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

Lecture – 03 The Evolution of Organization Theory – I

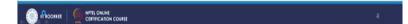
Welcome to this course on Organization Theory/Structure and Design. Now, we will talk about module 3. So, we are talking about part 1 that is the Introduction to Organization Theory and in module 1 and 2 we have talked about an Overview of Organization Theory.

Now, in this module 3 and module 4 we will talk about the Evolution of this theory that is the Organization Theory. So, let us start with module 3 and let us see what the things that this module will cover are.

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MODULE OVERVIEW

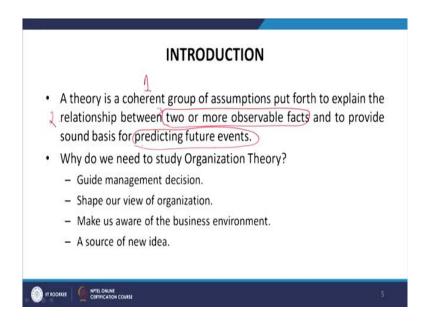
- Understanding the evolution of organization theories.
- Identifying Adam Smith's contribution to organization theory.
- Explaining how the Industrial Revolution changed organizations.
- Describing the Type 1 classification framework.
- Defining the four principles of scientific management.
- · Describing Henry Fayol's contribution to organization theory.
- · Defining Max Weber's bureaucracy.



The first thing that we will talk about today is understanding the evolution of organization theories. Then we will talk about identifying Adam Smith's contribution to organization theory; thereafter we will be explaining how the industrial revolution changed organizations.

Then we will describe the type 1 classification framework; defining the four principles of scientific management; followed by describing Henry Fayol's contribution to organization theory and, then we will define Max Weber bureaucracy.

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To start with what is a theory? A theory is a coherent group of assumptions. So, first important thing here is that it is coherent group of assumptions put forth to explain the relationship between two or more observable facts and to provide sound basis for predicting future events.

So, we are talking of a coherent group of assumptions that will explain a relationship between two or more observable facts that is the third thing and to provide a basis for predicting future events. So, two or more observable facts are understood so that we can make some predictions about the future events.

Now, why do we need to study organization theory? So, there are several reasons for that. First is it guides management decision; the second is it shapes our view of organization, then it also makes us aware of the business environment and it becomes a source of new ideas.

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While understanding the evolution of organization theories one must keep in mind the cumulative development of theories as the underlying theme. Theories are introduced, evaluated, refined and new insights tend to reflect the limitations of earlier theories. Thus, theories are not developed and understood in air-tight silos but as a continuous flow where different streams keep on adding and editing the existing and prevalent theories based on changing circumstances.

While understanding the evolution of organization theories one must keep in mind the cumulative development of theories as the underlying theme. So, we are talking about cumulative development of theories. So, that is the underlying theme. So, theories are introduced, evaluated, then refined and new insights tend to reflect the limitations of earlier theories.

So, first they are introduced then they are evaluated, then refined and then new theories and new insights they come to reflect or to overcome the limitations of earlier theories. So, this is how there is this cumulative development of theories. But, also keep in mind that theories are not developed and understood in air-tight silos.

So, they are not there for all times to come, but as a continuous flow where different streams keep on adding and editing the existing and prevalent theories based on changing circumstances.

So, new theories they keep on coming because of the changing circumstances. So, in social sciences and in management these theories they are not air-tight silos. So, they keep on changing, editing keeps on happening, new theories keep on coming, old theories keep on going out of fashion. So, this is how this continues.

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THE CASE OF UNITED PARCEL SERVICE (UPS) UNITED PARCEL SERVICE: THE WORLD'S LARGEST PARCEL DELIVERY COMPANY • Despite being over a 100 years old, this privately held company is described as one of the most efficient companies in the world. • Its efficiency lies, to some extent, in the practices of scientific management principles that originated in the early part of twentieth century. • UPS has more than 1000 industrial engineers who use time-study techniques to set standards for every job in the company.

Let us talk of the case of the United Parcel Service that is UPS. It is the world's largest parcel delivery company. Despite being over a 100 year old, this privately held company is described as one of the most efficient companies in the world. Its efficiency lies to some extent in the practice of scientific management principles that originated in the early part of 20th century.

So, because of its using the scientific management principle that is why it is considered to be a very efficient organization. So, UPS has more than 1000 industrial engineers who use timestudy techniques to set standards for every job in the company.

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THE CASE OF UNITED PARCEL SERVICE (UPS) UNITED PARCEL SERVICE: THE WORLD'S LARGEST PARCEL DELIVERY COMPANY

- For instance, a sorter at package-sorting hubs is expected to handle 1,124 packages an hour and is allowed no more than one mistake per 2,500 packages.
- Drivers of delivery trucks are instructed to walk to a customer's door at the brisk pace of three feet per second.
- UPS also keeps daily worksheets that specify performance goals and work output for every employee and department.



For instance, a sorter at package-sorting hubs is expected to handle 1124 packages an hour and is allowed no more than one mistake per 2500 packages. Drivers of delivery trucks are instructed to walk to a customer's door at the base of three feet per second. UPS also keeps daily worksheets that specify performance goals and work output for every employee and department.

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UNDERSTANDING THE CONTEXT

- Different social structures would suggest different ideas about organization and a discussion around these would help us understand the evolution of theories in a better and more holistic way.
- Throughout our discussion we would keep referring about the external circumstances that helped in shaping the theoretical developments.

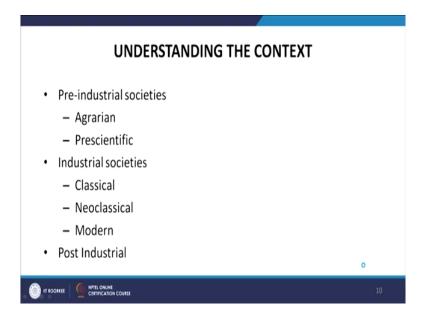
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Now, let us understand the context of these organization theories. So, different social structures would suggest different ideas about organizations and the discussion around these

would help us understand the evolution of theories in a better and a more holistic way. Throughout our discussion we would keep referring about the external circumstances that helped in shaping the theoretical development.

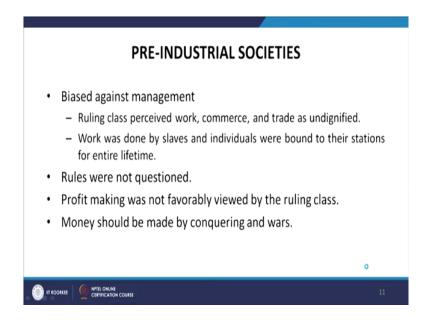
So, for us these external circumstances are very important and they keep on changing, that is why, the theory development in our context it keeps on changing, it keeps on happening, new theories keep on coming.

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So, continuing with understanding the context there are these pre-industrial societies which consisted of agrarian and pre scientific. Then came industrial societies, and classical, neoclassical and modern are the three classifications that they had and then came the post industrial societies.

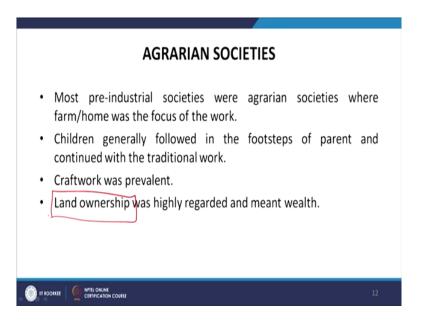
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Now, let us look at what this pre industrial societies are, that we are talking about. So, they were biased against management. Ruling class perceived work, commerce and trade as undignified. So, they were the ruling class and they did not want to do that kind of thing. Work was done by slaves and individuals were bound to their stations for entire lifetime.

Rules were made by those ruling class and they were not questioned. Profit making was not favorably viewed by the ruling class. Money should be made by conquering and wars and not by trade commerce and work. So, this is what was happening in pre-industrial societies.

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Then came agrarian societies. Most pre-industrial societies were agrarian societies where farm/house was the focus of the work. Children generally followed in the footsteps of parents and continued with their traditional work. So, children also used to do the same thing, the same work that their parents used to do.

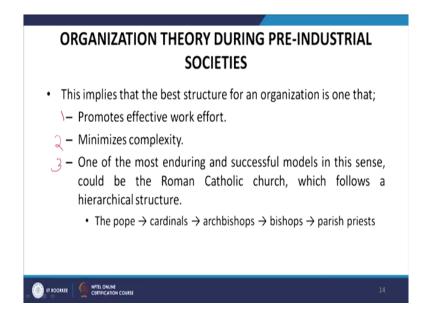
Craftwork was prevalent. Land ownership was highly regarded and meant wealth. So, this was what was considered to be of wealth, that is land ownership.

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ORGANIZATION THEORY DURING PRE-INDUSTRIAL SOCIETIES • The earliest insights on organization theory issues, seem to emerge in form of message from the Bible; — Managers need to delegate authority in large organizations. — Only the unusual or exceptional decisions should flow back up the hierarchy for resolution. • Early philosophers such as Socrates and Plato discussed leadership and described work specialization.

Now, let us look at organization theories during pre-industrial societies. The earliest insight on organization theory issues seems to emerge in form of message from the bible. Managers need to delegate authority in large organizations and only the unusual or exceptional decision would flow back up the hierarchy for resolution otherwise there would be resolved then and there. The earlier philosophers such as Socrates and Plato discussed leaderships and described work specialization.

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This implies that the best structure for an organization is one that promotes effective work effort 1. 2nd it minimizes complexity and the 3rd one is one of the most enduring and successful models in this sense could be the Roman Catholic church which follows a hierarchal structure.

The pope, then comes cardinal, archbishops, bishops and parish priest. So, this was the hierarchy that was there in the Roman Catholic Church. So, this was considered to be the most successful model of organization.

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INDUSTRIAL SOCIETIES With the emergence of a structured and organized discipline of economics and ideas such as 'Division of Labor' by Adam Smith (1776), manufacturing started becoming more standardized. Further, Industrial Revolution brought significant changes in the society and had a major impact on the development of organization theory.

Then came industrial societies. With the emergence of a structured and organized discipline of economics and ideas such as division of labor by Adam Smith in 1776, manufacturing started becoming more standardized. Further, Industrial Revolution brought significant changes in the society and had a major impact on the development of organization theory.

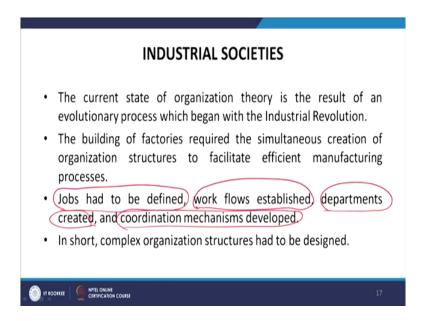
So, this industrial revolution then brought in this development of organization theory. Earlier all kind of organization theory used to come from the Bible and the church. So, whatever happened there was considered to be ideal and all kind of organizations were structured like the church.

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Now, there are two stages of industrialization. The 1st is development of an industrial infrastructure. So, it means a – nationwide transportation system; b – source of cheap power; c – technological innovation; d – modern communications; e – networked financial institutions and f – that is educated labor force. So, that was the 1st stage, the 2nd was creation of capital goods sector.

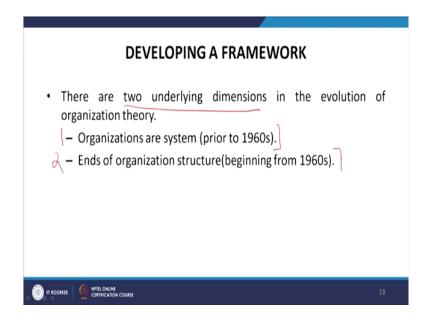
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The current state of organization theory is the result of an evolutionary process which began with the industrial revolution. The building of factories required the simultaneous creation of organizational structures to facilitate efficient manufacturing processes. Jobs had to be defined. Here came job definition. Jobs had to be defined; work flow that is the process of activities the flow of activities was established, departments were created and coordination mechanism was developed.

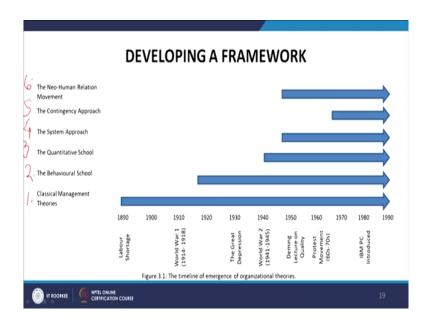
So, this is what happened in industrial societies. First define they job then the flow of activities created departments and then how does these departments will be coordinated so that mechanism was developed. In short, complex organizational structure had to be designed.

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Now, developing a framework – there are two underlying dimensions in the evolution of organization theory. So, what are these two? The 1st one is organizations are systems that was considered prior to 1960s. Then the 2nd is ends of organization structure that started coming from the beginning of 1960s.

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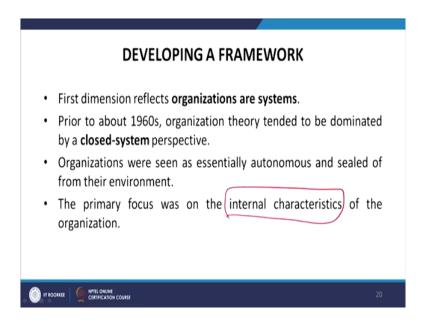
So, this is about developing a framework. So, now, you see that on the x-axis we have the timelines. So, this figure shows the timelines of emergence of organization theories from 1890 to 1990s. So, during this period that is 1890 as you can see there was a labor shortage.

In 1910 came the World War I that went from 1914 to 1918. Then, 1930 came the great depression followed by in 1940 the World War II that went from 1941 to 1945 and in 1950 deming lecture on quality came. 1960 protest movement and then in 1980 IBM PC was introduced. So, this is what happened along the time lines.

Let us start with this classical management theory. So, they had started from 1890s and they are continuing till now. The behavioral school they started in about 1920 and they are still continuing. The quantitative school they started again somewhere in 1940s and continued the systems approach they started somewhere in 1950s and are continuing, then came the contingency approach from 1970 to 1990s and then the new human relation movement. So, that started in 1950s and they and it is continuing.

So, now the advantage of this figure is that you can see how the various theories have developed over a period of time starting from 1890 to 1990 over this 100 year period.

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So, now, let us talk about this framework in some more detail. The first dimension reflects organizations are system. Prior to about 1960s organization theory tend to be dominated by a closed system perspective; organization were seen as essentially autonomous and sealed off from their environment. The primary focus was on the internal characteristics of the organization. So, you see that the primary focus was on the internal characteristics of the organizations.

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DEVELOPING A FRAMEWORK

- Second dimension deals with the ends of organization structure.
- Beginning around 1960, organization theory began to take on a distinctly open-system perspective.
- The primary focus shifted from the internal characteristics to approaches that emphasized the importance of events and processes external to the organization.

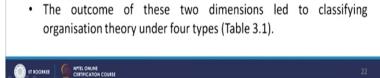


Then the second dimension deals with that end of organization structure. Beginning around 1960s, organization theory began to take on a distinctly open-system perspective. So, now, they came in with an open-system perspective. The primary focus shifted from the internal characteristics to approaches that emphasized the importance of events and processes external to the organization. So, with this now we are trying to incorporate the events and processes that are happening outside the organization.

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DEVELOPING A FRAMEWORK

- However, the second dimension includes two opposing perspectives-
 - Rational Perspective- structure of organization is conceived as a vehicle to achieve specified objectives.
 - Social Perspective emphasizes that structure is primarily the result of the conflicting forces by organization's constituents who seek power and control.



So, now we have started taking that thing into consideration into the decision making into organization theories. However, the second dimension includes two opposing perspective. So, the 1st perspective is the rational perspective. A structure of organization is conceived as a vehicle to achieve specified objectives.

And the 2nd is the social perspective which emphasizes that a structure is primarily the result of the conflicting force by organization constituents who seek power and control. The outcome of these two dimensions led to clarifying organization theory under four types that is this table 3.1.

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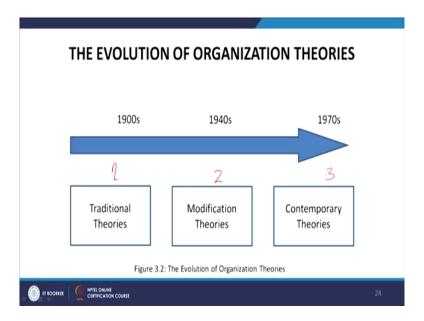
THEORIES (
Approximate Time Frame	1900-1930	1930-1960	1960-1975	1975 onwards
Systems perspective	Closed	Closed	Open	Open
End Perspective	Rational	Social	Rational	Social
Central Theme	Mechanical Efficiency	People and human relations	Contingency designs	Power and politics
Theoretical Classification	Type-1	Type-2	Type-3	Type-4

Now, it categorizes the evolution of all organizational theories. So, on this axis now we are talking of the approximate timeframe from 1900 to 1930, from 1930 to 60s and the third one from the 60s to 1975 and then 1975 onwards. Now, the first framework was systems perspective. So, in 1900 to 1930 it was closed and then from 6 and from 30 to 60 again it is closed, but then 60s onwards it became open.

Similarly, the end perspective it started with the rational went on to become social then again flipped back to being rational and then again it came back to social. The central theme in the 1st phase it had mechanical efficiency; in the 2nd phase it had a focus on people and human relations; in the 3rd phase it had a focus on contingency designs and in the 4th phase it had the focus on power and politics.

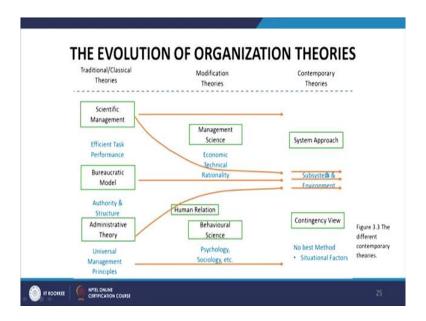
So, now, this theoretical classification. The first one from 1900 to 1930 is type I; from 1930s to 1960s is type 2; from 1960s to 1975 it is type 3 and from 1975 onwards it is type 4.

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Now, this shows the organization theories on this timeframe starting from 1900 to 1970. So, we started with traditional theory moved on in 1940s to modification theories and in 1970s to contemporary theories. So, I have tried to make this a development of organization theory very clear to you on the basis of the various timeframe and also on the basis of various theories how they have developed over a period of time, how the changes have come in these theories over the period of time.

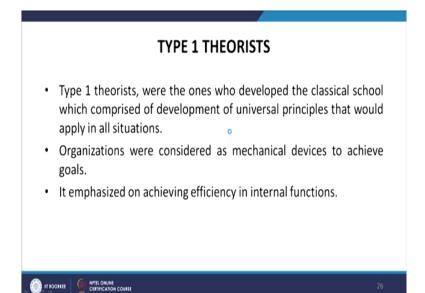
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Now, again on the left hand side you can look at the traditional or classical theories, in between are modification theories and on the extreme right there are contemporary theories. So, we are talking about the different contemporary theories. So, we started with scientific management, that is, efficient task performance, then came the bureaucratic model that is authority and structure then came administrative theory that is universal management principle.

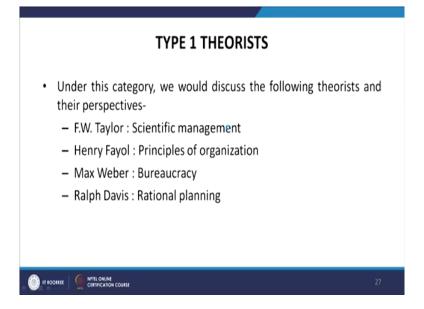
Now, these modification theories in between; so, there was this management science, then economic, technical and rationality, human relations, behavioral science that is psychology and sociology and then we moved on to the contemporary theories, system approach subsystems and environment contingency approach. So, now, you see that there is no best method.

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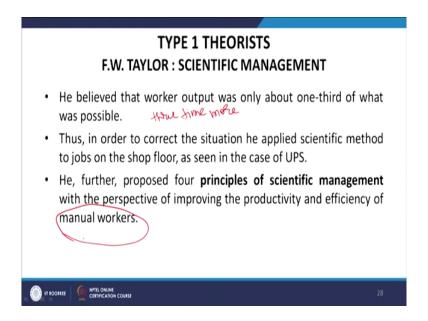
Now, let us look at the type 1 theorists, those people who propounded type 1 theories. So, type 1 theorists were the ones who developed the classical school which comprised of development of universal principles that would apply in all situations. Organizations were considered as mechanical devices to achieve certain goals. It emphasized on achieving efficiency in internal functions.

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Under this category, we would describe the following theorists and their perspective: Frederick W Taylor: Scientific management, Henry Fayol: Principles of organization, Max Weber Bureaucracy and Ralph Davis: Rational planning.

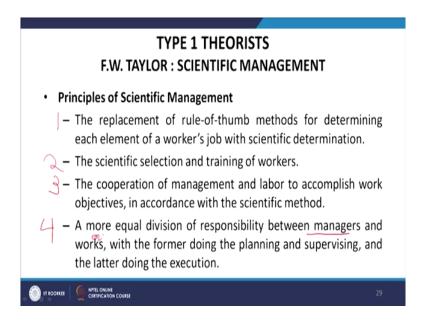
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Now, let us look at in detail about these type 1 theorists. So, we are talking of F W Taylor's scientific management theory. He believed that workers output was only about one third of what was possible. So, you see that the worker was able to produce three times more.

Thus, in order to correct the situation he applied scientific method to jobs on the shop floor, as seen in the case of UPS that we have talked about earlier. He further proposed four principles of scientific management with the perspective of improving the productivity and efficiency of manual workers. So, his focus was on manual workers and about increasing their productivity and efficiency.

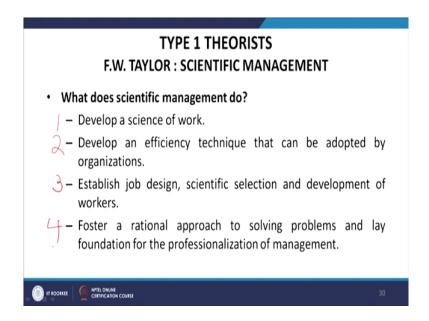
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Now, these are some of the principles of scientific management. The 1st is the replacement of rule of thumb methods for determining each element of a workers job with scientific determination. The 2nd is the scientific selection and training of workers. The 3rd is the cooperation of management and labor to accomplish work objectives in accordance with the scientific method.

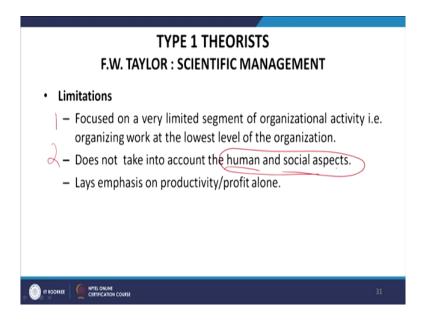
And, the 4th is a more equal division of responsibility between managers and works, with the former doing the planning and supervising and the later doing the execution. So, managers were supposed to be planning and supervising while workers were supposed to be doing the execution.

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Now, what does scientific management do? Develop a science of work; 2nd, develop an efficiency technique that can be adopted by organization. The 3rd is to establish job design, scientific selection and development of workers and the 4th one is to foster a rational approach to solving problems and lay foundation for the professionalization of management.

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The limitations of scientific management are that it is focused on a very limited segment of organizational activity that is organization of work at the lowest level of the organization. The 2nd is it does not take into account the human and social aspects. So, that is very

important, but then it assumes that every work is scientific in nature and human and social aspects do not come into picture. It lays emphasis on productivity and profit alone.

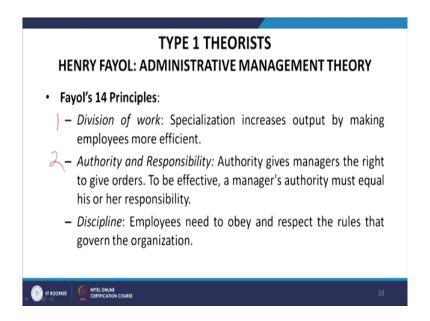
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Now, let us look at Henry Fayol, that is, the administrative management theory. So, Fayol developed 14 general principles applicable to managers at all levels of an organization and describe the functions of each manager. His primary focus was on the following areas. The 1st focus area was to systematize an organization. 2nd is use scientific forecasting and proper method of management.

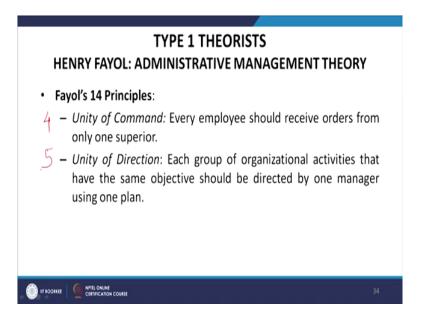
The 3rd is the macro concept and the 4th one is focus on the formal organization structure that separates the basic process of general management.

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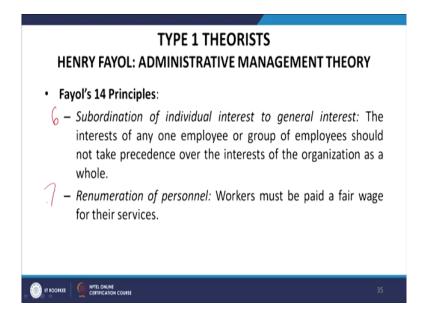
Now, these are the 14 principles of Henry Fayol. The 1st is the division of work that is the specialization increases output by making employees more efficient. The 2nd principle is authority and responsibility. Authority gives managers the right to give orders. Now, to be effective a manager's authority must equal his or her responsibility. The 3rd is discipline employees need to obey and respect the rules that govern the organization.

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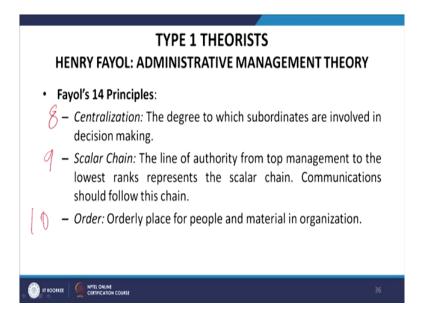
The 4th is unity of command every employee should receive orders from only one superior. The 5th one is unity of direction each group of organizational activities that have the same objectives should be directed by one manager using one plan.

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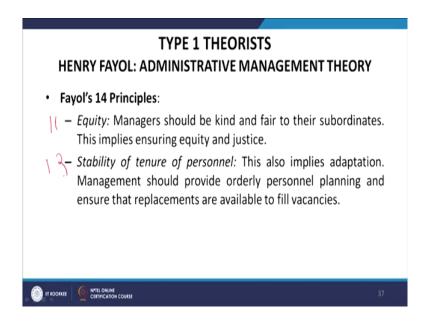
The 6th is subordination of individual interest to general interest. The interest of any one employee or group of employees should not take precedence over the interest of the organization as a whole. The 7th is remuneration of personnel workers must be paid a fair wage for their services.

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The 8th principle is centralization. The degree to which subordinates are involved in decision making. The 9th principle is scalar chain – the line of authority from top management to the lowest ranks represent the scalar chain communication should follow this chain. The 10th is the order – orderly place for people and material in organization. The 11th one is equity – managers should be kind and fair to their subordinates. This implies ensuring equity and justice in organizations.

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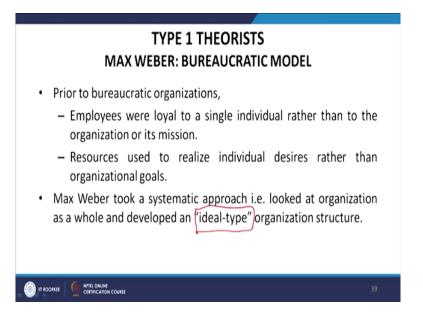
The 12th is stability of tenure of personnel. This also implies adaptation. Management should provide orderly personnel planning and ensure that replacements are available to fill vacancies.

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The 13th principle is initiative. Employees who are allowed to originate and carry out plans will exert high level of effort and the 14th is esprit de corps – promoting team spirit will build harmony and unity within the organization. So, these are the 14 principles of Henry Fayol.

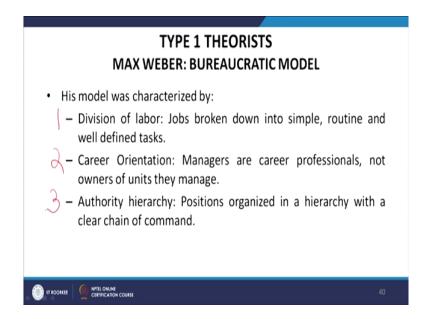
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Then comes the next, that is, Max Weber, he is also a type 1 theorist and we will talk about his bureaucratic model. So, prior to bureaucratic organizations employees were loyal to a single individual rather than to the organization or the organization's mission. Resources were used to realize individual desires rather than organization goals.

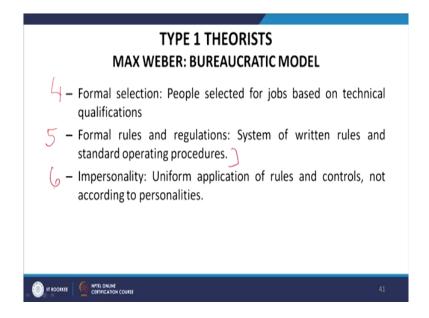
Max Weber took a systematic approach that is looked at organization as a whole and developed an ideal type organization structure. So, his contribution is this development of ideal type organization structure.

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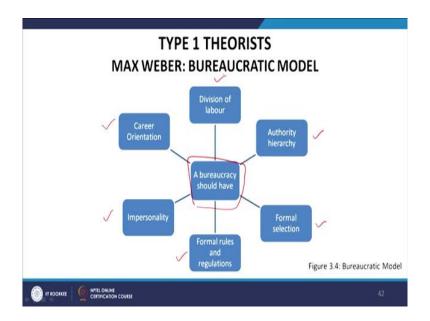
You may find some similarities with Henry Fayol's. So, his model was characterized by one division of labor that is jobs are broken down into simple routine and well-defined tasks. The 2nd thing is career orientation - Managers are career professionals not owners of unit they manage. The 3rd is authority hierarchy – positions organized in a hierarchy with a clear chain of command.

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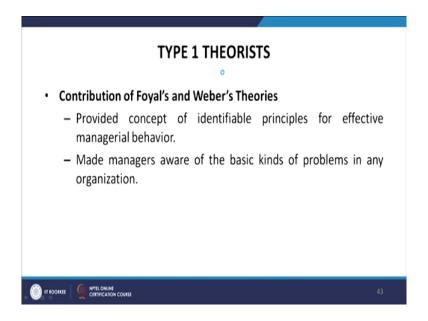
The 4th is formal selection - people selected for jobs based on technical qualification and not other things. The 5th is formal rules and regulations - system of written rules and standard operating procedures. So, that is a very important contribution of Max Weber. And, 6th is impersonality – uniform applications of rule and controls not according to personalities. So, that is important, rules and controls are to be applied uniformly and not depending upon the personalities.

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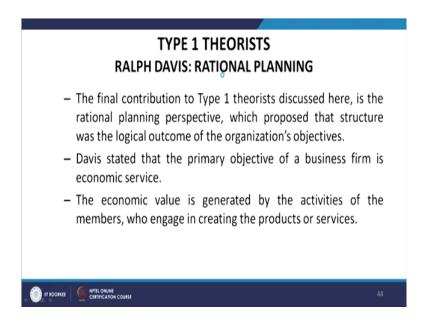
So, this is the Max Weber bureaucratic model, in between is bureaucracy should have, there should be a hierarchy of authority, a formal selection process, formal rules and regulations that is written maybe written down, impersonality and career orientation and followed by the division of labor. So, these are the six dimensions of this Max Weber bureaucratic model.

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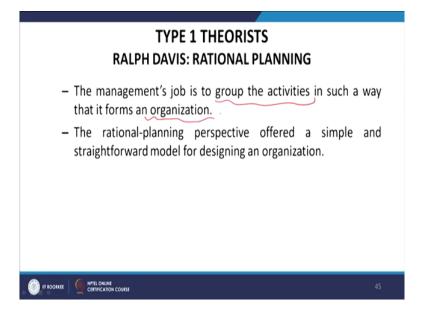
Now, just let us look at the contribution of Fayol and Weber's theory. They provided concepts of identifiable principles for effective managerial behavior and they made managers aware of the basic kinds of problems in any organization. Another type 1 theorist is Ralph Davis who gave this rational planning theory.

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So, the final contribution of type 1 theorists discussed here is the rational planning perspective. So, now, we have come a long way starting from a scientific management and F. W. Taylor to Ralph Davis. So, he proposed that structure was a logical outcome of organization objectives. Davis stated that the primary objective of a business firm is economic service. The economic value is generated by the activities of members who engaged in creating the products and services.

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The management's job is to group the activities in such a way that it forms an organization. So, now these managers they are supposed to group these activities and then this forms an organization. The rational-planning perspective offered a simple and straightforward model for designing and organization. So, this rational-planning then became a default method for organization structure; so, because it offered a simple and straight forward model for designing an organization.

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Management's formal planning determines the organization's objectives. These objectives, then, in logical fashion, determine the development of a structure, and the flow of authority and other relationships. So, this development of a structure, the flow of authority and other relationships flow in a logical fashion from management's formal planning to organization objectives and then that leads to the development of structure. it is not the other way that first we come up with a structure and then we come down to managements formal planning, but it starts with management formal planning and then it moves on to the development of this structure.

Hence, the structure of organization is contingent upon objectives and not the other way.

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CONCLUSION We started this module by discussion on theory and understanding the significance of studying organization theory.

- Next, we traced the evolution of organization theories and the contexts that shaped their development.
- We realized that modern organization theory began with the work of the Type 1 theorists.
- They relied heavily on simplistic and universal principles, developing models of organization that were overly rational and mechanistic.



In order to conclude we have started this module by discussion on theory and understanding the significance of studying organization theory. Then, we went on and we traced the evolution of organization theories and the context that shaped their development. After that we realized the modern organization theory began with the work of the type 1 theorists. They relied heavily on simplistic and universal principles, developing models of organizations that were overly rational and mechanistic.

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These are the four books from which the material was used to develop this module.

Thank you.