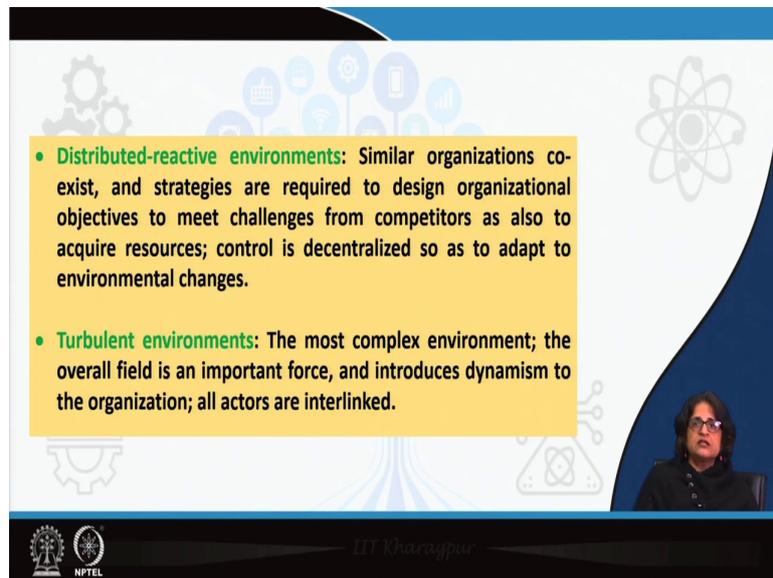
The second is placid clustered environments where the goals and the resources are clustered ok and unchanging and not randomly distributed ok. So, the goals and resources are clustered and unchanging which means there is some change and there is the they are clustered, but and unchanging, but not randomly distributed.

In the first case in placid randomized environments the goals and resources are randomly distributed, but in the second case which is placid clustered environments they are not randomly distributed. So, strategies are required for survival and organizations are centrally organized and well coordinated, ok.

So, in the first case in placid randomized environments the goals and resources remain unchanged and they are randomly distributed ok. So, because of that there is there is no need for a difference there is no difference between the tactics and the strategies. But in the case of placid clustered environments the goals and resources are clustered and are not randomly distributed in the first case they were randomly distributed, but here they are not randomly distributed.

So, strategies are required for survival and organizations are centrally organized and well coordinated.

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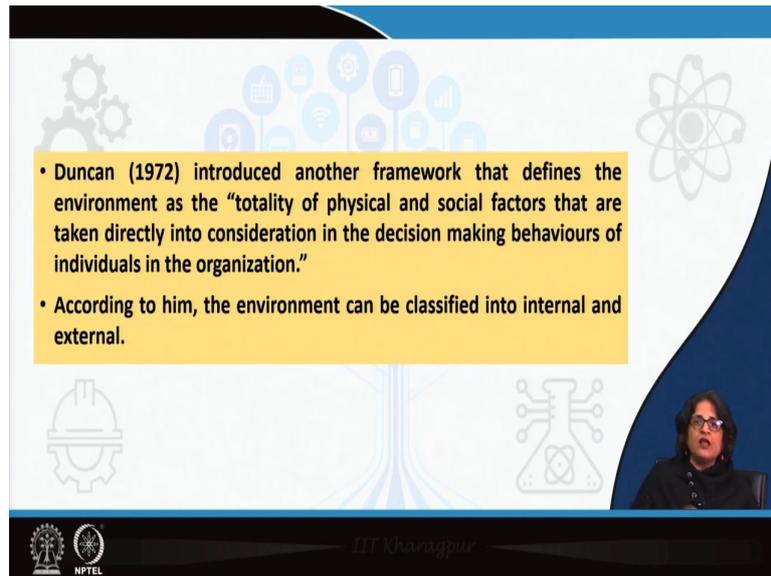
- **Distributed-reactive environments:** Similar organizations co-exist, and strategies are required to design organizational objectives to meet challenges from competitors as also to acquire resources; control is decentralized so as to adapt to environmental changes.
- **Turbulent environments:** The most complex environment; the overall field is an important force, and introduces dynamism to the organization; all actors are interlinked.

The third is distributed reactive environments. Now in distributed reactive environments they are similar organizations coexist and strategies are required to design organizational objectives to meet the challenges from competitors as also to acquire resources. So, control is highly decentralized so, as to adapt to the environmental changes ok.

So, in distributive reactive environments similar organizations coexist, strategies are needed to design organizational objectives to meet the challenges that the competitors pose, also to acquire control over resources. So, you need strategies and the control is decentralization decentralized. So, that adaptation to the environmental change can be easier the fourth is turbulent environments. Now what are turbulent environments?

Turbulent environments are the most complex of all environments the overall field is a, important source ok and there is dynamism to in the organization all factors are interlinked. So, these are highly complex and you know in the and very turbulent ok.

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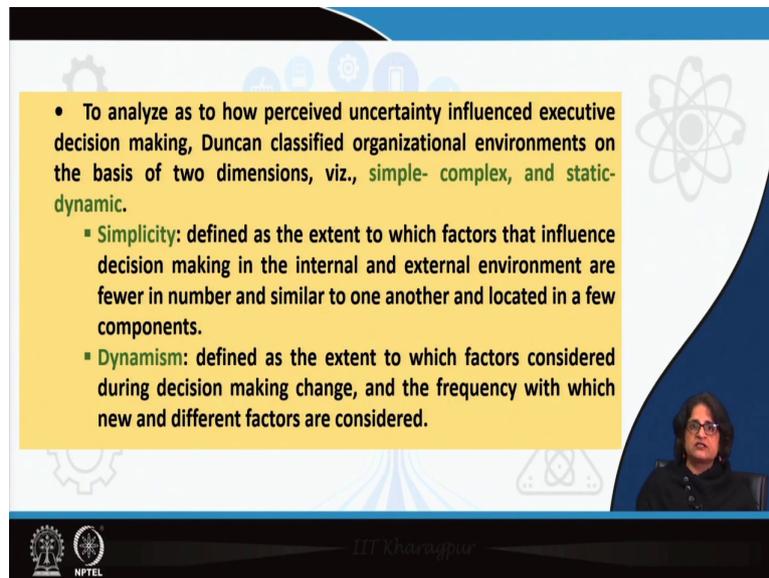
- Duncan (1972) introduced another framework that defines the environment as the “totality of physical and social factors that are taken directly into consideration in the decision making behaviours of individuals in the organization.”
- According to him, the environment can be classified into internal and external.

In the bottom right corner, there is a small video inset showing a woman with glasses speaking. At the bottom of the slide, there are logos for IIT Kharagpur and NPTEL.

Now, Duncan in 1972 another researcher introduced another framework which defines the environment as a totality of physical and social factors that are taken into consideration in the decision making behaviors of individuals in the organization. So, he spoke of the environment as the totality of physical and social factors that are directly taken into consideration in the decision making behaviors of the individuals in the organization.

And according to him environment can be classified as internal and external ok.

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• To analyze as to how perceived uncertainty influenced executive decision making, Duncan classified organizational environments on the basis of two dimensions, viz., **simple- complex, and static-dynamic**.

- **Simplicity:** defined as the extent to which factors that influence decision making in the internal and external environment are fewer in number and similar to one another and located in a few components.
- **Dynamism:** defined as the extent to which factors considered during decision making change, and the frequency with which new and different factors are considered.

The slide features a yellow text box with a blue border. In the bottom right corner, there is a small video inset showing a woman with glasses speaking. The background of the slide is white with faint icons of gears and a molecular structure. At the bottom, there are logos for IIT Kharagpur and NPTEL, and the name 'IIT Kharagpur' is written in a stylized font.

So, to analyze as to how uncertainty influences decision making Duncan classified the environments on basis of two dimensions ok fine. In order to he so, first he actually spoke about the fact that you know environments are can be classified as internal and external.

But he further added a dimension you know keeping in mind the fact that managers must take decisions he classified organization environments on as an on another dimension which is in terms of you know the simple complex versus the static dynamic. So, what did he do? He said simplicity was defined as the extent to which factors influencing decision making in the internal and external environment and are fewer in number and similar to one another and located in few components ok.

So, and dynamism was defined as the extent to which factors considered during decision making and the frequency with which new and different factors are considered. So, a while on

one hand he said that environments are internal and external. He wanted to also analyze as to how perceived uncertainty influences executive decision making and for that he classified organizational environments on the basis of two dimensions one was a simple complex the other is a static dynamic.

Simple complex and static dynamic. Now if you look at simple complex that is defined as the extent to which factors influencing decision making in the internal and external environment are fewer in number and similar to one another and they are located in few components.

What is dynamism? Dynamism is defined to the is defined as the extent to which factors considered during the decision making stage ok change and the frequency with which new and different factors are considered. So, that constitutes the dynamism ok.

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Rate of Environmental Change	Static	<p>Cell 1: Low Perceived Uncertainty</p> <ol style="list-style-type: none"> 1. Small number of factors and components in the environment. 2. Factors and components are somewhat similar to one another. 3. Factors and components remain basically the same. <p><i>Example: cardboard container industry</i></p>	<p>Cell 2: Moderately Low Perceived Uncertainty</p> <ol style="list-style-type: none"> 1. Large number of factors and components in the environment. 2. Factors and components are not similar to one another. 3. Factors and components remain basically the same. <p><i>Example: state universities</i></p>
	Dynamic	<p>Cell 3: Moderately High Perceived Uncertainty</p> <ol style="list-style-type: none"> 1. Small number of factors and components in the environment. 2. Factors and components are somewhat similar to one another. 3. Factors and components of the environment continually change. <p><i>Example: fashion industry</i></p>	<p>Cell 4: High Perceived Uncertainty</p> <ol style="list-style-type: none"> 1. Large number of factors and components in the environment. 2. Factors and components are not similar to one another. 3. Factors and components of environment continually change. <p><i>Example: banking industry</i></p>
		Simple	Complex
		Environmental Complexity	

Source: Duncan, R. B. (1972).
In Daft, R. L. (2008). *Organizational Theory and Design*, Tenth edition. South-Western, Cengage Learning USA.



Reference: Reprinted from "Characteristics of Organizational Environments"

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Now, if we plot it here and look at the dimensions here ok you have on the one hand a rate of environmental change which can be static or dynamic and then you have environmental complexity which is simple and complex.

We just said when we talk about simplicity and complexity or when we talk about you know the simple simplex simple versus complex we are actually talking about the extent to which factors which affect decision making in the internal external and environment a few and similar a few in number and similar to one another and located in few components.

And on the other dimension we have the rate of environmental change where environment can be either dynamic or static, it is when we talk of simplicity sorry when we talk about the static environment or when we are talking about dynamic environment it refers to the extent to which factors considered in during decision making change and the frequency with which new and different factors are considered.

So, if you look at it we have one situation where it is a simple static condition, a simple environment and a static environment cell 1, you have cell 2 which is a complex environment and a static environment, you have cell 3 which is a simple environment and a dynamic environment and your cell 4 which is a complex environment and a dynamic environment.

So, what we are seeing here is that one combination is cell 1 where the rate of environmental change is static and the environmental complexity is simple ok. So, cell 1 your rate of environmental change is static and your environmental complexity is simple. So, there is low perceived uncertainty so, small number of factors and environments in the environment.

In a small number of factors and components in the environment factors and components are similar to one another and factors and components remain basically the same ok this is cell 1. Cell 2 is when the rate of environmental change is static, but the environmental complexity is complex. So, you have a moderately low perceived uncertainty where you have large number of factors and components in the environment.

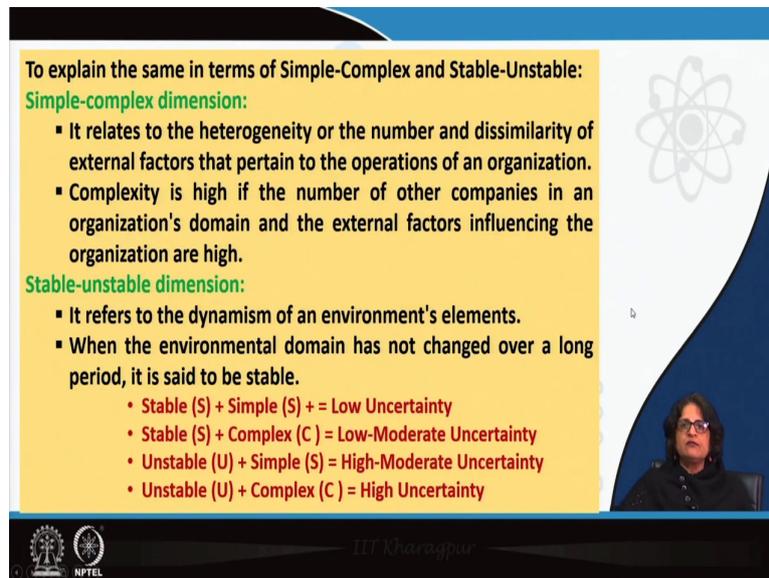
Factors and components are not similar to one another and they remain basically the same. So, you have environmental complexity and you have rate of environmental change which is static which defines cell 2 which is a moderately low perceived uncertainty cell. 3rd case is cell 3 which is a simple in terms of environmental complexity is simple and rate of environmental change is dynamic.

So, the rate of environmental change is dynamic, but the environmental complexity is low simple. So, you have moderately high perceived uncertainty. So, small number of factors and components in the environment factors and components are somewhat similar to one another and factors and components of the environment continually change.

And then you have the fourth where there is high perceived uncertainty because the rate of environmental change is very dynamic and the environmental complexity is also very very complex. So, the large number of factors and components they are not similar to one another and they continually change. So, if you see this here this particular this particular figure you see that there are four different cases.

And organizations can operate either in static or dynamic rate of environmental change or they can operate in environmental complexity which can range from simple to complex. And so, you have these four different environments that you can that an organization can that organizations can face they can either face low perceived uncertain environments or high perceived uncertain environments or moderately low perceived uncertain environments and moderately high perceived uncertainty environments ok.

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To explain the same in terms of Simple-Complex and Stable-Unstable:

Simple-complex dimension:

- It relates to the heterogeneity or the number and dissimilarity of external factors that pertain to the operations of an organization.
- Complexity is high if the number of other companies in an organization's domain and the external factors influencing the organization are high.

Stable-unstable dimension:

- It refers to the dynamism of an environment's elements.
- When the environmental domain has not changed over a long period, it is said to be stable.

- Stable (S) + Simple (S) = Low Uncertainty
- Stable (S) + Complex (C) = Low-Moderate Uncertainty
- Unstable (U) + Simple (S) = High-Moderate Uncertainty
- Unstable (U) + Complex (C) = High Uncertainty

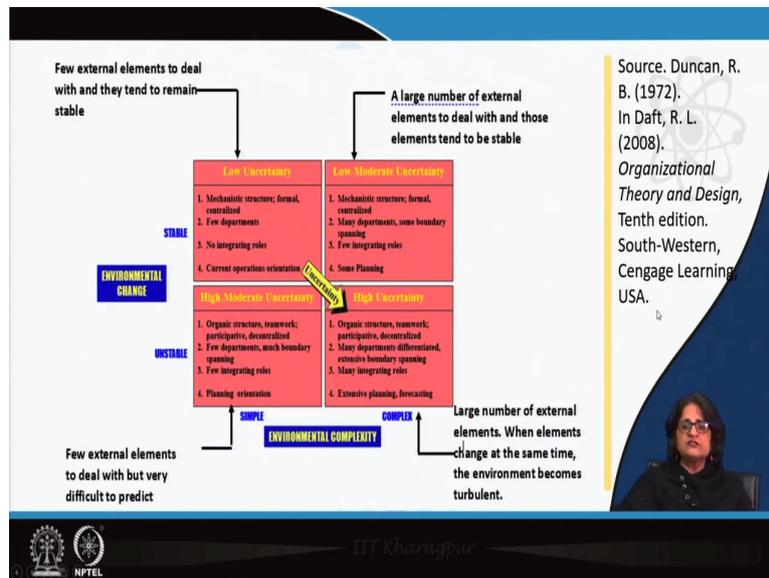
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Now, here to explain the same in terms of simple complex and stable unstable environments. So, simple complex dimension will relate to the heterogeneity or the number and dissimilarities of external forces that pertain to the organizational operations. Complexity is high if the number of other companies in the domain and the external factors influencing the organization are high.

And then you have stable unstable dimensions. So, it refers to the dynamism when the environmental domain has not changed over a long period of time it is said to be stable. So, you have a situation here where it is stable and simple so, uncertainty is low. When it is stable and complex so, stable and complex you have low moderate uncertainty you have unstable and complex which is high moderate uncertainty and when you have unstable and complex structures it is high uncertain environments.

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So, if you look at it here in the terms of how it affects organizational structure you will see here that in case of low uncertainty where you know it is a stable and simple structure, your if the mechanistic structure will work highly centralized few departments no integrating roles and companies or organizations can concentrate on current operations orientation.

But when it moves to high uncertainty organizations have to move to organic structures, teamwork, participative decision making, decentralization, differentiation, extensive boundary spanning roles what are extensive boundary spanning roles we shall be discussing in subsequent lectures and there will be extensive planning and forecasting for new it is not going to be restricted to the current, but also to be to the new, ok.

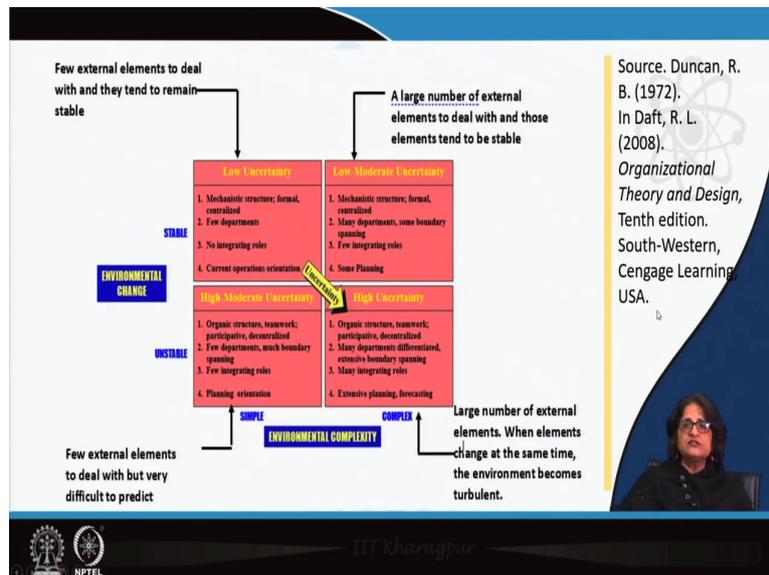
So, you have here different kinds of structures based on different kinds of environments. So, in stable simple environments where there is low uncertainty you can afford to do what you

are currently doing, but in complex and complex and you know environments and unstable environments where is huge amount of uncertainty organizations have to plan for future.

And they have to be more organic they have to be planning and forecasting for the future similarly in low moderate uncertainty where environments are stable and complex or in high moderate when they are unstable and simple. In those cases again the structures will vary because it is stability in cell 2 or low to moderate uncertainty you know you can afford to have a mechanistic structure centralized.

But as the environments change to unstable structures which you see in cells three and four which is high moderate uncertainty and high uncertainty. Organizations have to think of moving towards more organized organic structures, evolving structures ok.

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So, this is the difference which we observe ok. So, in the case of low uncertainty what is and in what is happening is few external elements to deal with. And so, they tend to remain stable, but in the case of you know in the case of you know high uncertainty you see there large number of external elements and elements change at the same time the environment is highly turbulent and so, companies have to move from mechanistic structures to organic structures ok.

So, what basically Emery and Trist as well as Duncan were trying to say was that when we talk of uncertainty in the environment that needs to be managed and environmental uncertainty and environmental change put together uncertainty you know uncertainty in and has to be managed one organizations must manage uncertainty, organization must manage change, organizations must manage complexity.

And in their attempts to do so, organizations face two kinds of or based on two dimensions they may face four different kinds of environments dimensions being complexity, which can be simple and complex and change which can be stable and unstable.

So, based on environmental change which is in terms of how stable it is or how unstable it is and based on environmental complexity which is a simple or complex, organizations would face different kinds of environments and to actually deal with those environments they would have to adopt different kinds of structures. And as they move from low uncertainty to high uncertainty they have to move from a mechanistic structure, highly centralized structure.

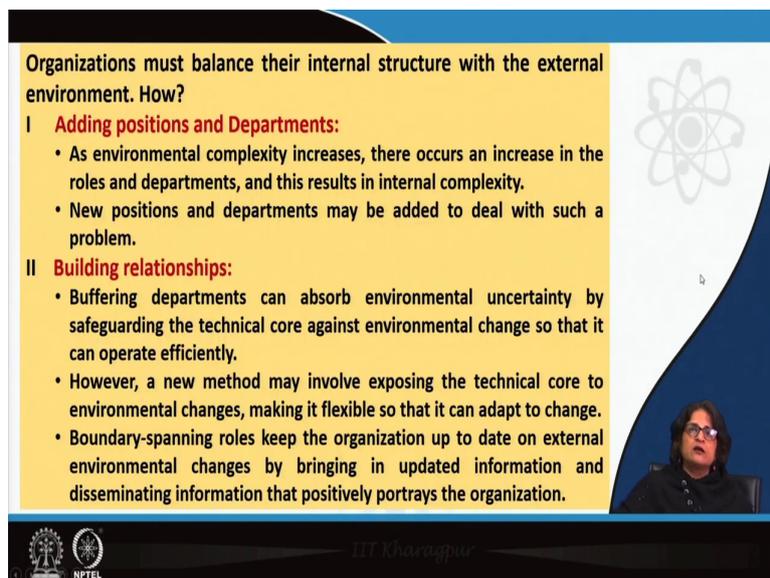
Few departments, few businesses, current state to and to an organic state which is organized structures which is more of teamwork, more of decentralization, more of integrating roles, more of not the current, but the future and so there has to be a huge change in the entire design, in the structure, in the strategy and in the culture of the organization at it moves as it moves from low uncertainty to high uncertainty.

I repeat as you move from low to high you move from mechanistic to organic you move from a centralized to decentralized, you move from the current to the future you move from you

know few departments to many departments, many businesses and you actually are moving from a mechanistic orientation to an organic evolving orientation.

The organic orientation emphasizes upon horizontal structures or you know teamwork, participation, differentiation, boundary spanning roles and a lot of integrating roles which happens as a result of horizontal differentiation. So, this is something which needs to be taken care of that as organizations face uncertain environments as they face complex environments as well as you know ever changing environments they need to change their structures and they need to change their design.

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Organizations must balance their internal structure with the external environment. How?

I Adding positions and Departments:

- As environmental complexity increases, there occurs an increase in the roles and departments, and this results in internal complexity.
- New positions and departments may be added to deal with such a problem.

II Building relationships:

- Buffering departments can absorb environmental uncertainty by safeguarding the technical core against environmental change so that it can operate efficiently.
- However, a new method may involve exposing the technical core to environmental changes, making it flexible so that it can adapt to change.
- Boundary-spanning roles keep the organization up to date on external environmental changes by bringing in updated information and disseminating information that positively portrays the organization.

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So, how do come organizations balance their internal structure with the external environment. One add positions; so, as environmental complexity increases there occurs an increase in the

roles in the departments and this results in internal complexity new positions and departments may need to be added to deal with such problems. Second is building relationships.

Buffering departments can absorb environmental uncertainty by safeguarding the technical core against environmental change. So, that it can operate efficiently. What are buffering departments? Buffering departments are the non technical departments ok. So, they can help absorb the environmental uncertainty a new method may involve exposing the technical core to environmental change making it flexible.

So, that it can adapt to change. So, boundary spanning roles are needed what are boundary spanning roles these are roles which are informal roles and connections or networks which develop and where people collaborate and work with each other. So, that. So, that the. So, that they can function effectively organization can function effectively. So, boundary spanning roles keep the organization up to date on external environmental changes by bringing in information and disseminating information.

So, what is what happens in boundaries spanning roles is that there are a lot of formal and informal networks which develop and there is lot of information sharing. So, such kind of a formal and informal relationship building information sharing and boundary spanning roles can also help an organization balance its internal structure with the external environment.

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III Differentiation and Integration:

- Differences in orientation (cognitive and emotional), between functional managers and the variance in the formal arrangement and structure between the departments constitute differentiation.
- The quality of cooperation, team work and collaboration between departments is referred to as integration.
- Often, departments are need to be coordinated by formal integrators.
- In highly uncertain environments, frequent changes are required; this necessitates greater information processing so that horizontal coordination can be achieved, and this makes the inclusion of integrators as an essential addition to the organizational structure.

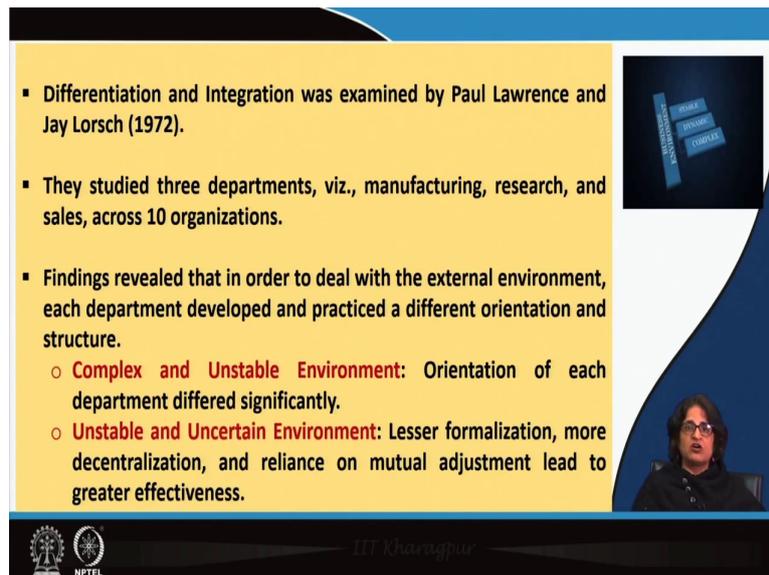
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Then we come to differentiation and integration. So, differences in orientation both cognitive as well as emotional between functional managers and the variance in terms of the formal arrangement and structure between departments constitutes the differentiation. So, the quality of cooperation, teamwork collaboration between different departments actually is referred to as integration.

So, often departments are needed to be coordinated by formal integrators as well and both differentiation and integration help fight you know help fight the problem regarding to bring about a balance between the internal structure and external environment, ok. So, you know difference in while differentiation is there or integration is also needed and in highly uncertain environments frequent changes are required.

So, this necessitates greater information processing. So, that horizontal coordination can be achieved and this makes the inclusion of formal integrators you know as information connectors and you know very essential to be a part of the organization.

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The slide features a yellow background with a blue header and footer. On the right side, there is a small inset image showing a 3D bar chart with three bars labeled 'SIMPLE', 'MODERATE', and 'COMPLEX'. Below the chart is a small video window showing a woman speaking. The main text is a bulleted list of findings from Lawrence and Lorsch's 1972 study.

- Differentiation and Integration was examined by Paul Lawrence and Jay Lorsch (1972).
- They studied three departments, viz., manufacturing, research, and sales, across 10 organizations.
- Findings revealed that in order to deal with the external environment, each department developed and practiced a different orientation and structure.
 - **Complex and Unstable Environment:** Orientation of each department differed significantly.
 - **Unstable and Uncertain Environment:** Lesser formalization, more decentralization, and reliance on mutual adjustment lead to greater effectiveness.

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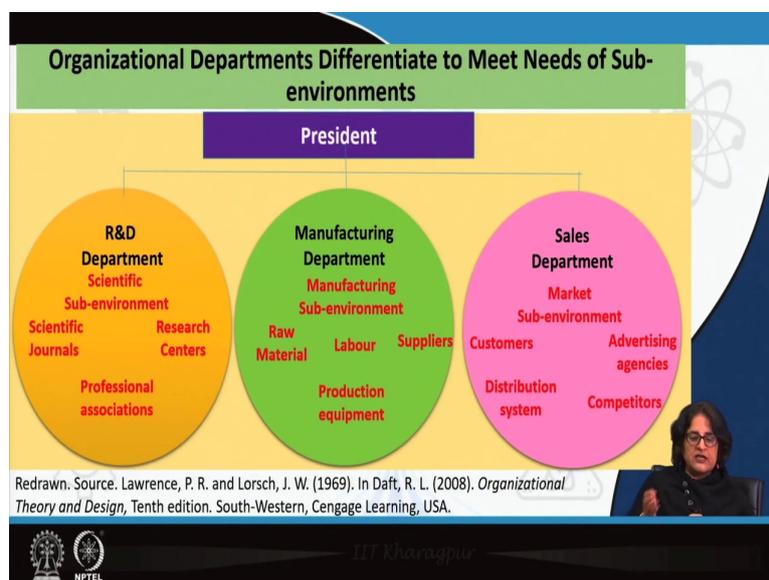
So, differentiation and integration was examined by Lawrence and Lorsch. And while they were talking about this they basically studied three departments manufacturing research and sales across ten organizations and the study was conducted by them in the 1970's and they revealed that in order to deal with the external environment every department developed a different orientation.

So, in complex and unstable environments orientation of each department differed significantly and in unstable and uncertain environments you know there was lesser formalization more decentralization and reliance on mutual adjustment led to great

effectiveness. So, they said that in complex and unstable environment the orientation of the various departments manufacturing sales and research was different.

And in unstable and uncertain environments there was lesser formalization more decentralization and a reliance on greater you know lot of reliance on mutual adjustment which ultimately led to effectiveness.

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So, they studied this in terms of you know they said that how there was a lot of reliance between the subunits in the R and D amongst the subunits in the manufacturing and amongst the subunits in the marketing and sales.

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Differences in Goals and Orientations among Organizational Departments			
Characteristics	R & D Department	Manufacturing Department	Sales Department
Goals	New developments, quality	Efficient production	Customer satisfaction
Time Horizon	Long	Short	Short
Interpersonal Orientation	Mostly task	Task	Social
Formality of Structure	Low	High	High

Redrawn. Source. Lawrence, P. R. and Lorsch, J. W. (1969). In Daft, R. L. (2008). *Organizational Theory and Design*, Tenth edition. South-Western, Cengage Learning, USA.



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And so, they said that in the case of R and D the goal was new development, quality, time horizon was long interpersonal orientation was majorly task and formality of structure was low, but in the case of sales the goal was customer satisfaction the time horizon was short interpersonal orientation was very very social and formality of structure was high.

So, and in the case of manufacturing the focus was on production efficient production, time horizon was short, interpersonal was task and formality of structure was high.

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IV Organic versus Mechanistic Management Processes:

- The response to environmental uncertainty manifests in the form of formal structure and control imposed on employees.
- Tom Burns and G. M. Stalker (1961) examined 20 industrial organizations in the UK.
- Findings revealed that the internal management structure of an organization is related to the external environment.
 - Stable external environment: Internal structure of the organization is characterized by centralization, formalization, standard rules and procedures, a clear hierarchy of authority. *Burns and Stalker termed this a mechanistic organization system.*
 - Rapidly changing environments: Internal structure of the organization is loose, free-flowing, and adaptive; rules and regulations are not written down, and in case they are, they are ignored; hierarchy of authority is unclear; decision making is decentralized. *Burns and Stalker termed this an organic organization structure.*

MECHANISTIC ORGANIZATION VS ORGANIC ORGANIZATION

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Finally, we come to the organic versus mechanistic management processes I spoke about it a couple of minutes ago and you know in response to environmental uncertainty we discussed how it has been proposed that when the environments are highly uncertain you know you move towards organic state or organic structure is a preferred one. So, Burns and Stalker in 1960's again examined 20 industrial organizations in the UK and they tried to relate the structure of the organization to the external environment.

And they said that in stable external environments the internal structure of the organization is characterized by centralization, formalization and standardized rules and regulations clear authority and they called it mechanistic, but in unstable environments, rapidly changing environments, the internal structure of the organization is loose free flowing, adaptive, decentralized rules and regulations are not written.

And even if they are written you know they are hardly followed and hierarchy of authority you know is the unclear and decision making is highly decentralized and they call it the they call it the organic structure.

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Mechanistic	Organic
<ul style="list-style-type: none"> ■ Tasks are broken into distinct and specific parts. ■ Rigidly defined tasks ■ Rules and procedures exist. ■ Existence of strict hierarchy of authority and control ■ Centralization with respect to knowledge and control of tasks, as well as decision making. ■ Communication is vertical. 	<ul style="list-style-type: none"> ■ Common tasks of the department, where everyone contributes. ■ Tasks are not rigidly defined; they are amenable to redefinition through employee teamwork. ■ Rules and procedures do not exist, and even if they exist, they are loosely followed. ■ Less hierarchy of authority and control. ■ Knowledge and control of tasks as well as decision making can happen anywhere in the organization. ■ Communication is horizontal.

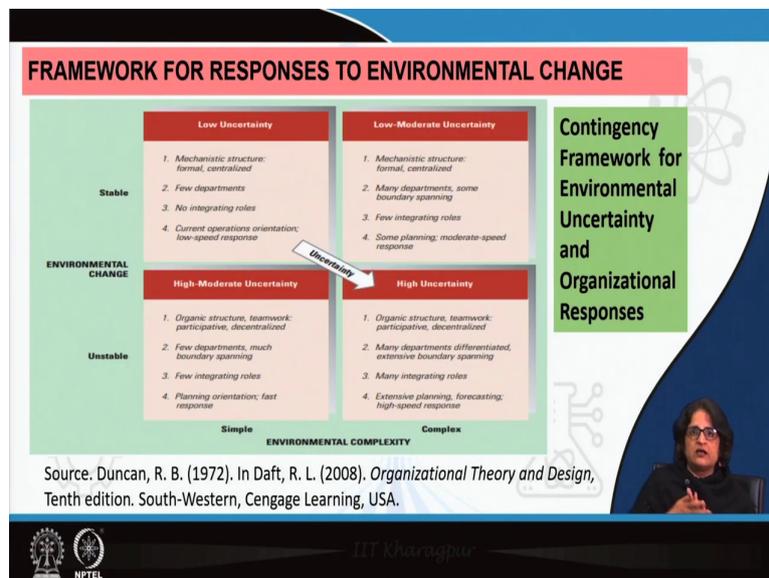
Adapted. Redrawn. Source: Zaltman et. al. (1973), In Daft, R. L. (2008). *Organizational Theory and Design*, Tenth edition. South-Western, Cengage Learning, USA.



So, this is how you compare and contrast the organic with the in with organic with the mechanistic and if you see you know where a mechanistic the communication is vertical and organic it is vertical as well as horizontal. And in centralization it is in mechanistic centralized there is centralization with respect to knowledge and control of tasks as well as decision making in organic it is decentralized decision making can happen anywhere and in the case of mechanistic the rules and regulations and procedures exist, but in organic they do not exist.

So, the we see here and we can compare and contrast the organic with the mechanistic.

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And this is how it would look like which I just start said you know a couple of minutes ago that when you respond to environmental change in low uncertainty cases of low uncertainty a mechanistic structure a formal centralized structure with few departments, no integrating roles and current operations and orientation can exist.

But as you move to high uncertainty organic structure is preferred one, teamwork, participative, decision making, decentralization, integrating roles, boundary spanning roles and extensive planning and forecasting for the future. So, this is how the this actually explains a contingency framework for environmental uncertainty and organizational responses. So, with this I come to a conclusion of this lecture.

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These are the references and we shall continue with the lecture in the.

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Dr. Khanna

Thank you.