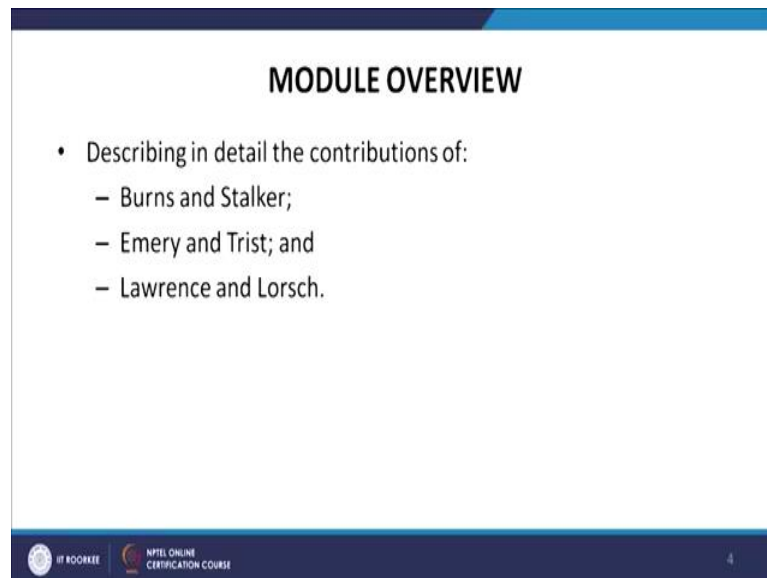


Organization Theory Structure and Design
Prof. Zillur Rahman
Department of Management Studies
Indian Institute of Technology, Roorkee

Lecture - 19
Environment - II

Welcome to this course on Organization Theory Structure and Design. Now we will talk about module 19. So, as you can see that in this part 2, module 18, 19 and 20 are dedicated to understanding of the environment. So, we have completed module 18, now we will continue with discussing about Environment in module 19 also.

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A presentation slide titled "MODULE OVERVIEW" in bold black text. Below the title is a bulleted list: "Describing in detail the contributions of:" followed by three sub-points: "Burns and Stalker;", "Emery and Trist; and", and "Lawrence and Lorsch." The slide has a dark blue header and footer. The footer contains the IIT Roorkee logo, the text "NPTEL ONLINE CERTIFICATION COURSE", and a small number "4" on the right.

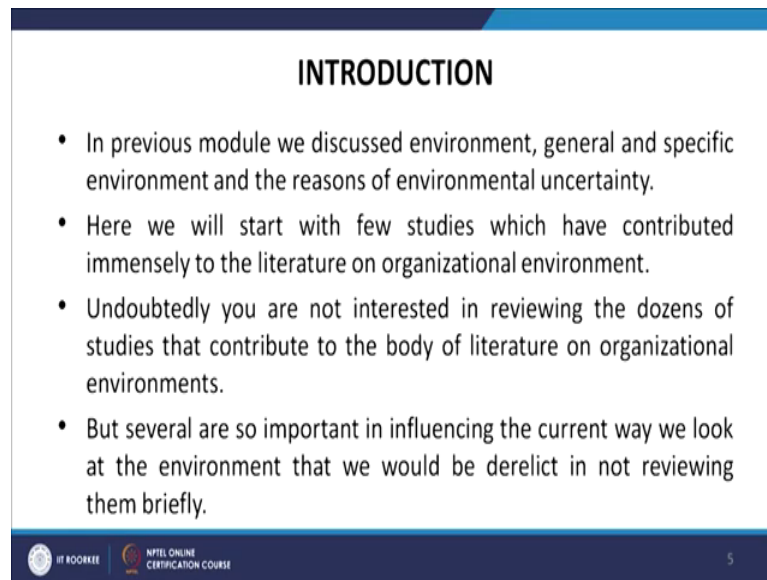
MODULE OVERVIEW

- Describing in detail the contributions of:
 - Burns and Stalker;
 - Emery and Trist; and
 - Lawrence and Lorsch.

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And these are the things that we will talk about today in this module that is the contributions of Burns and Stalker, Emery and Trist and Lawrence and Lorsch.

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INTRODUCTION

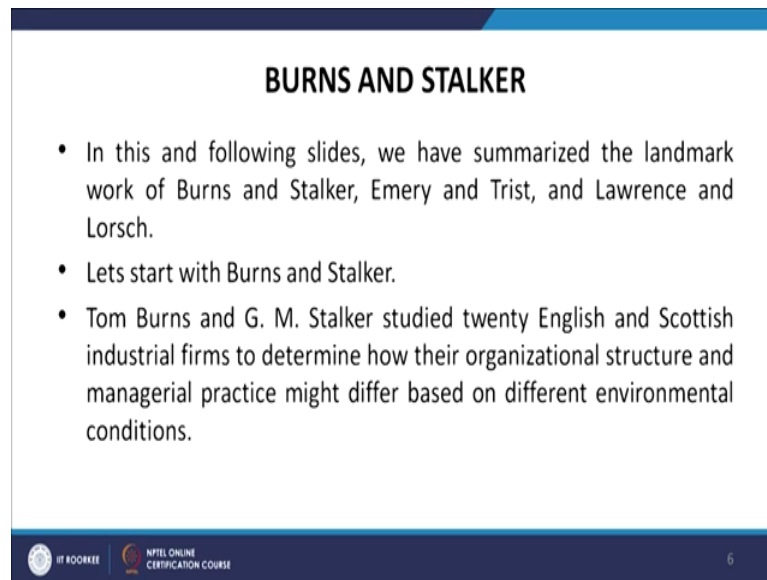
- In previous module we discussed environment, general and specific environment and the reasons of environmental uncertainty.
- Here we will start with few studies which have contributed immensely to the literature on organizational environment.
- Undoubtedly you are not interested in reviewing the dozens of studies that contribute to the body of literature on organizational environments.
- But several are so important in influencing the current way we look at the environment that we would be derelict in not reviewing them briefly.

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To start with, in the previous module we had discussed the environment, general and specific environment and the reasons of environmental uncertainty. Here we will start with few studies which have contributed immensely to the literature on organizational environment.

Undoubtedly you are not interested in reviewing the dozens of studies that contribute to the body of literature on organizational environment, but several are so important in influencing the current way we look at the environment that we would be derelict in not reviewing them briefly.

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BURNS AND STALKER

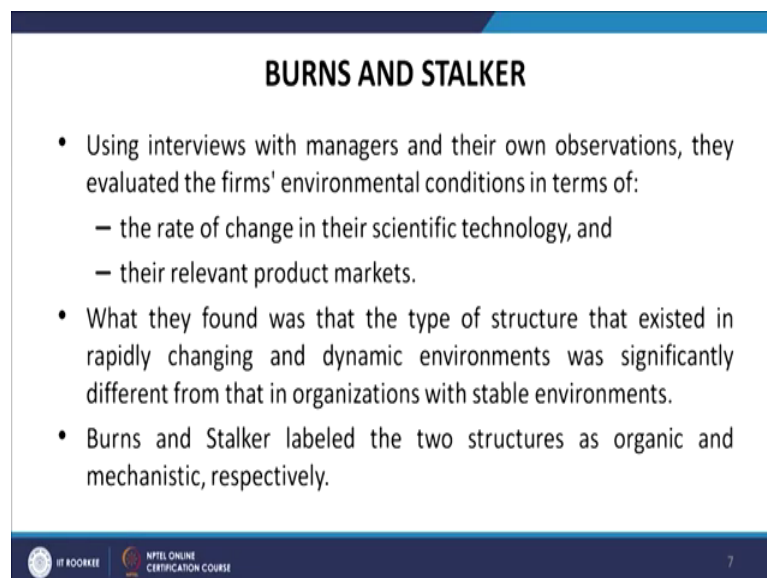
- In this and following slides, we have summarized the landmark work of Burns and Stalker, Emery and Trist, and Lawrence and Lorsch.
- Lets start with Burns and Stalker.
- Tom Burns and G. M. Stalker studied twenty English and Scottish industrial firms to determine how their organizational structure and managerial practice might differ based on different environmental conditions.

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Therefore, we are viewing these three studies. So, in this and the following slides we have summarized the landmark works of Burns and Stalker, Emery and Trist and Lawrence and Lorsch. So, these are the three studies that are important for us to understand so far as environment and environmental uncertainty are concerned.

So, let us start with Burns and Stalker. Tom Burns and G. M. Stalker studied twenty English and Scottish industrial firms to determine how their organizational structure and managerial practice might differ based on different environmental conditions.

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BURNS AND STALKER

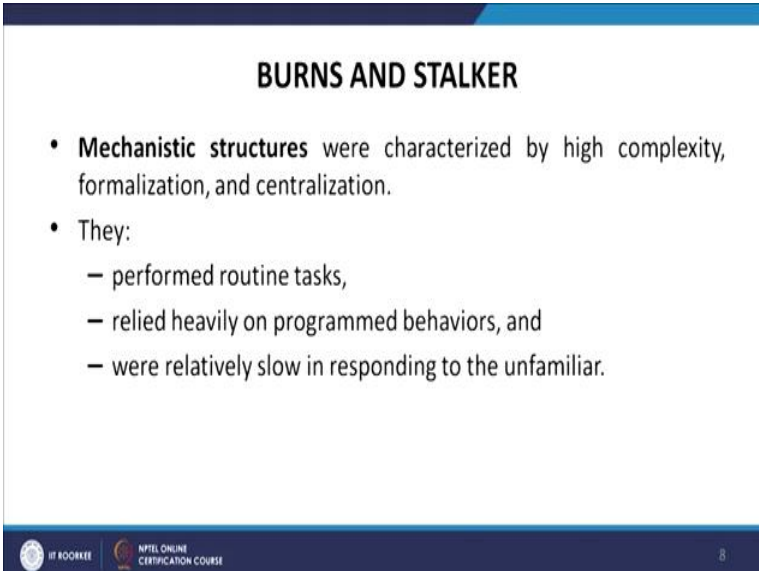
- Using interviews with managers and their own observations, they evaluated the firms' environmental conditions in terms of:
 - the rate of change in their scientific technology, and
 - their relevant product markets.
- What they found was that the type of structure that existed in rapidly changing and dynamic environments was significantly different from that in organizations with stable environments.
- Burns and Stalker labeled the two structures as organic and mechanistic, respectively.

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Using interviews with managers and their own observation they evaluated the firms' environmental conditions in terms of; one, the rate of change in their scientific technology and two, their relevant product markets.

What they found was that the type of structure that existed in rapidly changing and dynamic environment was significantly different from that in organizations with a stable environment. Burns and Stalker labeled the two structures as organic and mechanistic respectively. So, the rapidly changing and dynamic environment was termed as organic and the stable environment was termed as mechanistic.

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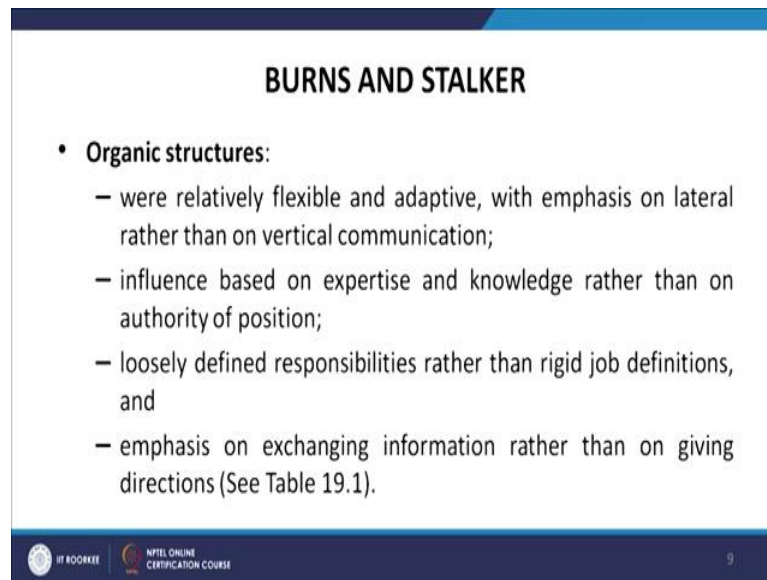
BURNS AND STALKER

- **Mechanistic structures** were characterized by high complexity, formalization, and centralization.
- They:
 - performed routine tasks,
 - relied heavily on programmed behaviors, and
 - were relatively slow in responding to the unfamiliar.

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Now, let us look at what are these mechanistic structures; mechanistic structures were categorized by high complexity, formalization and centralization. They performed routine tasks, relied heavily on programmed behaviors and were relatively slow in responding to the unfamiliar. While organic structures were relatively flexible and adaptive with emphasis on lateral rather than the vertical communication.

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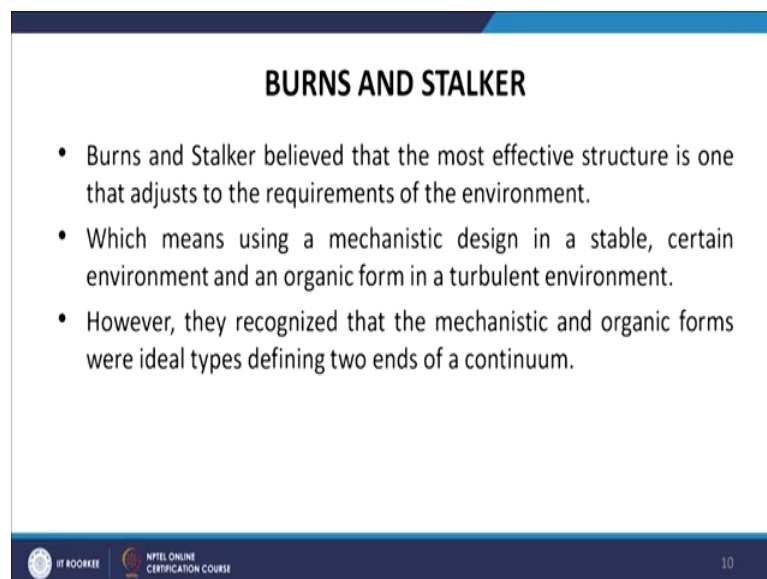
BURNS AND STALKER

- **Organic structures:**
 - were relatively flexible and adaptive, with emphasis on lateral rather than on vertical communication;
 - influence based on expertise and knowledge rather than on authority of position;
 - loosely defined responsibilities rather than rigid job definitions, and
 - emphasis on exchanging information rather than on giving directions (See Table 19.1).

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Influence based on expertise and knowledge rather than on authority of position; loosely defined responsibilities rather than rigid job definitions and emphasis on exchanging information rather than on giving directions.

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BURNS AND STALKER

- Burns and Stalker believed that the most effective structure is one that adjusts to the requirements of the environment.
- Which means using a mechanistic design in a stable, certain environment and an organic form in a turbulent environment.
- However, they recognized that the mechanistic and organic forms were ideal types defining two ends of a continuum.

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So, let us see that is elaborated in table 19.1. Burns and Stalker believed that the most effective structure is one that adjust to the requirements of the environment. Which means using a mechanistic design in a stable certain environment and organic form in a

turbulent environment. However, they recognize that the mechanistic and organic forms were ideal types defining two ends of a continuum.

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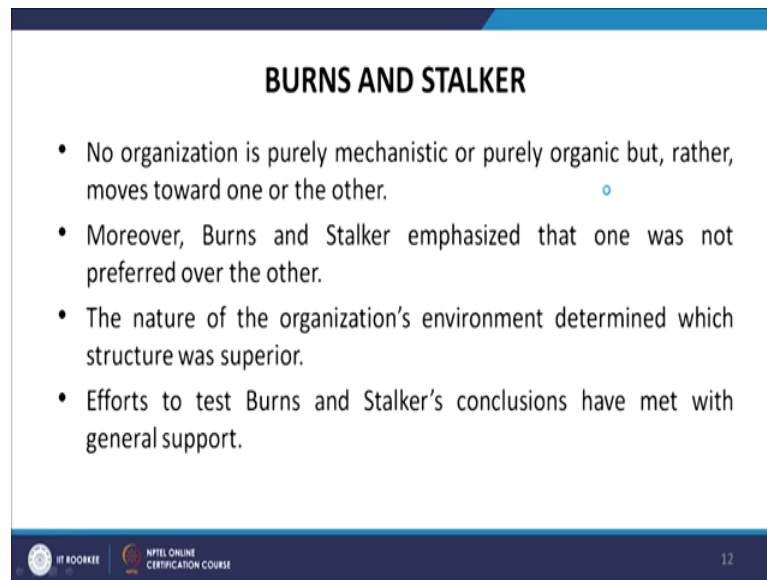
BURNS AND STALKER		
Table 19.1 Comparing Mechanistic and Organic Structures		
CHARACTERISTIC	MECHANISTIC	ORGANIC
Task Definition	Rigid	Flexible
Communication	Vertical	Lateral
Formalization	High	Low
Influence	Authority	Expertise
Control	Centralized	Diverse

Source: Robbins, S. P. (1990). *Organization Theory: Structures, Designs, and Applications*. Pearson Education India.

So, these are the two ends of this continuum this is table 19.1 that we are now looking at. So, on the left hand side we have this mechanistic and then followed by organic. Now, you see that the task definition in mechanistic is rigid while in organic it is flexible.

Communication in mechanistic is vertical and in organic it is lateral. Formalization in mechanistic is high while in organic it is low. Influence in mechanistic is authority and in organic it is expertise while control in mechanistic is centralized and control in organic is diverse.

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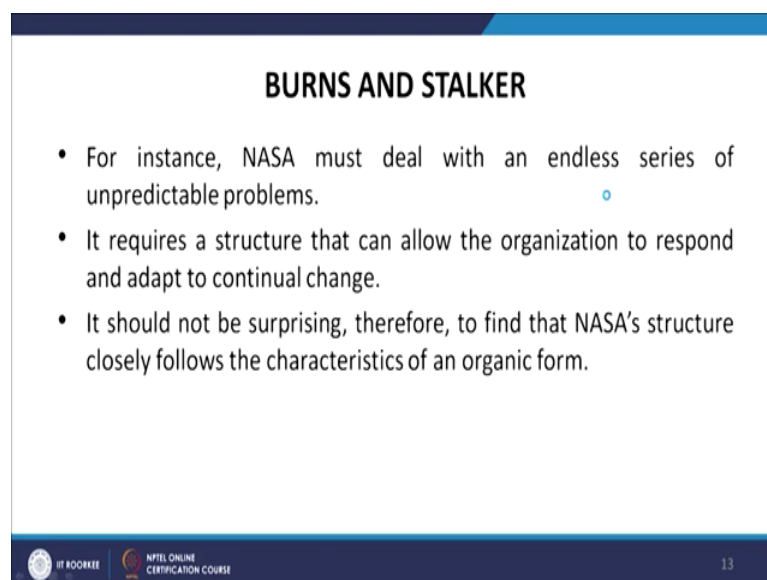
BURNS AND STALKER

- No organization is purely mechanistic or purely organic but, rather, moves toward one or the other.
- Moreover, Burns and Stalker emphasized that one was not preferred over the other.
- The nature of the organization's environment determined which structure was superior.
- Efforts to test Burns and Stalker's conclusions have met with general support.

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So, no organization is purely mechanistic or purely organic, but rather moves towards one or the other. Moreover, Burns and Stalker emphasized that one was not preferred over the other. The nature of the organization's environment determined which structure was superior. Efforts to test Burns and Stalkers conclusions have met with general support.

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BURNS AND STALKER

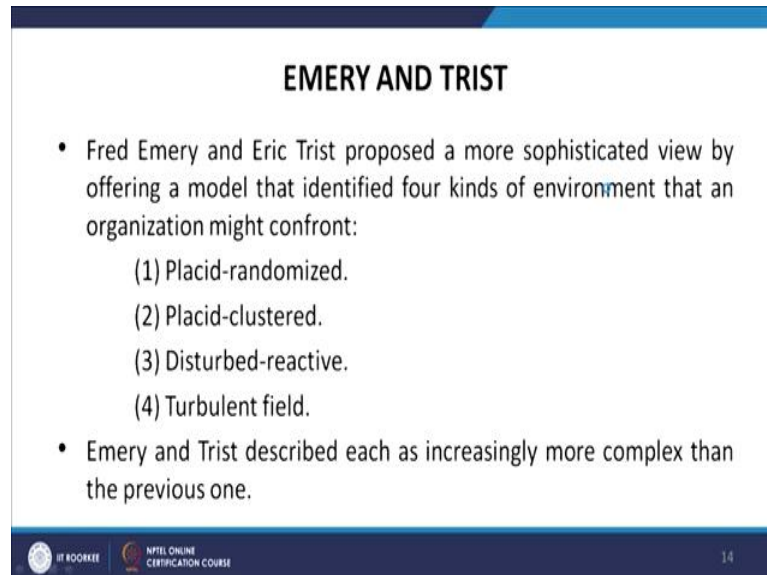
- For instance, NASA must deal with an endless series of unpredictable problems.
- It requires a structure that can allow the organization to respond and adapt to continual change.
- It should not be surprising, therefore, to find that NASA's structure closely follows the characteristics of an organic form.

IT ROORKEE | NPTEL ONLINE CERTIFICATION COURSE 13

For instance, NASA must deal with an endless series of unpredictable problems. It requires a structure that allows the organization to respond and adapt to continual

change. It should not be surprising therefore to find that NASA's structure closely follows the characteristics of an organic form.

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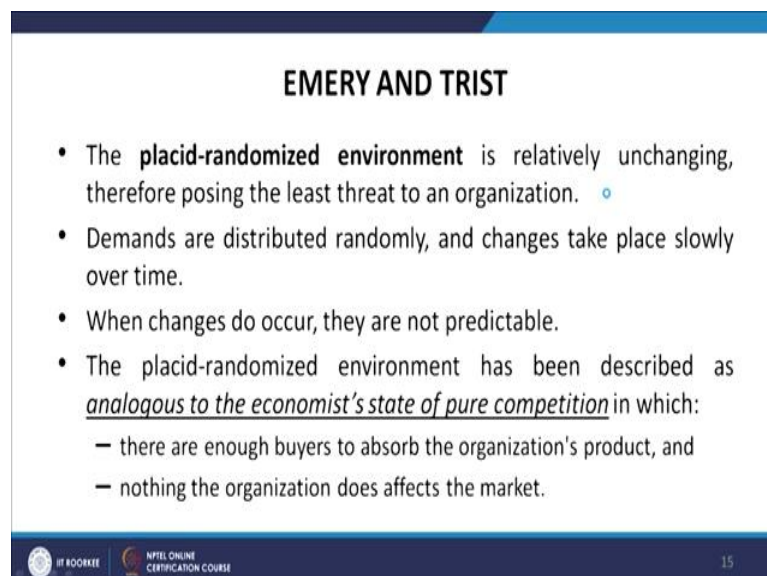
EMERY AND TRIST

- Fred Emery and Eric Trist proposed a more sophisticated view by offering a model that identified four kinds of environment that an organization might confront:
 - (1) Placid-randomized.
 - (2) Placid-clustered.
 - (3) Disturbed-reactive.
 - (4) Turbulent field.
- Emery and Trist described each as increasingly more complex than the previous one.

IFT ROORKEE | NPTEL ONLINE CERTIFICATION COURSE 14

Now, the next study in line is Emery and Trist. Fred Emery and Eric Trist proposed a more sophisticated view by offering a model that identified four kinds of environment that an organization must confront. So, first is placid-randomized, another is placid-clustered, then comes distributed-reactive and turbulent-field. Emery and Trist described each as increasingly more complex than the previous one.

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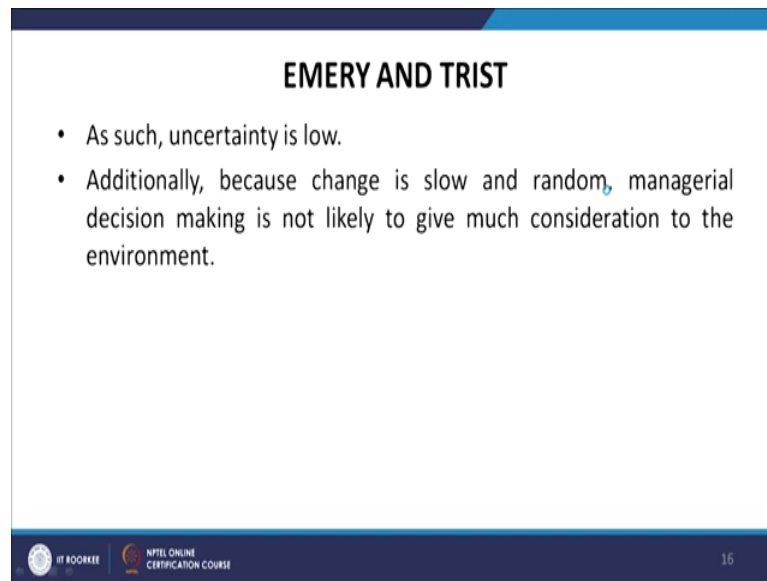
EMERY AND TRIST

- The **placid-randomized environment** is relatively unchanging, therefore posing the least threat to an organization.
- Demands are distributed randomly, and changes take place slowly over time.
- When changes do occur, they are not predictable.
- The placid-randomized environment has been described as analogous to the economist's state of pure competition in which:
 - there are enough buyers to absorb the organization's product, and
 - nothing the organization does affects the market.

IFT ROORKEE | NPTEL ONLINE CERTIFICATION COURSE 15

So, the placid-randomized environment is relatively unchanging, therefore posing the least threats to an organization. Demands are distributed randomly and changes take place slowly over time. When changes do occur, they are not predictable. The placid-randomized environment has been described as analogous to the economist's state of pure competition in which there are enough buyers to absorb the organization products and nothing the organization does affects the market.

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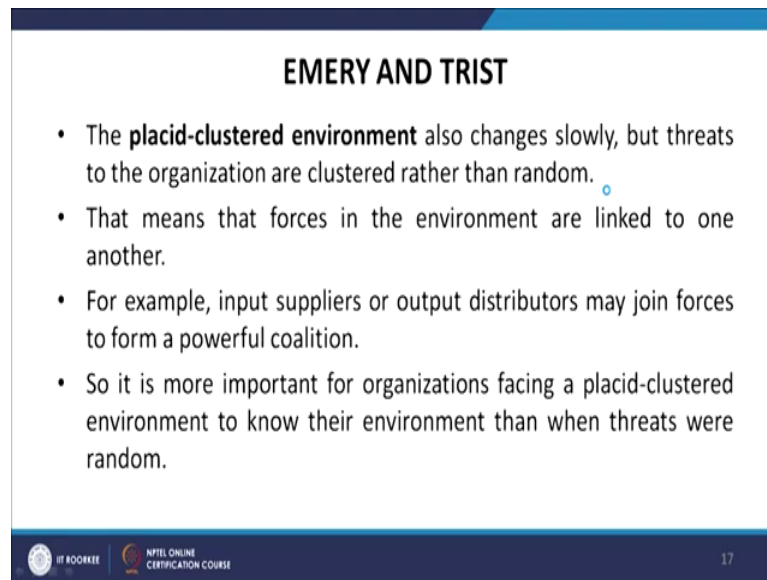
EMERY AND TRIST

- As such, uncertainty is low.
- Additionally, because change is slow and random, managerial decision making is not likely to give much consideration to the environment.

IT ROOBBEE | NPTEL ONLINE CERTIFICATION COURSE | 16

As such, uncertainty is low additionally because change is slow and random managerial decision making is not likely to give much consideration to the environment.

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EMERY AND TRIST

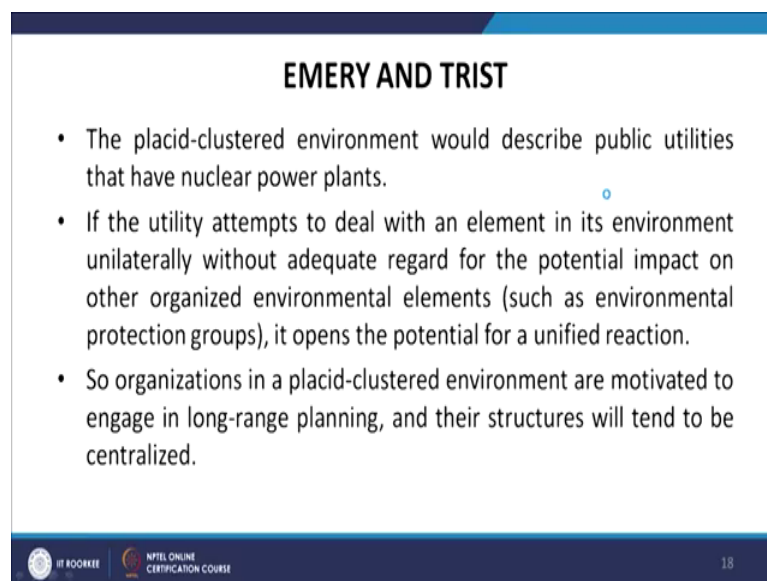
- The **placid-clustered environment** also changes slowly, but threats to the organization are clustered rather than random.
- That means that forces in the environment are linked to one another.
- For example, input suppliers or output distributors may join forces to form a powerful coalition.
- So it is more important for organizations facing a placid-clustered environment to know their environment than when threats were random.

IIT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 17

The placid-clustered environment also changes slowly but threats to the organization are clustered rather than random. That means that forces in the environment are linked to one another.

For example, input suppliers or output distributors may join forces to form a powerful coalition. So, it is more important for organizations facing a placid-clustered environment to know their environment than when threats were random.

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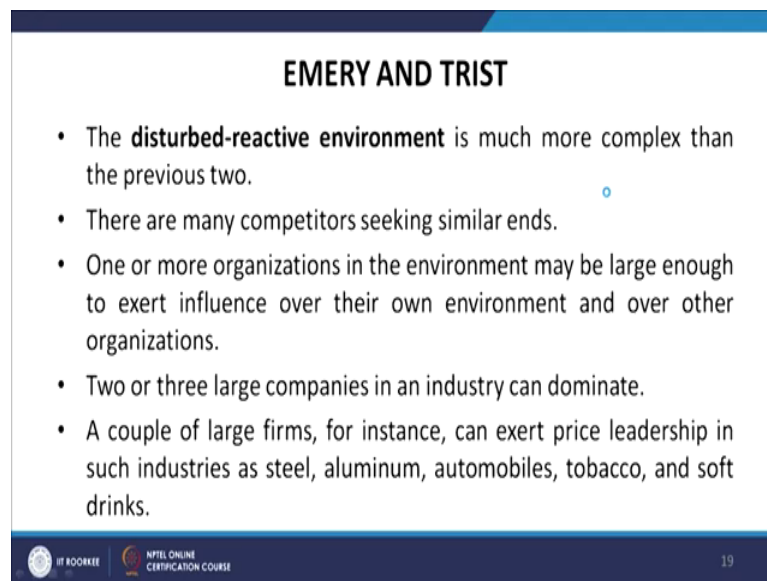
EMERY AND TRIST

- The placid-clustered environment would describe public utilities that have nuclear power plants.
- If the utility attempts to deal with an element in its environment unilaterally without adequate regard for the potential impact on other organized environmental elements (such as environmental protection groups), it opens the potential for a unified reaction.
- So organizations in a placid-clustered environment are motivated to engage in long-range planning, and their structures will tend to be centralized.

IIT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 18

The placid-clustered environment would describe public utilities that have nuclear power plants. If the utility attempts to deal with an element in its environment unilaterally without adequate regard for the potential impact on other organized environmental elements such as environmental protection groups, it opens the potential for a unified reaction. So, organizations in a placid-clustered environment are motivated to engage in a long range planning and their structure will tend to be centralized.

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The slide is titled "EMERY AND TRIST" in bold black text. Below the title is a bulleted list of five points describing a disturbed-reactive environment. The slide has a dark blue header and footer. The footer contains the IIT ROORKEE logo, the text "NPTEL ONLINE CERTIFICATION COURSE", and the number "19".

- The **disturbed-reactive environment** is much more complex than the previous two.
- There are many competitors seeking similar ends.
- One or more organizations in the environment may be large enough to exert influence over their own environment and over other organizations.
- Two or three large companies in an industry can dominate.
- A couple of large firms, for instance, can exert price leadership in such industries as steel, aluminum, automobiles, tobacco, and soft drinks.

The distributed-reactive environment is much more complex than the previous two. There are many competitors seeking similar ends. One or more organizations in the environment may be large enough to exert influence over their own environment and over other organizations. Two or three large companies in an industry can dominate. A couple of large firms for instance can exert price leadership in such industries as steel, aluminum, automobile, tobacco and soft drinks.

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EMERY AND TRIST

- For instance;
 - Armco Steel (An American steelmaking company) cannot afford to ignore the future plans and current actions of USX Corp (an American integrated steel producer).
 - Similarly, when 7-Up began to actively market their soda by emphasizing its caffeine-free contents, the other major soft-drink firms—notably Coca-Cola and PepsiCo—quickly introduced caffeine-free products.

IT ROOKIE NPTEL ONLINE CERTIFICATION COURSE 20

For instance, Armco steel, an American steel making company cannot afford to ignore the future plans and current actions of USX Corp, an American integrated steel producer. Similarly, when 7-Up began to actively market their soda by emphasizing its caffeine-free contents, the other major soft drink firms notably Coca-Cola and PepsiCo quickly introduced caffeine free products.

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EMERY AND TRIST

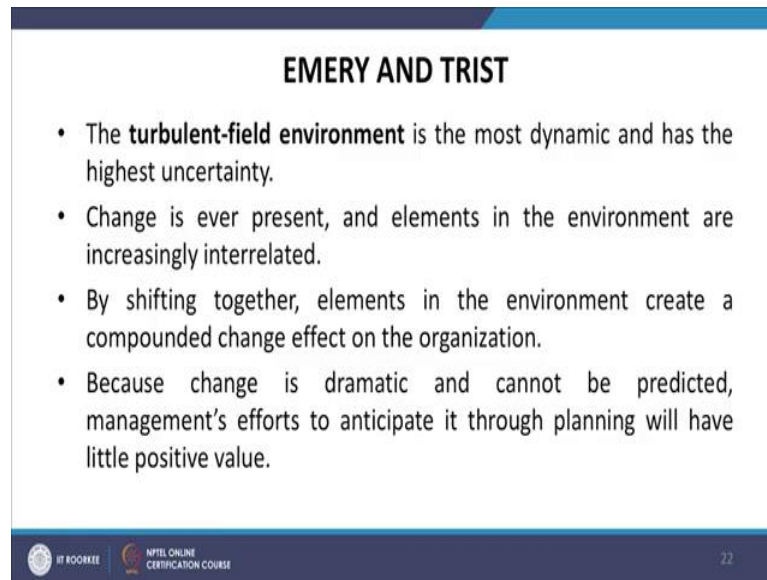
- Organizations facing a disturbed-reactive environment develop planned series of tactical initiatives, calculate reactions by others, and evolve counteractions.
- This competition requires flexibility to survive, and the structure of these organizations tends toward decentralization.

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Organizations facing a distributed-reactive environment develop planned series of tactical initiatives, calculate reactions by others and evolve counteractions. This

competition requires flexibility to survive and the structure of these organizations tend towards decentralization. The turbulent field environment is the most dynamic and has the highest uncertainty.

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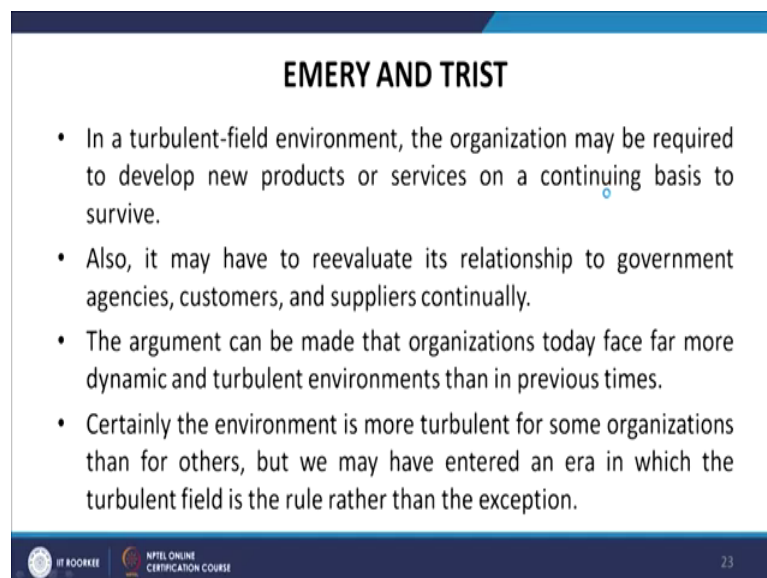
EMERY AND TRIST

- The **turbulent-field environment** is the most dynamic and has the highest uncertainty.
- Change is ever present, and elements in the environment are increasingly interrelated.
- By shifting together, elements in the environment create a compounded change effect on the organization.
- Because change is dramatic and cannot be predicted, management's efforts to anticipate it through planning will have little positive value.

IT ROOKIE NPTEL ONLINE CERTIFICATION COURSE 22

Change is ever present and elements in the environment are increasingly interrelated. By shifting together elements in the environment create a compounded change effect on the organization. Because change is dramatic and cannot be predicted, managements efforts to anticipate it through planning will have little positive value.

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EMERY AND TRIST

- In a turbulent-field environment, the organization may be required to develop new products or services on a continuing basis to survive.
- Also, it may have to reevaluate its relationship to government agencies, customers, and suppliers continually.
- The argument can be made that organizations today face far more dynamic and turbulent environments than in previous times.
- Certainly the environment is more turbulent for some organizations than for others, but we may have entered an era in which the turbulent field is the rule rather than the exception.

IT ROOKIE NPTEL ONLINE CERTIFICATION COURSE 23

In a turbulent-field environment the organization may be required to develop new products or services on a continuing basis in order to survive. Also, it may have to reevaluate its relationship to government agencies, customers and suppliers continually.

The argument can be made that organizations to today face far more dynamic and turbulent environment than in previous times. Certainly, the environment is more turbulent for some organizations than for the others, but we may have entered an era in which the turbulent field is the rule rather than the exception.

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EMERY AND TRIST


- A few of these changes are listed in Table 19.2 .

Table 19.2: Major Environment Changes in Recent Years

Technological
Introduction of microcomputers
Telecommunication satellites
Worldwide telephone direct dialing
Social
Women's movement
Concern for physical fitness
Resurgence of urban centers for commercial and residential development
Economic
Deregulation of the airline and trucking industries
Rapid rise, then fall, of oil prices
Decline in the inflation rate

Source: Robbins, S. P. (1990). *Organization Theory: Structures, Designs, and Applications*. Pearson Education India.

 IIT Kharagpur

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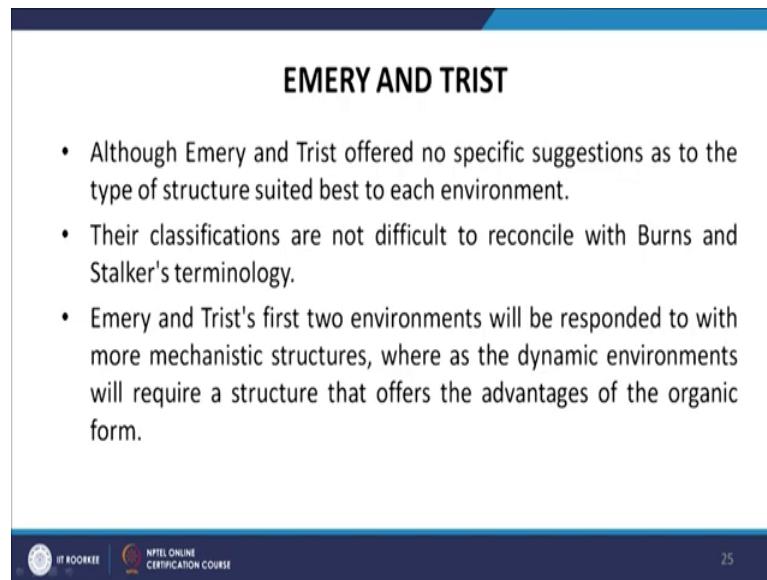
24

So, the few of these changes are listed in this table 19.2. So, this table 19.2, it highlights major environmental changes in recent years.

For example, in the technological environment, the changes that have happened in recent years are introduction of microcomputers, telecommunication satellites and worldwide telephone direct dialing while in the social environment that includes a women's movement, concern for physical fitness, resurgence of urban centers for commercial and residential development.

In the economic environment various changes have happened including deregulation of airline and trucking industries, rapid rise, then fall of oil prices, so you see that oil prices keeps on changing every day and there is decline in inflation rates.

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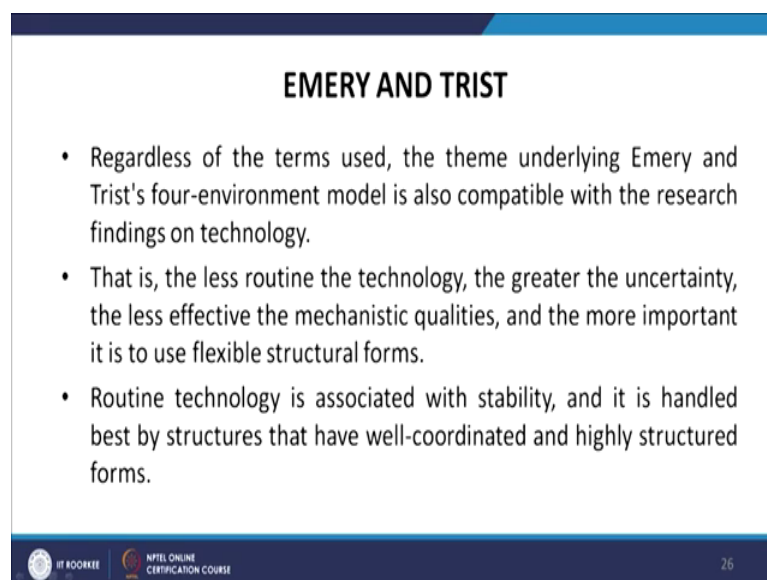
EMERY AND TRIST

- Although Emery and Trist offered no specific suggestions as to the type of structure suited best to each environment.
- Their classifications are not difficult to reconcile with Burns and Stalker's terminology.
- Emery and Trist's first two environments will be responded to with more mechanistic structures, whereas the dynamic environments will require a structure that offers the advantages of the organic form.

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So, although Emery and Trist offered no specific suggestions as to the type of structure suited best to each environment. Their classification is not difficult to reconcile with Burns and Stalkers terminology. Emery and Trist first two environments will be responded to with more mechanistic structures whereas the dynamic environments will require a structure that offers the advantage of the organic form.

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EMERY AND TRIST

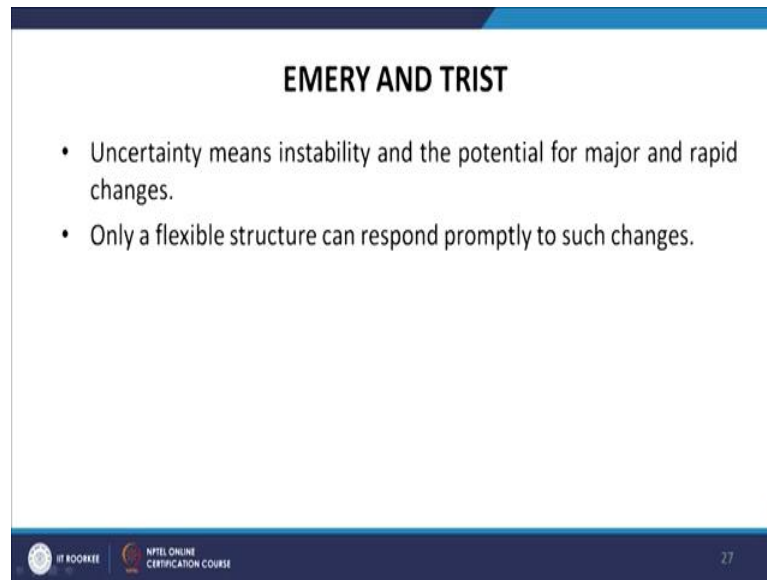
- Regardless of the terms used, the theme underlying Emery and Trist's four-environment model is also compatible with the research findings on technology.
- That is, the less routine the technology, the greater the uncertainty, the less effective the mechanistic qualities, and the more important it is to use flexible structural forms.
- Routine technology is associated with stability, and it is handled best by structures that have well-coordinated and highly structured forms.

IIT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 26

Regardless of the terms used the theme underlying Emery and Trist four environmental model is also compatible with the research findings on technology. That is the less

routine the technology, the greater the uncertainty, the less effective the mechanistic qualities and the more important it is to use flexible structural forms. Routine technology is associated with stability and it is handled best by structures that have well coordinated and highly structured forms.

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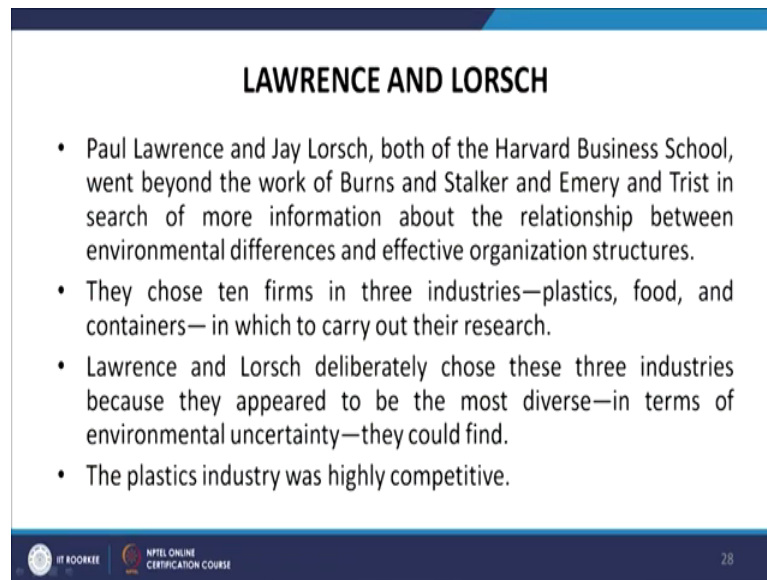


The slide is titled "EMERY AND TRIST" in bold black text. Below the title, there are two bullet points: "• Uncertainty means instability and the potential for major and rapid changes." and "• Only a flexible structure can respond promptly to such changes." The slide has a blue header and footer. The footer contains the logos of IIT ROORKEE and NPTEL ONLINE CERTIFICATION COURSE, along with the page number 27.

- Uncertainty means instability and the potential for major and rapid changes.
- Only a flexible structure can respond promptly to such changes.

Uncertainty means instability and the potential for major and rapid changes. Only a flexible structure can respond promptly to such changes. The last study in this line is Lawrence and Lorsch study. So, Paul Lawrence and Jay Lorsch both of the Harvard Business School went beyond the work of Burns and Stalkers and Emery and Trist in search of more information about the relationship between environmental differences and the effective organizational structure.

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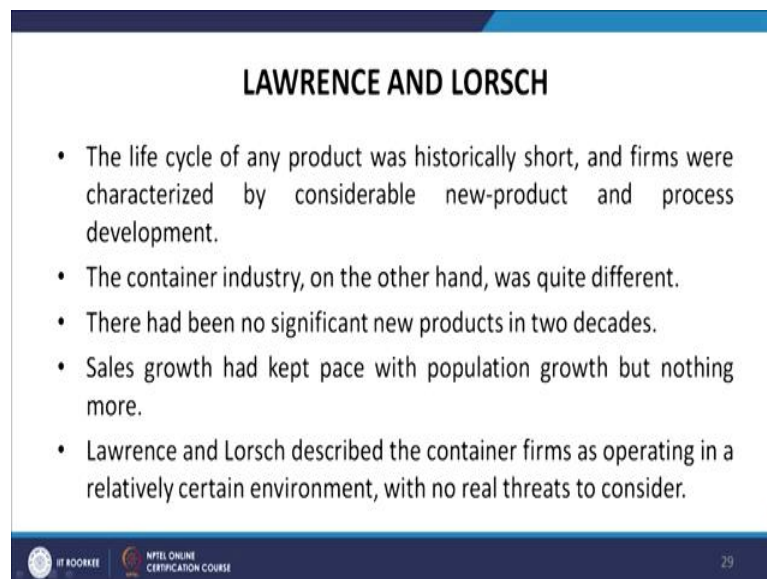
LAWRENCE AND LORSCH

- Paul Lawrence and Jay Lorsch, both of the Harvard Business School, went beyond the work of Burns and Stalker and Emery and Trist in search of more information about the relationship between environmental differences and effective organization structures.
- They chose ten firms in three industries—plastics, food, and containers—in which to carry out their research.
- Lawrence and Lorsch deliberately chose these three industries because they appeared to be the most diverse—in terms of environmental uncertainty—they could find.
- The plastics industry was highly competitive.

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They chose ten firms in three industries; plastics, food and containers in which to carry out their research. Lawrence and Lorsch deliberately chose these three industries because they appear to be most diverse in terms of environmental uncertainty they could find. The plastics industry is highly competitive.

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LAWRENCE AND LORSCH


- The life cycle of any product was historically short, and firms were characterized by considerable new-product and process development.
- The container industry, on the other hand, was quite different.
- There had been no significant new products in two decades.
- Sales growth had kept pace with population growth but nothing more.
- Lawrence and Lorsch described the container firms as operating in a relatively certain environment, with no real threats to consider.

IIT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 29

The life cycle of any product was historically short and firms were categorized by considerable new products and process development.

The container industry on the other hand was quite different. There had been no significant new product in two decades. Sales growth had kept pace with population growth but nothing more. Lawrence and Lorsch described the container firms as operating in a relatively certain environment with no real threats to consider.

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LAWRENCE AND LORSCH

- The food industry was midway between the two.
- There had been heavy innovation, but new-product generation and sales growth had been less than plastics and more than containers.
- Lawrence and Lorsch sought to match up the internal environments of these firms with their respective external environments.
- They hypothesized that the more successful firms within each industry would have better matches than the less successful firms would.

IT ROOBBEE NPTEL ONLINE CERTIFICATION COURSE 30



The food industry was midway between the two. There had been heavy innovations but new product generation and sales growth had been less than plastics and more than containers. Lawrence and Lorsch sought to match up the internal environments of these firms with their respective external environments.

They hypothesized that the most successful firms within each industry would have better matches than the less successful firms would. Their measure of the external environment sought to tap the degree of uncertainty.

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LAWRENCE AND LORSCH

- Their measure of the external environment sought to tap the degree of uncertainty.
- This measurement included:
 - 1 – the rate of change in the environment over time,
 - 2 – the clarity of information that management held about the environment, and
 - 3 – the length of time it took for management to get feedback from the environment on actions taken by the organization.



 IIT ROORKEE  NPTEL ONLINE CERTIFICATION COURSE 31

The measurement included first the rate of change in the environment over time; 1. The second is the clarity of information that management held about the environment and the third one is the length of time it took for management to get feedback from the environment on actions taken by the organization. But what constituted an organization's internal environment was the question. Lawrence and Lorsch looked at two separate dimensions; differentiation and integration.

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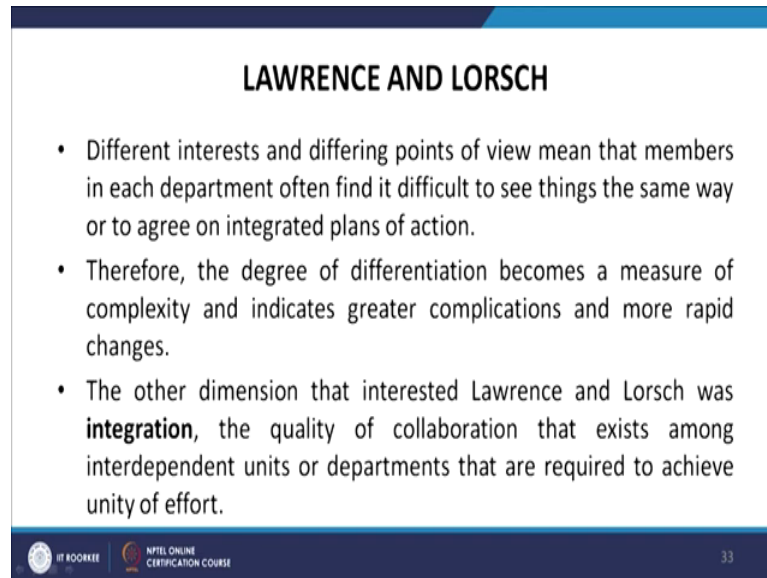
LAWRENCE AND LORSCH

- But what constituted an organization's internal environment?
- Lawrence and Lorsch looked at two separate dimensions: differentiation and integration.
- The term **differentiation** as used by Lawrence and Lorsch closely parallels our definition of horizontal differentiation.
- But, in addition to task segmentation, Lawrence and Lorsch argued that managers in various departments can be expected to hold different attitudes and behave differently in terms of their goal perspective, time frame, and interpersonal orientation.

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LAWRENCE AND LORSCH

- Different interests and differing points of view mean that members in each department often find it difficult to see things the same way or to agree on integrated plans of action.
- Therefore, the degree of differentiation becomes a measure of complexity and indicates greater complications and more rapid changes.
- The other dimension that interested Lawrence and Lorsch was **integration**, the quality of collaboration that exists among interdependent units or departments that are required to achieve unity of effort.

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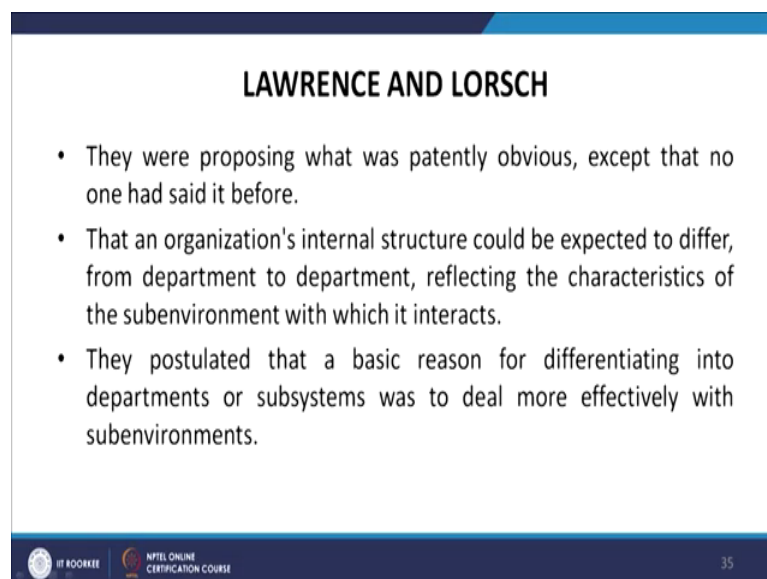
LAWRENCE AND LORSCH

- Integration devices that organizations typically use include rules and procedures, formal plans, the authority hierarchy, and decision-making committees.
- The unique, and probably the most important, part of Lawrence and Lorsch's study was that they did not assume the organization or the environment to be uniform and singular.
- In contrast to previous researchers, they perceived both the organization and the environment as having subsets; that is, that parts of the organization deal with parts of the environment.

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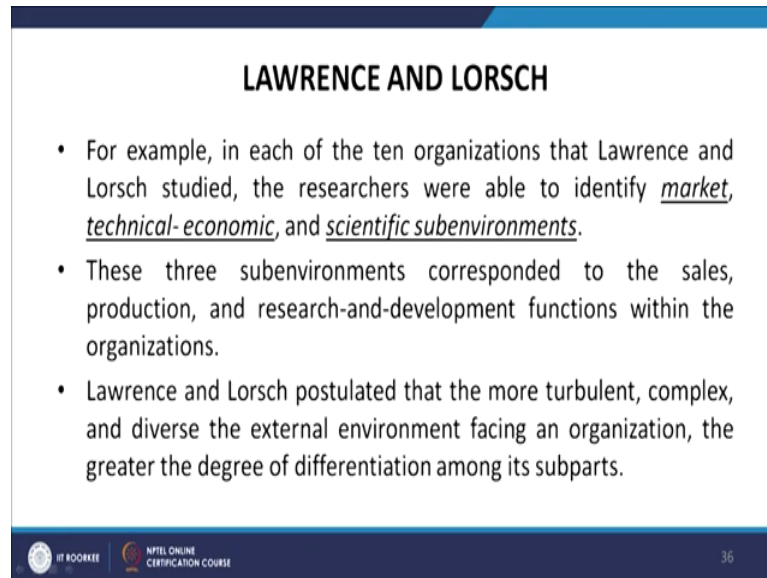
LAWRENCE AND LORSCH

- They were proposing what was patently obvious, except that no one had said it before.
- That an organization's internal structure could be expected to differ, from department to department, reflecting the characteristics of the subenvironment with which it interacts.
- They postulated that a basic reason for differentiating into departments or subsystems was to deal more effectively with subenvironments.

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LAWRENCE AND LORSCH

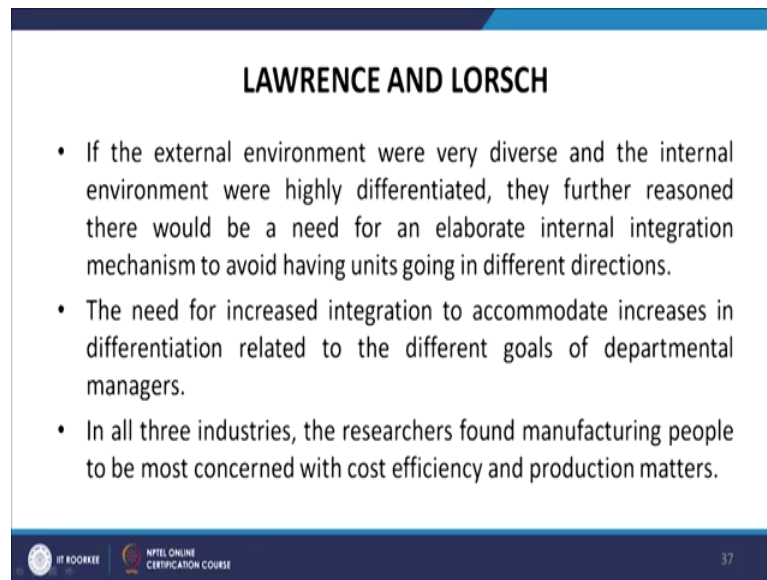
- For example, in each of the ten organizations that Lawrence and Lorsch studied, the researchers were able to identify market, technical-economic, and scientific subenvironments.
- These three subenvironments corresponded to the sales, production, and research-and-development functions within the organizations.
- Lawrence and Lorsch postulated that the more turbulent, complex, and diverse the external environment facing an organization, the greater the degree of differentiation among its subparts.

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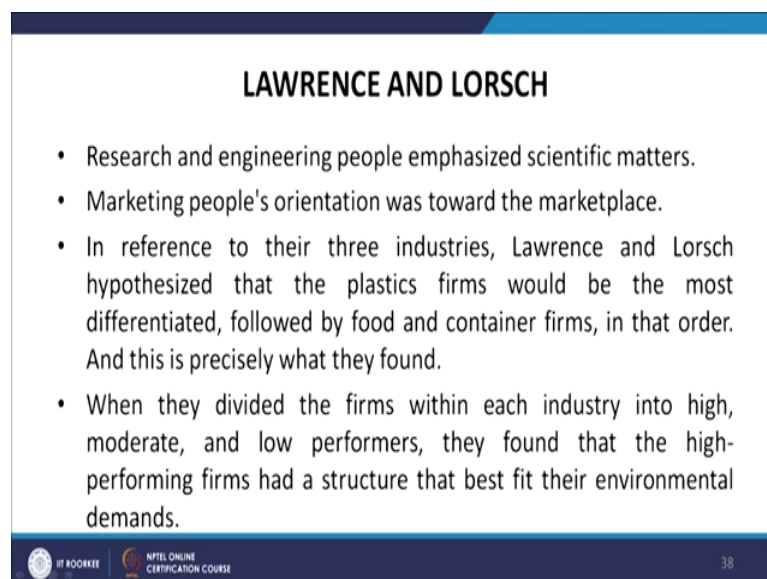
LAWRENCE AND LORSCH

- If the external environment were very diverse and the internal environment were highly differentiated, they further reasoned there would be a need for an elaborate internal integration mechanism to avoid having units going in different directions.
- The need for increased integration to accommodate increases in differentiation related to the different goals of departmental managers.
- In all three industries, the researchers found manufacturing people to be most concerned with cost efficiency and production matters.

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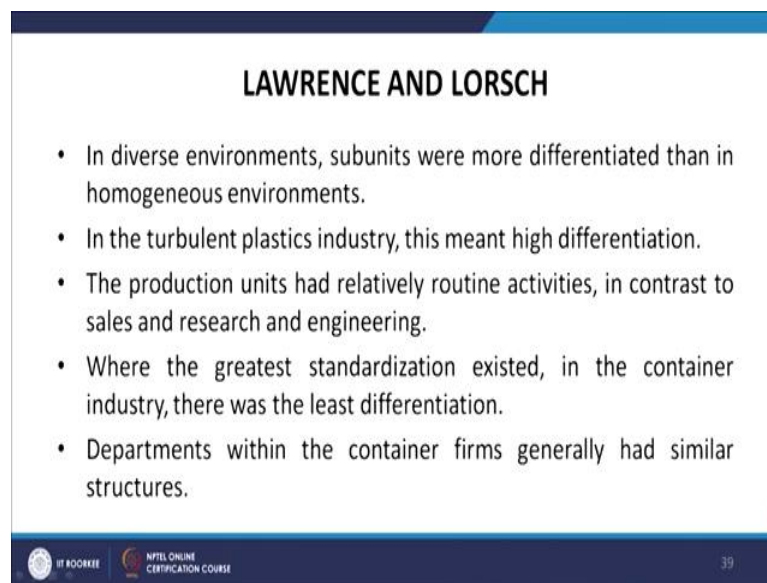
LAWRENCE AND LORSCH

- Research and engineering people emphasized scientific matters.
- Marketing people's orientation was toward the marketplace.
- In reference to their three industries, Lawrence and Lorsch hypothesized that the plastics firms would be the most differentiated, followed by food and container firms, in that order. And this is precisely what they found.
- When they divided the firms within each industry into high, moderate, and low performers, they found that the high-performing firms had a structure that best fit their environmental demands.

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LAWRENCE AND LORSCH

- In diverse environments, subunits were more differentiated than in homogeneous environments.
- In the turbulent plastics industry, this meant high differentiation.
- The production units had relatively routine activities, in contrast to sales and research and engineering.
- Where the greatest standardization existed, in the container industry, there was the least differentiation.
- Departments within the container firms generally had similar structures.

IIT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 39

In diverse environments, sub units were more differentiated than in homogeneous environments. In the turbulent plastic industry this means high differentiation. The production units had a relatively routine activities, in contrast to sales and research and engineering. Where the greatest standardization existed in the container industry there was the least differentiation. Departments within the container firms generally had similar structures.

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LAWRENCE AND LORSCH

- The food firms, as postulated, were in the middle ground.
- Additionally, the most successful firms in all three industries had a higher degree of integration than their low-performing counterparts.
- What does all this mean?
- First, there are multiple specific environments with different degrees of uncertainty.
- Second, successful organizations' subunits meet the demands of their subenvironments.

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The food firms as postulated were in the middle ground. Additionally, the most successful firms in all three industries had a higher degree of integration than their low performing counterparts. But what does all this mean to us? First there are multiple specific environments with different degrees of uncertainty. Second successful organization sub units meet the demands of their sub-environments.

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LAWRENCE AND LORSCH

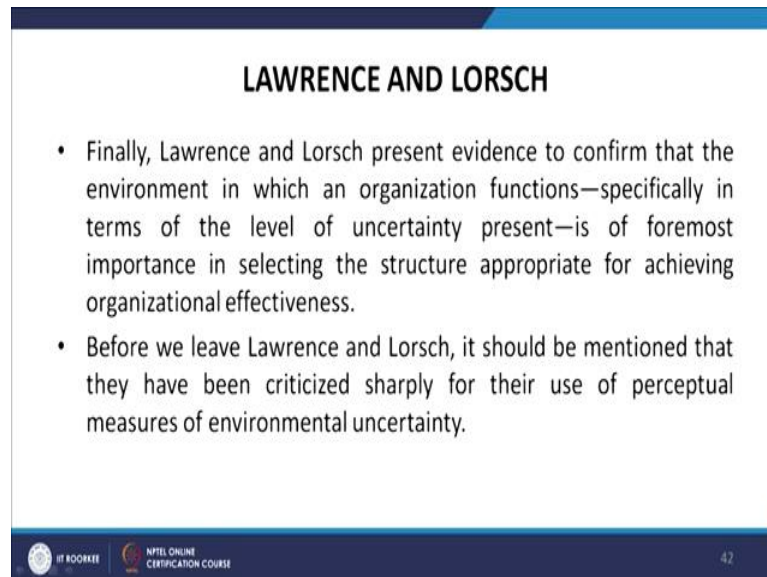
- Since differentiation and integration represent opposing forces, the key is to match the two appropriately.
- Creating differentiation between departments to deal with specific problems and tasks facing the organization and getting people to integrate and work as a cohesive team toward the organizations' goals.
- Successful organizations have more nearly solved the dilemma of providing both differentiation and integration by matching their internal subunits to the demands of the subenvironment.

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problems and tasks facing the organization and getting people to integrate and work as a cohesive team towards the organization's goals. Successful organizations have more nearly solved the dilemma of providing both differentiation and integration by matching their internal subunits to the demands of the sub-environments.

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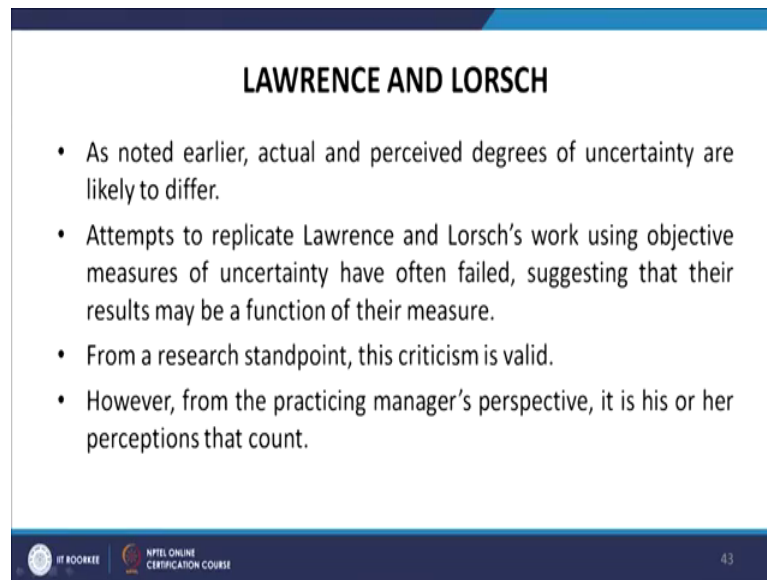
LAWRENCE AND LORSCH

- Finally, Lawrence and Lorsch present evidence to confirm that the environment in which an organization functions—specifically in terms of the level of uncertainty present—is of foremost importance in selecting the structure appropriate for achieving organizational effectiveness.
- Before we leave Lawrence and Lorsch, it should be mentioned that they have been criticized sharply for their use of perceptual measures of environmental uncertainty.

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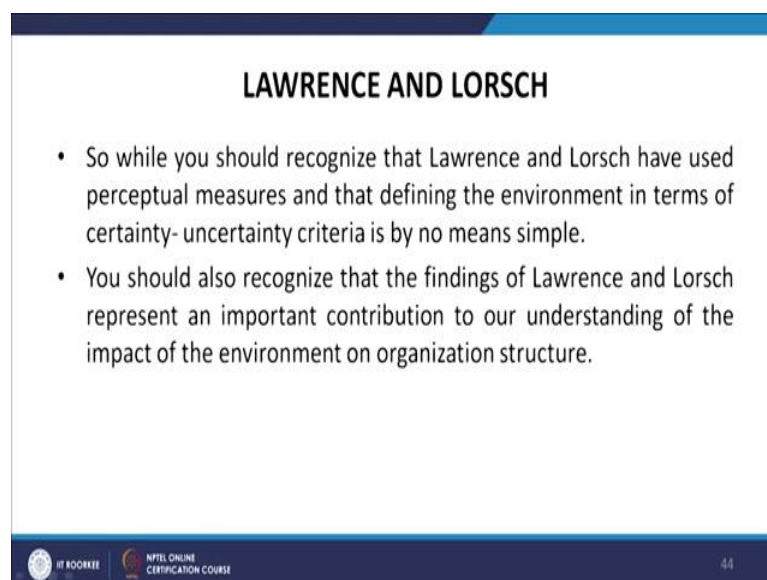
LAWRENCE AND LORSCH

- As noted earlier, actual and perceived degrees of uncertainty are likely to differ.
- Attempts to replicate Lawrence and Lorsch's work using objective measures of uncertainty have often failed, suggesting that their results may be a function of their measure.
- From a research standpoint, this criticism is valid.
- However, from the practicing manager's perspective, it is his or her perceptions that count.

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As noted earlier, actual and perceived degrees of uncertainty are likely to differ. Attempts to replicate Lawrence and Lorsch work using objective measures of uncertainty have often failed, suggesting that their results may be a function of their measure. From a research standpoint this criticism is valid. However, from the practicing manager's perspective it is his or her perception that counts.

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LAWRENCE AND LORSCH

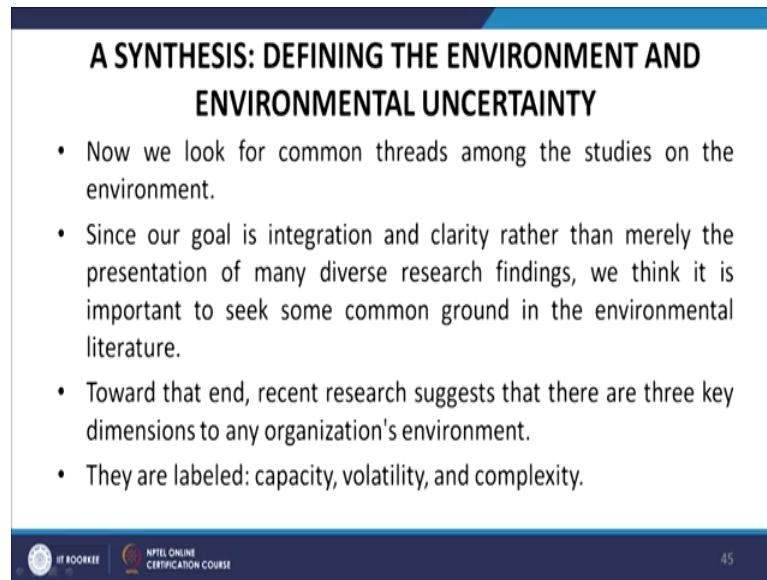
- So while you should recognize that Lawrence and Lorsch have used perceptual measures and that defining the environment in terms of certainty-uncertainty criteria is by no means simple.
- You should also recognize that the findings of Lawrence and Lorsch represent an important contribution to our understanding of the impact of the environment on organization structure.

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by no means simple. You should also recognize that the findings of Lawrence and Lorsch represents an important contribution to our understanding of the impact of the environment on organization structure.

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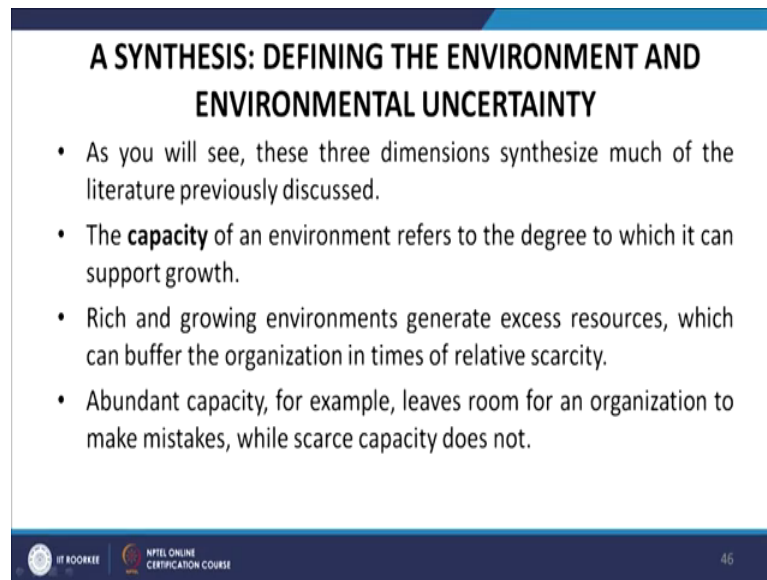
A SYNTHESIS: DEFINING THE ENVIRONMENT AND ENVIRONMENTAL UNCERTAINTY

- Now we look for common threads among the studies on the environment.
- Since our goal is integration and clarity rather than merely the presentation of many diverse research findings, we think it is important to seek some common ground in the environmental literature.
- Toward that end, recent research suggests that there are three key dimensions to any organization's environment.
- They are labeled: capacity, volatility, and complexity.

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Now, let us do a synthesis defining the environment and environmental uncertainty. Now, we will look for common threads among the studies on the environment. Since our goal is integration and clarity rather than merely the presentation of many diverse research findings, we think it is important to seek some common ground in the environmental literature. Towards that end, recent research suggests that there are three key dimensions of an organization's environment. And they are labeled as capacity, volatility and complexity.

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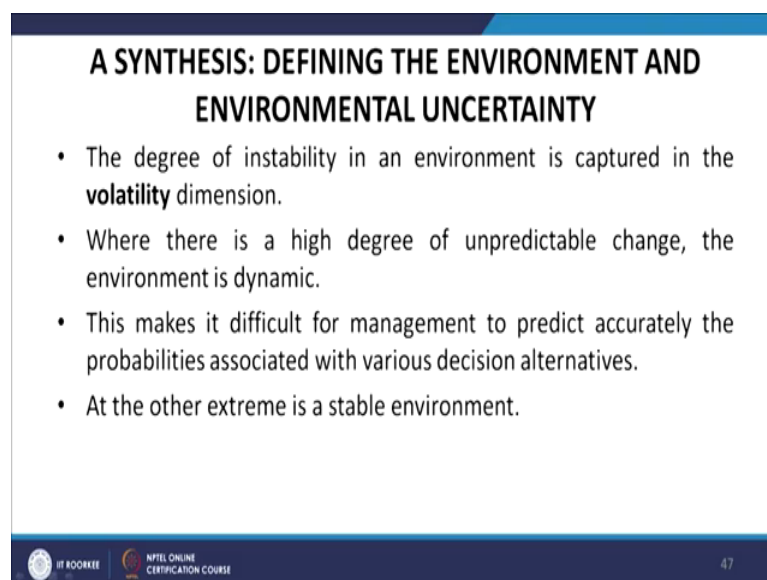
A SYNTHESIS: DEFINING THE ENVIRONMENT AND ENVIRONMENTAL UNCERTAINTY

- As you will see, these three dimensions synthesize much of the literature previously discussed.
- The **capacity** of an environment refers to the degree to which it can support growth.
- Rich and growing environments generate excess resources, which can buffer the organization in times of relative scarcity.
- Abundant capacity, for example, leaves room for an organization to make mistakes, while scarce capacity does not.

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So, as you will see these three dimensions synthesize much of the literature previously discussed. The capacity of an environment refers to the degree to which it can support growth. Rich and growing environments generate excess resources which can buffer the organizations in times of relative scarcity. Abundant capacity for example leaves room for an organization to make mistakes while scarce capacity does not.

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A SYNTHESIS: DEFINING THE ENVIRONMENT AND ENVIRONMENTAL UNCERTAINTY

- The degree of instability in an environment is captured in the **volatility** dimension.
- Where there is a high degree of unpredictable change, the environment is dynamic.
- This makes it difficult for management to predict accurately the probabilities associated with various decision alternatives.
- At the other extreme is a stable environment.

IIT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 47

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A SYNTHESIS: DEFINING THE ENVIRONMENT AND ENVIRONMENTAL UNCERTAINTY

- Finally, the environment needs to be assessed in terms of **complexity** ; that is, the degree of heterogeneity and concentration among environmental elements.
- Simple environments are homogeneous and concentrated.
- This might describe the tobacco industry, since there are relatively few players.
- Its easy for firms in this industry to keep a close eye on the competition.

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Finally, the environment needs to be assessed in terms of complexity, that is, the degree of heterogeneity and concentration among environmental elements. Simple environments are homogeneous and concentrated. This might describe the tobacco industry since there are relatively few players. It is easy for firms in this industry to keep a close eye on the competition, in contrast environments categorized by heterogeneity and dispersion are called complex.

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A SYNTHESIS: DEFINING THE ENVIRONMENT AND ENVIRONMENTAL UNCERTAINTY

- In contrast, environments characterized by heterogeneity and dispersion are called complex.
- This is essentially the current environment in the computer software business. Everyday there is another "new kid on the block" with whom established software firms have to deal.
- Figure 19.1 summarizes our definition of the environment along its three dimensions.

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This is essentially the current environment in the computer software business. Every day there is another new kid on the block with whom established software firms have to deal. Figure 19.1 summarize our definition of the environment along its three dimensions.

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A SYNTHESIS: DEFINING THE ENVIRONMENT AND ENVIRONMENTAL UNCERTAINTY

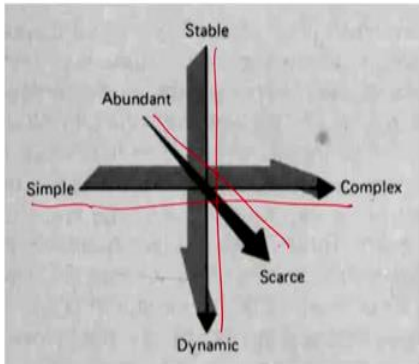


Figure 19.1 Three-Dimensional Model of the Environment

Source: Robbins, S. P. (1990) *Organization Theory: Structures, Designs, and Applications*. Pearson Education India.

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This is figure 19.1, this is the three-dimensional model of the environment. So, on the x axis varies from simple to complex, the y axis goes from stable to dynamic and the z axis moves from abundant to scarce and now this environment has to be categorized in these three dimensions.

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A SYNTHESIS: DEFINING THE ENVIRONMENT AND ENVIRONMENTAL UNCERTAINTY

- The arrows in this figure are meant to indicate movement toward higher uncertainty.
- So organizations that operate in environments characterized as scarce, dynamic, and complex face the greatest degree of uncertainty.
- Why?
- Because they have little room for error, high unpredictability, and a diverse set of elements in the environment to constantly monitor.

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The arrows in the figures are meant to indicate movement towards higher uncertainty. So, organizations that operate in environments characterized as scarce, dynamic and complex, face the greatest degree of uncertainty. Why? Because they have little room for error, high unpredictability and a diverse set of elements in the environment to constantly monitor.

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A SYNTHESIS: DEFINING THE ENVIRONMENT AND ENVIRONMENTAL UNCERTAINTY

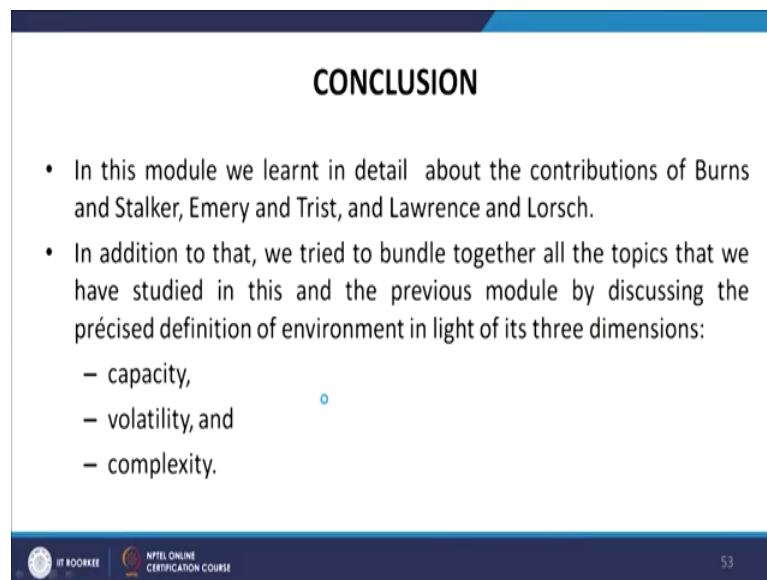
- Given this three-dimensional definition of environment, we can offer some general conclusions.
- There is evidence that relates the degrees of environmental uncertainty to different structural arrangements.
- Specifically, the more scarce, dynamic, and complex the environment, the more organic a structure should be.
- The more abundant, stable, and simple the environment, the more the mechanistic structure will be preferred.

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Given this three-dimension definition of environment, we can offer some general conclusions. There is evidence that relates the degree of environmental uncertainty to different structural arrangements.

Specifically, the more scarce, dynamic and complex the environment, the more organic a structure should be. The more abundant, stable and simple the environment, the more the mechanistic structure will be preferred. So, in order to conclude this module, we learnt in detail about the contributions of Burns and Stalker, Emery and Trist and Lawrence and Lorsch.

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CONCLUSION

- In this module we learnt in detail about the contributions of Burns and Stalker, Emery and Trist, and Lawrence and Lorsch.
- In addition to that, we tried to bundle together all the topics that we have studied in this and the previous module by discussing the precise definition of environment in light of its three dimensions:
 - capacity,
 - volatility, and
 - complexity.

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In addition to that we tried to bundle together all the topics that we have studied in this and the previous modules by discussing the precise definition of environment in light of its three dimensions. And the three dimensions are capacity, volatility and complexity and these are the four books from which the material for this module was taken.

Thank you.