Organization Theory/Structure and Design
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Lecture - 02
An Overview – II

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Welcome to this course Organization Theory Structure and Design. Now, we will talk about module 2. So, as you see that we are talking about part 1 that is introduction to organization theory and we are covering an overview to this course. We have completed module 1, now let us see what we will talk about in module 2. So, we will discuss systems perspective, then we will talk about lifecycle perspective and then we will end up discussing how systems and life cycles are part of biological metaphor.

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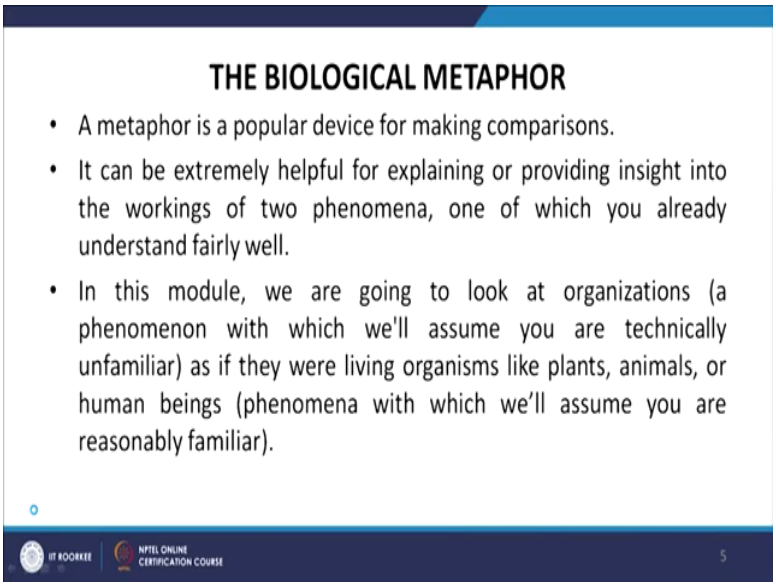

Now, let us look at what is this biological metaphor. A metaphor is a popular device for making comparisons. It can be extremely helpful for explaining or providing insights into the working of two phenomena, one of which you already understand fairly well.

So, in this module we are going to look at organizations, a phenomenon with which we will assume you are technically unfamiliar, as if they were living organisms like plants, animals or human beings (phenomenon with which we will assume you are reasonably familiar). So, we call this comparison the biological metaphor.

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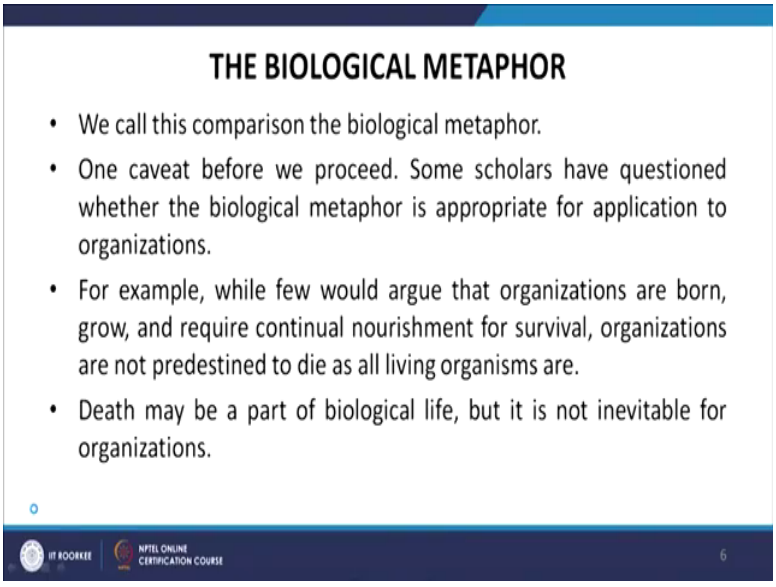

One caveat before we proceed. Some scholars have questioned whether the biological metaphor is appropriate for application to organizations. For example, while few would argue that organizations are born, grow and require continuous nourishment for survival, organizations are not predestined to die as all living organisms are. Death may be part of the biological life, but it is not inevitable for organizations.

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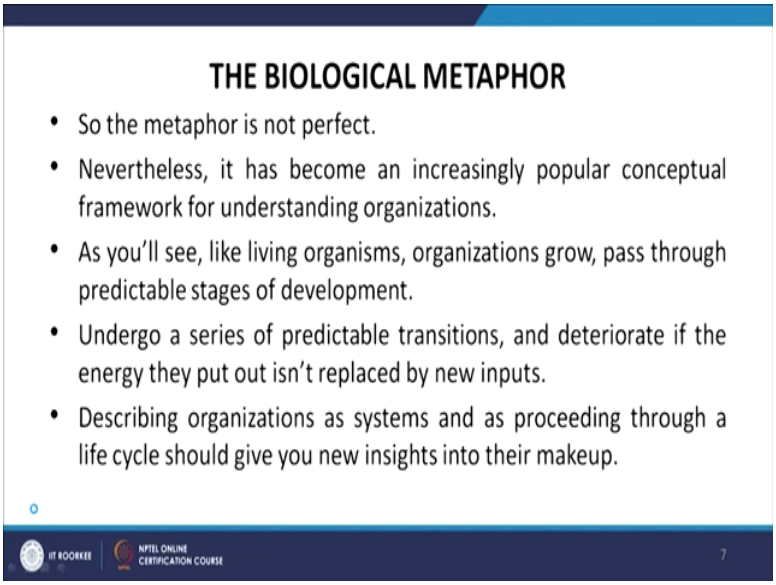

So, the metaphor is not perfect. Nevertheless, it has become an increasingly popular conceptual framework for understanding organizations. As you will see like living organisms, organizations grow, pass through predictable stages of development, undergo a series of predictable transitions and deteriorate if the energy that put out is not replaced by new input. Describing organization as a system and as proceeding through a life cycle should give you new insight into their makeup.

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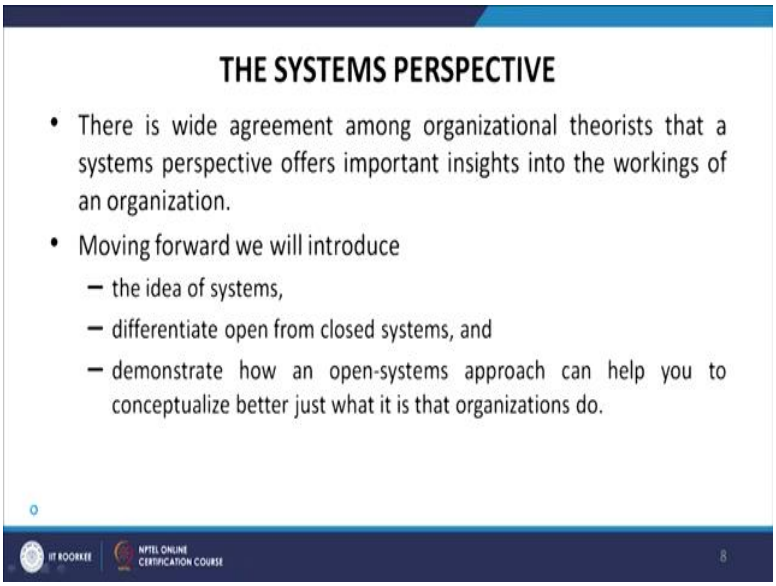

Now, let us look at the systems perspective. There is wide agreement among organization theorists that a system perspective offer important insight into the working of an organization. Moving forward we will introduce the idea of system, differentiate open from closed systems and demonstrate how an open-system approach can help you to conceptualize better just what it is that organization do.

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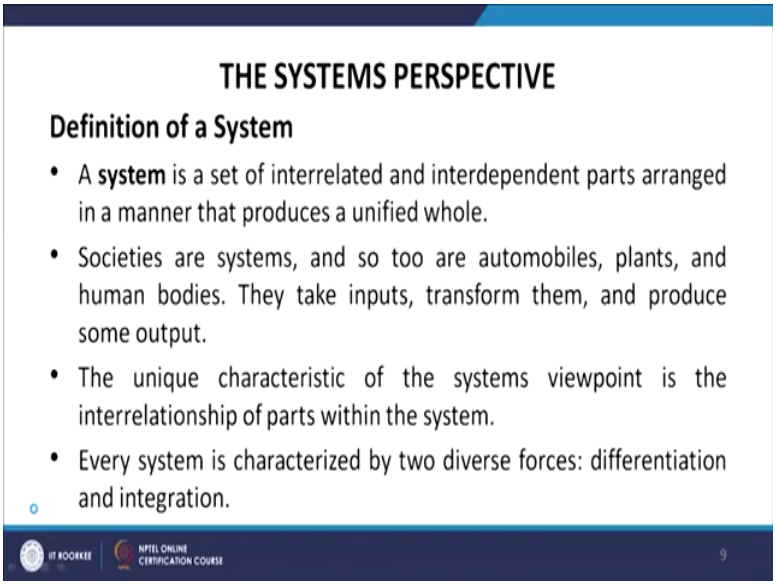

Let us define what a system is. A system is a set of interrelated and interdependent parts arranged in a manner that produces a unified whole. Societies are system and so, are

automobiles, power plants and human bodies. They take input, transform them and produce some output. The unique characteristic of the system viewpoint is the interrelationship of parts within the system. Every system is characterized by two diverse forces, that is differentiation and integration.

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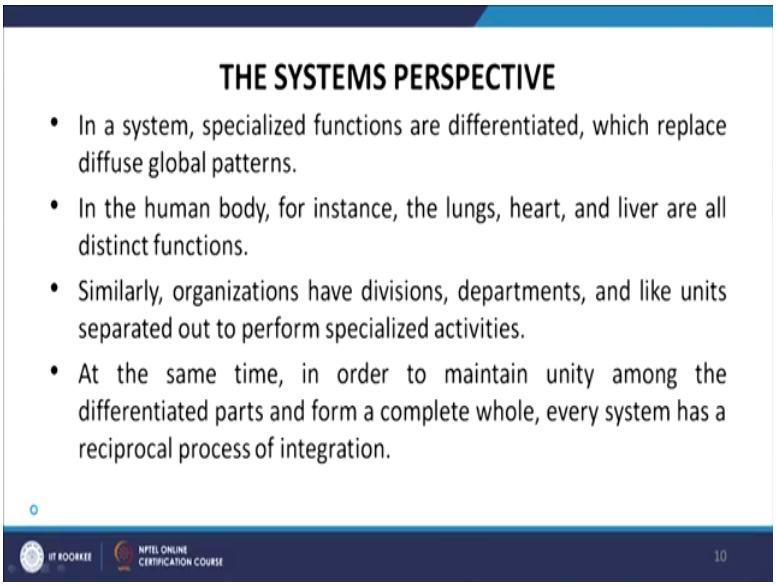

In a system, a specialized functions are differentiated which replace diffused global pattern. In the human body for instance the lungs, heart and liver are all distinct functions. Similarly, organizations have division, departments and like units separated out to perform specialized activities. At the same time, in order to maintain unity among the differentiated parts and form a complete whole, every system has a reciprocal process of integration.

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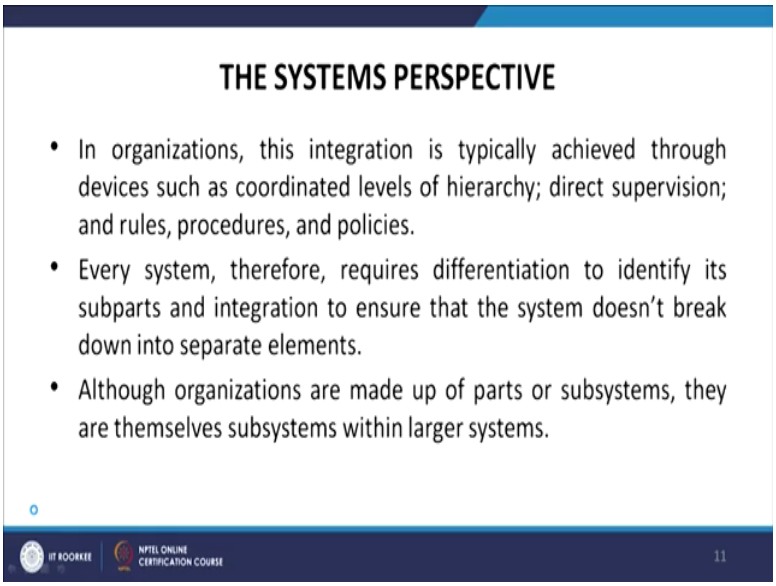

In organizations, this integration is typically achieved through devices such as coordinated level of hierarchy, direct supervision, rules, procedures and policies. Every system therefore, requires differentiation to identify its subparts and integration to ensure that the system does not break down in separate elements. Although organizations are made up of parts or subsystems they are themselves subsystems within larger systems.

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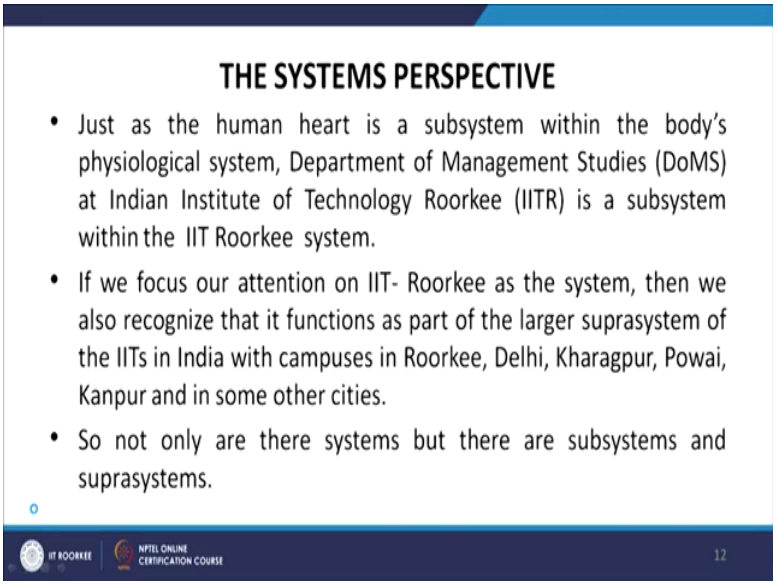

Just as the human heart is a subsystem within the body's physiological system, the Department of Management Studies at Indian Institute of Technology Roorkee is the

subsystem within the IIT Roorkee system. If we focus our attention on IIT Roorkee as the system, then we also recognize that it functions as part of large suprasystem of the IITs in India and campuses in Roorkee, Delhi, Kharagpur, Bombay, Kanpur and in several other cities.

So, not only are there systems, but there are subsystems and suprasystems.

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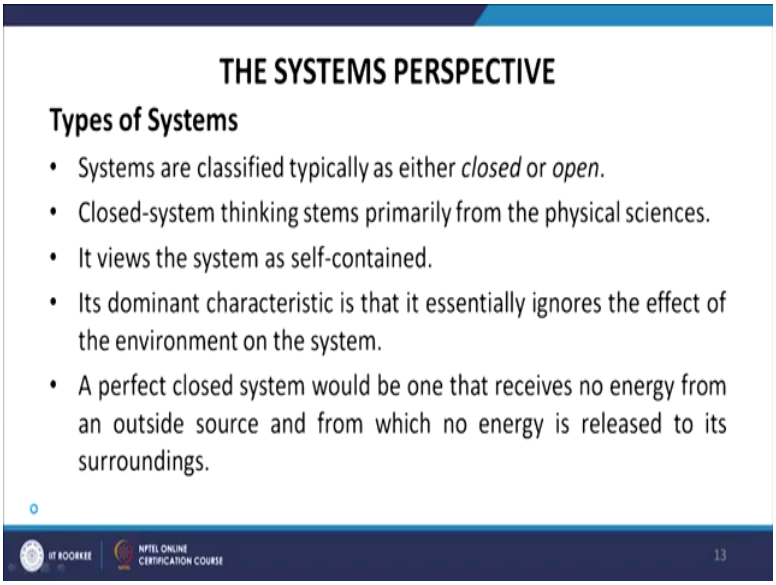

Now, let us look at the different types of systems. Systems are classified typically as either closed or open. Closed-system thinking stems primarily from the physical sciences. It views the system as self-contained. Its dominant characteristic is that it essentially ignores the effect of the environment on the system. A perfect closed system would be one that receives no energy from an outside source and from which no energy is released to the surrounding.

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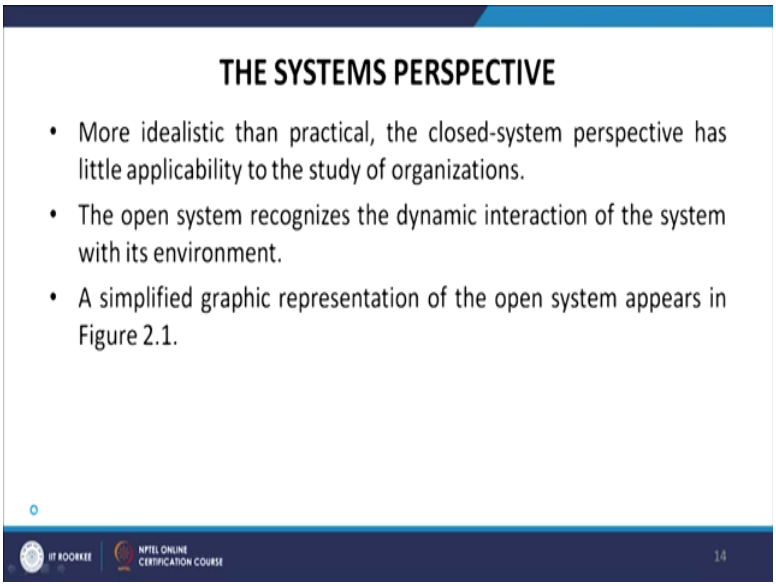

More idealistic than practical, the closed-system perspective has little applicability to the study of organizations. The open system recognizes the dynamic interaction of the system with its environment. So, a simplified graphical representation of the open system appears in figure 2.1.

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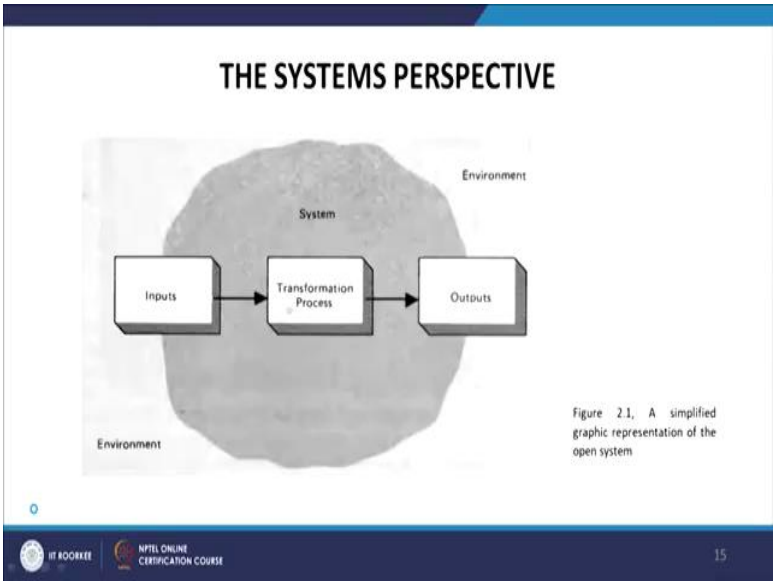

So, this is what this systems perspective is, this open system is. So, we have those inputs, outputs and in between transformations is happening and whole of this is a system and outside we have this environment.

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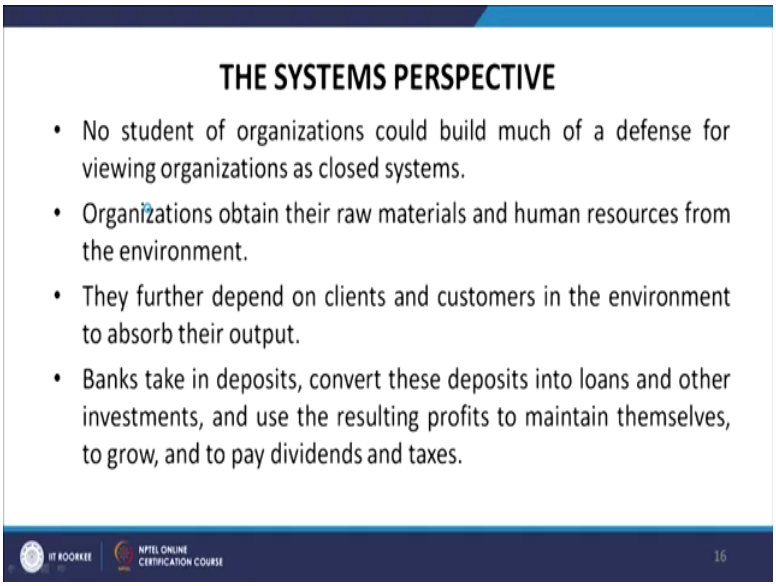

So, no student of organization could build much of a defense for viewing organization as closed systems. Organizations obtain their raw material and human resources from the environment. They further depend on clients and customers in the environment to absorb their output. Banks take in deposits, convert these deposits into loan and other investments and use the resulting profits to maintain themselves, to grow and to pay dividend and taxes.

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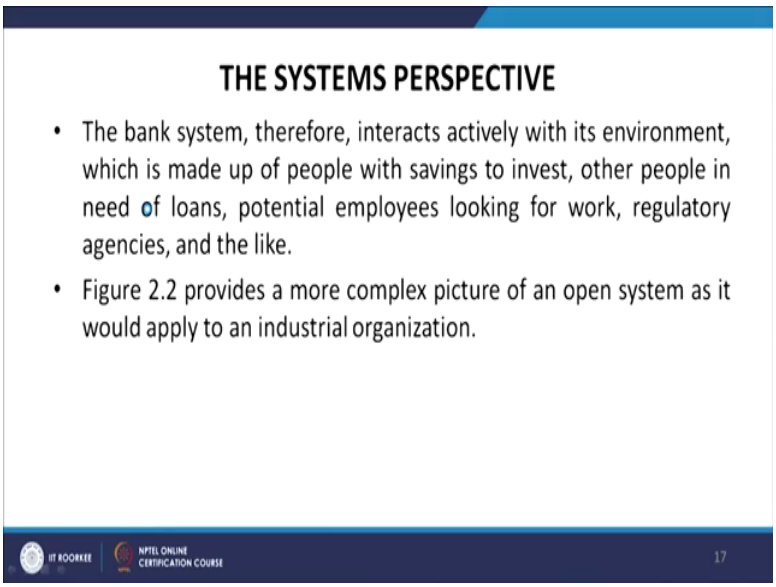

The bank system therefore, interacts actively with its environment which is made up of people with saving to invest, other people in need for loans, potential employers looking for

work, regulatory agency and the like. Figure 2.2 provides a more complex picture of an open system as it would apply to an industrial organization.

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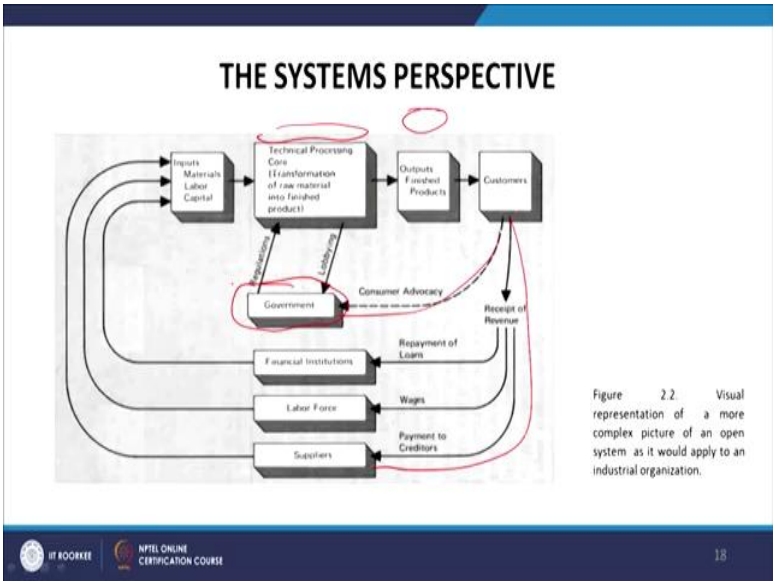

Figure 2.2. Visual representation of a more complex picture of an open system as it would apply to an industrial organization.

So, this is the more complex picture of that. So, now, you have input that is material, labor and capital. Then the technical processing, the core is happening, (Refer Time: 07:55) output is the finished product, then it goes to the customer. Now, then the receipt of revenue customer pays, goes to the creditors as wages, to the labor force and as repayment of the loan.

Then again all these things are provided as input to the organization and then there is this customer advocacy. The government is there to maintain the harmony in the system by way of regulations and then industry they lobby with the government for various kinds of regulations.

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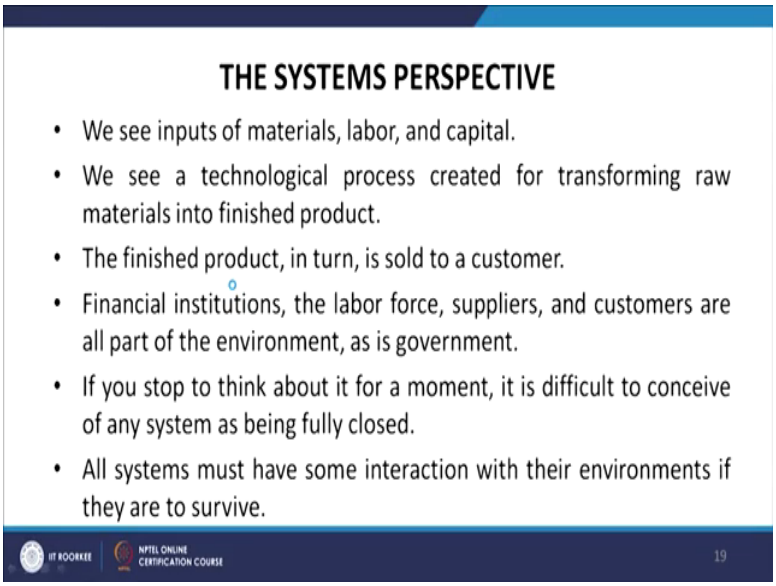

So, we see inputs of material, labor and capital. We see a technological process created for transforming raw material into finished goods. The finished products in turn are sold to a customer. Financial institutions, the labor force, suppliers and customers are all part of the environment as is government. If you stop to think about it for a moment, it is difficult to conceive of all systems as being fully closed.

All system must have some interaction with their environments if they are to survive.

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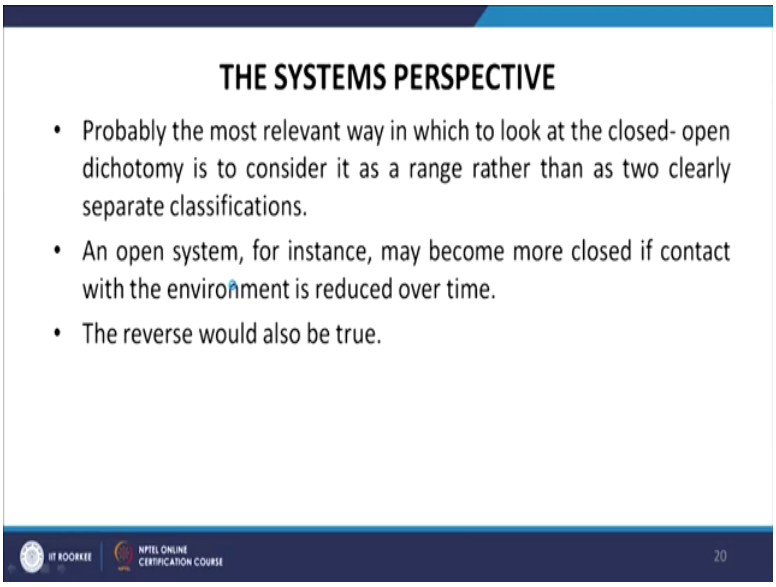

Probably the most relevant way in which to look at the closed open dichotomy is to consider it as a range rather than as to clearly separate classifications. An open system for instance, may become more closed if contact with the environment is reduced to overtime. The reverse would also be true.

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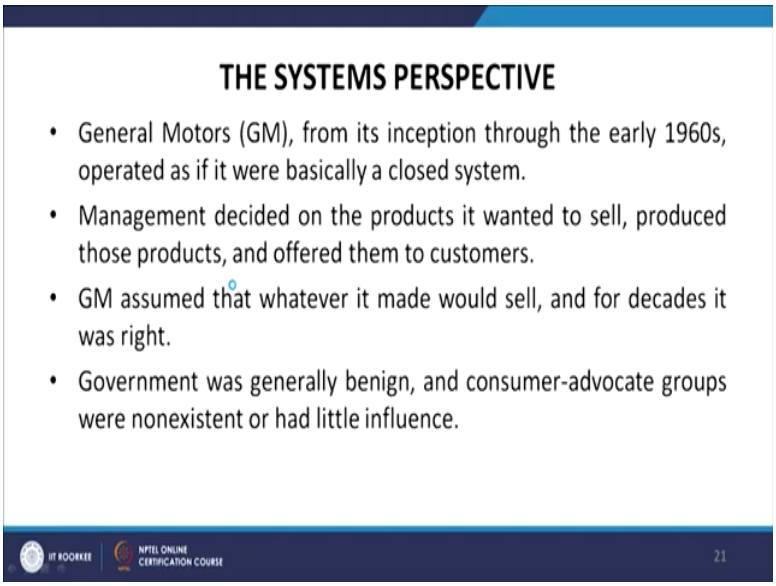

General Motors from its inception through the early 1960s, operated as if it were basically a closed system. Management decided on the products it wanted to sell, produce through product and offered them to the customers. GM assumed that whatever is made would sell and for decades it was right. Government was generally benign and consumer advocate groups were nonexistent or had little influence.

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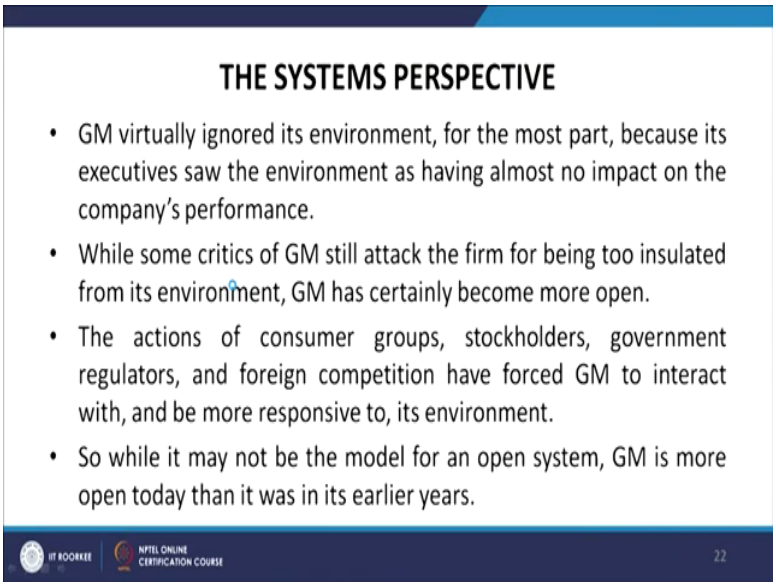

GM virtually ignored its environment for the most part, because its executive saw the environment as having almost no impact on the company's performance. While some critics of General Motors still attack the firm for being too insulated from its environment, GM has certainly became more open.

The action of consumer groups, stockholders, government regulators and foreign competition have forced General Motors to interact with and be more responsive to its environment. So, while it may not be the model for an open system, GM is more open today than it was in its earlier years when it started.

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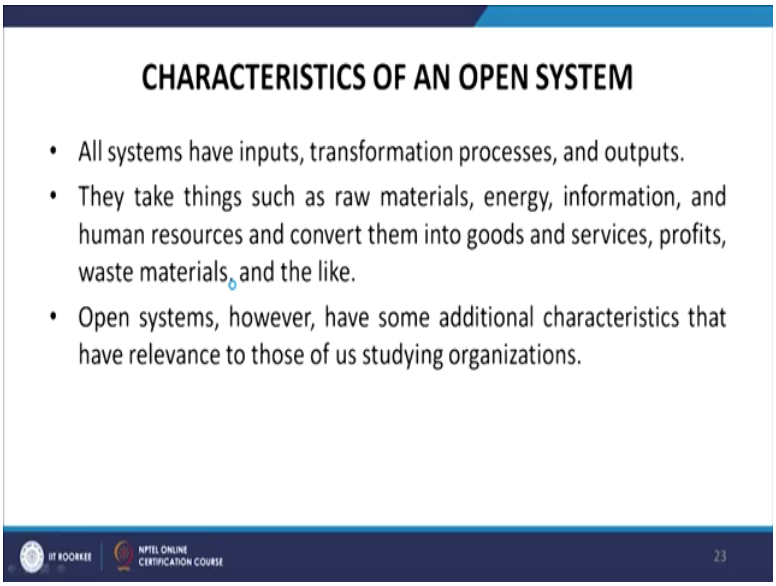

All systems have input, transformation processes and output. They take things such as raw material, energy, information and human resources and convert them into goods and services, profits, waste material and the like. Open system; however, have some additional characteristics that have relevance to those of us studying organization.

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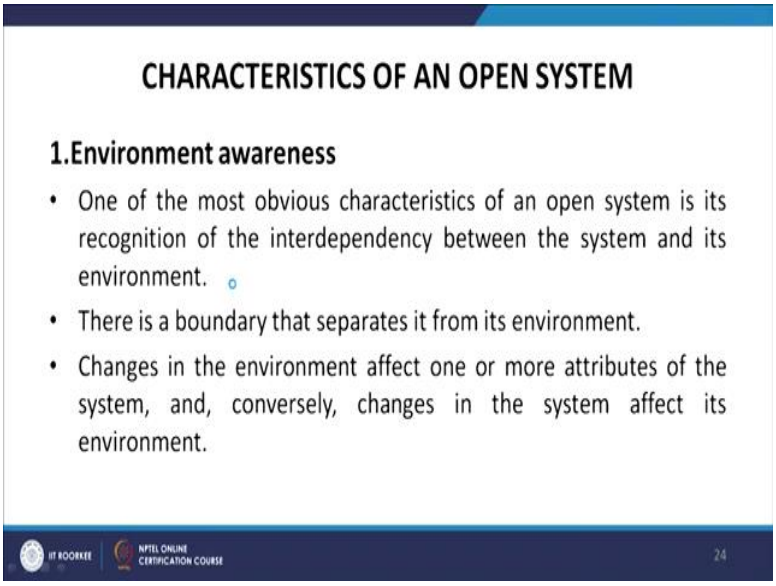

The first characteristic of an open system is the environment awareness. One of the most obvious characteristic of an open system is its recognition of the interdependencies between the system and its environment. There is a boundary that separates it from the environment.

Changes in the environment affect one or more attributes of the system and conversely changes in the system affects its environment.

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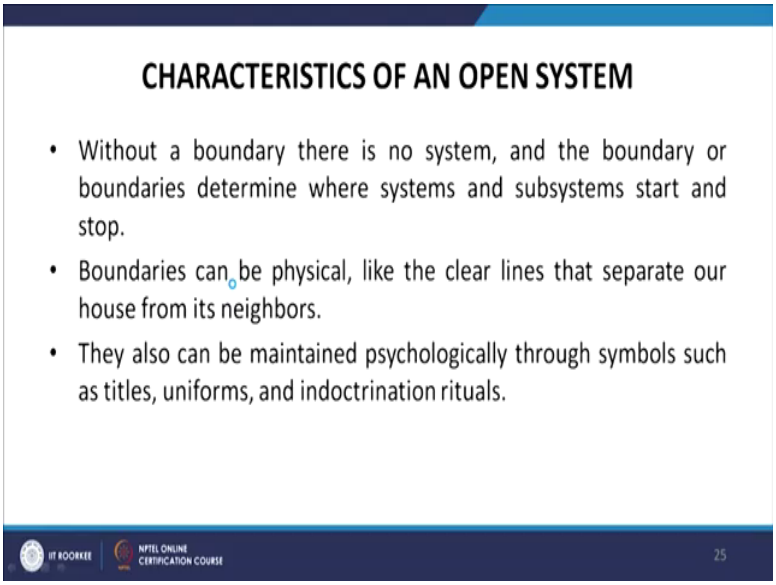

Without a boundary there is no system and the boundary or boundaries determine where systems or subsystems start and stop. Boundaries can be physical like the clear lines that separate our houses from its neighbors. They also can be maintained physiologically through symbols such as titles, uniforms and indoctrination rituals.

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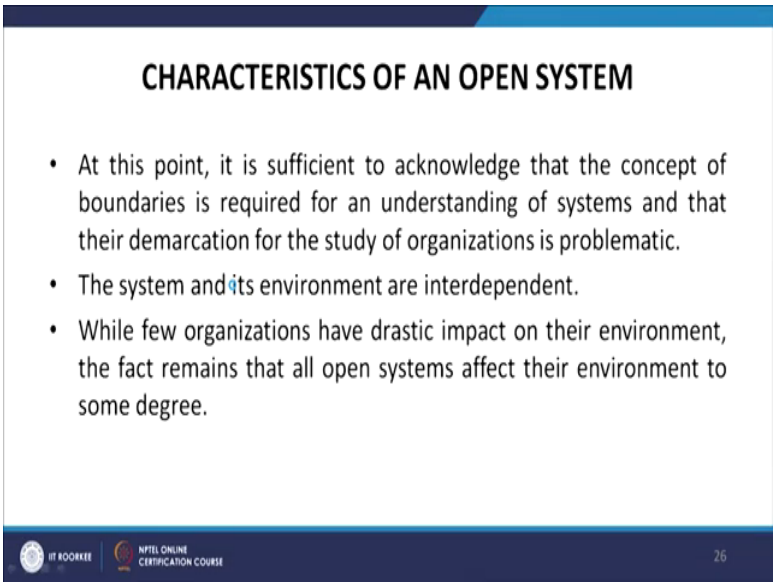

At this point, it is sufficient to acknowledge that the concept of boundaries is required for an understanding of systems and that their demarcation for the study of organization is problematic. The system and its environment are interdependent. While few organizations have drastic impact on their environment, the fact remains that all open systems affect their environment to some degree.

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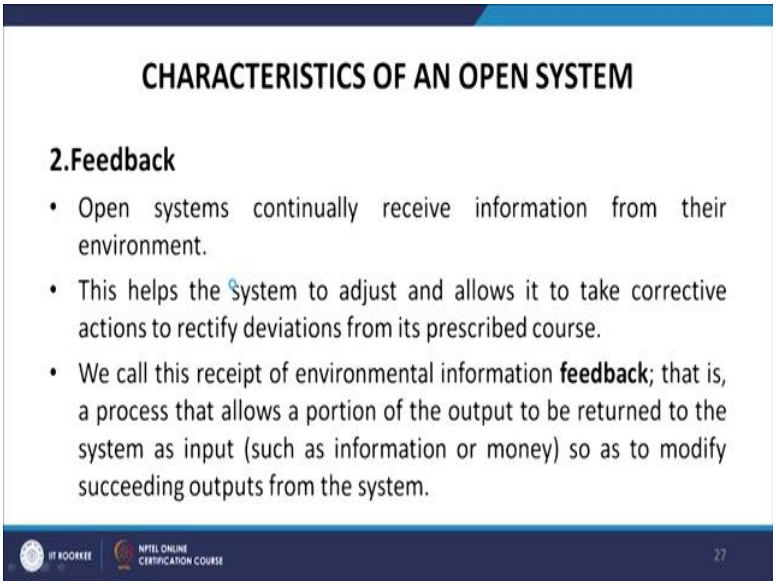

The 2nd characteristic is feedback. Open systems continuously receive information from their environment. They help the system to adjust and allow it to take corrective actions to rectify deviations from its prescribed course. We call this receipt of environment information as feedback, that is, a process that allows a portion of the output to be returned to the system as input such as information or money so as to modify succeeding outputs from the system.

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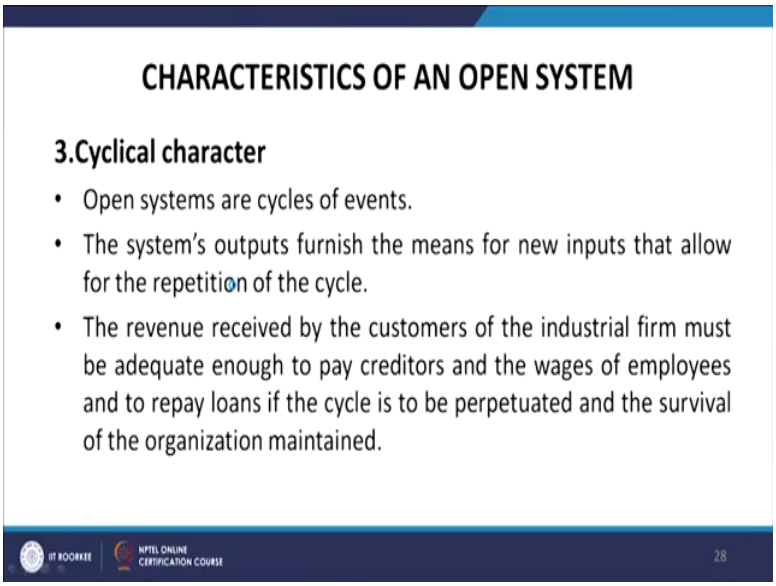

The 3rd is their cyclical character. Open systems are cycle of events. The system's output furnish the means for new inputs that allow for the repetition of the cycle. The revenue received by the customers of the industrial firm must be adequate enough to pay creditors and the wages of employees and to repay loans if the cycle is to be perpetuated and the survival of the organization maintained.

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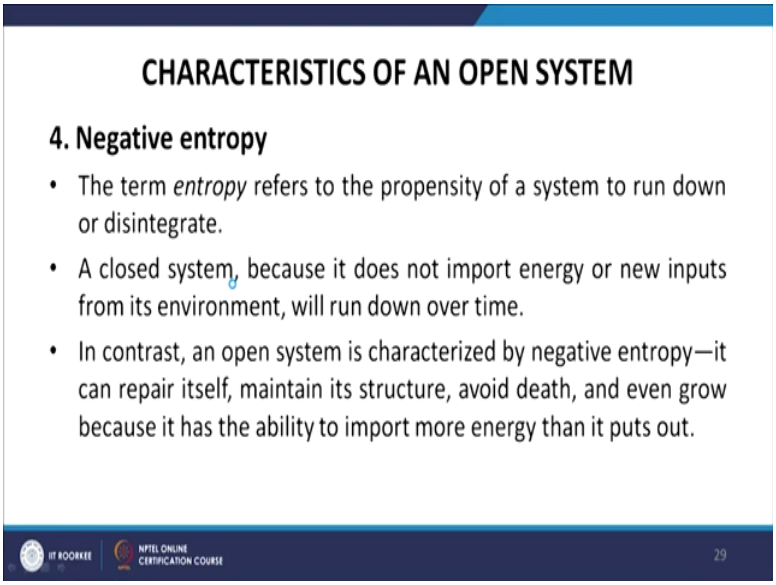

Negative entropy: the term entropy refers to the propensity of the system to run down or disintegrate. The closed system, because it does not import energy or new inputs from its

environment will run down over time. In contrast, an open system is categorized by negative entropy - it replaces itself, maintains its structure, avoid death and even grow because it has the ability to import more energy than it puts out.

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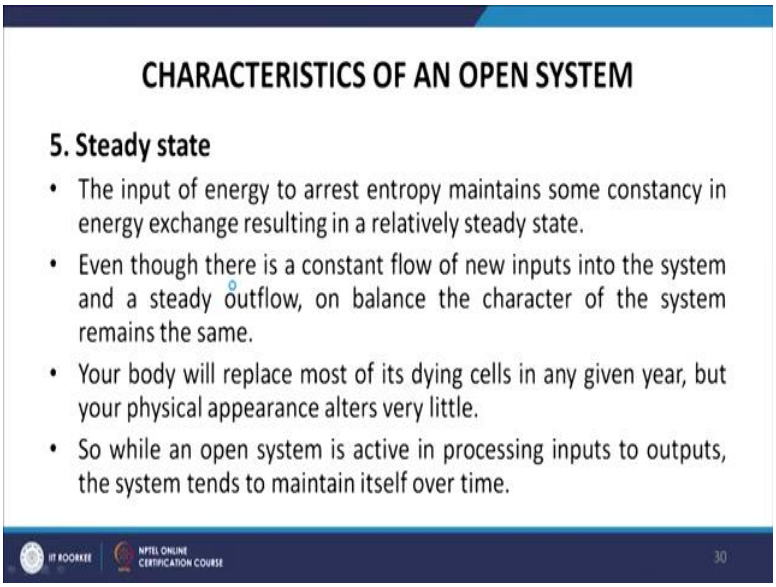

The 5th characteristic is a steady state. The input of energy to arrest entropy maintains some constancy in energy exchanging resulting in a relatively steady state. Even though there is a constant flow of new input into the system and a steady outflow on balance the character of the system remains the same. Your body will replace most of its dying cells in any given year, but your physical appearance alters very little.

So, while an open system is active in processing inputs to outputs, the system tends to maintain itself over time.

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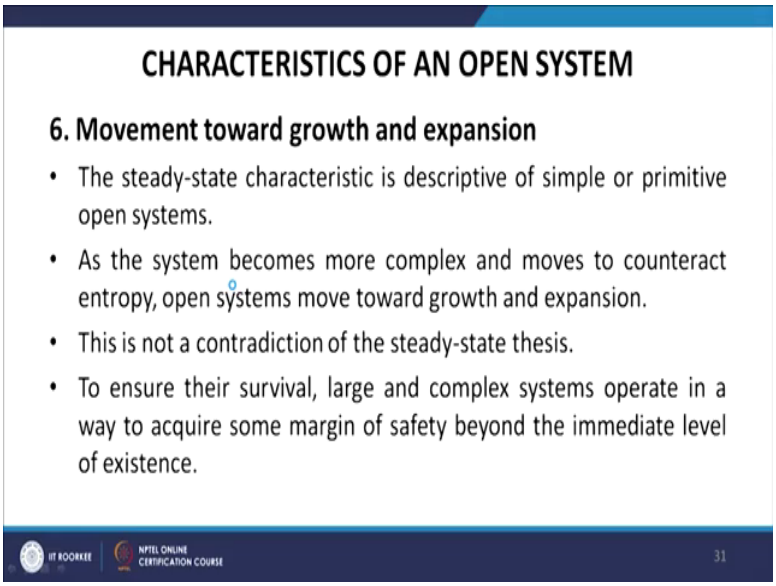

The 6th characteristic is the movement towards growth and expansion. The steady state characteristic is descriptive of a simple or primitive open system. As the system becomes more complex and moves to counteract entropy, open systems move towards growth and expansion. This is not a contradiction of the steady-state thesis. To ensure their survival, large and complex systems operate in a way to acquire some margin of safety beyond the immediate level of existence.

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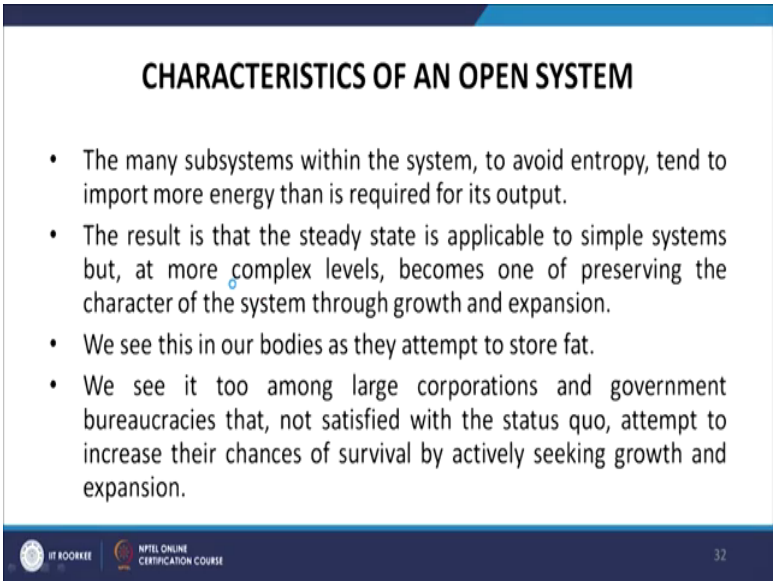

The many subsystems within the system to avoid entropy tend to import more energy than is required for its output. The result is that the steady state is applicable to simple systems, but at the same complex level becomes one of preserving the character of the system through growth and expansion.

We see this in our bodies that they attempt to store fat. We see it too among large corporations and government bureaucracies that not satisfied with the status quo, attempt to increase their chances of survival by actively seeking growth and expansion.

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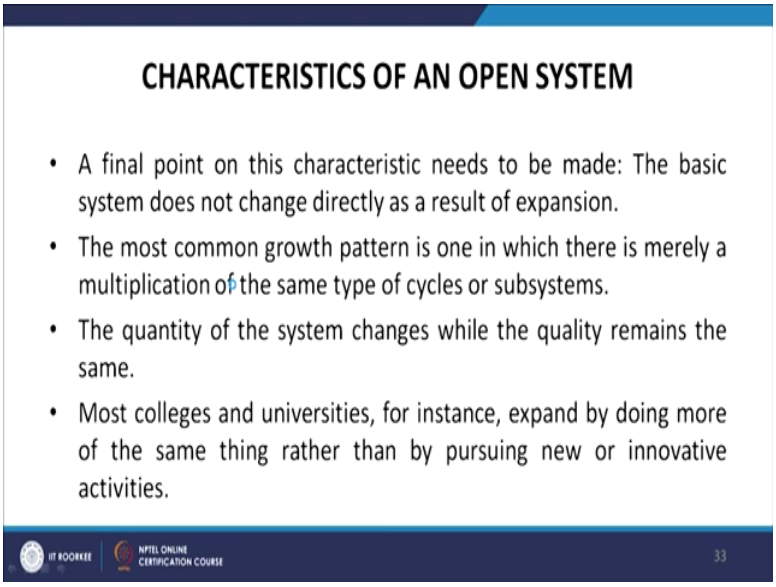

The final point of this characteristic needs to be made: the basic system does not change directly as a result of expansion. The most common growth pattern is one in which there is merely a multiplication of the same type of cycles or subsystems. The quantity of the system changes while the quality remains the same. Most colleges and universities for instance expand by doing more of the same thing rather than by pursuing new or innovative activities.

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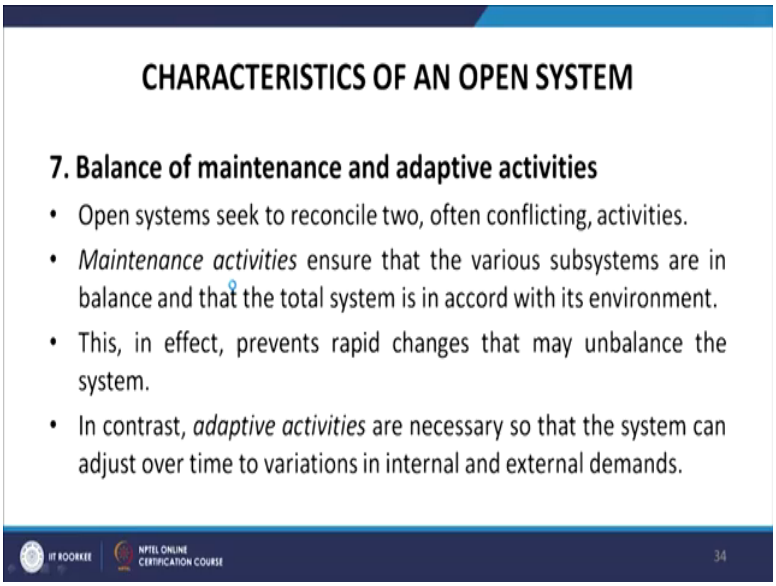

The 7th is the balance of maintenance and adaptive activities. Open system seeks to reconcile two often conflicting activities. Maintenance activities ensure that the various subsystems are in a balance and that the total system is in accord with its environment. This, in effect, prevents rapid changes that may unbalance the system. In contrast, adaptive activities are necessary so, that the system can adjust over time to variation in internal and external demands.

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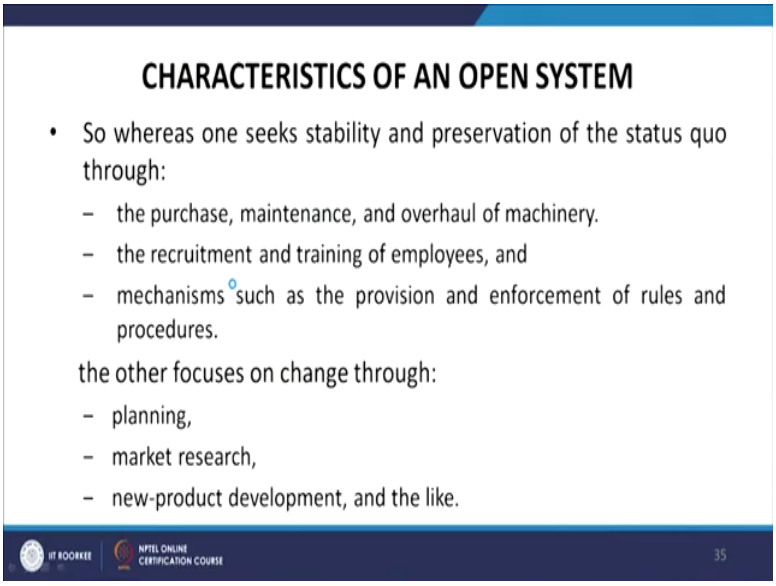

So, whereas, one seeks stability and preservation of the status quo through: the purchase, maintenance and overhaul of machinery, the recruitment and training of employees and mechanisms such as the provision and enforcement of rules and procedures. The other focuses on change through: planning, market research, new-product development and the like.

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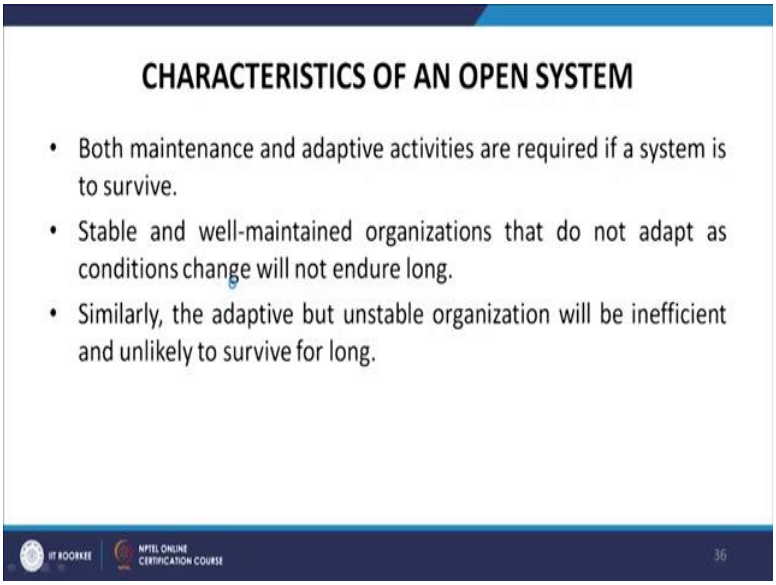

Both maintenance and adaptive activities are required in if a system is to survive. Stable and well-maintained organizations that do not adapt as condition changes will not endure long. Similarly, the adaptive but unstable organizations will be inefficient and unlikely to survive for long.

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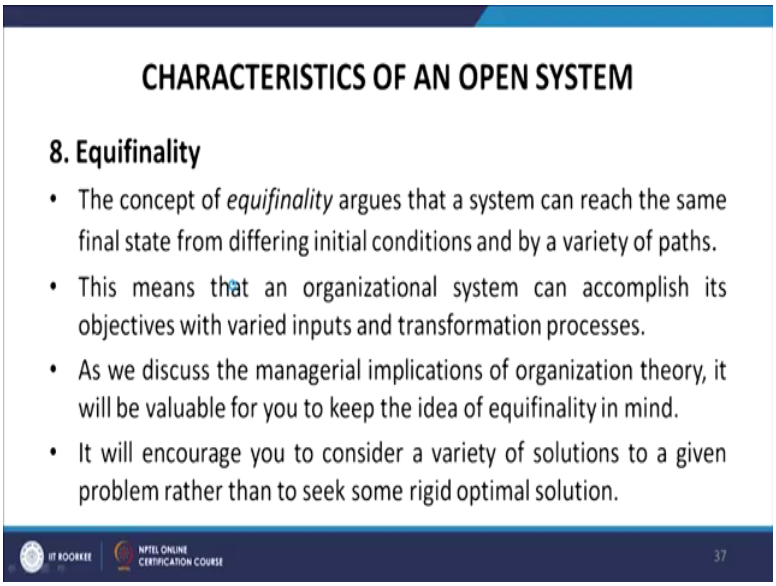

The 8th characteristic of open system is equifinality. The concept of equifinality argues that a system can reach the same final state from different initial conditions and by a variety of paths. This means that an organization system can accomplish its objectives with varied inputs and transformational processes.

As we discuss the managerial implications of organization theory, it will be valuable for you to keep the idea of equifinality in mind. It will encourage you to consider a variety of solutions to a given problem rather than to seek some rigid optimal solution.

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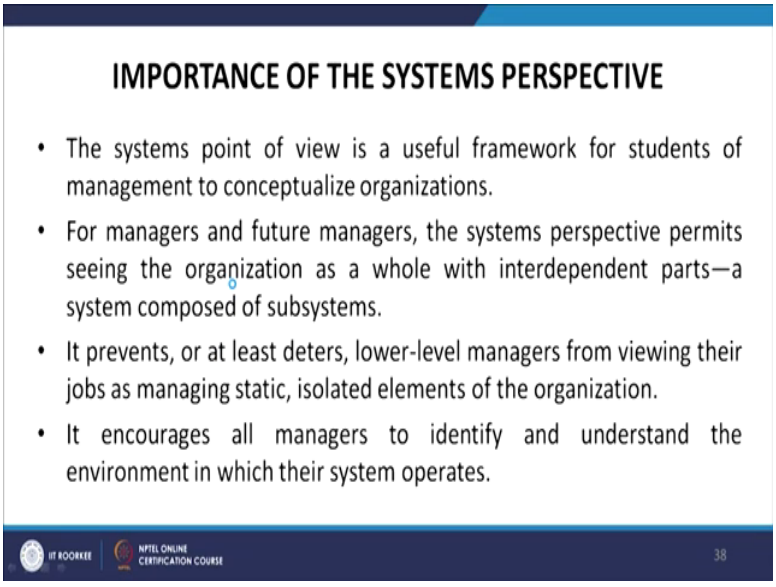

The system point of view is a useful framework for students of management to conceptualize organizations. For managers and future managers, the system perspective permits seeing the organization as a whole with interdependent parts - a system composed of subsystems. It prevents or at least deters, lower level managers from viewing their jobs as managing static, isolated elements of the organization. It encourages all managers to identify and understand the environment in which their system operates.

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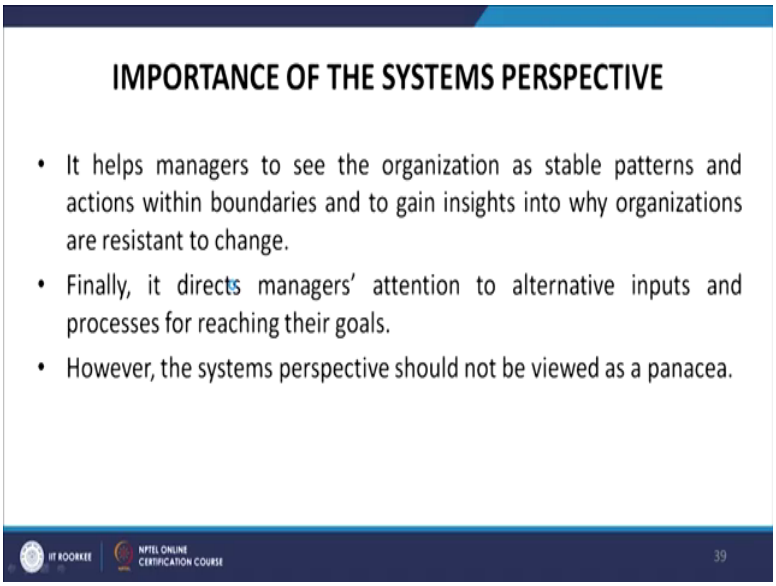

It helps managers to see the organization as stable pattern and actions within boundaries and to gain insight into why organizations are resistant to change. Finally, it directs managers' attention to alternative inputs and processes for reaching their goals. However, the system perspective should not be viewed as a panacea.

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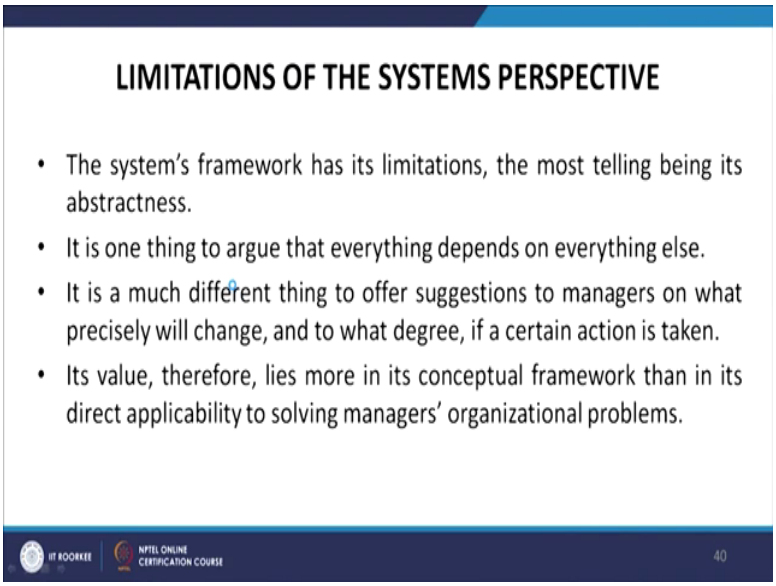

Now, limitations of the system perspective are the system's framework has its limitation, the most telling being its abstractness. It is one thing to argue that everything depends on everything else. It is much different thing to offer suggestions to managers on what precisely will change and to what degree if a certain action is taken. Its value therefore, lies more in the conceptual framework than in its direct applicability to solving managers' organizational problems.

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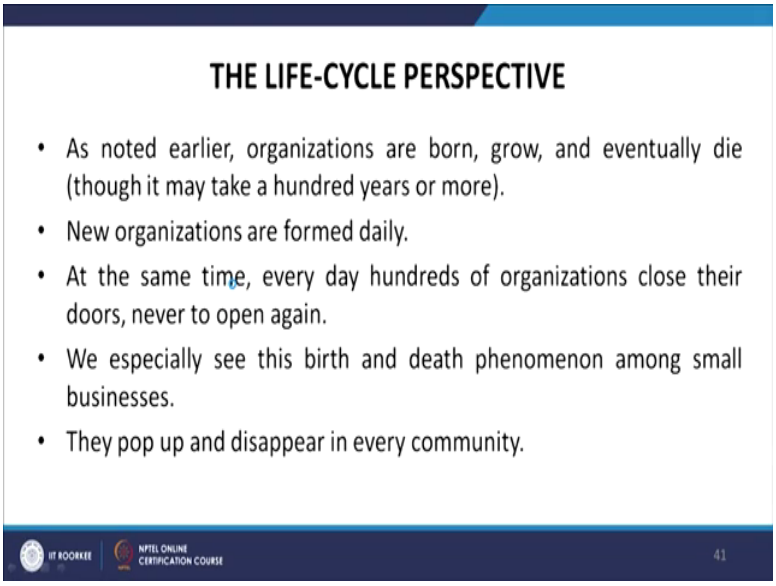

Now, let us look at the lifecycle perspective. So, as noted earlier organizations are born, grow and eventually die though it may take hundred years or more. New organizations are formed daily. At the same time every day hundreds of organizations close their doors, never to open again. We especially see this birth and death phenomena among small businesses. They pop up and disappear in every community.

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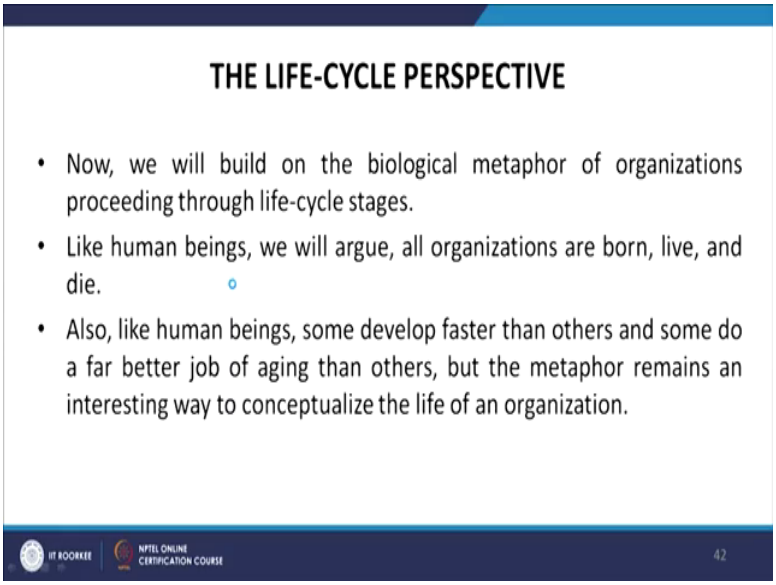

Now, we will build on the biological metaphor of organization proceedings through lifecycle stages. Like human beings we will argue all organizations are born, live and die. Also like all human beings, some develop faster than others and some do a far better job of aging than others, but the metaphor remains an interesting way to conceptualize the life of an organization.

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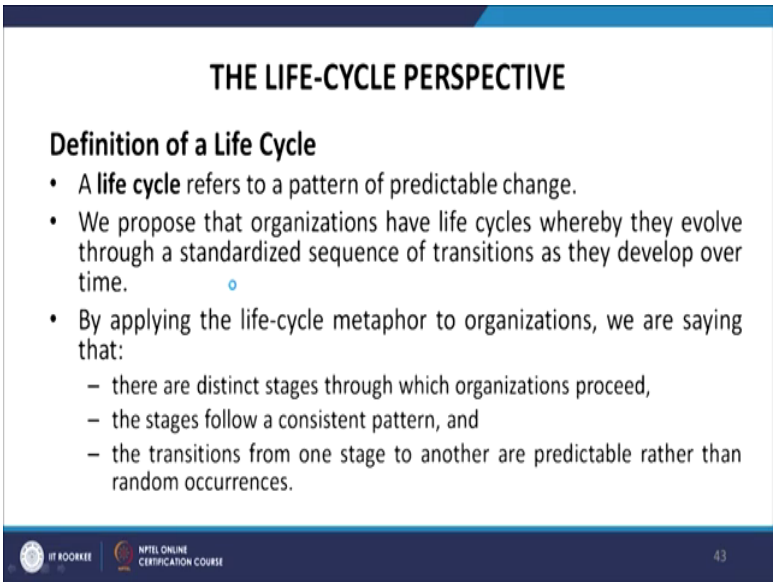

Now, let us define the life cycle. The life cycle refers to the pattern of predictable change. We propose that organizations that have life cycles whereby they evolve through a standardized sequence of transition as they develop over time. By applying the life cycle metaphor to organizations, we are saying that first, there are distinct stages through which organizations proceed. Second, the stages follow a consistent pattern and the third, the transition from one stage to another are predictable rather than random occurrences.

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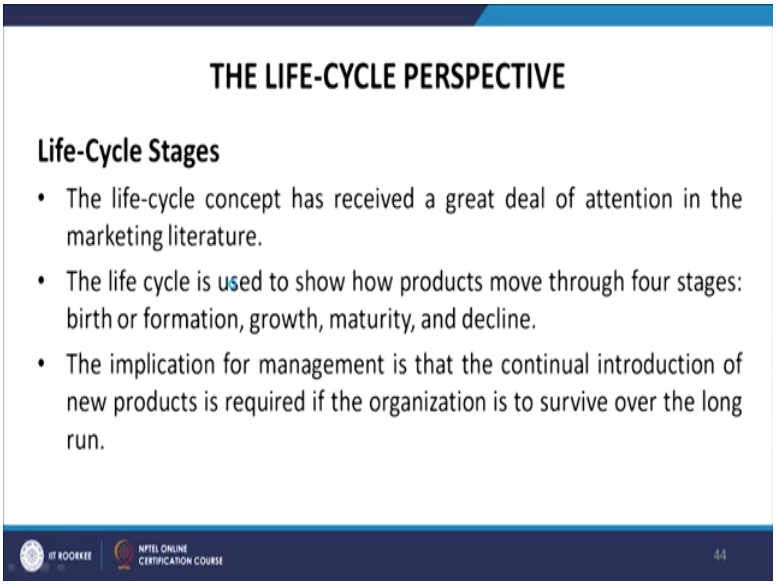

Now, what are the stages? The lifecycle concept has received a great deal of attention in the marketing literature also. The lifecycle is used to show how product moves through four stages that is birth or formation, growth, maturity and decline. The implication for management is that the continual introduction of new products is required if the organization is to survive over the long run.

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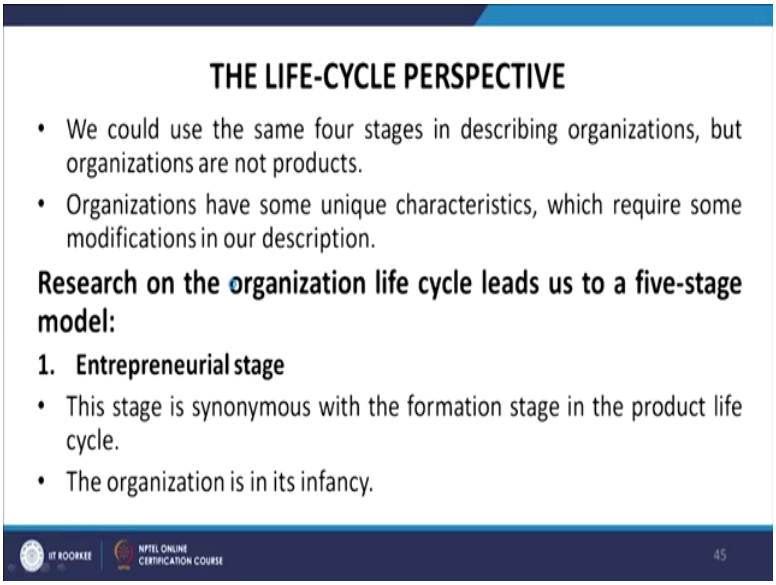

We could use the same four stages in describing organizations, but organizations are not product. Organizations have some unique characteristics which require some modification in our description. So, research on the organization lifecycle leads up to five-stages model. The 1st is entrepreneurial stage. This stage is synonymous is synonymous with the formation stage in the product lifecycle. The organization is in its infancy.

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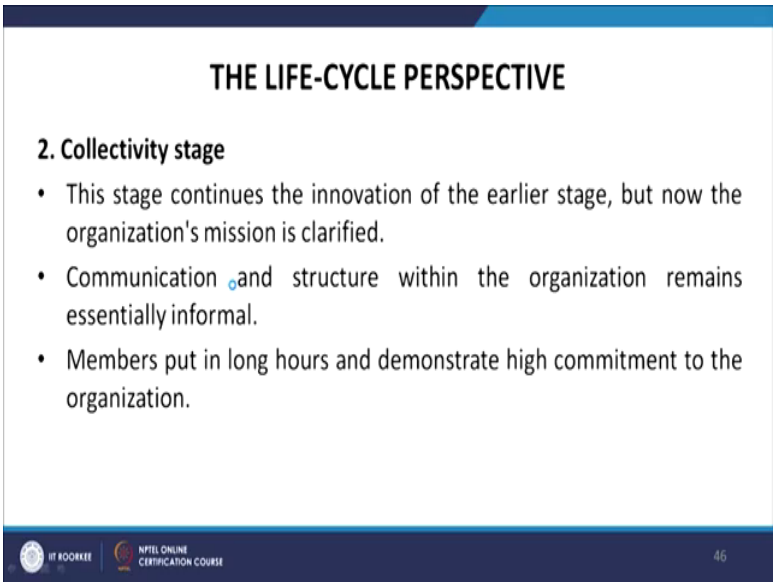

The 2nd is the collectivity stage. This stage continues the innovation of the earlier stage, but now the organization's mission is clarified. Communication and structure within the organization remains essentially informal. Members put in long hours and demonstrate high commitment to the organization.

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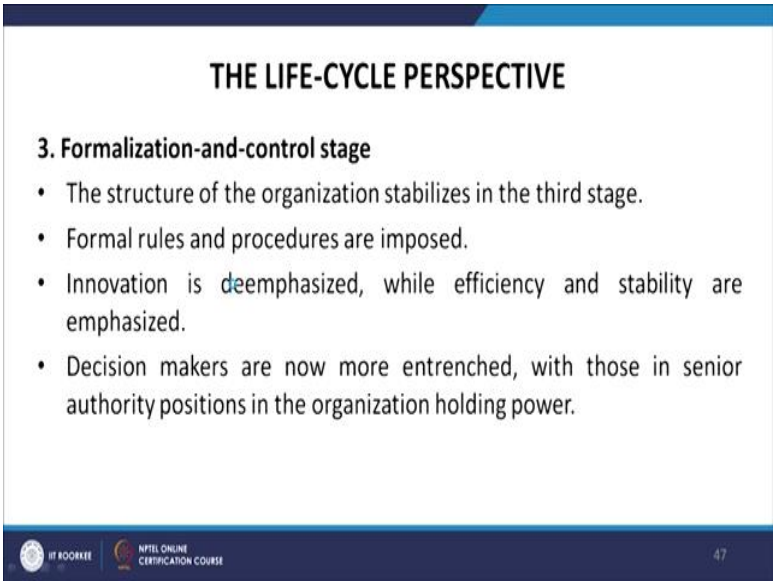

The 3rd is formation and control stage. The structure of the organization stabilizes in the third stage. Formal rules and procedures are imposed. Innovation is deemphasized, while

efficiency and stability are emphasized. Decision makers are now more entrenched, with those in senior authority positions in the organization holding power.

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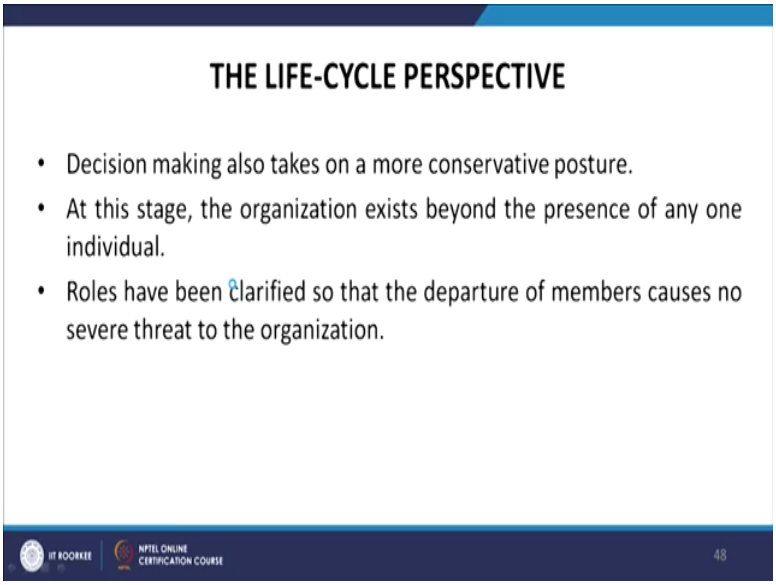

Decision making also takes on a more conservative posture. At this stage, the organization exists beyond the presence of any one individual. Roles have been clarified so that the departure of members causes no severe threat to the organization.

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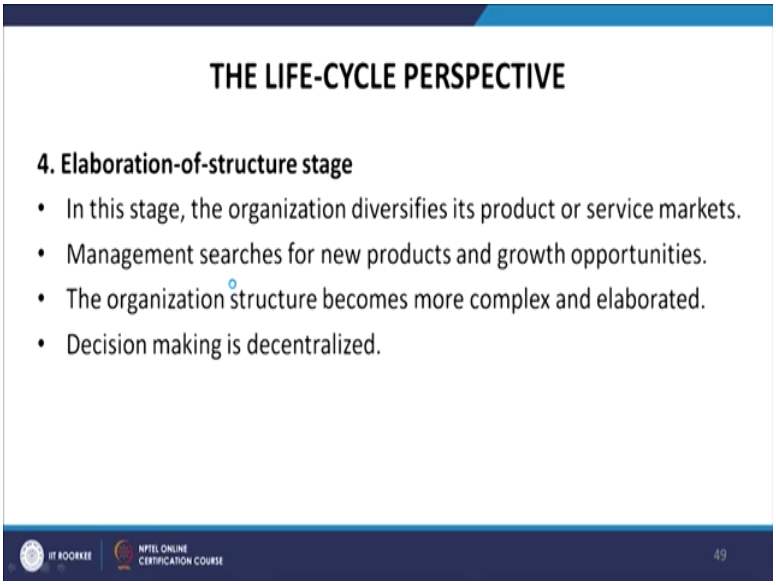

The 4th is elaboration of structure stage. In this stage, the organization diversifies its product or service markets. Management searches for new products and growth opportunities. The

organization structure becomes more complex and elaborate and the decision making is decentralized.

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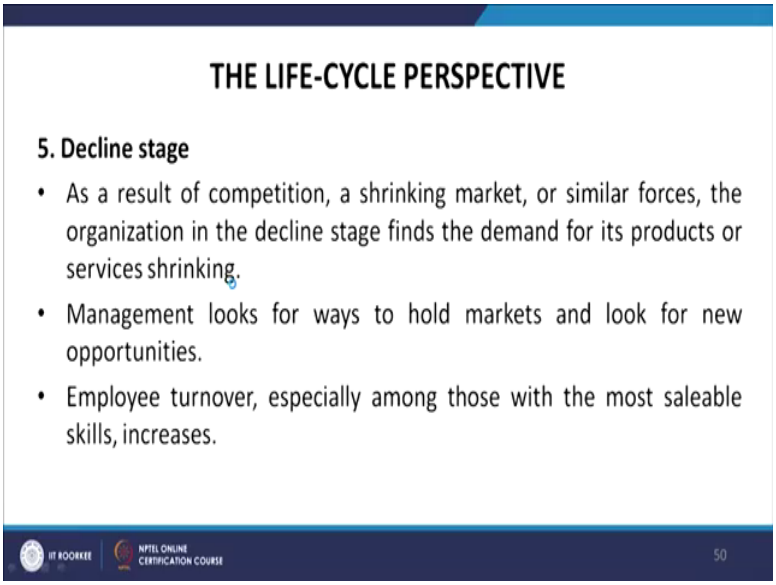

The 5th is the declining stage. So, as the result of competition, a shrinking market or similar forces, the organization in the declining stage finds the demand for this products or services shrinking. Management looks for ways to hold markets and look for new opportunities. Employee turnover especially among those with the most saleable skills, increases.

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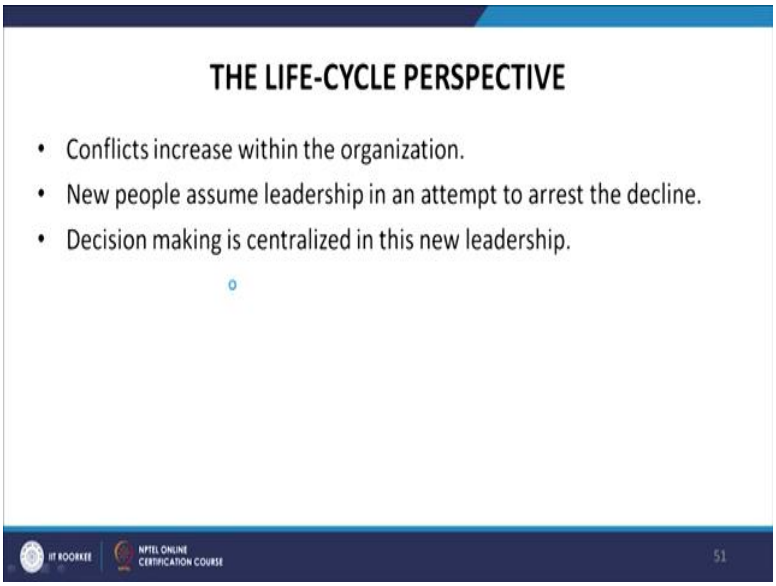

So, conflicts increase within the organization. New people assume leadership in an attempt to arrest the decline and decision making is centralized in the new leadership.

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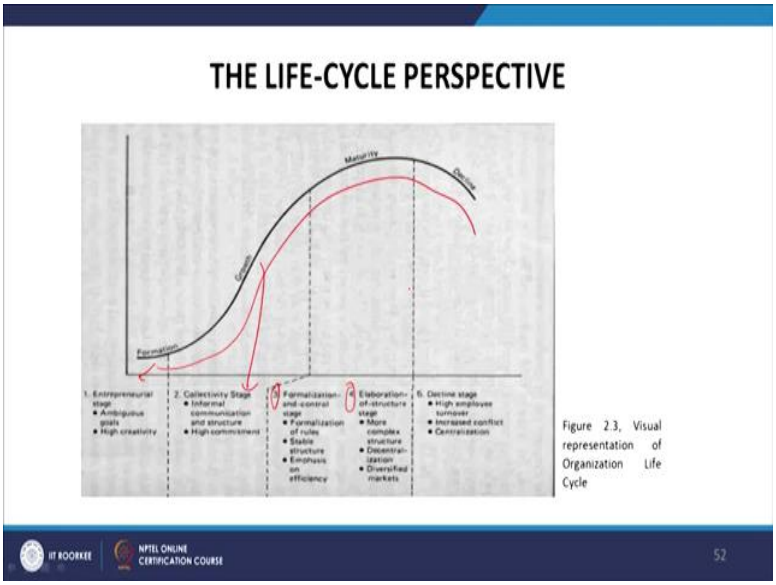

Figure 2.3, Visual representation of Organization Life Cycle

Now, this is the lifecycle perspective. So, you see that now we are moving from formation to growth to maturity and to decline. So, this is the visual representation of organization lifecycle. So, what happens in the 1st stage, that is the entrepreneurial stage; so, there are ambiguous goals and high level of creativity is required. In the 2nd stage, that is collectivity stage, informal communication and structure is there and high commitment is required.

In the 3rd stage, that is the maturity. So, there are these two things: formalization and control stage and the elaboration of a structure stage. So, two things happen here. So, formalization of rules happens, stable structures come into play and emphasis is on efficiency. Then the structure becomes more complex, decentralization happens and the markets are diversified.

So, in the formation that is entrepreneurial stage, this is the growth stage; in maturity two things happen and then the declined stage. So, there is in decline high employee turnover, increased conflict and then they move to the decision making to the centralized one.

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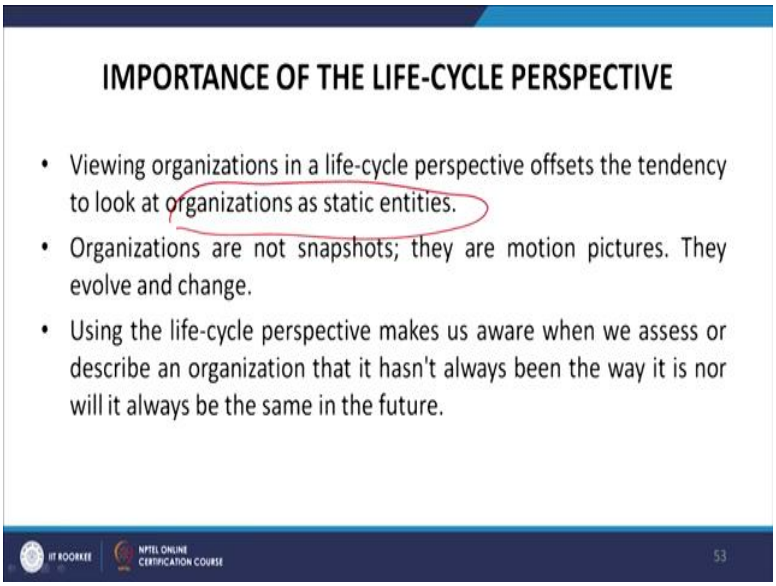

Now, what is the importance of this lifecycle perspective for us? Viewing organization in a lifecycle perspective offsets the tendency to look at organizations as static states. So, we are not to look at organizations as static entities, but as dynamic entities. Organizations are not snapshots; they are motion pictures. They evolve and they change. So, using the lifecycle perspective makes us aware when we assess or describe an organization that it has not always been the way it is nor will it always be the same in the future.

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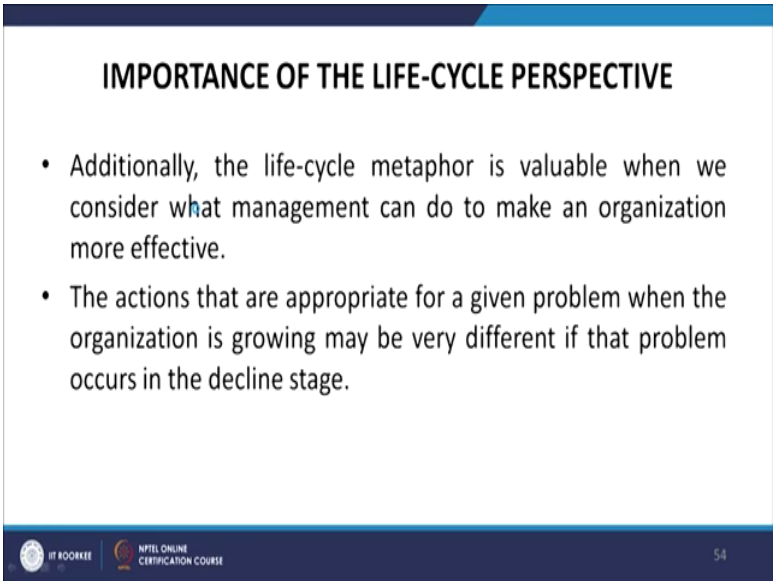

Additionally, this life-cycle metaphor is valuable when we consider what management can do to make an organization more effective. The actions that are appropriate for a given problem when the organization is growing may be very different if the problem occurs in the decline stage.

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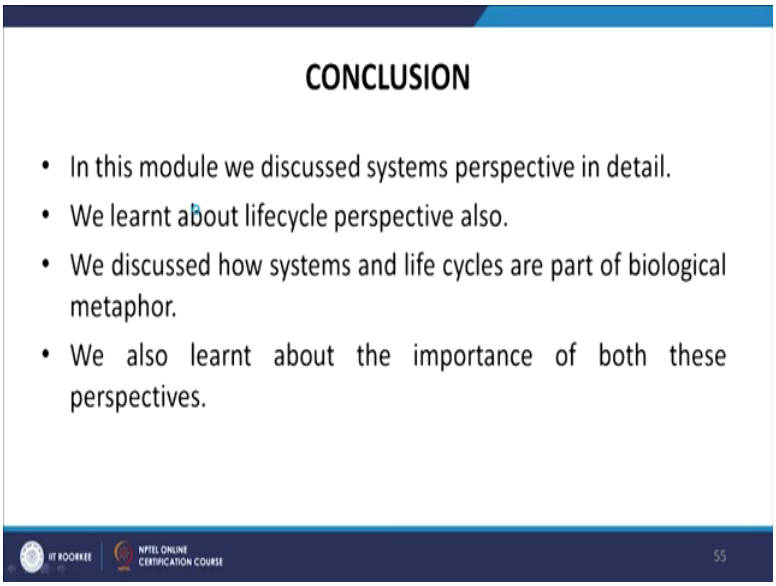

So, to conclude, in this model we have discussed systems perspective in detail. Then we have learned about the life cycle perspective, thereafter we have discussed how systems and life cycles are part of a larger biological metaphor. And, we have also learned about the importance of both these perspectives.

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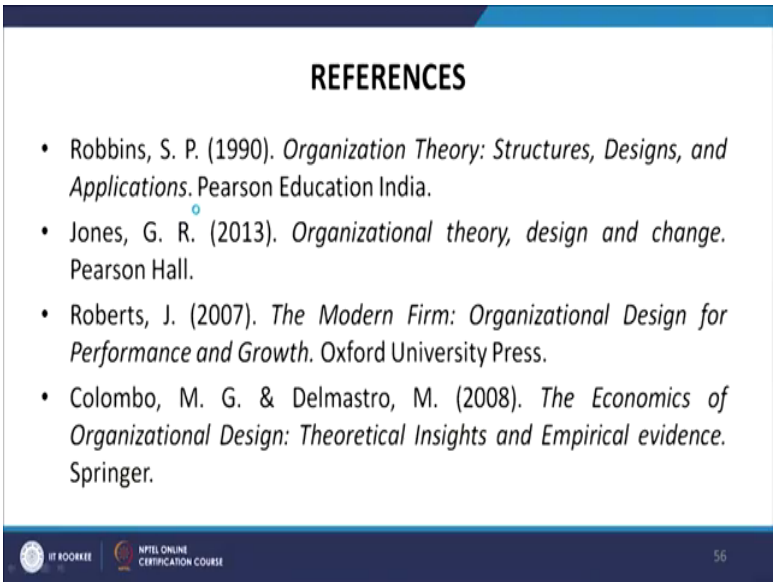

And, again these are the four books from which the material for this module was taken.

Thank you.