

Organization Management

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Module No. # 01

Lecture No. # 08

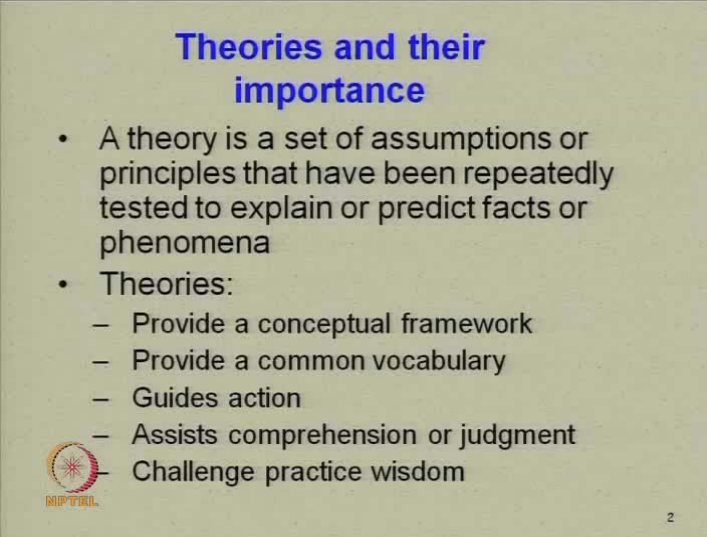
Systems and Contingency Approach to Organization Theory & Practice and Techniques of Organizational Diagnosis

The topic for discussion is systems and contingency approach to organization theory and practice and techniques of organizational diagnosis. The topic as is apparent is divided into two segments: one is the relationship of organization theory and practice to systems and contingency approach and the other is techniques of organizational diagnosis.

One of the fundamental underpinnings of organization management is not only to understand what is happening, which of course is important; nothing can happen unless you understand what is happening, but to do something about it. In fact, this approach has a strong resonance of Karl Marx, who said **that** the task of philosophers has been so far to understand the world; the important thing is to change the world.


Understanding is the takeoff point of any process, but it does not go far enough because what you do with that understanding? As we have repeatedly observed - since management is the art of making of a practitioner, you cannot be a practitioner unless you are an action-oriented person. You cannot be an action-oriented person unless you are able to understand structure and then deliver.

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Theories and their importance

- A theory is a set of assumptions or principles that have been repeatedly tested to explain or predict facts or phenomena
- Theories:
 - Provide a conceptual framework
 - Provide a common vocabulary
 - Guides action
 - Assists comprehension or judgment
 - Challenge practice wisdom

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The subject matter has to do with organization theory. As we all know, theory is a set of assumptions or principles that have been repeatedly tested to explain or predict facts or phenomena. This does not mean that there is 100 percent predictive validity; predicting facts or phenomena has nothing to do with 100 percent accuracy. In fact, nothing in the world is 100 percent. There is no such thing as 100 percent guarantee. There is no such thing as 100 percent insurance. In fact, 100 percent can only be a slogan; it is always an act of approximation.

What is the purpose **that** theories fulfill? Theories provide a conceptual framework. Remember our preceding discussion on a framework of organizational analysis; framework is to recall what we have already taken up; a system of reading meaning into the randomness of life. There is a lot in life that cannot be explained - Why you are born? Where you are born? Indeed, why were you born at all? Where you will die and how you will die?

If the two polarities of human existence are birth and death and both are essentially unexplained, then it is only human ego, which leads people to read meaning between two unexplained phenomena. If you began in an unexplained way and you will end in an unexplained way; then if you want to explain everything, which comes between two unexplained phenomena to be explained logically, it can only be a display of the homosapien's ego that has no logical basis at all. Then, one goes through life asking

many silly questions - Why did it have to happen to me? To which the only logically reply is - Why should it not happen to you? Or, I did not deserve this. Good heavens! You are both the petitioner and the judge; forget being the lawyer. You will decide - it should have happened to me or I do not deserve this. Then, what do you deserve? I deserve better; everyone deserves better.

Over a period of time, I have developed a claptrap response to the standard question - how are you? My stock reply is - I could be doing better, which always surprises people. They turned around to me and said - what do you mean? I said everyone wants to do better. So, what is wrong with my wanting to do better? Or, you lie through that statement - How are you? Fine. You know you are not fine and he is not interested to knowing how you are; he asks you a question because it is one of the notions of life that when you meet somebody you must say something. I cannot understand that. Why must I begin talking at the very first exposure to someone? I may not feel like talking; I may have nothing to say. Why must I be talking?

There have been occasions when people have entered my room; I look at them, they look at me, I go back to my work, they keep standing there or they can take a chair if they wish. Then, they wait for me to open a conversation; I see absolutely no reason why I should open the conversation. So, they keep sitting there for a few minutes. Obviously, since they are occupying a space in my room, my reaction is - Oh my God! He is so strange; is that so? What do you expect me to do? Nice to see you; what is so nice about seeing you? I am glad you came; why should I be glad that you came? I did not ask you. Again, goes back to the way we keep talking endlessly without meaning.

I will give you a sample. You see actually what happens is - when you put all the facts together on the balance, it would appear that taking a logical view on things would be appropriate to assume that it is possible to conclude rationally that if you keep all the facts in mind and you go on and on, what is that you are saying? You are saying nothing. You can talk like that endlessly - you see what happens is actually speaking when you keep all the facts in mind, it would appear that on the balance, it would be a sensible thing...; go on saying what you got to say. No, I am coming to it; get to it.

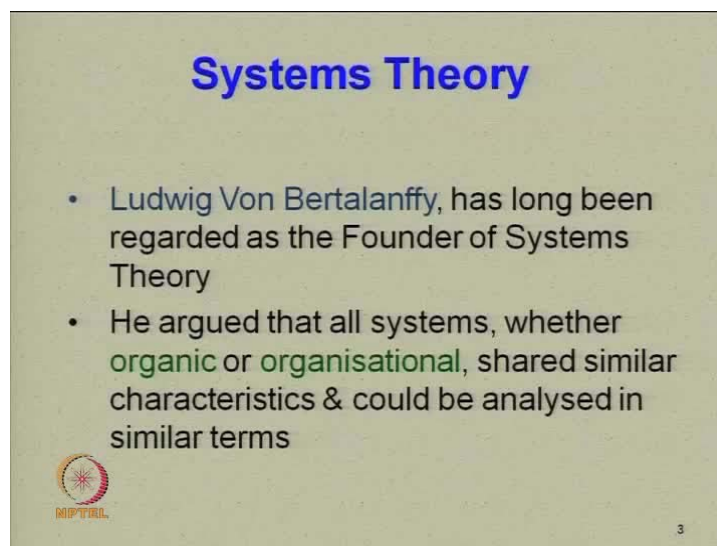
People who preface and intersperse their statements - you know what I mean; no, the truth is I do not know what you mean. As our saying - no sweetheart, the truth is you are

not saying anything. Why do not you begin saying something that I would know what you are saying?

Actually, when you start applying your mind, you will find that a lot of human conduct is just thoughtless. That is what marks a better professional from not such a good professional. The not so good a professional is talking for the sake of talking. There are people who would walk into the room. Again, to go back to my favorite language, which is never spoken in a pristine manner; it is always broken with Hindi – **Tusi aur kaho ji; tusi kya kahun ji?** If you do not know Punjabi, it means - tell me more. I have not even opened my mouth, what more should I tell you? So, I turn around and I said - what should I tell you? My God! Such a strange man; I asked him to say more; I was only beginning a conversation, but he says what I should tell you.


In other words, there is a subtle difference between randomness and a framework. That subtle difference makes all the difference between you are being a good professional and not being such a good professional. Theory helps you to meet the gap. Therefore, it provides: guides for action; assists in comprehension or judgment; challenge practice wisdom; **they were theories important**. Even if they are not correct, they give you a framework of reference.

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Systems Theory

- Ludwig Von Bertalanffy, has long been regarded as the Founder of Systems Theory
- He argued that all systems, whether **organic** or **organisational**, shared similar characteristics & could be analysed in similar terms

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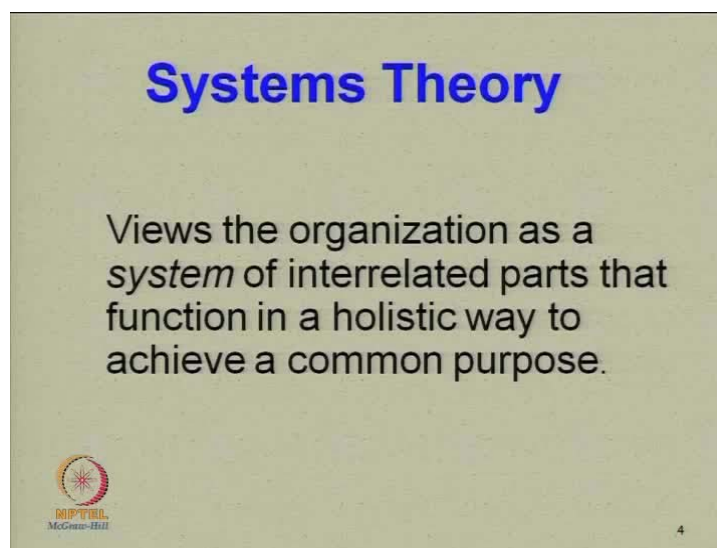
Let us first take up the Systems Theory, which is the topic for our consideration. Popularly, it is attributed to Ludwig Von Bertalanffy; again, like many other notions, he

is certainly not the founder of Systems Theory. Systems Theory is as old as the Greek civilization. However, we have noticed that like every generation, like every period, we believe that the world during our time is the wisest; it is not true. As I was telling you - management does not begin with Frederic Taylor, but everyone believes Frederic is a father of modern management. I do not know why we want to discover fathers and mothers for everything; **somebody has to be a father this and somebody has to be a mother vat.**

The truth is - everything is a continuum and everything begins quietly and then it gathers strengths over a period of time. You must see the significance of the organic origin of any idea. It begins imperceptibly, develops imperceptibly, and it is not noticed till it gathers strength. Over a period of time, not only does it gather strength, it begins to live an impact. However, we cannot **bury** inventing these notions. One of the important components of a standard subject matter of a treatment is to recognize that you have to approximate the body of knowledge, which is generally perceived to be true.

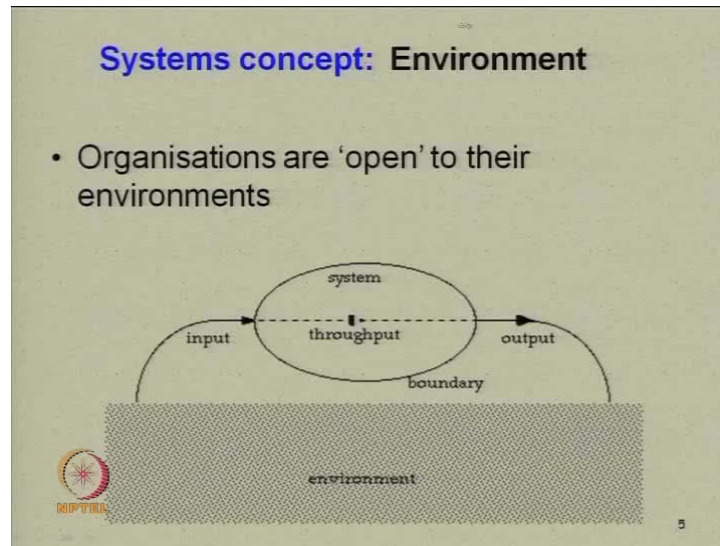
What did Mister Bertalanffy say? He argued that all systems whether organic or organizational, shared similar characteristics and could be analyzed in similar terms. Do not ask me justify it; I am not his reincarnation. This is what he said and this is why he is regarded as the founder or the father of Systems Theory.

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Systems Theory views organization as a system of interrelated parts that function in a holistic way to achieve a common purpose. This definition of systems is widely believed to be the most complete definition of systems and is generally believed to be true. Again, I do not want to generate at your level of understanding or debate into these components, but I do wish you to understand that a system is composed of interrelated parts.

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Therefore, the systems concepts inevitably talks of the environment. The environment can be closed or open. There is an input, a throughput, an output, a boundary condition of the throughput, which defines the domain through which throughput works and then again it goes back to the environment.

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Systems Concepts: Adaptation

- To survive the organisations must adapt to its environment
- All non-random functioning systems have:
Inputs ⇌ Processes ⇌ Output ↓
↑ Feedback loop with criteria ←
- An organisation that does not produce what is reqd by its environment must either change or disappear



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The Systems Concepts has several adaptations. One of them is - to survive, the organizations must adapt to its environment. All non-random functioning systems have inputs, processes, and outputs. Therefore, feedback loop with criteria.

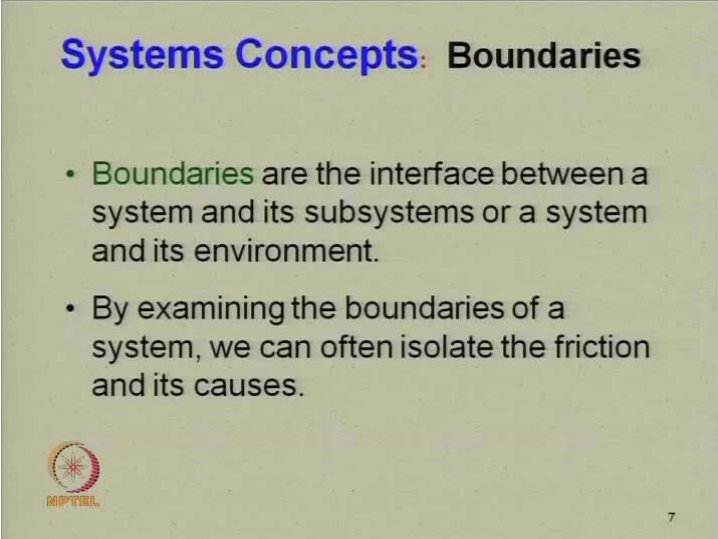
Now, the significant here is not that there is a feedback; everything is a feedback. In fact, systems model reduced to its basic elements is an impact and response model. When you put it in a systems framework, it becomes a little more structured, a little more defined, and therefore, little more specific. So, what is the difference between an impact and response model and a feedback, which comes out of input-process-output? That feedback is with criteria. It is this criteria, which is the significant concept. The criteria again define a structure of the feedback. We have repeatedly maintained that to be a growing person, you have to be a learning person; learning takes place from being open to a feedback.

Organizations are also supposed to be learning systems. In other words, everything and anything to be growing must be constantly receiving inputs. If it is not receiving inputs, it is not a learning system. If it is not a learning system, it is not a growing system. If it is not a growing system, it is not a changing system. If it is not a changing system, then it cannot be at peace or in synergy with the environment, which by definition is a changing world all the time; there is no such thing as a constant environment. Therefore, if the environment is changing, so must the organization. The only way to change

constructively is through growth. An organization that does not produce what is required by its environment must either change or disappear. The proper word there would have been perish.


There is no such thing as an organizational life without a purpose. Why must you exist? Because remember that all organizations are brought into existence at a given point of time for a given purpose. Organizations have their life cycle and that lifecycle goes through the usual experience of rise, maturity, decline; unless renewed, it dies a normal death.

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Systems Concepts: Boundaries

- **Boundaries** are the interface between a system and its subsystems or a system and its environment.
- By examining the boundaries of a system, we can often isolate the friction and its causes.

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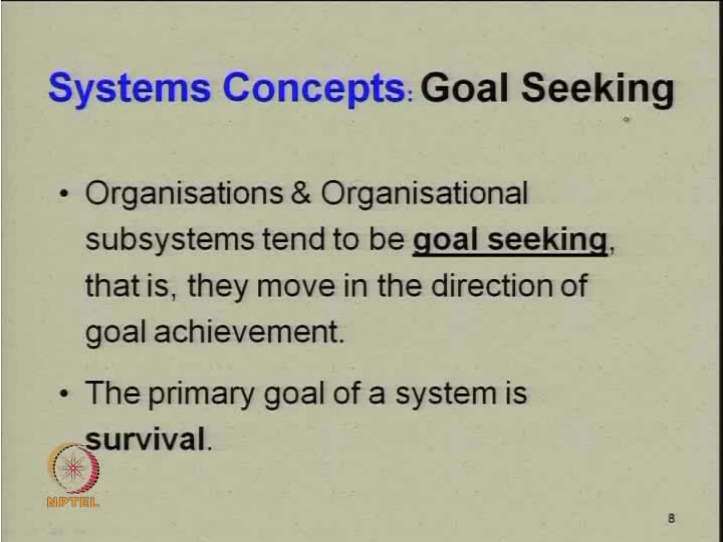
Therefore, one of the central concepts of Systems Theory is boundaries; everything has to be defined. Boundaries are the interface between a system and its subsystem or a system and its environment. Boundary is where one thing changes into another.

If you are a system, then there must be something common amongst the components. It is this understanding of commonness, which creates a system. The moment the commonness change, a new system comes into existence. If all of them are part of a larger system, these are subsystems.

By examining the boundaries of a system, we can often isolate the friction and its causes because you learn to recognize that no one is like anyone else; or, people or systems do


not have to be photocopies. Therefore, you understand and appreciate each other's angularity or defining characteristics.

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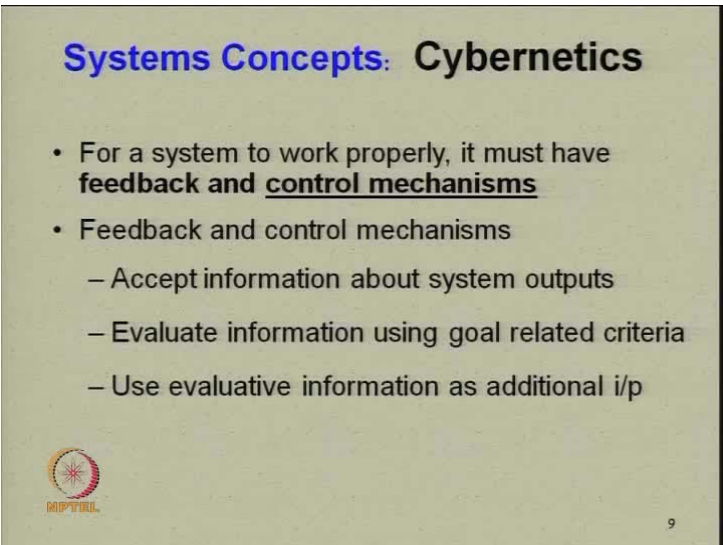
Systems Concepts: Goal Seeking

- Organisations & Organisational subsystems tend to be **goal seeking**, that is, they move in the direction of goal achievement.
- The primary goal of a system is **survival**.

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The second component of Systems Concepts is goal seeking. Organizations and organizational subsystems tend to be goal seeking, that is, they move in the direction of goal achievement. Therefore, survival is the basic law of all systems.

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Systems Concepts: Cybernetics

- For a system to work properly, it must have **feedback and control mechanisms**
- Feedback and control mechanisms
 - Accept information about system outputs
 - Evaluate information using goal related criteria
 - Use evaluative information as additional i/p

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If you are to survive, there must be some kind of a control mechanism. So, there is again yet another concept of Systems Theory - Cybernetics. Cybernetics is essentially a control

mechanism to keep a system as per plan. Please understand this - it is a control mechanism not to give you the yes and the no; it is a control mechanism to keep a system as per plan; in fact, one of the biggest challenges, which the industry faces today. I noticed one through a longitudinal analysis, which I undertook this morning - on a large organization, which spawned a subsidiary. I called for all the papers, which went into the launch of the subsidiary and I went through the first presentation, which was made to the board. This was a good four years ago.

The presentation does not define the feasibility of the project itself; a very common mistake when you are working under the holding company concept because you have some cash surplus and you have had some activity in a given area. If you belong to the ruling family, you have a dream one night - let us open into this product line. So, you call two of your executive directors and they dutifully agree to the great brainwave you have; even calling you a genius to have thought of, which nobody else has thought of. They are assigned the task of doing a presentation.

Because of the form of the company law, you have to take it through some sort of an approval to the board. So, they come up before the board; say the commonest things in the most pedantic manner. When you do a content analysis, you find that they have really said nothing. They have not even recognized the track record of the company in that particular product line; forget longitudinal thinking. They behave as if it is a great new idea. After saying the commonest things, the board again dutifully agrees that the subdivision be opened and it will have the status of the subsidiary in course of time. Periodic presentations are made to the board repeatedly mundane with no analytical data other than huge statistical charts, which give sales figures and investment figures. What you do with these figures is never clear. Again, everyone dutifully signs. After 4 years, they find that it is not even making money. It is such a drain on the mother company that the mother company is beginning to run losses at which stage a Vinayshil Gautam has to be produced to set the company right. The trouble is even he cannot set it right.

If you have any exposure to the clinical method, you must realize that there are infections caused by a virus or caused by some agency. I am not here to teach you medicine, which have become immune to antibiotics. Systems become immune to interventions; unless you can crack the system to penetrate it, you cannot diagnose it.

This is something, which most happy consultants are oblivious of. So, you find a rash of consultants in the area for which there is a fashion wave.

About 7 years ago, world was full of ERM consultants. Everyone was setting up an enterprise resource system interestingly after the founder himself had said it does not work. Huge investments were being made in setting up enterprise resource management systems. Nothing wrong with it provided it is intelligently done embedded in the potential of the organization and with a purpose. Now, all these three are overlooked; it is not intelligently done, it is done in a repetitive manner. It is not done in a manner that is integrated with the organization, but it is done in a standard manner where it has been done three places else. It is not adapted to the organization because the consultant has no capacity to adapt, he can only pair at what he has paired at 4 places else.

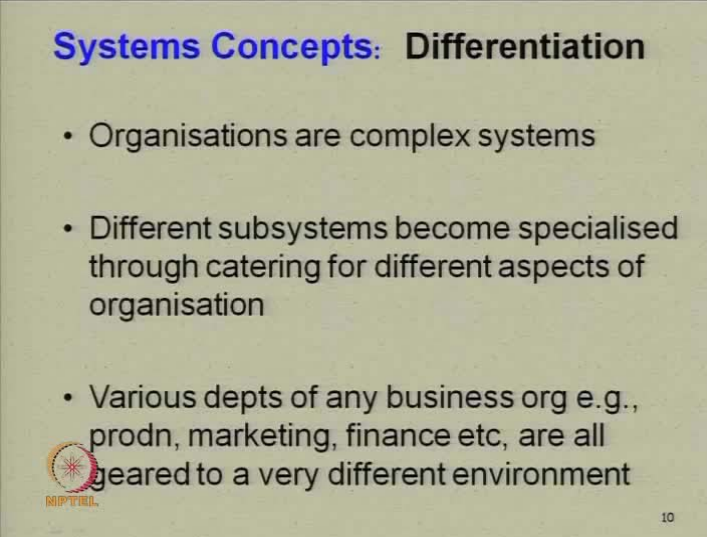
You do not have the capacity to make a difference, that is, organizational diagnosis. Any course on organization management should give you some basic competency to understand whether this system will work or not. I have often compared organizational diagnosis processes to be that of an ophthalmological system. When you go to an ophthalmologist and for those of you to whom that word may be new - a specialist insight in eye part of the body. That is the only way to define it because that is a word. I know English is fashionable, but I am also conscious that most people can neither speak English nor understand English. However, it does not matter; fashion has got nothing to do with reality.

I mean, if you see all those fashion shows and the costumes designed by, conceived by, delivered by, so and so, whenever you find anyone wearing them in real life. So, what are you supposed do? Put on those costumes and parade outside this lecture theatre. That is a fashion. I know it is fashionable to be English speaking. The truth is that English died in this country many decades ago. In fact, the English that we speak is not even understood by the Englishman. This is because somebody gets promoted to a job, you will say let me go and thank him. How do you go and thank somebody, who has been promoted to a job? You can only go and congratulate him. It is the same thing; it does not matter. Of course, nothing matters. At the end of the day, we all die. So, how does it matter?

Never mind, we will continue to speak English whether anybody understands it or not. We will continue to create a new version of English and then declare that this is an Indian language. Of course, it is an Indian language because nobody else understands it; that is the way only. The use of the word only is generally strewn around like **Om nama swaha**; he eats only; life is that way only; he is coming only; no, he is sleeping only. What is that word only? Only is the only word I know in English. Yet, we will all speak English; never mind, long live English. What I am trying to tell you is that there is a distinction between fashion and reality. Organizational diagnosis has to do with the reality of changing the world. Systems approach is a way of doing it; it is not the way, the only way; in fact, it is one of the many options available.

Therefore, the next concept of cybernetics that has been explained to you (Refer Slide Time: 27:49) - Feedback and code control mechanisms have to: accept information about systems outputs; evaluate information using goals related criteria; use evaluative information.

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Systems Concepts: Differentiation

- Organisations are complex systems
- Different subsystems become specialised through catering for different aspects of organisation
- Various depts of any business org e.g., prodn, marketing, finance etc, are all geared to a very different environment

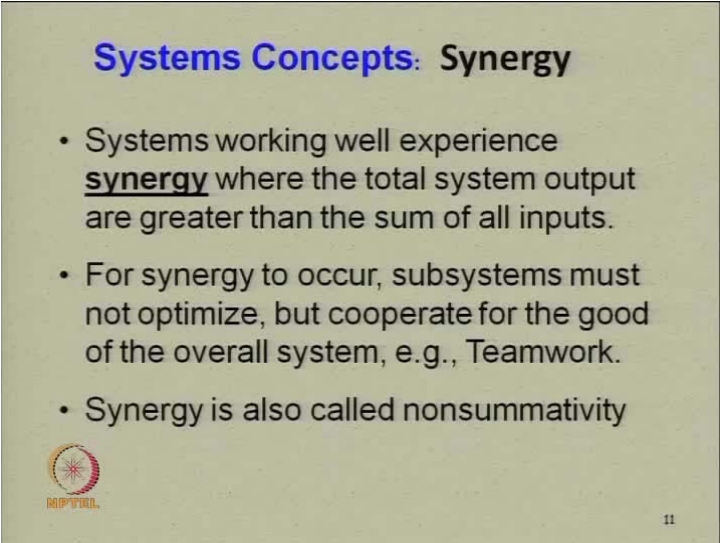
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There is the systems concept of differentiation. Since organizations are complex systems, different subsystems become specialized through catering for different aspects of organization. That is where specialization goes with the general organizational characteristics.

There are two concepts, which you should be familiar with an organization management: integration and differentiation. You are operating with a differentiating concept when you distinguish between the marketing exercise and the book keeping exercise. However, you are looking at the integrative function when you look at the strategy. It is unfortunate that a lot of management teaching and learning is done with an overlay of disciplines, which has got nothing to do with the management. This is where, it is important to recognize that management is not industrial engineering, management is not psychology, management is not commerce; management is nothing else, but management. No matter how you may argue about it, you cannot understand management.


Without understanding management appears a tautological truth, but people believe they get to be the management experts by virtue of the fact that they are a good another professional. There is a very simple paradigm like everything else; management needs to be learnt as management. The principles which I am elaborating to you help you to gift character to the learning of management. The two concepts, which have just shared with you is differentiation and integration principles in design of organizations.

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Systems Concepts: Synergy

- Systems working well experience **synergy** where the total system output are greater than the sum of all inputs.
- For synergy to occur, subsystems must not optimize, but cooperate for the good of the overall system, e.g., Teamwork.
- Synergy is also called nonsummativity

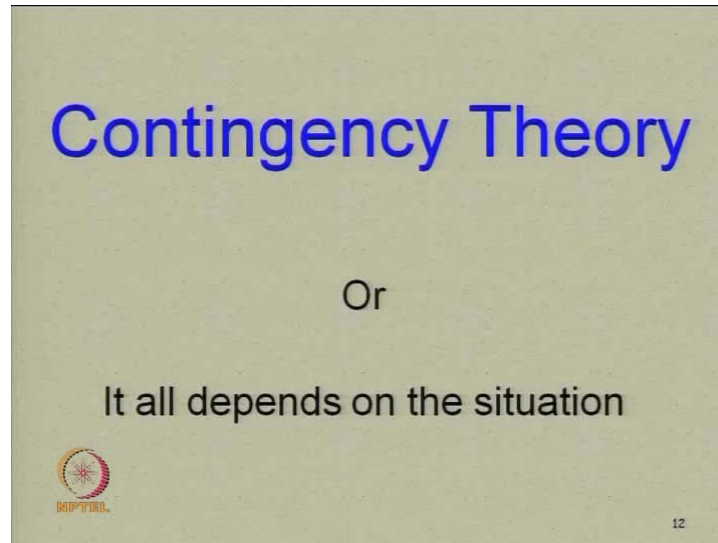
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Another word used for integration is synergy - Systems working with well experience synergy where the total systems outputs are greater than the sum of all inputs. It is important to realize that the character of groups is not additive. When the subsystems put together, the subsystems acquire a characteristic and acquire a strength far beyond the

totaling of the individual subsystem strengths. Synergy is also called nonsummativity. Ultimately, management is an integrative discipline and it puts together different components. Therefore, looking at subsystems beyond the systems does not make sense.

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Then, there is a contingency theory. As I said, vocabulary becomes with great reluctance to people who believe that numerics are the only language worth knowing; or, who believe that language is learned on its own; or, who believe that use of language is **blah blah blah**. I have taken pains to mention that contingency theory can also be understood that it all depends on the situation.

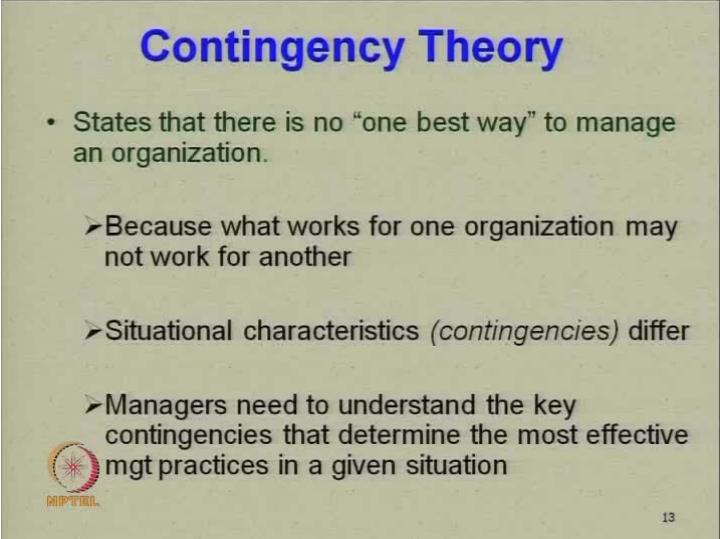
When you study man-made fibers, it is assumed that you must have the technical terminology of textile engineering. When you study urology, it is assumed you will have the technical terminology of medicine and surgery with you. However, when you study management, everything is expected to be explained to you in layman's terms. If you talk management in a technical terminology, they will say that you are talking jargons; we do not understand what you say. To which, my answer is - why must you understand what I say without being prepared for it.

If I will not understand urology without understanding the technical terminology of medical sciences and I cannot understand man-made fibers without understanding the technical terminology of textile engineering, why must you understand organization management without getting the vocabulary and the technical terminology of the

management discipline? However, that is the way management is approached. Therefore, I have to take it on board and in trying to communicate to the kind of audience I have for these sessions when I say organization theory, I deliberately put in an or and say it all depends upon the situation; so, that is Eureka. Now we understand.

I hope several of you would be shaking your head and say - it all depends on the situation; that is contingency theory and I know that. No, I do not think you know it and I do not think you will know it fully even after I explain it because what I will explain to you is the basic outline. What I will do is help you to be literate to start reading about contingency theory. So, have no illusions, but of the many ways of not learning is before somebody starts saying (()) I have understood it all. You have understood nothing my child, but you do not have the humility to know that you have not understood it. Everything needs effort to understand. So, whether you say it in Punjabi or whether you say it in Bengali, common wisdom remains the same.

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Contingency Theory

- States that there is no “one best way” to manage an organization.
 - Because what works for one organization may not work for another
 - Situational characteristics (*contingencies*) differ
 - Managers need to understand the key contingencies that determine the most effective mgt practices in a given situation

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Therefore, what is contingency theory? Contingency theory is that there is no one best way to manage an organization. Why an organization? There is no one best way to manage anything; say if inanimate objects. Therefore, the principle of standardization applies only to inanimate objects; non-life materials. Let there be no confusion about this. Therefore, if you want measurement to be specific everywhere, then clearly, you are

not a manager because what works for one organization may not work for another. Much in the same manner in which what works for one individual, may not work for another.

Then, there are situational characteristics, which are called contingencies. After all that is common to everyone - everyone has two eyes, two ears, one nose, one mouth, it does not make two persons similar. The shape of the nose will be different, the size of the ear will be different and the capability of the ear will be different because each one will hear differently. So, what do you mean by saying everyone is born equal? The meaning is very simple. Everyone has a right to equal opportunity because no two people are born equal. The trouble with learning is - if you reduce it to popular claptrap phrases, then you understand it all the wrong way. Even equality has to be defined. Therefore, each organization is different to every other organization because the contingency of each organization is different.

Managers need to understand the key contingencies that determine the most effective management practices in a given situation. Therefore, there is no such thing as the best practice. It is another matter just as you have got bestsellers like 2 minutes managers; everyone at the end of the day wants to know the best practices. Sweetheart, there is no such thing as best practices; terrible shocker is not it?

Even a bigger shocker if your boss believes - get me the best practices; survey the companies and find it out for them. Find out; one way to keep your career **straight** is keep obliging the boss, but another way to keep your sanity is know what the truth is. So, while keeping on the right side of the boss, it is your responsibility to know reality on your own. Ladies and gentlemen, the truth very simple is that there is no such thing as the best practices. The reason for that is the contingency theory. In fact, my definition of the best practices that which works for me; for me that is the best practice. Managers need to understand the key contingencies that determine the most effective management practices in a given situation; in fact, even in the same organization, the same situation if repeated may need to be handled differently. You cannot have the best practice of dealing with a strike; each strike may be different. You cannot have the best practice on anything.

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Technology

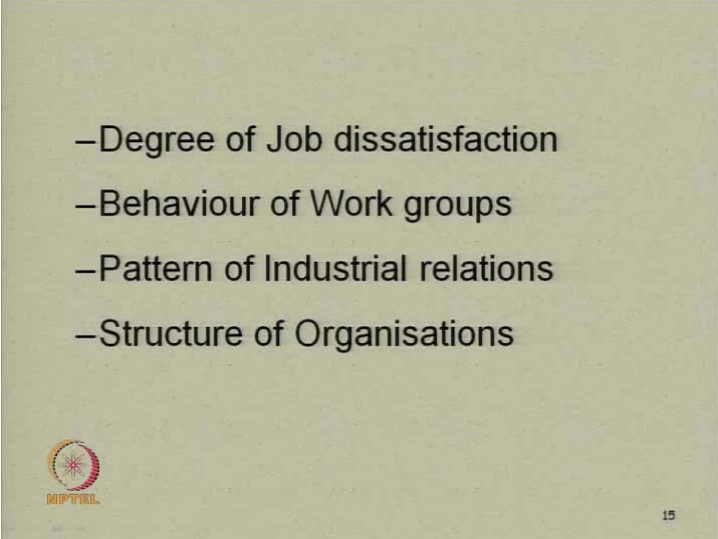
- Lots of research since 1950 has taken place to identify the effects of technology upon organisations
- Research by Woodward & Tavistock Institute indicated that Technology influenced :




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One of the greatest determinants of any good practice is technology. The effect of technology upon an organization is an important consideration in this **course**. That is why we will be talking of mechanization, automation, computerization at a subsequent point of time. However, I want you to understand that the way we use the word technology in organization management has a specific connotation. However, before I get to that specific connotation, let me share with you some of the research work, which has been done in this area in organization management.

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- Degree of Job dissatisfaction
- Behaviour of Work groups
- Pattern of Industrial relations
- Structure of Organisations



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I would refer to the research work of Woodward and the Tavistock institute, which indicated that technology influenced four parameters: degree of job **satisfaction**, behavior of group works, pattern of industrial relations and structure of organizations. You can clearly see that the four parameters here are being influenced by not just gross technology, but through standardized work practices. Therefore, you have to understand the way the word technology is used in management like many other words – democracy, socialism, secularism. What have you... Once you pass into a circle of communication, where people start chanting these words, these words lose their connotation. It means all sorts of things to all sorts of people. Technology is one of those words, which **alas** means all sorts of things to all sorts of people. At certain institutions, it becomes holy cow. So, you are even expected to talk of management technology; you are expected to talk of behavioral technology. If not behavioral technology talk at least the behavioral engineering. In fact, nothing is complete without the use of the word technology or engineering.

If that is the only way you communicate, what is the problem with it? However, you should know that is not the dictionary meaning of technology. There is a **solace** in words and words are very powerful instruments. Alas, it is one of the linguistics truths of study of languages that words are very often used because they acquire a connotation, which has nothing to do with the meaning, which the word initially had. Here two people are fighting: one person is clearly the aggrieved party; the other is the agent provocateur. Suddenly, somebody arrives and says - peace; do not fight; please move away. What are you trying to do? You are equating an aggressor with a victim in the name of the word peace because nobody is supposed to question the word peace. So, the moment you say peace, everyone is supposed to line up behind you. What about the violence, which was inflicted on me? No, you would not even find that out and you say peace.

You cannot change that pattern through which the world communicates. However, if you are a scientific practitioner of organization management theory, you are at least conscious of the abuse of words. Therefore, I alert you to the fact that the use of the word technology in organization management is substantially different from the general use of the word technology and much of it will become apparent as I go down the presentation. There is a correlation between technology and degree of job **satisfaction** because

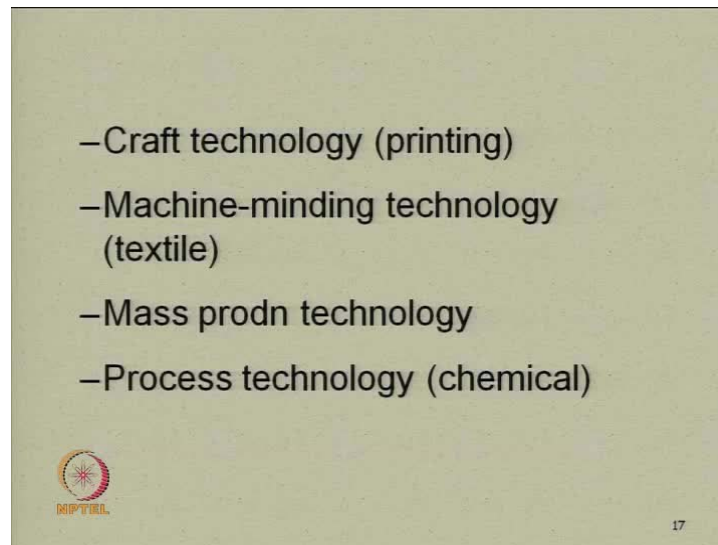
remember that I have listed four parameters here and I will go down each of those four to explain to you what it means.

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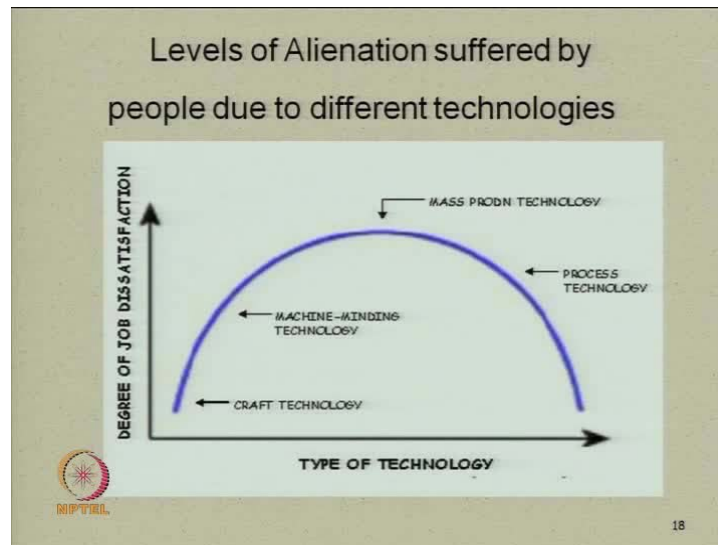
Different technologies have different effect on nature of work and **degree of job satisfaction**. Please note this - different technologies have different effect on nature of work and degree of job satisfaction. In the early years of the coming enough computerization, you used to have huge machines, which runs stencil for reproduction of work and you ran it with a handle. When it was replaced with a photocopier, a lot of people, who were used with reproducing through stencils found it painful to change because habits form around technology. Technology acquires a personality. It takes on the character of the user. So, different technologies have different effects on the nature of work.

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Blauner distinguished between four different technologies: craft technology, machine-minding technology, mass production technology, process technology. That was one person's definition of different types of technologies. When it gets to work design, there is unit technology, batch technology and a process technology. Since work is woven around technology, it creates different designs of work. Therefore, in organization management, a deep rooted understanding of the meaning of the word technology is important to understand how work is structured. Clearly, there is a difference between a printing technology and a chemical technology; in fact, there is nothing common between the two; say the word technology itself.

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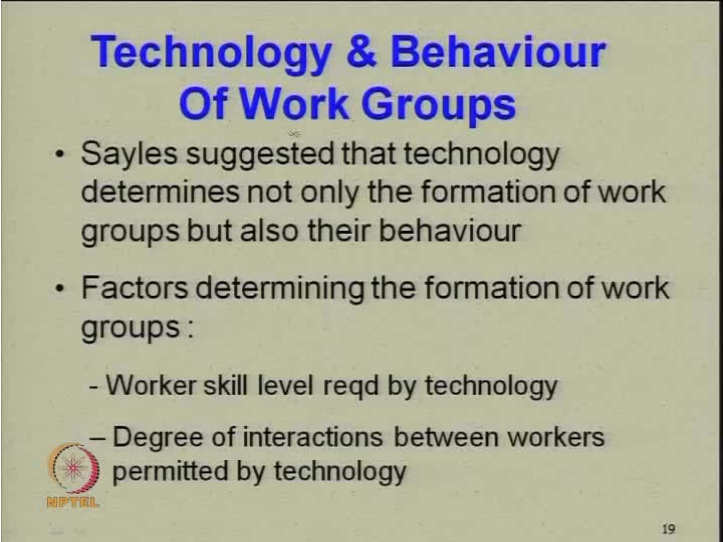
Therefore, there is a level of alienation suffered by people due to different technologies. I know a lot of people, who resent receiving letters in print. They believe it is conversion of a very personal sentiment into a mass sentiment. If you have to write a letter to somebody you love, value, cherish, you write it in your longhand.

This is a value system. You want argue with it, please go ahead. If your loved one is willing to receive a dictated letter signed by your secretary, by all means send it; what is the problem? I have missed you so much, John on behalf of Anderson; nothing like it. It does not have to be John and Anderson, it could as well be Swaminathan on behalf of Subramanyam. I mean, there is nothing significant about one name or another name in the illustration, which I have given. In other words, technology evokes emotion. I would wish you to understand this observation seriously, but not flippantly and not in a humorous way.

If you look at the degree of job satisfaction and type of technology... Let us look at the four technologies I talked about - the craft technology, the machine-minding technology, the mass production technology and the process technology. This is the job satisfaction curve. The highest alienation is supposed to take place with mass production technology. It creates a very abstracted situation with no personalization at all. That has an impact on job satisfaction. Therefore, job satisfaction is not just a factor of perks, salaries, your

leave patterns, your conditions of work, **which are all it is**. However, there are other characteristics, which define job satisfaction.

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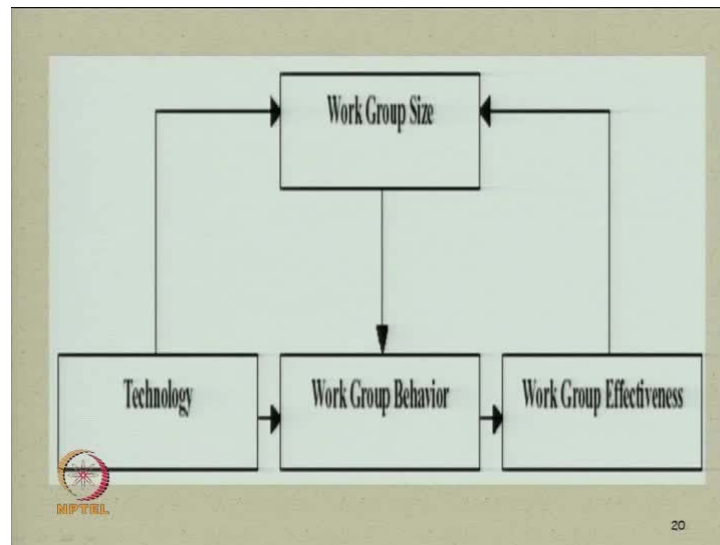
**Technology & Behaviour
Of Work Groups**

- Sayles suggested that technology determines not only the formation of work groups but also their behaviour
- Factors determining the formation of work groups :
 - Worker skill level reqd by technology
 - Degree of interactions between workers permitted by technology

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There is technology and behavior of work groups. Sayles suggested that technology determines not only the formation of a workgroup, but also their behavior. Remember my statement - work is designed around technologies, unit, batch, process, et al. There has been serious study, which says that technology determines the behavioral pattern. Factors determining the formation of work groups are: workers skill level is required by technology; degree of interaction between workers permitted by technology.

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This diagram puts the proposition in a schematic manner. Technology affects work group size and work group behavior. They both have a relationship with work group effectiveness. Work group behavior determines work group effectiveness; work group effectiveness is a feedback into workgroup size. Therefore, work group size is impacted both by technology and by work group effectiveness, which work group behavior being at the heart of the proposition.

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Let us look at the concern of technology and industrial relations.

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Technology & Organisational Structure


- J Woodward carried out one of the most influential studies to 'discover whether principles of organisations laid down by an expanding body of Mgt theory correlates with business success when put into practice'



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- **Methodology :**
 - About hundred firms were taken as a sample
 - They were divided into 3 general categories based on their method of production :
 - Simple units & small batch prodn methods
 - Large batch & mass prodn methods
 - Complex process prodn methods
 - All these firms were placed along what she called continuum of technological complexity

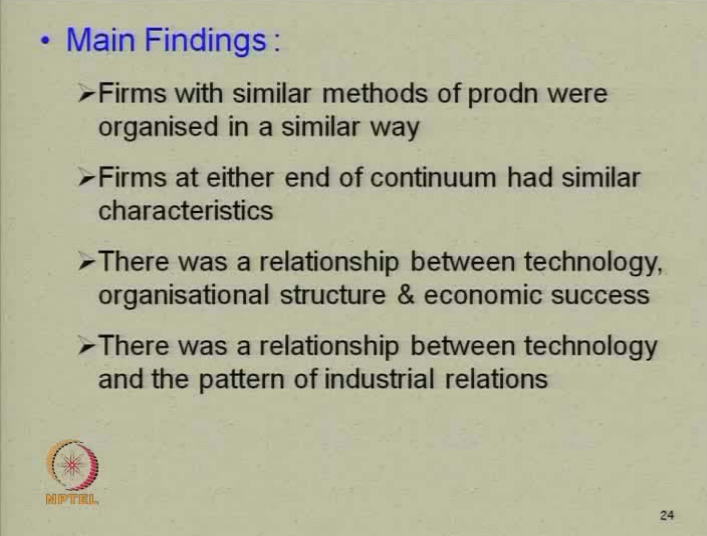


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Technology and Organization Structure: John Woodward carried out one of the most influential studies to discover; as she put it, whether principles of organizations laid down by an expanding body of management theory correlates with business success when put into practice. Again, we go back to the central theme of this presentation. Do principles of work organization as indeed the principles around which your organization is structured affect your results? or can you leave it at random to work out itself? and at the end of it, (()) how does it matter? The answer is very simple - it does matter, which is why organization theory is central to the study of organizational effectiveness.


What was it that John Woodward did? Studied about 100 firms as a sample; they were divided into three general categories based on their method of production. The three categories were: simple units and small batch production methods, large batch and mass production methods, and complex process production methods. All these firms were placed along what she called continuum of technological complexity. So, the key word here is continuum of technological complexity.

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• **Main Findings :**

- Firms with similar methods of prodn were organised in a similar way
- Firms at either end of continuum had similar characteristics
- There was a relationship between technology, organisational structure & economic success
- There was a relationship between technology and the pattern of industrial relations


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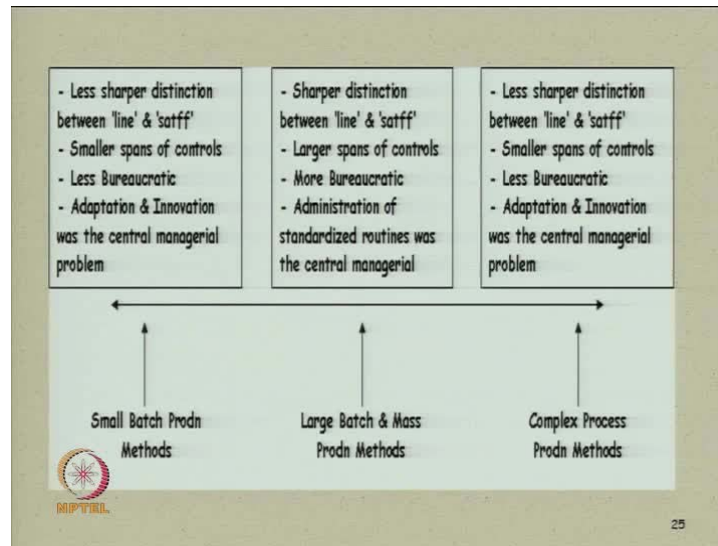
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What were the findings? Firms with similar methods of production were organized in a similarly way. Not that somebody did so consciously, but that is the way it worked out and there by emerged a theory. The theory that if you have similar production methods, you will be having similar patterns of organization; the theory gets established that there is a correlation between your methods of production and ways of organizing work. Therefore, the next time around when you are setting up a production unit, you also think about ways of organizing work. That is the useful purpose a theory serves. So, a set of experiences establish a theory. When that theory gets tested through repeated empirical situations, it becomes the touchstone of beginning work the next time around and thereby you reduce the incidence of era.

There was a relationship between technology, organization structure and economic success. This is a very important principle for you to register. If there is a relationship between technology, organization structure and economic success, then there is

definitely a correlation between technology and patterns of industrial relations. This pattern of industrial relations is usually not studied in any study of technology. This creates a problem in seeing the significance of technology. It is just as well that even the most ardent believers of technology recognize the far reaching impact, which technology has.

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In this diagram, we attempt to sum up all that we have been saying so far; looking at small batch production methods, large batch and mass production methods, complex process production methods. When it comes to small batch production methods, these are: less sharper distinctions between line and staff; small spans of control; less bureaucratic; adaptation and innovation as the central managerial problem. When it comes to large and mass production methods: sharper distinction between line and staff; large spans of control; more bureaucratic; administration of standardized routines as the central managerial concern.

When it comes to complex process production methods, then: less sharper distinction between line and staff; smaller spans of control; less bureaucratic; adaptation and innovation as the central managerial problem. Therefore, in certain way, small batch production methods become similar to complex process methods when it comes to central managerial problems because in both cases, adaptation and innovation becomes the central managerial problem. So, there is greater similarity between small batch

production methods and complex process methods. Then, there is between complex process method and large batch and mass production methods.

We shall be then taking up the study of socio-technical systems.

Thank you.