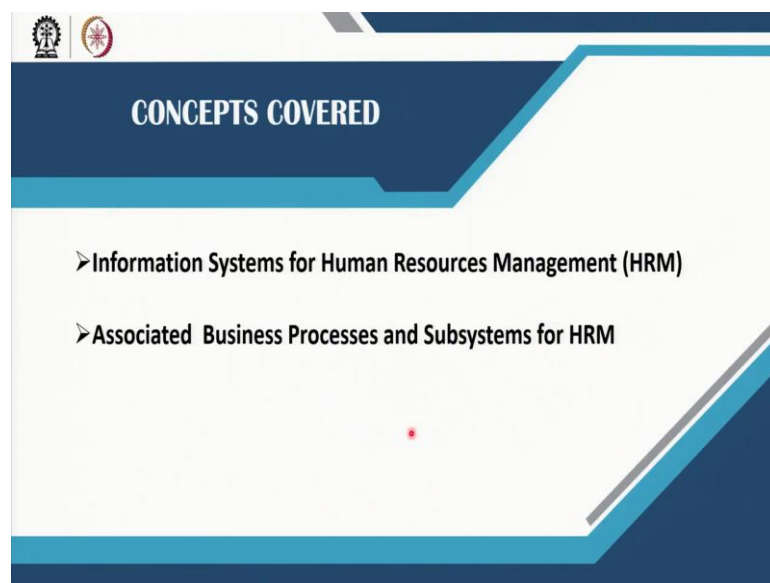


Management Information System
Prof. Kunal Kanti Ghosh
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Indian Institute of Technology, Kharagpur

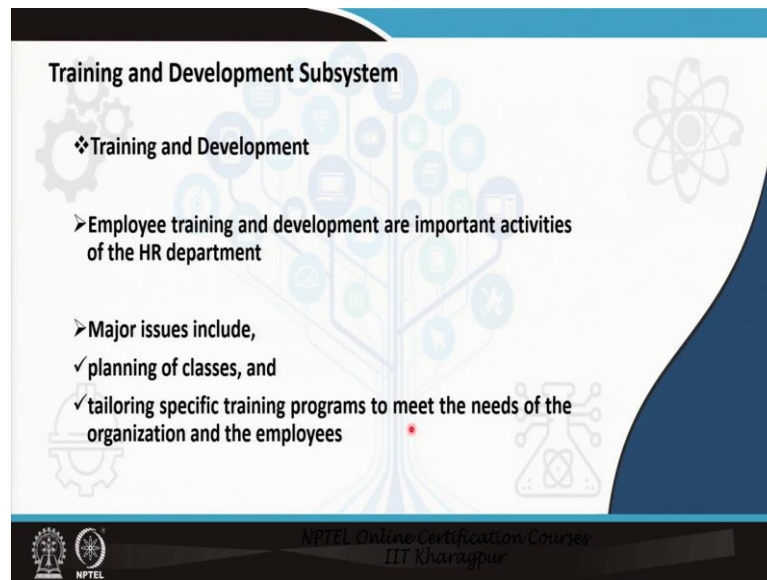
Week – 06
Module - 05
Lecture - 29
Information Systems for Human
Resource Management (Contd.)

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Hi, welcome back to the 5th module of the 6th week related to our course on “Management Information Systems”! Today we will start from where we left in the last module on ‘human resource management’. The concepts are again related to the various business processes and subsystems and the information that needs to be maintained by the HRIS for supporting those business processes.

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Training and Development Subsystem

- ❖ Training and Development
 - Employee training and development are important activities of the HR department
 - Major issues include,
 - ✓ planning of classes, and
 - ✓ tailoring specific training programs to meet the needs of the organization and the employees

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Today we will start with the ‘training and development subsystem’, which is another important component of HRIS. See the employee training and development are one of the most important activities of any HR function and the major issues include planning of the scheduled classes and tailoring specific training programs to meet the needs of the organization as well as the needs of the employees.

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Training and Development Subsystem

- ❖ Training and Development
 - HR departments may build a career development plan for each of the employees

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So, the training and development subsystem helps HR managers to build carrier development plan for each and every employee.

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Training and Development Subsystem

- ❖ Training and Development
 - HRIS may support the,
 - ✓ planning,
 - ✓ monitoring, and
 - ✓ control of training and development related activities
 - by using workflow applications

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This particular subsystem in HRIS rather supports planning, monitoring and control of training and development related activities using workflow applications and these workflow applications are embedded inside the training and development subsystem.

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Training and Development Subsystem

- ❖ Training and Development
 - This subsystem gives detailed information about,
 - ✓ Training Needs of Employees
 - ✓ Details of Trainers
 - ✓ Training Modules and Content
 - ✓ Training Feedback
 - ✓ Measure of Training Effectiveness

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The training and development subsystem gives detailed information about the training needs of employees. The training needs of the employees are first identified through their performance appraisals and also as part of the activities related to maintaining skills inventory data set and sometimes the different functional managers may specify certain

special training requirements for executing some new projects or developing some new products. And those training needs are very important, because that skill set may not be readily available inside the organization.

The training and development subsystems they also maintain detailed information related to the trainers; that means, all those employees or the requisite persons who will be delivering those training.

This subsystem also maintains data related to the training modules, the different course outlines, the coverage and content of these courses. Besides maintaining the employees feedback related to that various training programs that have been imparted onto them. This subsystem also captures and maintains different measures which are deployed for finding out the effectiveness of training.

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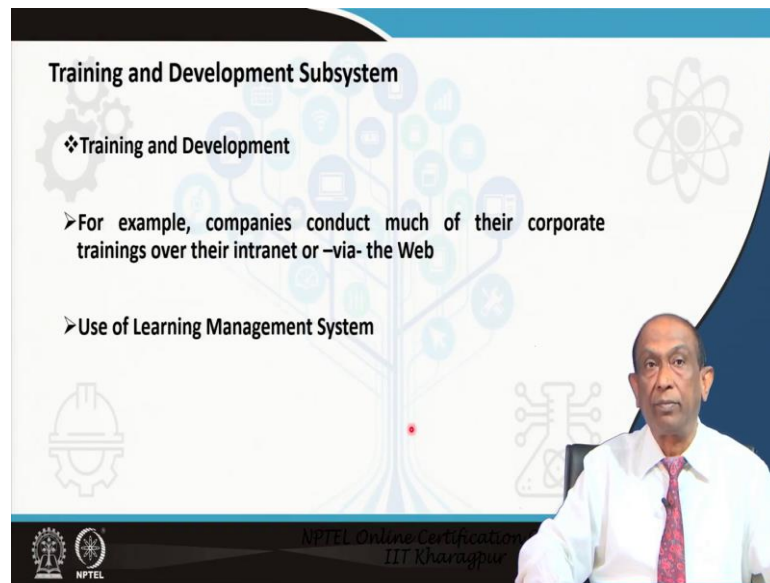
The slide is titled "Training and Development Subsystem" and features a background with a stylized tree of icons representing various educational and technological concepts. The text on the slide reads:

- ❖ Training and Development
- Now-a-days, innovative developments are taking place in the areas of,
 - Intelligent Computer-aided Instruction, and
 - Application of Multimedia Support for Instructional Activities

In the bottom right corner, there is a video inset of a man in a white shirt and red tie. The bottom of the slide includes the NPTEL logo and the text "NPTEL Online Certification IIT Kharagpur".

Now a day's innovative developments are taking place in the areas of intelligent computer aided instruction and application of multimedia support for instructional activities. So, all these details are being captured and maintained in the training and development subsystems of HRIS.

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Training and Development Subsystem

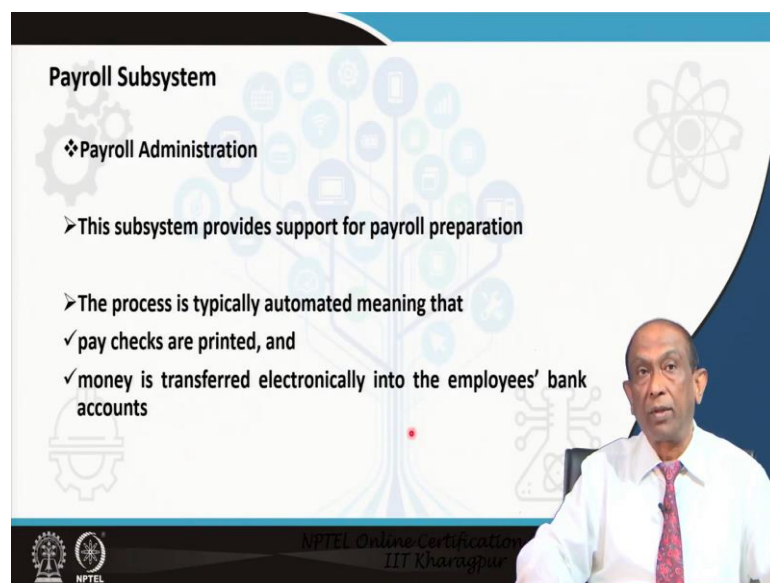
- ❖ Training and Development
 - For example, companies conduct much of their corporate trainings over their intranet or –via- the Web
 - Use of Learning Management System

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For example, through the subsystems companies conduct much of their corporate trainings over the intranet or via the web. This subsystem are also interfaced with the various learning management systems like Moodle and others and I will talk about learning management system in details in subsequent modules.

But this interface has already been established in various organizations between interface between the training and development subsystem and the learning management systems.

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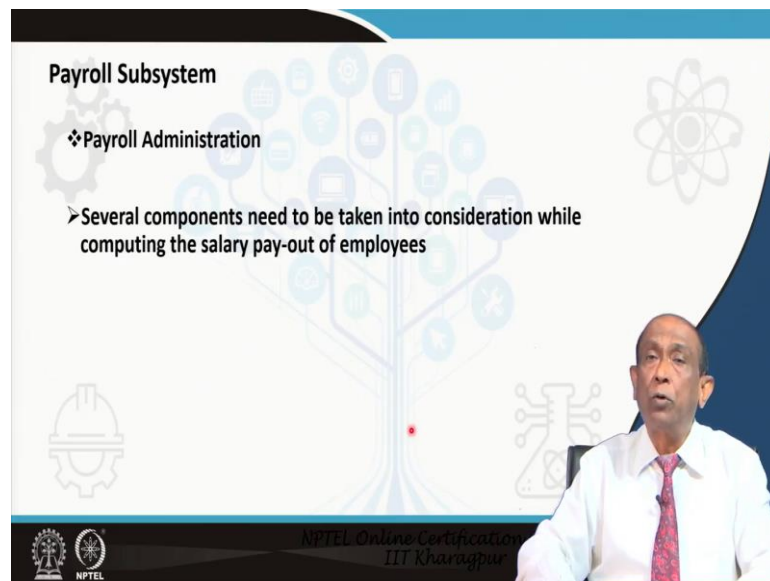
Payroll Subsystem

- ❖ Payroll Administration
 - This subsystem provides support for payroll preparation
 - The process is typically automated meaning that
 - ✓ pay checks are printed, and
 - ✓ money is transferred electronically into the employees' bank accounts

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Next important subsystem related to HRIS is the sub system, which supports administration of payroll. The subsystems supports preparation of payroll and then distribution of paychecks printing and distribution of paychecks. Normally this process business process is typically automated, whereby pay checks are printed and money is transferred electronically into the employees bank accounts.

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Payroll Subsystem

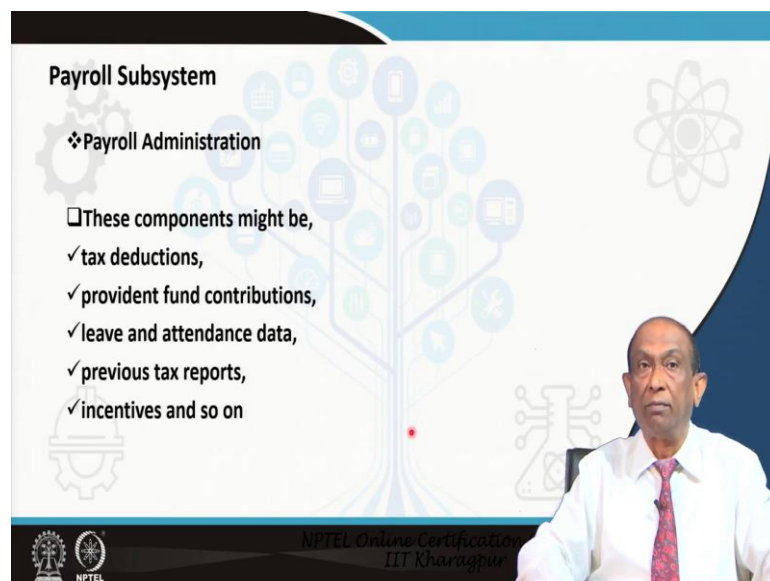
- ❖ Payroll Administration

➤ Several components need to be taken into consideration while computing the salary pay-out of employees

The slide features a background with a stylized tree of icons representing various business and technology concepts. A speaker is visible in the bottom right corner of the slide frame.

Several components need to be taken into consideration while computing the salary payout of employees and the payroll administration subsystem helps in doing that.

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Payroll Subsystem

- ❖ Payroll Administration

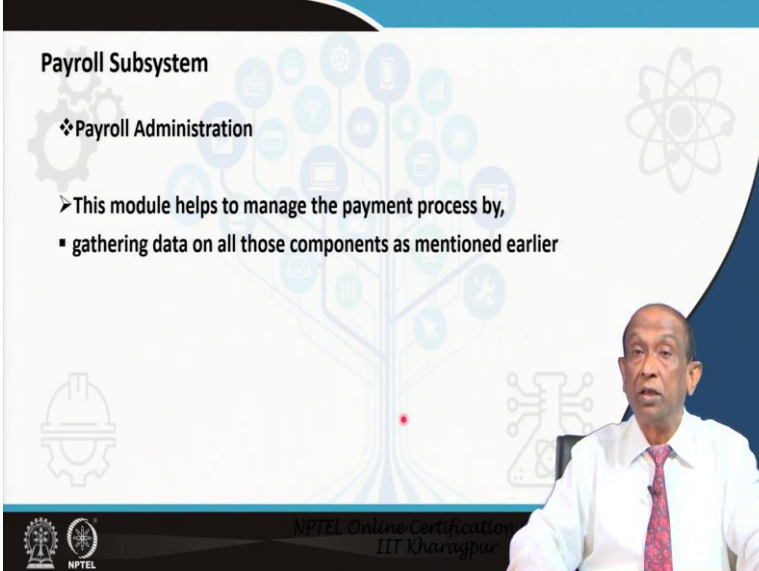
☐ These components might be,

- ✓ tax deductions,
- ✓ provident fund contributions,
- ✓ leave and attendance data,
- ✓ previous tax reports,
- ✓ incentives and so on

The slide features a background with a stylized tree of icons representing various business and technology concepts. A speaker is visible in the bottom right corner of the slide frame.

So, what are the components that the system needs to maintain, their tax deductions, contributions to provident fund, data related to leave and attendance of employees, previous tax reports, the various kinds of incentives that have been paid on to the employees and so on.

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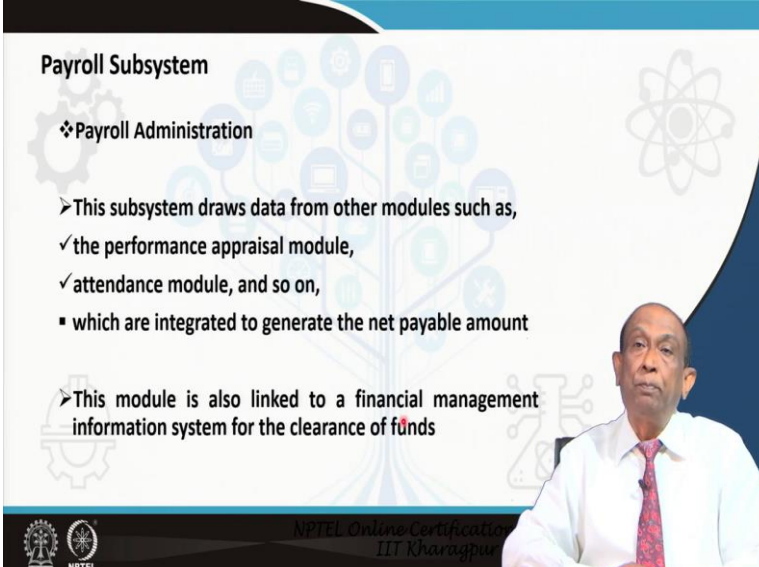
Payroll Subsystem

- ❖ **Payroll Administration**
 - This module helps to manage the payment process by,
 - gathering data on all those components as mentioned earlier

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So, this payroll administration subsystem this particular module helps to manage the payment process by gathering data on all those components as we have mentioned earlier.

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Payroll Subsystem

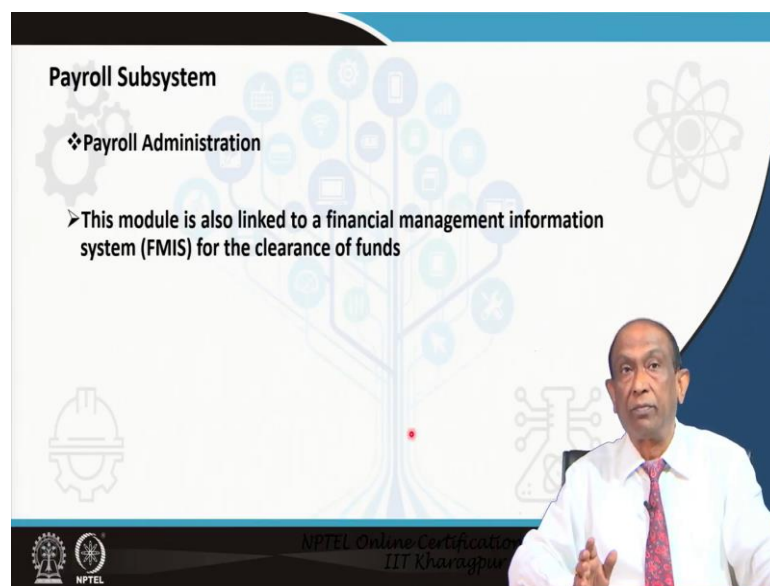
- ❖ **Payroll Administration**
 - This subsystem draws data from other modules such as,
 - ✓ the performance appraisal module,
 - ✓ attendance module, and so on,
 - which are integrated to generate the net payable amount
 - This module is also linked to a financial management information system for the clearance of funds

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This payroll administration subsystem draws data from other modules, because this subsystem is linked with other subsystems that we have just now discussed like say performance evaluation system. So, it draws related information or data from the performance appraisal module, attendance module to compute the net payable amount.

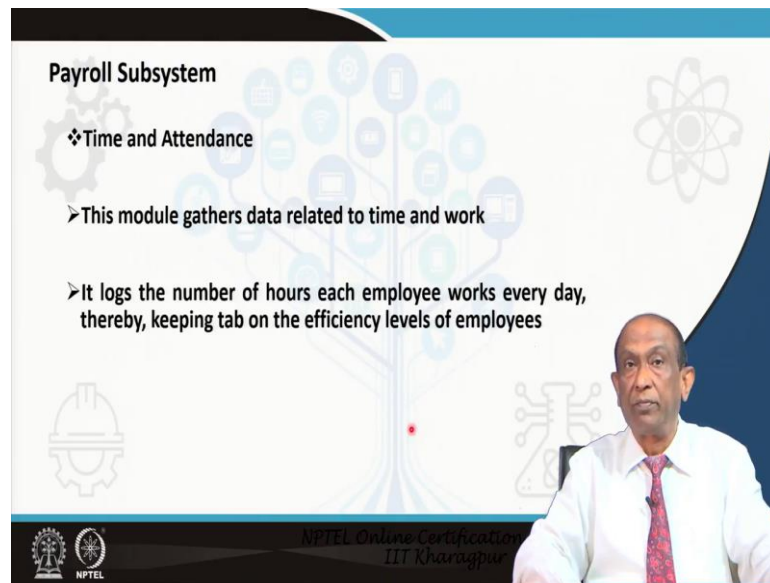
All the subsystems are integrated or interlinked with each other and this payroll administration subsystem is also linked to financial management information systems for clearance of funds.

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This is very important; this module is linked to financial management information systems for the clearance of funds.

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Payroll Subsystem

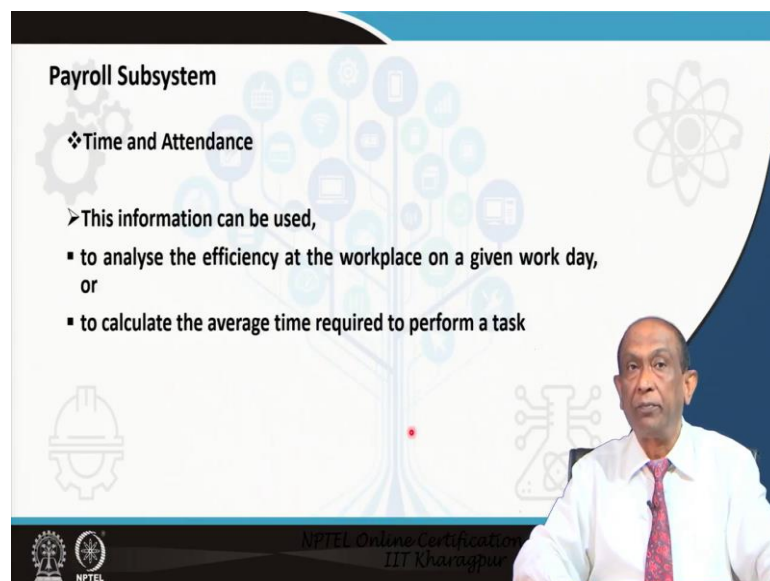
- ❖ Time and Attendance
 - This module gathers data related to time and work
 - It logs the number of hours each employee works every day, thereby, keeping tab on the efficiency levels of employees

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Then we also need to know about another subsystem related to payroll which is the time and attendance subsystem or time and attendance module, which gathers data related to the time and work done by the employees.

This module logs the number of hours each employee works every day, thereby keeping a control or a tab on the efficiency levels of these employees.

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Payroll Subsystem

- ❖ Time and Attendance
 - This information can be used,
 - to analyse the efficiency at the workplace on a given work day, or
 - to calculate the average time required to perform a task

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And that information may be used to analyze the efficiency at the workplace on a given work day or to calculate the average time required to perform a particular task.

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Payroll Subsystem

❖ **Benefits Administration**

- A major component of compensation is benefits
- Some of the benefits offered to the employees such as insurance or medical claims vary with the employees' job category
- This module can link this information to work out which benefit can be availed by which employee in a particular grade

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Then another very important module which is related sometimes comes embedded inside the payroll subsystem or interfaced with the payroll system is a Benefit Administration module.

A major component of compensation is benefits that are received by the employees, some of the benefits offered to the employees who are working in the organizations. For example, insurance or say medical claims and these benefits they vary with the employee's job category. That means, corresponding to the level at which the employee is working, these benefits, they also vary.

And the benefits administration module can link this information or help in finding out which benefit can be availed by which employee in a particular grade. Because in a particular grade employees may not be eligible for all the benefits, for a particular grade employees are entitled to certain benefits and even within that each of one of the each of these benefits the amount that they receive money value of that will also vary depending on the grade in which the employee is working.

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Payroll Subsystem

- ❖ **Benefits Administration**
- Employees' contributions to their organizations are rewarded by,
 - ✓ salaries/wages,
 - ✓ bonuses, and
 - ✓ other benefits (these benefits include those for health as well as contributions for pensions)

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Benefits administration system also captures all the rewards that each and every employee receives depending on their contribution in the organization. So, employees contributions to their organizations are rewarded by mainly salaries or the wages that they receive, the bonuses that they get and other benefits that include health and medical benefits as well as the contributions that the organizations make for their or make in their pension funds.

(Refer Slide Time: 20:33)

Payroll Subsystem

- ❖ **Benefits Administration**
- Providing flexibility in selecting benefits is viewed as a competitive advantage in large organizations – this can be supported by this subsystem
- Some companies have automated benefits enrolments

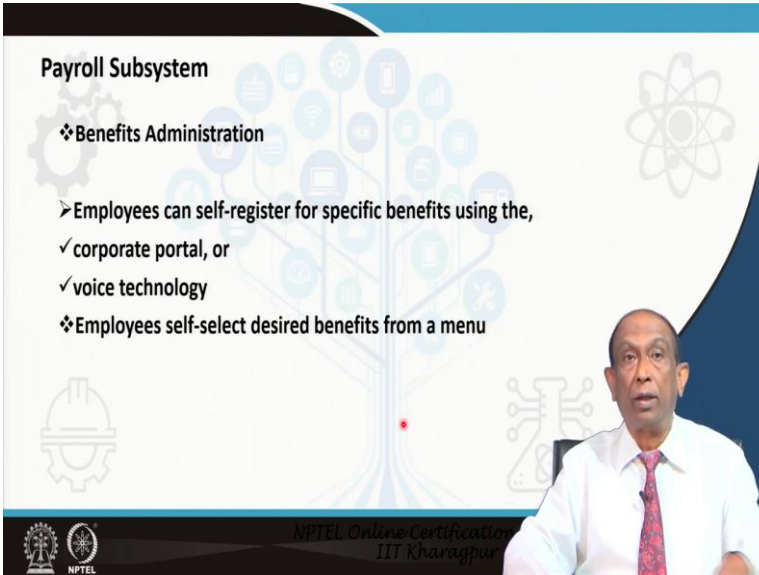
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And sometimes organizations they provide a lot of flexibility to their employees in selecting the benefits that they want and thereby all this thing is decided by the employees.

Because the organization might say that a particular employee may be entitled to this much percentage of their basic pay for the total benefits that they will receive and then they ask they provide a menu to the employees and then they ask you select what kind of benefits you want and with respect to each type of benefit how much amount should be given.

So, this is sometimes viewed as a competitive advantage particularly in large organizations and this is all supported by the benefits administration sub module.

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Payroll Subsystem

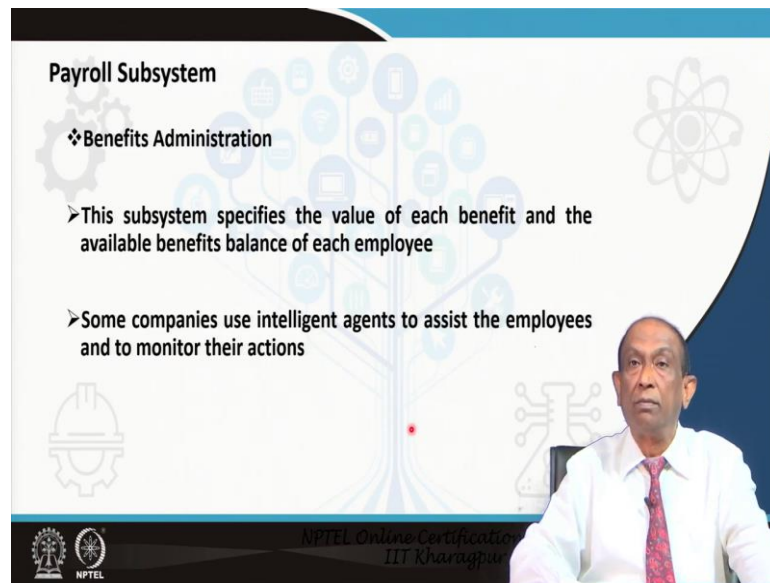
- ❖ **Benefits Administration**
- Employees can self-register for specific benefits using the,
 - ✓ corporate portal, or
 - ✓ voice technology
- ❖ Employees self-select desired benefits from a menu

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Most companies today have automated benefits enrollments, employees can self register that already said through a menu they can select specific benefits and these can be deployed using corporate portal or even some companies they have deployed voice technology in registering the specific benefits that employees they want.

So, employees basically self select the desired benefits from a menu and many employees perceive this flexibility as an advantage given to them. Thereby some kind of loyalty is generated from among these employees because the employees they can save a lot of tax by appropriately selecting or framing this benefit package.

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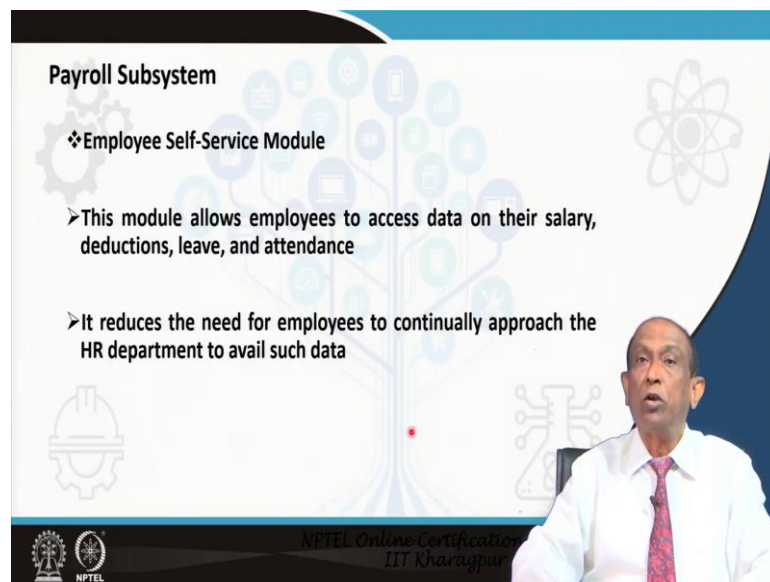
Payroll Subsystem

- ❖ **Benefits Administration**
 - This subsystem specifies the value of each benefit and the available benefits balance of each employee
 - Some companies use intelligent agents to assist the employees and to monitor their actions

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This subsystem specifies the value of each benefit and the available benefits balance of each employee. And many companies today use intelligent agents software developed through the algorithms which pertain to business intelligence to assist the employees in selecting their benefits. And this intelligent agents, they monitor these actions.

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Payroll Subsystem

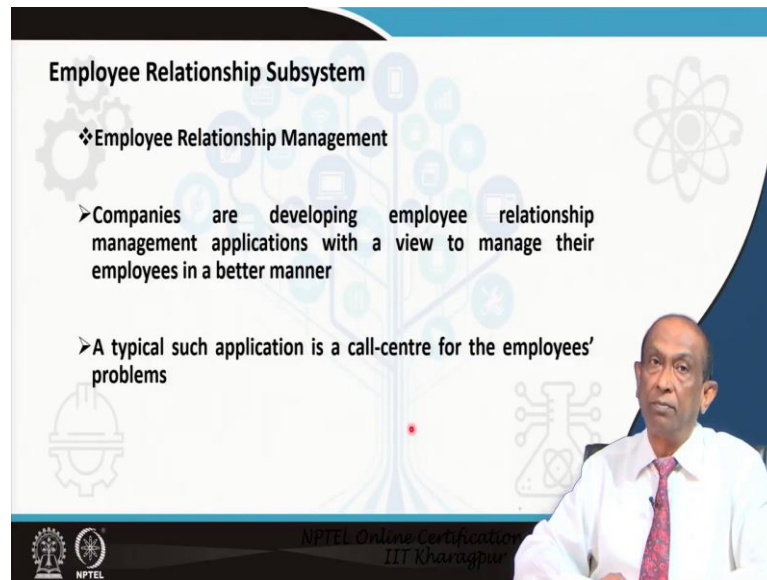
- ❖ **Employee Self-Service Module**
 - This module allows employees to access data on their salary, deductions, leave, and attendance
 - It reduces the need for employees to continually approach the HR department to avail such data

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Then we talk about the employee self service module which allow the employees to access data on their salary, the various kinds of deductions that have been made leave and attendance.

They themselves can see and their queries are satisfied through this particular self service module. So, this module reduces the need for employees to continually approach the HR department to avail such data and satisfy their queries.

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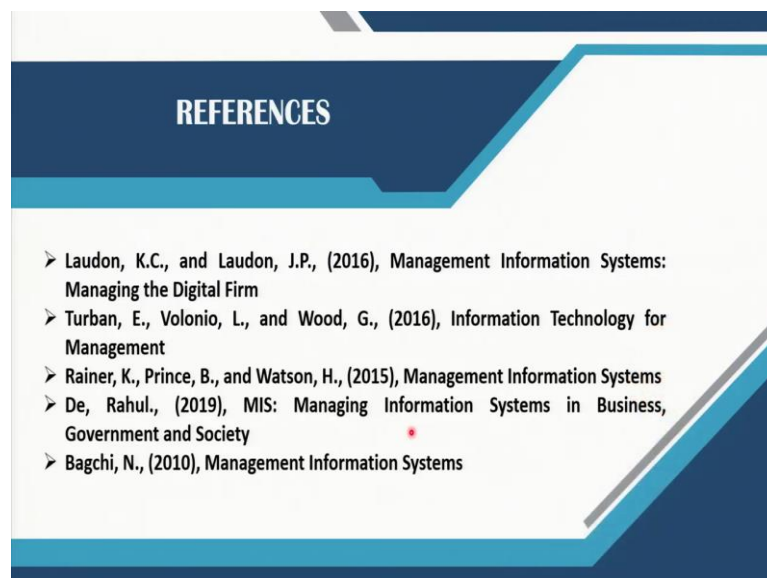
Employee Relationship Subsystem

- ❖ Employee Relationship Management
- Companies are developing employee relationship management applications with a view to manage their employees in a better manner
- A typical such application is a call-centre for the employees' problems

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Then we talk about the Employee Relationship Subsystem, companies today are developing employee relationship management applications with a view to manage their employees in a better manner. A typical such application is a call center for the employees problems.

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REFERENCES

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- Turban, E., Volonio, L., and Wood, G., (2016), Information Technology for Management
- Rainer, K., Prince, B., and Watson, H., (2015), Management Information Systems
- De, Rahul., (2019), MIS: Managing Information Systems in Business, Government and Society
- Bagchi, N., (2010), Management Information Systems

These are the references that have been used in preparing this particular module; you may go through these books and you might get detailed information on this application systems, which today they are not developed in isolation; all these application systems.

They are integrated in a seamless manner inside an enterprise resource planning system (ERPS) which has become very popular and most companies today, medium and large, have implemented ERPS in their system in a successful manner. And ERPS, they support all those application needs that we have discussed.

Thank you all for the patience!