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

### Lecture - 10 **Dimensions of Organization Structure – III**

Welcome to this course on Organization Theory/Structure and Design. As you can see from this slide now we will talk about the last module in part 1 and we will continue with our discussion on the Dimensions of Organization Structure that we started in module 8 and continued in module 9.

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centralization.

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### **MODULE OVERVIEW** Describing the relationships between complexity, formalization, and Identifying why organizations might practice decentralization. · Discussing how MIS affects structural dimensions.

Now, let us look at what are the things that will be covered in this module. So, we will start by describing the relationships between complexity, formalization and centralization. Then we will identify why organizations must practice decentralization and then we will discuss how MIS affects structural dimensions. Let us start with the relationship between formalization and complexity, both these terms we have talked about in module 9.

So, there is a considerable evidence to support a strong association among specialization, standardization and formalization. Where employees perform narrow repetitive and specialized tasks, their routine tends to be standardized and a large number of rules and regulations govern their behavior.

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Assembly line workers have highly specialized jobs with standardized routines and a wealth of formal rules and procedures to follow.

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On the other hand we find cases of high complexity being linked with low formalization. For instance the highly trained specialists or professionals do not require a great number of rules and regulations. High formalization in such activities would only impose redundant controls. The preceding findings are not contradictory. They acknowledge the

important difference between functional and social specialization. And the fact that the two types of specialization have different effects on the need for formalization.

High horizontal differentiation when achieved through division of labor, typically means hiring unskilled personnel to perform routine and repetitive tasks. Division of labor then tends to be associated with high degree of formalization to facilitate coordination and control.

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Where high horizontal differentiation is achieved by hiring specialists and professionals formalization will tend to be low, these people do non routine tasks. Their previous socialization will have instilled internal standards of control, so high formalization is not necessary.

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Our conclusion therefore is that the key to understanding the complexity-formalization relationship is to focus on these two things, the first is the degree of horizontal differentiation and the second is the way it is achieved.

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### CENTRALIZATION

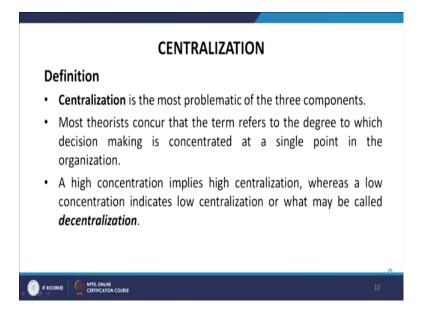
- Where are decisions made in the organization: up on top by senior management or down low where the decision makers are closest to the action?
- This question introduces the last of the components that make up organization structure.
- The subject of upcoming slides will be centralization and its counterpart, decentralization.



Now, let us move on to understanding what is centralization. Where are decisions made in the organization up on top by senior management or down low where the decision makers are closest to the action? The question introduces the last of the components that make up organization structure. The subject of upcoming slides will be centralization and

its counterpart decentralization. So, let us start with the definition of centralization. Centralization is the most problematic of the 3 components. Most theorists concur that the term refers to the degree to which decision making is concentrated at a single point in the organization.

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The high concentration employs high centralization, whereas the low concentration indicates low centralization or what may be called as decentralization.

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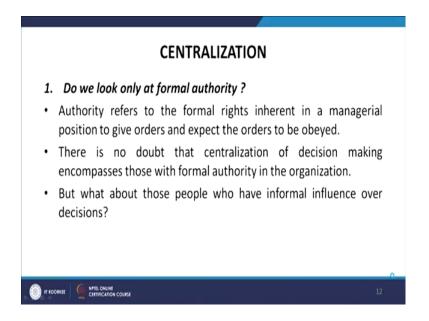
### **CENTRALIZATION**

- There is also agreement that it is distinctly different from spatial differentiation.
- Centralization is concerned with the dispersion of authority to make decisions within the organization, not geographic dispersion.
- However, beyond these points, the water quickly becomes muddy.
- The following questions suggest the breadth of the problem.



There is also agreement that it is distinctly different from spatial differentiation. Centralization is concerned with the dispersion of authority to make decisions within the organization not geographic dispersion. However, beyond these points the water quickly becomes muddy. The following questions suggest the breadth of the problem.

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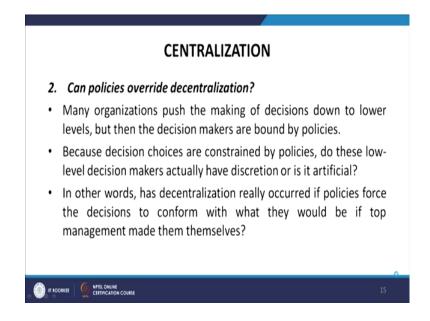


Now, first of this problem is, do we look only at formal authority? Authority refers to the formal rights inherent in a managerial position to give orders and expect the orders to be obeyed. There is no doubt that centralization of decision making encompasses those with formal authority in the organization, but what do those people who have informal influence over decisions.

For instance, at a major television network Sangeeta is a staff research specialist in the programming department. Her job is to identify characteristics that differentiate successful from unsuccessful prime time programs. She prepares the reports on her findings, but she has no formal authority. Yet the director of programming has her attend meetings informally where decisions for future programming are made.

Additionally, he rarely makes a major programming decision without checking out Sangeeta's opinion. Sangeeta has no formal authority in her position, but she does affect decisions. Is this consistent with high centralization or low?

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Now, then we move on to the next question, can policies override decentralization? Many organizations push the making of decisions down to lower levels, but then the decision makers are bound by policies.

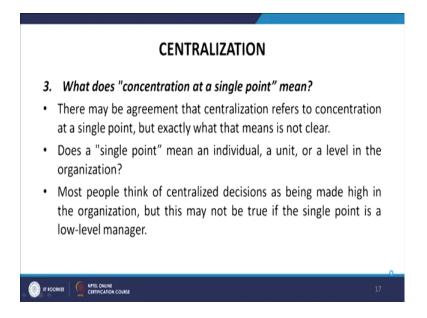
Because, decision choices are constrained by policies do these low level decision makers actually have discretion or is it artificial? In other words, has decentralization really occurred if policies force the decisions to conform with what they would be if top management made them themselves?

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### CENTRALIZATION • One could argue that, even though employees low in the organization are making many decisions, if those decisions are programmed by organizational policies, a high degree of centralization exists.

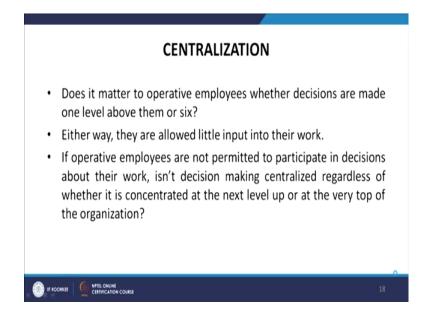
One could argue that even though employees low in the organization are making many decisions, if those decisions are programmed by organizational policies a high degree of centralization exists.

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The third issue is what does concentration at a single point means. There may be agreement that centralization refers to concentration at a single point, but exactly what that means is not clear. Thus a single point means an individual, a unit or a level in the organization. Most people think of centralized decisions as being made high in the organization. But this may not be true if the single point is a low level manager.

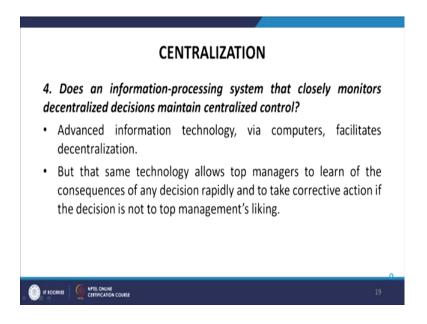
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Does it matter to operative employees whether decisions are made one level above them or six levels above them? Either way they are allowed little input into their work. If operative employees are not permitted to participate in decisions about their work, is not decision making centralized regardless of whether it is concentrated at the next level up or at the very top of the organization?

The fourth question is does an information processing system that closely monitors decentralized decisions maintain centralized control? Advanced information technology via computers facilitates decentralization.

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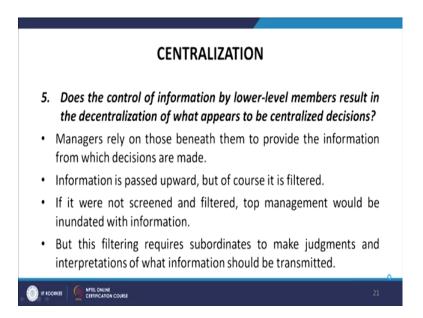
But that same technology allows top managers to learn of the consequences of any decision rapidly and to take corrective action if the decision is not to top management's liking.

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## CENTRALIZATION If discretion is delegated downward but closely monitored by those above, is it real decentralization? In such cases, there is no real sharing of control in the organization. One could argue that there is only the appearance of decentralization, and top management maintains effective centralized control.

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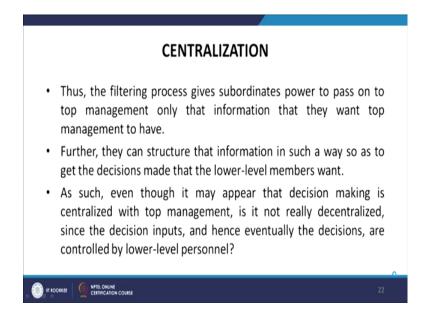
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The next question is does the control of information by low level members result in the decentralization of what appears to be centralized decisions. Managers rely on those beneath them to provide the information from which decisions are made. Information is passed upwards but of course it is filtered, if it were not screened and filtered top management would be inundated with information.

But this filtering requires subordinates to make judgments and interpretations of what information should be transmitted. Thus the filtering process gives subordinates power to pass on to top management only that information that they want top management to have.

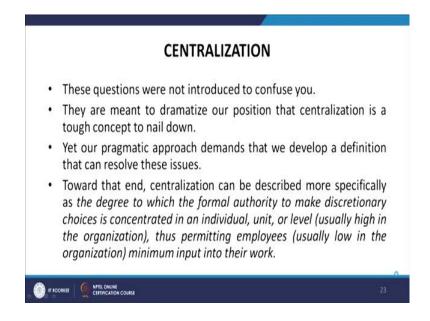
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Further they can structure the information in such a way so as to get the decision made that the low level members want. As such even though it may appear that decision making is centralized with top management, is it not really decentralized, since the decision inputs and hence eventually the decisions are controlled by lower level personnel?

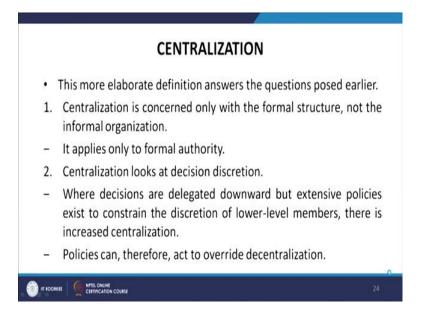
These questions are not introduced to confuse you, they are meant to dramatize our position that centralization is a tough concept to nail down; yet our pragmatic approach demands that we develop a definition that can resolve these issues.

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Towards that end centralization can be described more specifically as the degree to which the formal authority to make discretionary choices is concentrated in an individual unit or level, that is usually high in the organization. Thus permitting employees which are usually low in the organization, minimum input into their work.

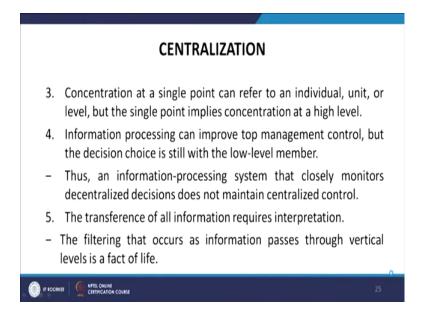
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This more elaborate definition answers the question posed earlier. So, the 1st thing that it answers is, centralization is concerned only with the formula structure not the informal organization. Therefore, it applies only to formal authority. 2nd centralization looks at

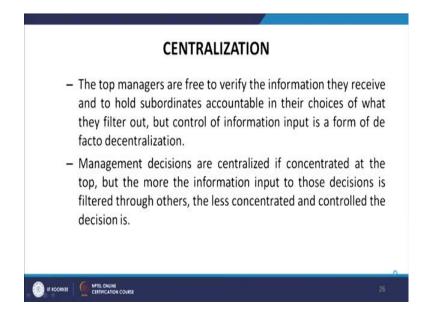
decision discretions. Where decisions are delegated downwards but extensive policies exist to constrain the discretion of lower level members, there is increased centralization. Policies can therefore act to override decentralization.

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The third is, concentration at a single point can refer to an individual unit or level, but the single point implies concentration at a high level. Information processing can improve top management control, but the decision choice is still with the low level member. Thus an information processing system that closely monitors decentralized decisions does not maintain centralized control. The filtering that occurs as information passes through vertical levels is a fact of life.

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The top managers are free to verify the information they receive and to hold subordinates accountable in their choices of what they filter out, but control of information input is a form of de facto decentralization.

Management decisions are centralized if concentrated at the top, but the more the information input to these decisions is filtered through others the less concentrated and controlled the decision is. Now, we will talk about the relationship between decision making and centralization.

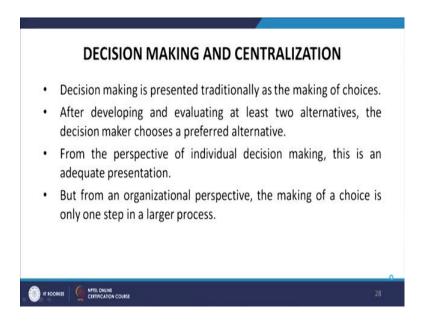
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# DECISION MAKING AND CENTRALIZATION Managers—regardless of where they are in the organization—make decisions. The typical manager must make choices about goals, budget allocations, personnel, the ways in which work is to be done, and ways to improve his or her unit's effectiveness. As critical as a knowledge of authority and the chain of command are to the understanding of centralization, of equal importance is the awareness of the decision-making process. The degree of control one holds over the full decision-making process is, itself, a measure of centralization.

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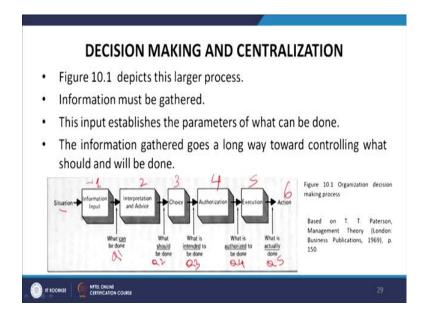
As critical as knowledge of authority and the chain of command are to the understanding of centralization, of equal importance is the awareness of the decision making process. The degree of control one holds over the full decision making process is itself a measure of centralization.

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Decision making is presented traditionally as the making of choices after developing and evaluating at least two alternatives. The decision maker chooses a preferred alternative. From the perspective of individual decision making this is an adequate presentation but from an organizational perspective the making of a choice is only one step in a larger process.

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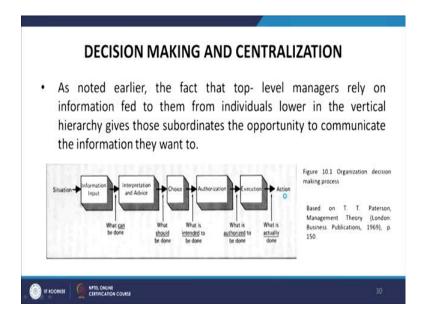


This figure 10.1 depicts this larger process. So, this figure 10.1 it depicts organization decision making process. So, the information must be gathered this input establishes the parameter of what can be done, the information gathered goes a long way towards controlling what should and will be done. So, you see that it starts from here situation and then comes this information input, next comes the question what can be done then again come second step interpretation advice.

Then comes this question, question number 2, what should be done? and then comes the choice. Again question number 3, what is intended to be done? And then comes the fourth authorization, then comes the question fourth what is authorized to be done and then it leads to execution and then comes question what is actually done and then it leads to action.

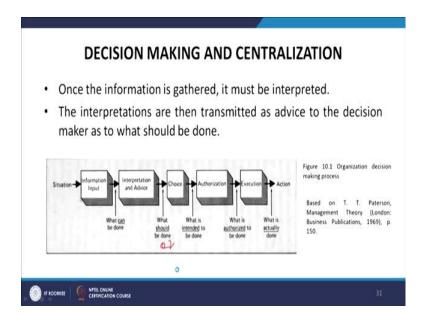
So, you see that at each step there is a question that needs to be answered before proceeding to the next step. So, it starts with situation then comes the information, inputs, interpretation, advice, choice, authorization, execution and action and in between there are 5 questions that need to be answered.

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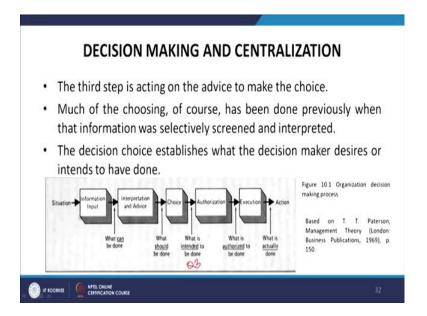
As noted earlier, the fact that top level managers rely on information fed to them from individuals lower in the vertical hierarchy gives those subordinates the opportunity to communicate the information they want to.

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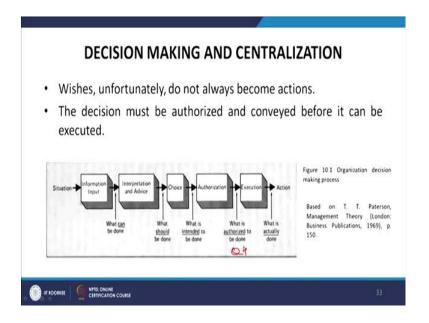
Once the information is gathered it must be interpreted. The interpretations are then transmitted as advice to the decision makers as to what should be done. So, that is question number 2.

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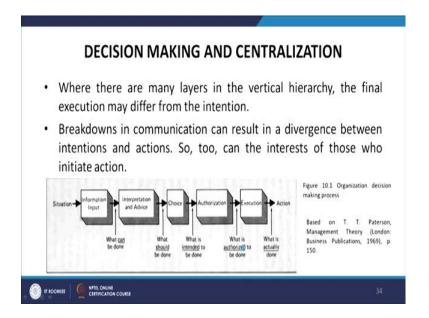
In the third step it is about acting on the advice to make the choice. Much of the choosing of course, has been done previously when that information was selectively screened and interpreted. The decision choice establishes what the decision makers desire or intend to have done. So, this is we are talking of question number 3.

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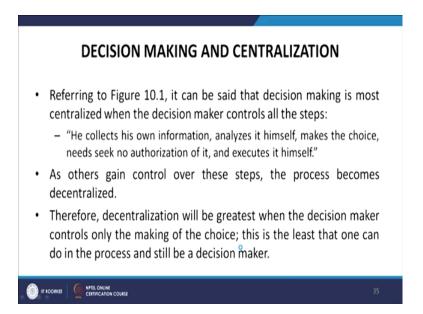
Now, as we move on, wishes unfortunately do not always become actions; the decision must be authorized and conveyed before it can be executed. So, this is the question number 4, which is to be answered before we move on to the next stage that is execution.

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So, where there are many layers in the vertical hierarchy the final execution may differ from the intention. Breakdowns in communication can result in a divergence between intentions and actions. So too can the interest of those who initiate actions.

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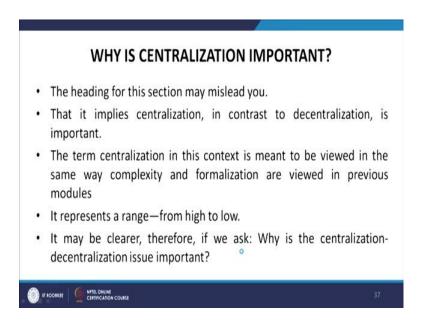


Referring to figure 10.1 it can be said that decision making is most centralized when the decision maker controls all the steps. That is, he collects his own information, analyzes it himself, makes the choice, seeks no authorization of it and executes it himself. As others gain control over these steps, the process becomes decentralized. Therefore,

decentralization can be the greatest when the decision maker controls only the making of the choice, this is, the least that one can do in the process and still be a decision maker.

So, viewing the organizational decision process as more than merely choosing between alternatives gives us insight into the intricacies involved in defining and assessing the degree of centralization in an organization.

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Now, we will look at this important question, that why is centralization important? The heading of this section may mislead you that it implies centralization in contrasted to decentralization is important. The term centralization in this context is meant to be viewed in the same way complexity and formalization are viewed in previous modules. It represents a range from high to low. It may be clearer, therefore, if we ask why is the centralization decentralization issue important?

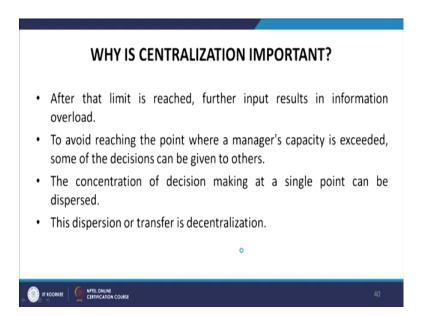
As described in addition to being collection of people, organizations are decision making and information processing systems. Organizations facilitate the achievement of goals through coordination of group efforts. Decision making and information processing are centre for coordination to take place yet and this point is often overlooked by students of decision making and organization theory. Information itself is not the scarce resource in organizations.

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# WHY IS CENTRALIZATION IMPORTANT? Advanced information technology provides managers with bundles of data to assist in making decisions. We live in a world that drenches us with information. The scarce resource is the processing capacity to attend to information. Managers are limited in their ability to give attention to data they receive. Every manager has some limit to the amount of information that he or she can process.

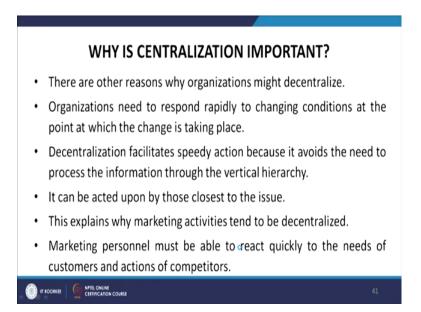
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After that limit is reached further input results in information overload to avoid reaching the point where manager's capacity is exceeded, some of the decisions can be given to others. The concentration of decision making at a single point can be dispersed. This dispersion or transfer is decentralization.

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There are other reasons why organization might decentralize. Organizations need to respond rapidly to changing conditions at the point at which the change is taking place. Decentralization facilitates speedy action because it avoids the need to process the information through the vertical hierarchy. It can be acted upon by those closest to the issue.

This explains why marketing activities tend to be decentralized. Marketing personnel must be able to react quickly to the needs of customers and actions of competitors.

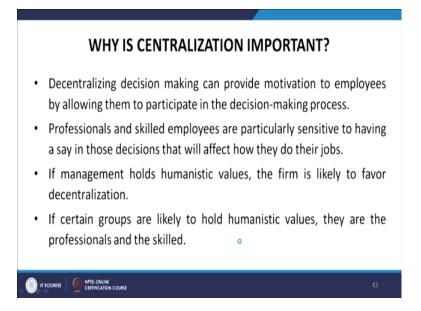
In addition to speed, decentralization can provide more detailed input into the decisions. If those most familiar with an issue make a decision, more of the specific facts relevant to that issue will be available.

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# WHY IS CENTRALIZATION IMPORTANT? In addition to speed, decentralization can provide more detailed input into the decision. If those most familiar with an issue make a decision, more of the specific facts relevant to that issue will be available. The sales people at a company's facilities in Rio de Janeiro are much more likely to know the relevant facts for making pricing decisions on the company's products in Brazil than would a sales executive five thousand miles north in New York.

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Decentralizing decision making can provide motivations to employees by allowing them to participate in the decision making process. Professionals and skilled employees are particularly sensitive to having a say in those decisions that will affect how they do their jobs. If management holds humanistic values the firm is likely to favor decentralization.

If certain groups are likely to hold humanistic values they are the professionals and the skilled.

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# WHY IS CENTRALIZATION IMPORTANT? Because these people desire to share in the decision-making process, the opportunity to do so should be motivating. On the other hand, if management holds autocratic values and centralizes authority, employee motivation can be predicted to be low.

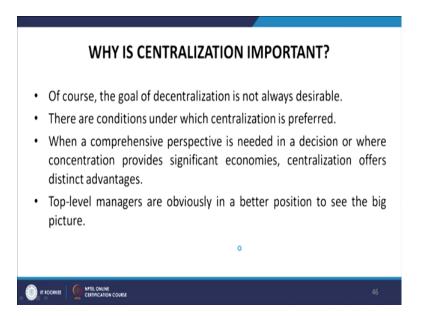
Because these people desire to share in the decision making process, the opportunity to do so should be motivating. On the other hand if management holds autocratic values and centralizes authority, employee motivation can be predicted to be low. A final plus for decentralization is the training opportunity that it creates for low level managers, by delegating authority top management permits less experienced managers to learn by doing.

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## WHY IS CENTRALIZATION IMPORTANT? A final plus for decentralization is the training opportunity that it creates for low-level managers. By delegating authority, top management permits less experienced managers to learn by doing. By making decisions in areas where impact is less critical, low-level managers get decision-making practice with the potential for minimum damage. This prepares them for assuming greater authority as they rise in the organization.

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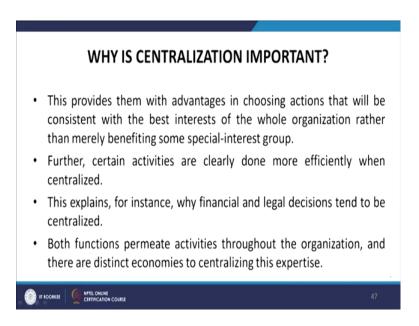
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Of course the goal of decentralization is not always desirable. There are conditions under which centralization is preferred when a comprehensive perspective is needed in a decision or where concentration provides significant economies, centralization offers distinct advantages. Top level managers are obviously in a better position to see the big picture.

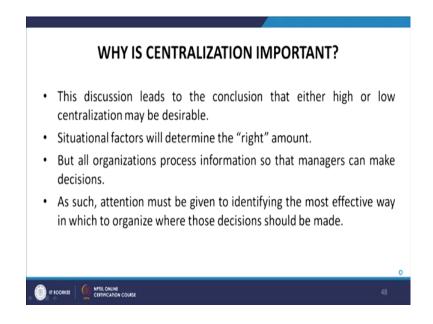
This provides them with advantages in choosing actions that will be consistent with the best interest of the whole organization, rather than merely benefiting some special interest group. Further certain activities are clearly done more efficiently when centralized, this explains for instance why financial and legal decisions tend to be centralized.

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Both functions permeate activities throughout the organization and there are distinct economies to centralizing this expertise.

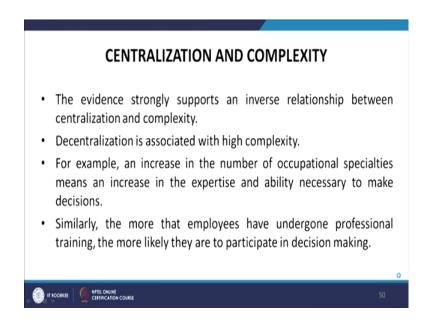
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This discussion leads to the conclusion that either high or low centralization may be desirable. Situational factors will determine the right amount. But all organization process information, so that managers can make decisions as such attention must be given to identifying the most effective way in which to organize where those decisions should be made.

As we close this part on structural components, it is important to attempt to identify what relationships there are if any between centralization and complexity and between centralization and formalization. So, now we will look at this relationship between centralization and complexity. The evidence strongly supports an inverse relationship between centralization and complexity.

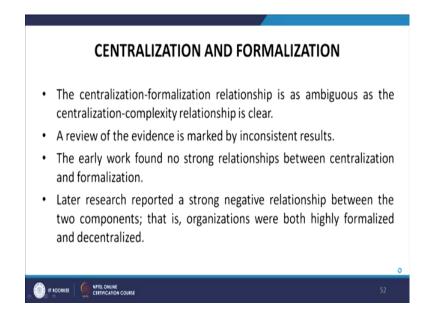
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Decentralization is associated with high complexity. For example, an increase in the number of occupational specialties means an increase in the expertise and ability necessary to make decisions. Similarly, the more employees have undergone professional training, the more likely they are to participate in decision making.

Conversely the evidence find that the greater the centralization of work decisions, the less professional training is likely to be exhibited by employees. We expect therefore, to find high complexity associated with decentralization when we examine the structure of organizations.

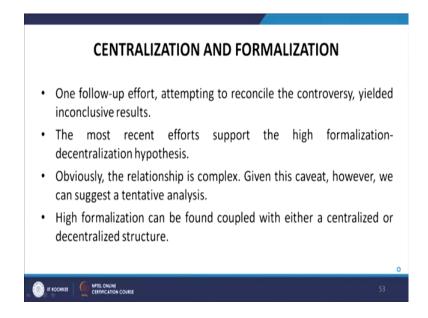
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Now, we will talk about the relationship between centralization and formalization. The centralization-formalization relationship is as ambiguous as the centralization complexity relationship is clear.

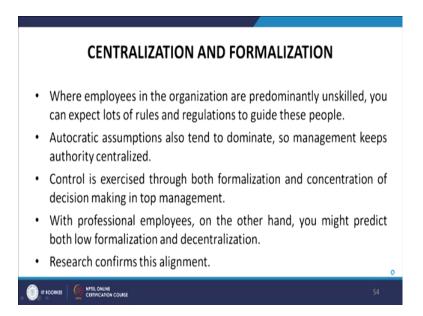
A review of the evidence is marked by inconsistent results. The early work found no strong relationships between centralization and formalization. Later research reported a strong negative relationship between the two components that is organizations were both highly formalized and decentralized.

One follow up effort attempting to reconcile the controversy yielded inconclusive results. Recent efforts support the high formalization decentralization hypothesis. (Refer Slide Time: 28:20)



Obviously the relationship is complex given this caveat, however we can suggest a tentative analysis. High formalization can be found coupled with either a centralized or decentralized structure.

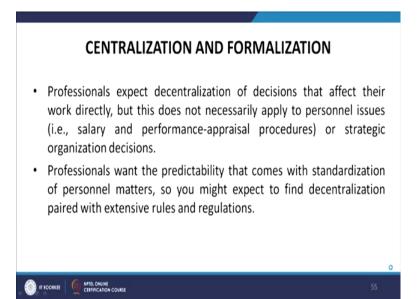
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Where employees in the organization are predominantly unskilled, you can expect lots of rules and regulations to guide these people. Autocratic assumptions also tend to dominate, so management keeps authority centralized. Control is exercised through both formalization and concentration of decision making in top management. With

professional employees on the other hand you might predict both low formalization and decentralization. Research confirms this alignment.

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Professional expect decentralization of decisions that affect their work directly but this does not necessarily apply to personnel issues, like salary and performance appraisal procedures or strategic organization decisions. Professionals want the predictability that comes with standardization of personal matters, so, you might expect to find decentralization paired with extensive rules and regulations.

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# CENTRALIZATION AND FORMALIZATION Additionally, professionals' interest is in their technical work, not in strategic decision making. This can result in low formalization and centralization. Centralization, however, is confined to strategic rather than to operative decisions, the former having little impact on the work activities of the professional.

Additionally professionals' interest is in their technical work not in strategic decision making. This can result in low formalization and centralization. Centralization however is confined to strategic rather than to operative decisions, the former having little impact on the work activities of the professionals. Now let us look at how the sophisticated information system will be changing organization structure.

Sophisticated information systems will be changing the way we look at organization structures. This is specifically true for the widespread use by management personnel of personal computers that can tap into large centralized databases and that are linked together as part of a larger computer network. For example, when managers have direct access to data they can handle more subordinates.

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### SOPHISTICATED INFORMATION SYSTEM WILL BE CHNAGING ORGANIZATIONAL STRUCTURE

- Why? Because computer control can substitute for personal supervision.
- The result can be wider spans of control, fewer levels in the organization, and organizations that are lower in complexity.
- Information systems may also lead to less formalization and more decentralized organizations.
- Again, the reason is that management information systems can substitute computer control for rules and decision discretion.



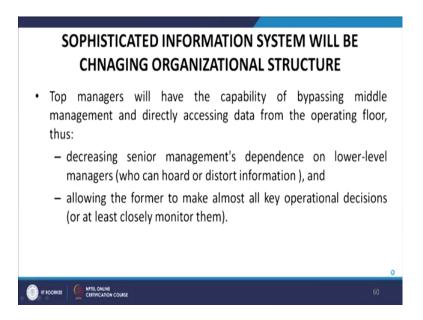
Why? Because computers' control can substitute for personal supervision. The result can be wider spans of control, fewer levels in the organization and the organizations that are lower in complexity. Information systems may also lead to less formalization and more decentralized organizations. Again the reason is that management information systems can substitute computer controls for rules and decision discretions.

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# SOPHISTICATED INFORMATION SYSTEM WILL BE CHNAGING ORGANIZATIONAL STRUCTURE Computer technology rapidly apprises top managers of the consequences of any decision and allows them to take corrective action if the decision is not to their liking. Information systems should lead to the appearance of more decentralization with no corresponding loss of control by top management. Of course, sophisticated management information systems might also lead to more centralized organizations.

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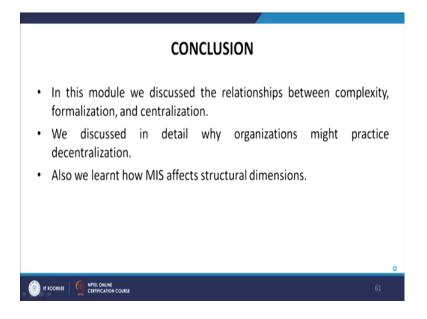
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Top managers will have the capability of bypassing middle management and directly accessing data from the operating floor. Thus, decreasing senior management's

dependence on lower level managers who can hold or distort information and allowing the former to make almost all key operational decisions or at least closely monitor them.

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So, to conclude in this module we have discussed the relationships between complexity, formalization and centralization. Then we had discussed in detail why organizations might practice decentralization and we have also learnt how MIS affects structural dimensions.

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And these are the 4 books from which the matter for this module was taken.

Thank you.