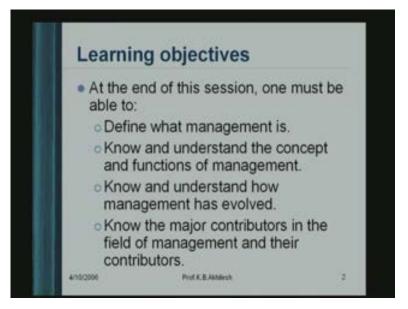
### Concept of Management and Evolution of Management Thought Prof. K. B. Akhilesh Department of Management Studies Indian Institute of Science, Bangalore

#### Lecture - 1

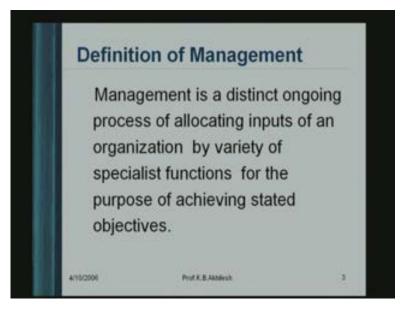
Today we will talk about the concept of management and evolution of management thought. This lecture should give you an idea of what management is all about. You should be able to define what management is and you should know and understand the concept and functions of management, know and understand how management has evolved and also know the major contributors in the field of management and their contributions.

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As we go along, we need to look at very clearly what management is all about. There are commonsensical view people view based on their experience, but what I intend to give you, is a summary of all of these views. Look at, for example, this definition.

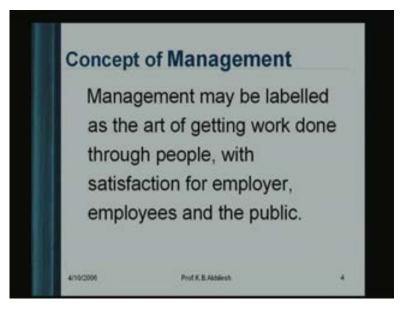
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Management is a distinct ongoing process of allocating inputs of an organization by variety of specialist functions, for the purpose of achieving stated objectives. So, when you see this, keywords are extremely important.

It is an ongoing process. Management is not an event; management is something which cannot be completed with a beginning and with an end. Management becomes a process. Process of what? - with a variety of specialist functions. That means, it is a task of bringing various resources together, including the people and making sure that these things are moving towards the stated objectives. That is, now the objectives are important, specialist functions are important and allocations of inputs are important and keyword is, it is an ongoing process.

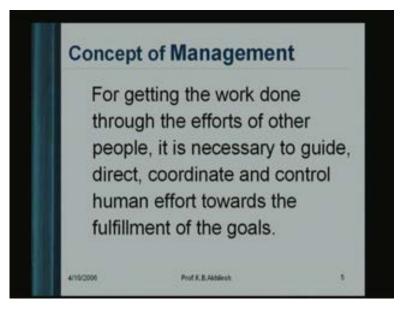
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The another definition, if you see, management may be labeled as the art of getting work done through people. When you look at people, and you start working with people, always people question whether management is an art or management is a science. So, if you see from this, basically the view is, it is an art of getting work done with satisfaction for employer, employees and the public; public in the sense all the stakeholders.

So, the management's key responsibility is to balance. So, this balancing of sometime flitting interest becomes an art. It is in that sense, the management also has been viewed as an art.

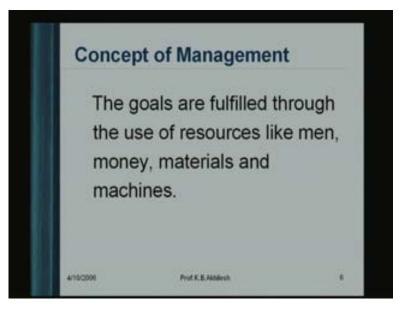
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Look at this definition. For getting the work done through the efforts of other people, it is necessary to guide, direct, coordinate and control human effort towards the fulfillment of the goals. So the goal achievement is the key; and towards that, you have to guide people, you have to direct people, you have to coordinate and control.

Today, the leadership has been defined in terms of these two things: both direction as well as the control. So it is in this sense, it is coordinating the efforts of different people. It is getting work done and all the time moving towards goals. I think these are the views. Look at this.

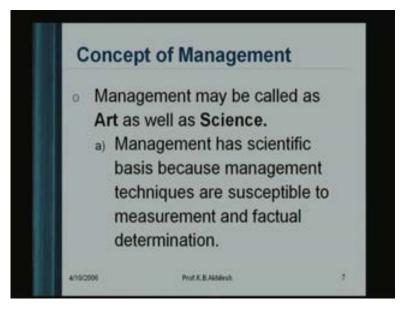
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The goals are fulfilled through the use of resources like men, money, materials and machines. So people, we have talked about earlier, money comes out as a separate keyword in this definition.

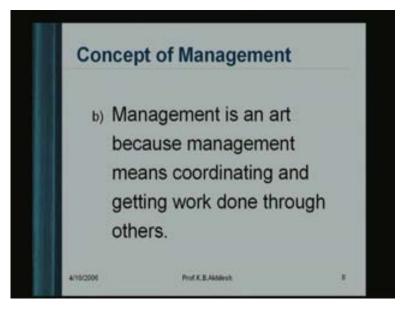
Money, materials and machines; this definition evolved very clearly with respect to the manufacturing management, industrial management- you can't think of management without these four 'M's - you can always add market, you can always add one more dimension to it but men, money, materials and machines. Men includes certainly women. So, it is the human resource, the people dimension as well as the money; what we used to earlier call as general process has been split into money, materials and machines.

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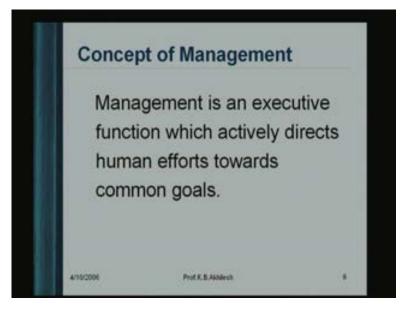
So, management by...may be also called as art as well as science. I think this is where we start seeing a kind of a departure coming in. Management has scientific basis, because management techniques are susceptible to measurement and factual determination. So that means we are more guided by the data, we are guided by the analysis, we are guided by the probability theories, we are guided by statistics, we are guided by modeling, we are guided by empirical evidences, we are guided by several of the research methodologies of the social science and that is how it is also called as the science. We will elaborate some of these things as we go along.

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So, management is an art because management means coordinating and getting work done through people; and while working with others, conflicts are there, relationships are there, the coordination element is there, so all that makes the task more of style-specific, value-specific, context-specific and that is how it is considered as an art.

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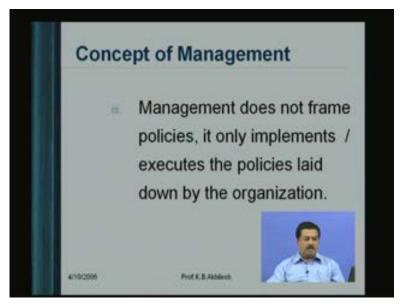
But as we are seeing, the management is an executive function which actively directs human efforts towards common goals. So the direction towards common goals and it is an executive function means it has this direction and control.

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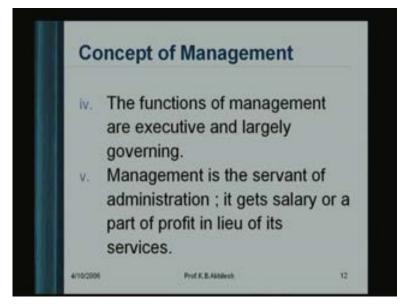
So the main characteristics of the management as you can see, it is to integrate and apply the knowledge and to develop and deploy analytical approaches. So these two makes management more as a science than merely as an art.

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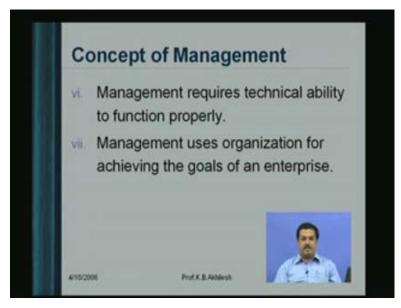
So management does not frame policies, it only implements, executes, the policies laid down by the organization. This is the view of many of the people who look at management more from an operational view. So that means it is not strategic view, but operational view. Strategic view means you are setting policies, you are setting directions. Operational view is implementation.

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Similarly, the functions of management are executive and largely governing. So this executive and governing would involve direction, coordination, control, feedback, communication. So these are all essentially referred to as executive and governing functions. And sometimes people also view, I use the word people in the context of a) there could be managers, they are the writers, sometimes they are the ones who were viewed impassionately about the management theory, management knowledge. So management is the servant of administration; it gets salary or a part of profit in lieu of its services.

So, this means what? They are trying to differentiate between owners and the implementers. So the owners are different; owners are not really the management, the managers are the management. I think with this...why I have brought this definition is this view is extremely important.

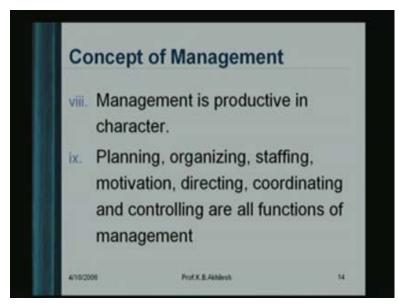


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Then also, the management requires technical ability. Technical ability is what we defined earlier as management of science, to function properly. So, management uses organization for achieving the goals of an enterprise. So what is the role of management? – is to create an effective organization. An effective organization is goal directed, it is

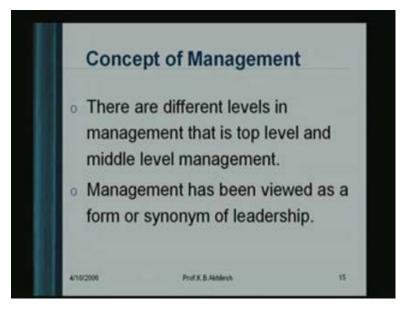
hierarchical, there is an order, there is control. So the core role of any management is to create an organization.

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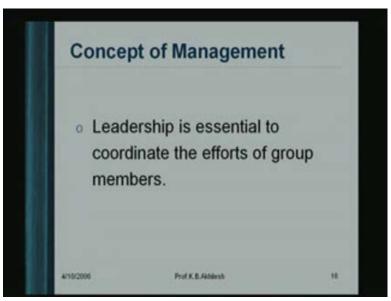
I think these are the views, but if you go further, management is productive in character. So management means there is efficiency, management means there is gain, management means there is profit, management means it is value addition. I think these are the concepts of management. Towards that, what it means? Planning, organizing, staffing, motivation, motivating you can call it as, directing, coordinating and controlling: these are all called as functions of management. So as we go along, we will elaborate on these functions of management.

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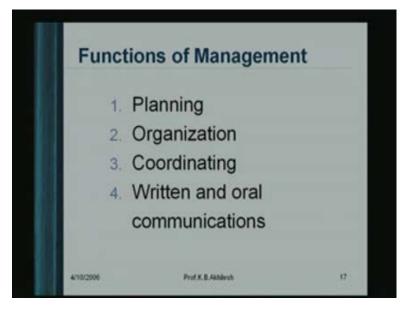
Similarly, when you look at the concept, there are different levels in the management. There is a top level management, there is a mid-level management. So, it is also called as supervisory, mid-level, top or even it could be at the board level. So, management has been viewed further as a synonym of leadership. The leadership means it is inspiring, there is passion, there is initiative. It is not only this, it is energizing all others who are involved in the task completion.

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So towards that if you see, the management is also viewed as a leadership. So the leadership is essential to coordinate the efforts of group members. Particularly it becomes very very relevant when you see the team working. At the team level, leadership becomes very critical and you cannot differentiate much between the management and the leadership. As I said earlier, let us look at the functions of management.

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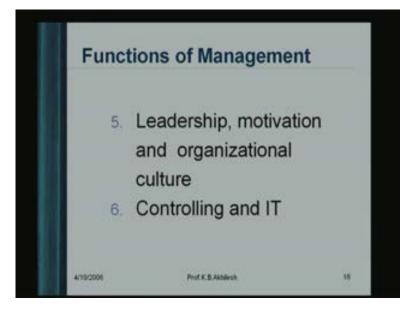


So far we looked at how different concepts, different views of management has evolved. But if you see the functions of management, it is planning, planning the resources, planning the future, then organization. Essentially, we are talking about who should do what, definitions of responsibilities, definitions of roles, definitions of authority, definitions of positions. So, these are all part of the organization. Then coordinating. We people do things according to their convenience, but there is also requirement of the organization. People do have their own goals to be achieved, but they should not forget the requirements, the needs of the organization as a whole.

So that means you need to work towards understanding the individual needs and the organizational requirements and to integrate; integrate from one level to the other, integrate from one department and the other. These are all coordination. And towards

that, the written and oral communications. Written: there are the procedures, the instructions, the memos, the office communications. The oral communications would involve discussions, informing people over different medias, may be over phone, things like that. So, the written and oral communications are again part of the functions of managements.

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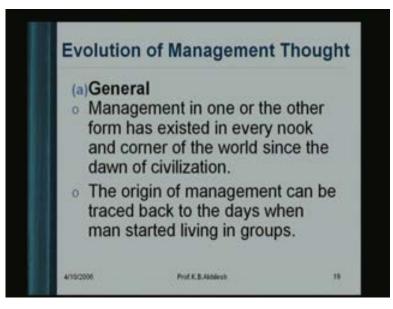
Then people also talk about the leadership, motivation and organizational culture. The functions of management is to build leadership pipe line, leadership at different levels, as well as bringing passion and energy in people towards meeting the goals that is essentially called as motivation, understanding the needs of every individual and relating those needs to, or aspirations to, the opportunities available within and outside the organization, providing both tangible and intangible rewards. These are all part of this motivation and building organizational culture. The culture is symbol of how people behave in a group.

Organization is a collection of people and people as a whole define work culture, organizational culture. So the culture would involve building appropriate values; respecting elders is one symbol of the culture. So, respecting elders, respecting values of

the organization, timeliness; many of these things are part of building organizational culture. Today we are also talking about productivity, we are talking about delivery, we are talking about quality. Essentially, people are seeing these are all bi-product of strong organizational culture. Unless you build culture, unless you build collective values, build collective mindsets, collective rituals in the organization, it is very difficult to sustain the performance of the organization and that is how are we are also talking about functions of management is also building appropriate organizational culture.

We also have this controlling and also IT, the information technology. Today you know, we are changing the way we have done things in the past, both in manufacturing as well as in communication. The third dimension to this is the office technologies. So as we see, manufacturing, communication and office technologies are largely influenced by the deployment of information technology. We will examine the scope of this little later on, but technology deployment is an important function of management.

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I think for a moment, let us try on this; to look at evolution of management thought itself. Then, whatever the concepts what we discussed earlier will also be more meaningful and you will be able to understand and appreciate how these differences have come over a period of time. See, if you look at...management in one or the other form has existed in every nook and corner of the world since the dawn of civilization. So, management is nothing new; but management has evolved as a discipline. As you see, programs on MBA, programs covering different concepts and functions of management in different specializations are being taught and offered. All these can be appreciated by quickly having a overview of this management thought and how it has evolved.

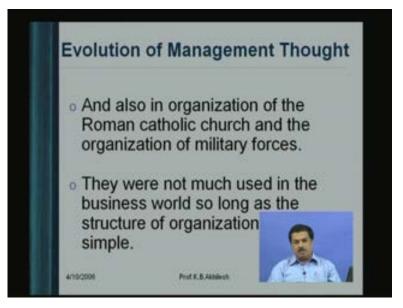
So, the origin of management can be traced back to the days when man started living in groups.

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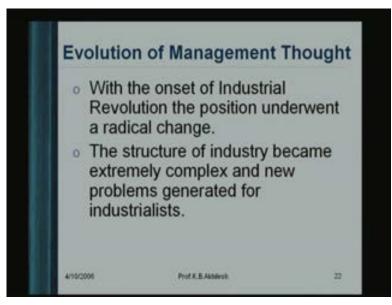
So, the group became the first vehicle of understanding the coordination. Group became the first instrument of seeing the goals and then how the goal can be achieved through collective efforts. Somebody would plan, somebody would coordinate, someone did all these in different ways, but these are all learning, trial and error. Hence, application of one's knowledge to see how better things can be done. But history reveals that strong men organized the masses into groups and also became the leaders. Evidence of the use of principles of management is to be found in the organizational public life you can see in ancient Greece.

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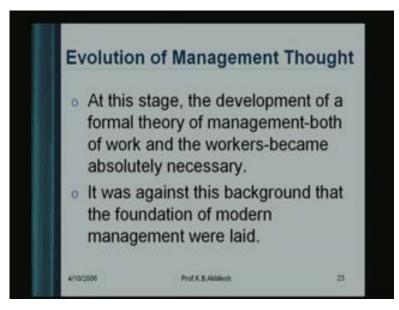
You can see such things in the Roman Catholic Church. Similar things were coming in the military forces. So, but the the same things were not applied in the straight fashion in the business world, unless we started thinking about the structure of organization and things like that.

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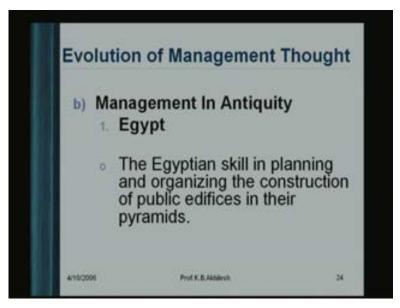
The important departure came with the onset of industrial revolution; the position underwent a radical change. The structure of industry became extremely complex and new problems generated for industrialists. So the departure of this industrial revolution means volumes. The volumes meant that the individual alone was not sufficient to produce, individual had to work with machines. So this machine meant a definition of interface with respect to the time, with respect to the effort, with respect to the motions, and that is how you see that industrial revolution gave that pressure for being systematic and also understanding how human effort can be organized better.

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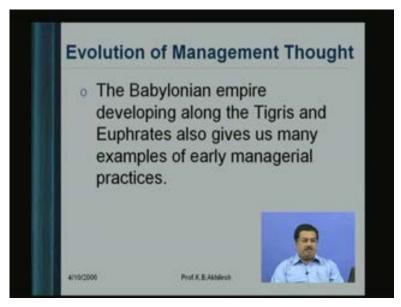
Similarly the...at this stage, the development of a formal theory of management, both of work and the workers, became absolutely necessary. So, we will see how the modern management concept got evolved with the background of this industrial revolution, and also the application of the management principles to achieve better productivity, better efficiency.

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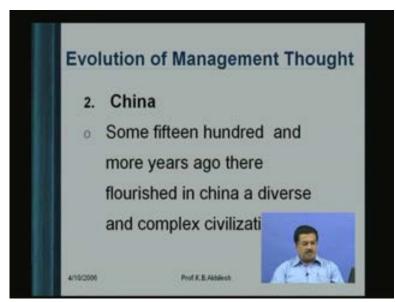


So, it is important to look at some of the historical nature of this management evolution. See, the Egyptians' skill in planning and organizing, the construction of public edifices particularly in their pyramids is to be appreciated, it was a great effort.

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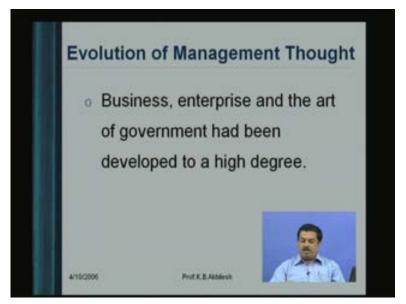
Then you also see the Babylonian empire developing along the Tigris and Euphrates, also gives us many examples of early management or managerial practices. Managerial practices are nothing but coordination, coordinating the efforts of human beings towards achievement of management organizational goals.



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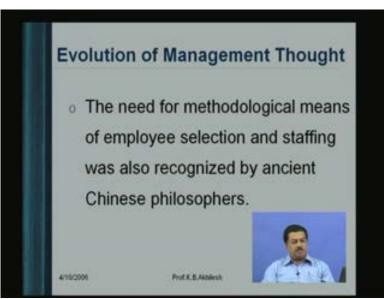
So China if you see, some 1500 or more years ago, there flourished a diverse and complex civilization.

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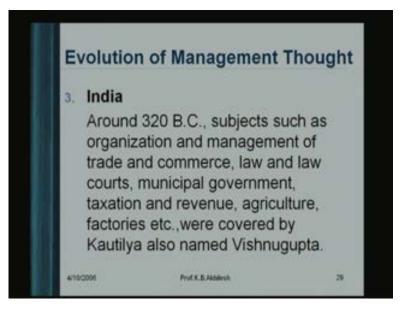


Business, enterprise and the art of government had been developed to a very high degree.

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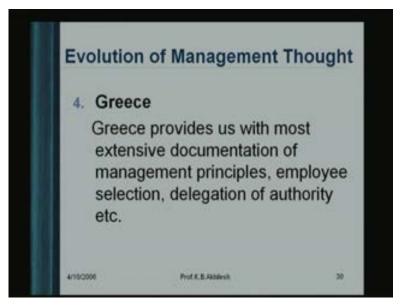


And there are the needs for methodological means of employee selection and staffing was also recognized by ancient Chinese philosophers. (Refer Slide Time: 20:37)



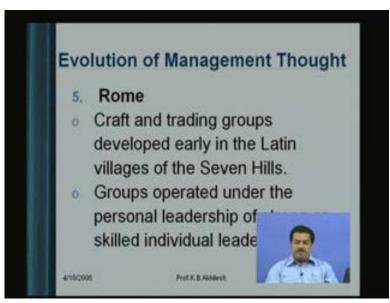
Similarly in India, if you read Kautilya, the Vishnuguptha, the Chanakya, again you will see that many of these things have been stated so clearly around 320 B.C. such as organization and management of trade and commerce, law and law courts, municipal governments, taxation, revenue, agriculture, factories; all these concepts have been mentioned in Kautilya's Arthashasthra.

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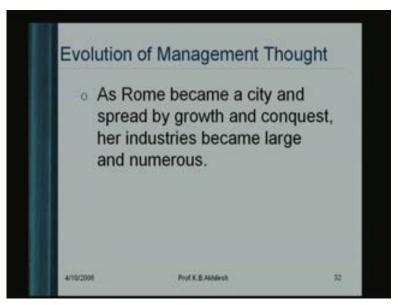
Similarly, the Greece provides us with most extensive documentation of management principles, employee selection, delegation of authority, all these things. So we will find these kinds of references coming not only in one civilization but different countries, different civilizations.

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So the Rome...we mentioned for craft and trading groups developed by the Latin villages of the Seven Hills. The groups operated under the personal leadership of strong or skilled individual leaders.

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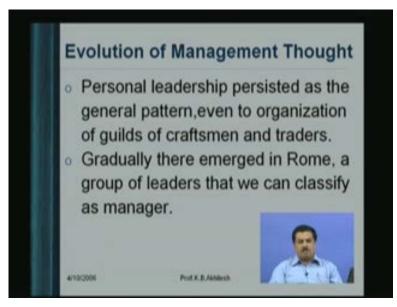
Further, we also see that Rome became a city and spread by growth and conquest, her industries became large and numerous. So the examples are many.

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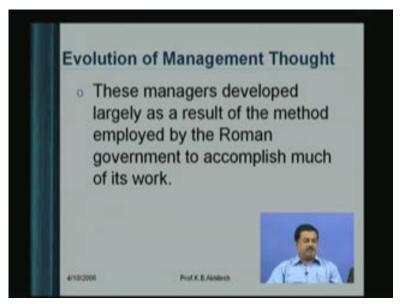
It was ranging from the making of armor through dress making and the pickling of olives to mining of metals and salt. So, whenever there was a group work and they were focusing on the volumes, then you saw or you will see, the necessity of management and understanding these management and management principles contributed to the definition and scope of management as it appears.

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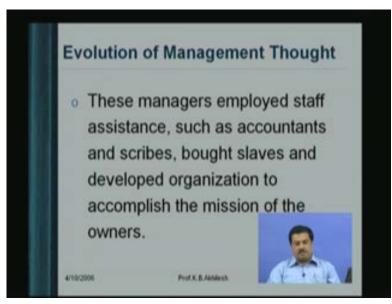
Personal leadership persisted general pattern even to organization of guilds of craftsmen and traders. We have had gurus in our own context. The masters - they meant all to the fellows who wanted to learn, who wanted to apply, who wanted to understand a particular field of activity. So there in Rome, a group of leaders that we can classify as managers... I think that is an early documentation.

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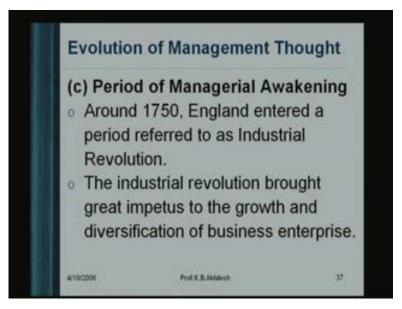
So these managers developed largely as a result of the method employed by the Roman government to accomplish much of its work. Today we also see the administrative service.

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So these managers employed staff assistance, such as accountants and scribes, bought slaves and developed organization to accomplish the mission of the owners.

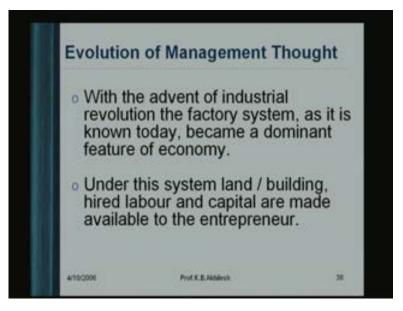
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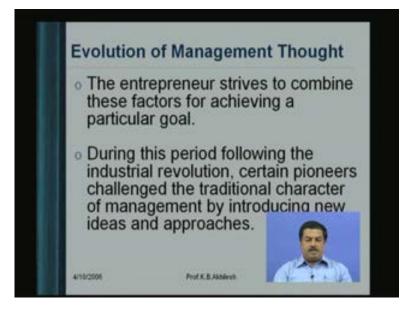
But still, we see a period of awakening; a managerial awakening came only around the industrial revolution the way I mentioned. Around 1750, England entered a period referred to as industrial revolution. So, the clear departure is around the 1750 and like in India, the first factory system you can think of is 1854. So that was the time lag, so where... really we can think of how we were behind about 100 years around that time in terms of this factory system.

So the industrial revolution brought great impetus to the growth and diversification of business enterprise. There was no business enterprise at that point of time. It is basically the trading combined with the manufacturing.

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But with the advent of industrialization and industrial revolution, the factory system, as it is known today, became a dominant feature of economy. The manufacturing and factory got defined and got evolved throughout 1850s to the late...we can go that around 1980s. I think it is a growth of about 100 to 130 years. Under this system land, building, hired labour, capital were all made available to the entrepreneur.

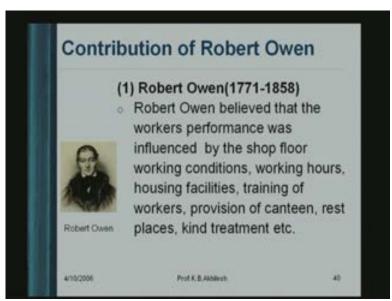


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The entrepreneur strives to combine these factors for achieving a particular goal. So during this period following the industrial revolution, certain pioneers challenged the traditional character of management by introducing new ideas and approaches in coordinating the efforts of labour, human labour and the capital.

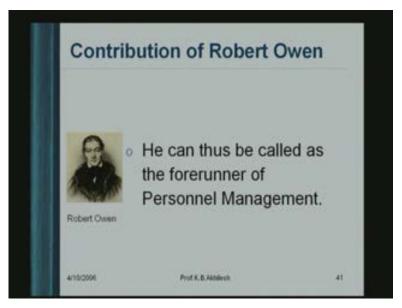
And that is how we will start seeing some of the specific contributions made, and...by some of the individuals who can also be called as early authors of management or early theories of management. Let us look at some of these things because these things have been documented systematically by the western scholars, western researchers and that is how we also owe it, that management as a discipline evolved in western countries.

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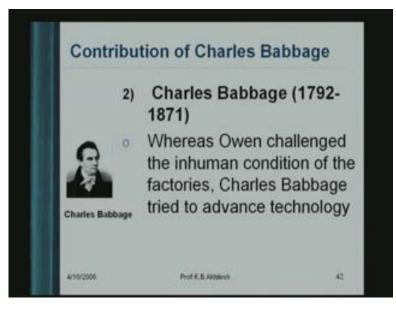
So look at contribution of Robert Owen. Robert Owen lived from 1771 to 1858. Robert Owen believed that the worker's performance was influenced by the shop floor working conditions, working hours, housing facilities, training of workers, provision of canteen, rest places, kind treatment, etcetera. And even today these factors are valid. You have to provide good drinking water, making sure that there is condition for their work is favorable, and the working hours is not too straining on the individuals. But these are all basic principles, basic aspects recognized by us.

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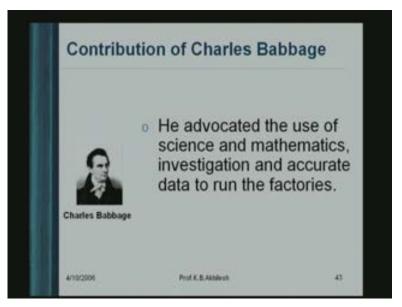
Thus, he can be called as the forerunner of personnel management. So the management of human resource, if you see, Robert Owen talked about way back.

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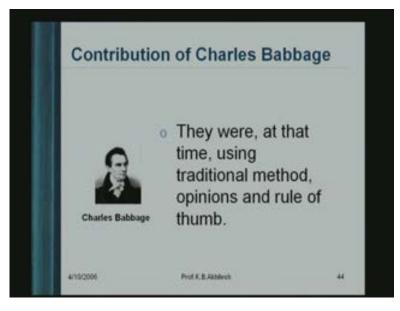
Then, we also understand the concept of Charles Babbage, 1792 to 1871. Whereas Owen challenged the inhuman conditions of the factories, but Babbage tried to advance technology.

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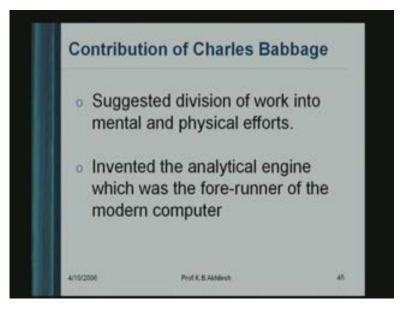


He advocated the use of science and mathematics, investigation and accurate data, to run the factories.

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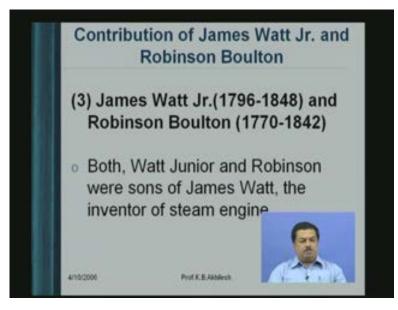


So, that is how you see the art and science coming in very early days. So, contribution of Charles Babbage you see, they were at the time using traditional methods, opinions and rule of thumb - what we call the heuristics. (Refer slide time: 27:37)



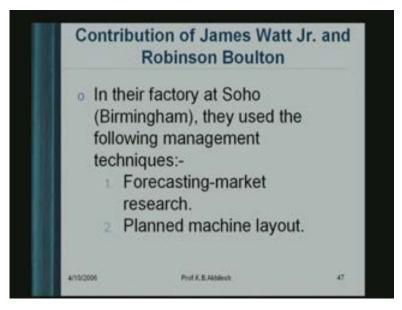
But, he suggested division of work into mental and physical efforts, invented the analytical engine, which was the fore-runner of the modern computer. So the data analysis, that became more important.

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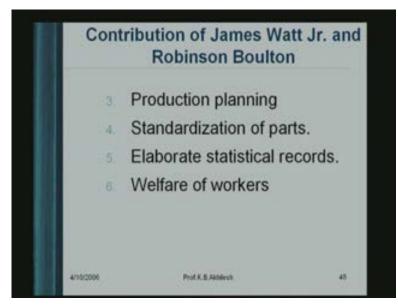
Then you will see James Watt Junior and Robinson Boulton. Both Watt and Robinson were sons of James Watt, the inventor of steam engine.

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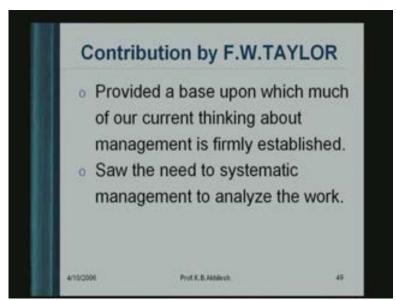
And, in their factory at Soho, Birmingham, they used the following management techniques: forecasting...now you will see first time, the market research and then they planned machine layout. So, they were thinking about the requirements and then how to meet those things.

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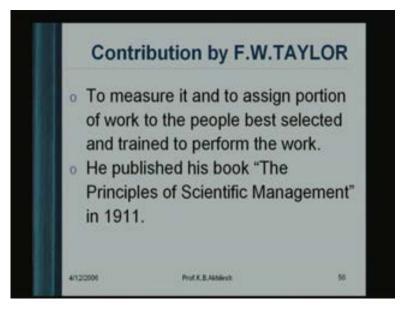
Then also, they started talking of production planning, standardization of parts, elaborate statistical records and welfare of workers. So, we started getting the view of the factory, the definition of the factory; along with the definition of the factory, several of the management principles and management aspects also started developing.

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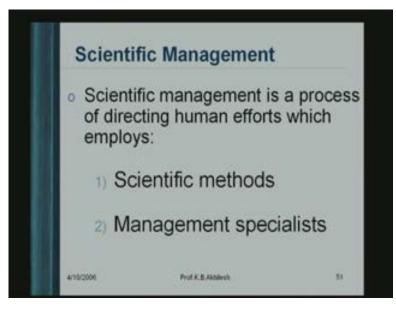
Then we talk about F. W. Taylor; provided a base upon which much of our current thinking about management is firmly established. He saw the need to systematic management to analyze the work. He said the work is the fundamental of all the things of the organization, all of the management. Unless we understand the jobs, unless we understand every activity of the organization, we are able to look at the activity, how it is organized, how it is grouped and how the resources are allocated for each of the activities, movement of men and material, he thought, there cannot be better management.

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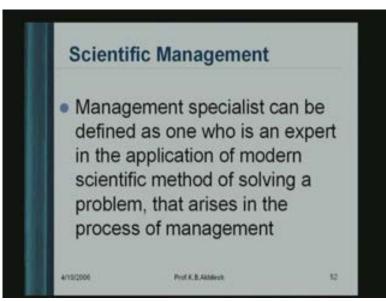
And that is how we see...the first time he published what is known as "The Principles of Scientific Management" in the year 1911. So the...to measure it and to assign portion of work to the people best selected and trained to perform the work; so he started talking about the right man for the right job.

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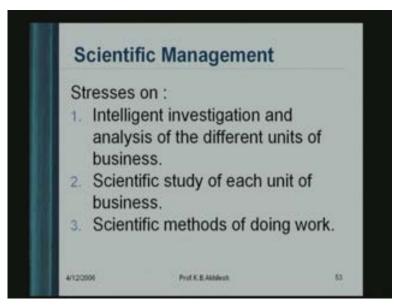
If we look at the scientific management, as he spoke, is a process of directing human efforts which employs: scientific methods and also the management specialists.

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Management specialist can be defined as one who is an expert in the application of modern scientific method of solving a problem that arises in the process of management. So you see, the the keyword is the problem solving and application of the methods and the one who is trained in some of these methods.

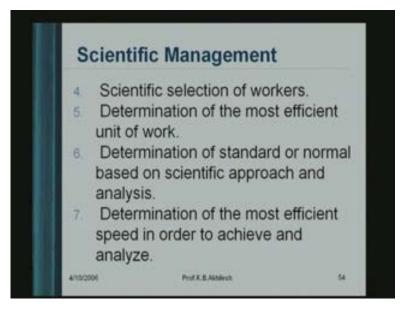
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So the methods, which we if we can elaborate quickly, it stresses on: intelligent investigation and analysis of the different units of business, scientific study of each unit of business, scientific methods of doing work. So in this sense, scientific methods, scientific study means a systematic collection of data and analysis of these data and directing the future course of action based on the data, the activities at this...

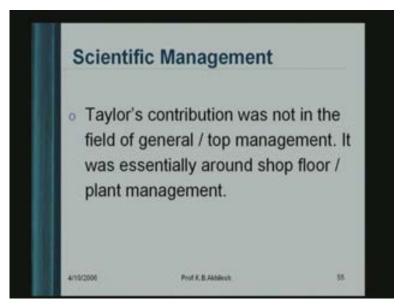
All these things if you see, what Babbage talked about, what others talked about is of two things: one is to make sure that the workers' comfort and workers' --- is addressed to and the other side is the deployment of machinery to get the required volumes. So, the industrial revolutions contributed specifically to the machinery and machinery made to be deployed to achieve the required volumes. And we should not forget this. On the other side, the human dimension: using the workforce to move the material and to feed these machines and get the required quantity of output.

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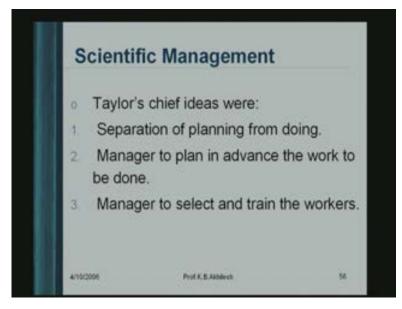
So the scientific selection of workers became very important; that whoever were able to put that required physical effort, determination of the most efficient unit of work; so the material, little bit of material organizing, material planning to feed these machines, determination of standard or normal based on scientific approach and analysis.

So, we started using the word called the standard man hours or also called as the SMH. So, the standard man hours is given one hour, how much a normal person can do - I think these concepts got introduced. Determination of the most efficient speed in order to achieve and analyze. So, you have to define how much could be produced by this machine and what is the required human effort to achieve some of these things. So together, we were able to see how we can coordinate the material, the machine and the men - the definition what we took earlier. (Refer slide time: 33:25)



So, the Taylor's contribution was not in the field of general or the top management. It was essentially around shop floor or the plant management.

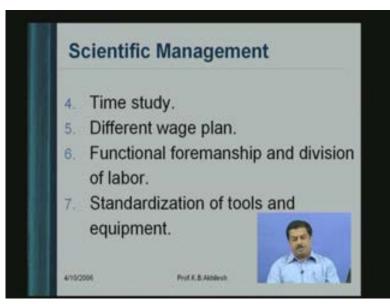
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So the plant layout, industrial engineering, all these things got inspired by the work of this Taylor. So Taylor's chief ideas were: separation of planning from doing; some supervisory role got emerged around this time. He said very clearly, someone else need to

understand perhaps the activities and plan towards that and the person who does that just follows these instructions. So, manager to plan in advance the work to be done, and manager to select and train the workers. So, what should be done and who should do it, became the key aspect of management or the manager.

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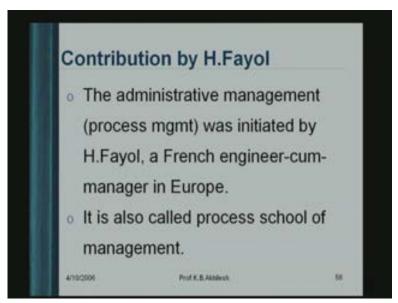
Then the time study - how much time is required to perform each of the activities; and now, based on the effort, based on the time taken, based on the speed with which one was able to do that task, he also started defining the wage plan. So the wage plan, if we see in a simpler term, it is called the piece rate systems or time based system.

So the piece rate is, if you produce how many units, unit based call was the piece rate system, that is for every piece or every unit, you pay an 'x' amount of money. For example, now we can allocate the task if we are interested in getting 30 chairs manufactured. So then, I will...one can tell the person, "Look 30 chairs, I will pay you 'x' amount per chair". That is called the piece rate system.

But the other way is that you come and work for 8 hours per day - I do not know how many hours you are going to take to complete the chairs, but I will pay for hourly basis.

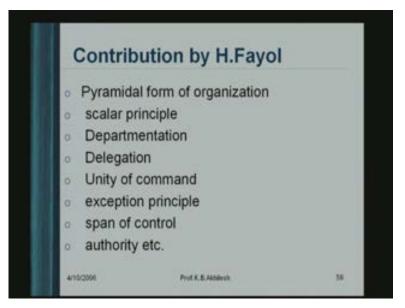
An hourly or a daily basis is time based pay, the other one is essentially the piece rate pay system. So we follow both in every organization. So the standardization of tools and equipment...because then, every task demanded that use of certain equipments, certain tools, so that workers were educated in handling these specific tools. It is also called as the motion study. The time and motion study also contributed further to the field of ergonomics.

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Then we think in terms of Henry Fayol. So, Taylor focused on the shop floor and the shop floor management contributing to the field of ergonomics, time and motion study. And whereas Henry Fayol came from a background of... he was an engineer and...the implementing a automotive manufacturing facility. So the administrative management or the process of management was initiated by Henry Fayol, a French engineer-cummanager in Europe. It is also called as the process school of management.

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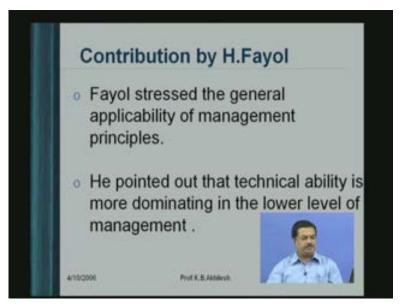


So in the process school of management, he talked about what is known as several principles of management. I think I will not elaborate on all of these principles of management, but for your understanding I will try and mention these principles as quickly as possible, but in another lecture, I will elaborate some these things.

So as you see, he talked about the pyramidal form of the organization. So it is typically having large number of operators, workers at the lower level, then the supervisory management at the middle and the top management. So, he talked about the scalar principle. He talked about the departmentation, delegation, unity of command, exception principle, span of control, authority; all these things he mentioned.

So, this span of control is that how many persons one can typically supervise. If you see, the exception principle is that you define in a standard way, how the things to be handled. But when some exception comes, he wrote this, the ringing of the phone is another kind of a thing; so, you do not expect to handle in the normal things when you do not follow the...you define a standard method, but then you have a method of handling some of the exceptions. Authority is that every position need to have that required discretion, need to commit resources. So, the responsibility and the authority has to go together.

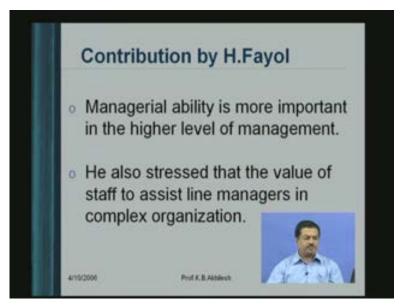
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So, Fayol stressed the general applicability of management principles. He said these principles are universal. Every kind of organization - may be a hospital, may be manufacturing, maybe an educational institution - he talked about the universality of the management principles. He pointed out that technical ability is more dominating in the lower level of management. More skills are required to organize the task and closer supervision of the task so, that it demanded an understanding of the job and the job knowledge, the details of the activities to be performed.

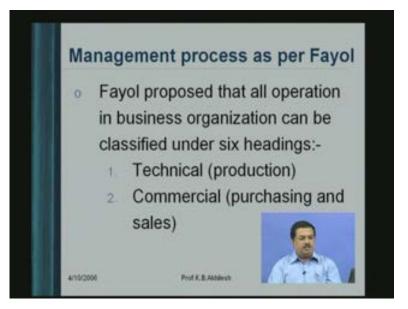
But as we go up in the organizational hierarchy, these things according to him were less relevant and more of the organizational skills, more of planning skills were more important, according to him.

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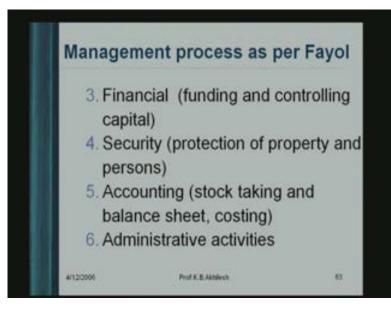
So, managerial ability is more important in the higher level of management. He also stressed the value of staff to assist line managers in complex organization. So, the line managers...so he brought that concept of staff in line. So the line managers who are directly involved in the day to day operations...whereas the staff - it could be in the finance, it could be in the human resource; they would advise about discipline, how to maintain the discipline, how one can achieve these things at the shop floor. Similarly, on the costing or keeping accounts, these were all the staff functions. So, the staff functions were not seen as the main core of the organization. So we got the concept of line and staff.

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So, management process as proposed by Fayol is that in business organization, it can be classified under six headings: there are technical aspects which can also be called as the production, then there is commercial (purchasing and sales).

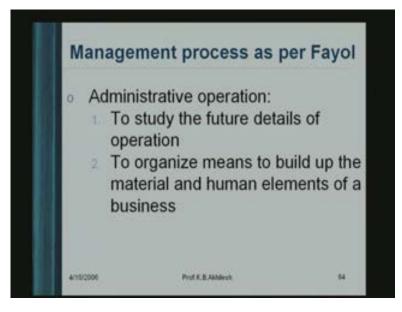
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And then financial (the funding and the controlling the capital), the security (in terms of protection of property and persons), accounting (stock taking and balance sheet and the

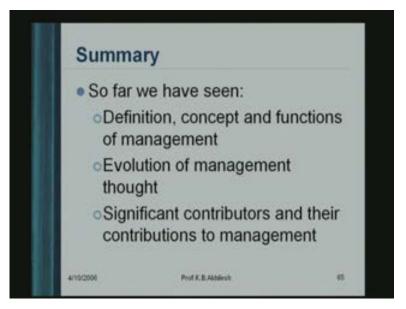
costing), and the administrative activities. Administrative activities involving hiring people, what we call today as the personnel management; and also the deploying and the human resource of the people and disciplining the keeping the time, making the payments for the kind of work what they have done. These were all considered as administrative activities.

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So, he defined the administrative function in detail to study the future details of operation, to organize means to build up the materiel and human elements of a business.

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So, management definitions were coming at this stage. So very clearly, how organizations need to create its human efforts and efficiency of the technology developed to achieve the goals. So consistently, we see a) the people, b) the materials and the objectives and the goals, and to achieve all these things, the role of the management.

The role of management essentially - to coordinate, to plan, to organize and to to make sure that the profitability, the productivity, the productive nature of the organization is maintained. So towards that, the efforts have been put by different generations, different countries by their own nature of institutions, by their own nature of organizational context.

So, agriculture being the dominant pattern of work, we move to an industrial pattern of work. In the industrial pattern of work, we deployed machineries. The deployment of machinery demanded that lot of human effort at the work place to move the material. On the other side, somebody required to plan this movement of material and also bring the required capital to organize the men and the material. So bringing this capital was considered the role of the owners, but however, to run the establishment, to run the

organization, to run all these men and material and the capital towards the goal of the organization, became the role of the management.

So but, as we are seeing the role of the management getting defined, but we want it to make it much more efficient. And that is where, Taylor and Henry Fayol, they became very very relevant in the history of management. So Taylor focused on the software activities, he focused on how to go about it by building brick by brick; so, focused on the motion, focused on the time, focused on differentiating the time and the piece rate basis. So, he also evolved the wage rates as well as the incentive systems to motivate employees.

But with this, we also got a clear definition of the factory system. In the factory system, it is the machinery which was a dominant thing and the men work with the machines, produce the volumes to meet different requirements of the economy - so with that, so one had to relate to the economy, what is happening in the economy towards the forecasting, understanding the markets and producing whatever required for the markets. And that is the time where Henry Fayol talked about how grouping of the activities to be done, how supervision is very important and how the the principles of supervising and also authority and the responsibility and things like that, which are the so-called the efficient principles of management. If you follow, the management tends to be much more effective.

He also talked about the universality of these principles of management, where he talked about the applicability of these principles to different areas. So, when I mention these Henry Fayol and Taylor, please do not think others are not important or others are not there. But we are getting into that stage of both art as well as the science of management. So, the science of management grew around Taylor and the work of Taylor. We see the art of management grew very clearly around the experiences of the people and Fayol becomes one of the early management theories.

And then we see several of the people who talked about later on. Peter Drucker talked about the management by objectives, where he elaborated in detail how the organizational objectives can be translated, can be defined at different levels and how each of the levels of the management could be integrated. So, the significant contributors and their contributions of management, we need to understand in order to appreciate how the field of management has grown over the years.

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And in my next lecture, I want to get the details of what is this planning all about, how planning has been defined, what are the different types of planning and what are the major steps one need to go through in terms of this managerial planning, the strategies and also the method of achieving the objectives of the organization what we can call it as MBO or the management by objectives.

So if you have some questions, we can always discuss about those questions.

Thank you very much.