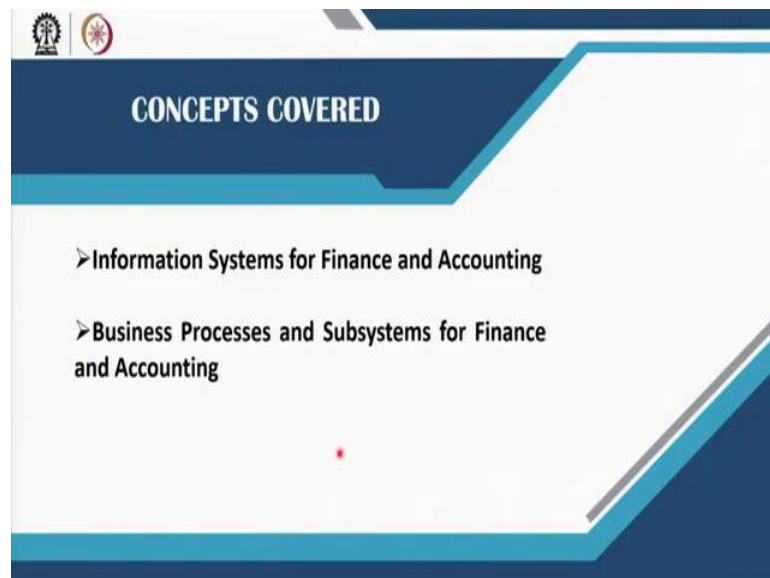


Management Information System
Prof. Kunal Kanti Ghosh
Vinod Gupta School of Management
Indian Institute of Technology, Kharagpur

Week - 06
Module – 03
Lecture – 27
Information Systems for Finance and Accounting

Hi, welcome back to our course on “Management Information Systems”! Today we will be dealing with the 3rd module of week 6 that is ‘information systems for finance and accounting’.

(Refer Slide Time: 00:37)



In here, along with the features of the finance and accounting management information systems. We will be also discussing about the major business processes and the subsystems for the finance and accounting function.

(Refer Slide Time: 00:57)

The slide features a light blue background with a central graphic of a tree whose branches are composed of various financial icons like a dollar sign, a bar chart, and a pie chart. To the left, there are faint icons of gears and a building. To the right, there is a faint atomic symbol. The slide has a dark blue curved border on the right side.

Information Systems for Finance and Accounting

- The finance function is responsible for
 - ✓ managing the organization's financial assets such as
 - ✓ cash,
 - ✓ stocks,
 - ✓ bonds, and
 - ✓ other investments
 - in order to maximize the return on those financial assets

NPTEL Online Certification Course
IIT Kharagpur

The finance function is responsible for managing the organizations financial assets; for example, cash, stocks, bonds and other investments with the purpose of maximizing the return on this financial assets. And in order to do that, the finance functions particularly the financial managers need various type of information from both internal and external sources. Internal to the organization and the external environment which you know influences the performance of the organization.

And MIS for finance and accounting provides financial managers with all the required information to take proper decisions at the right time, in a right manner.

(Refer Slide Time: 02:17)

Information Systems for Finance and Accounting

- The finance function is also in charge of managing the capitalization of the firm
- In order to determine whether the firm is getting the best return on its investments, the finance function must obtain a considerable amount of information from sources external to the firm

NPTEL Online Certification Course
IIT Kharagpur

The finance function also manages the capitalization of the firm. And in order to determine whether the firm is getting the best return on its investments, the finance function must obtain considerable amount of information from sources which are external to the firm. And this kind of information is captured and maintained in the finance and management; finance information systems for finance and accounting.

(Refer Slide Time: 03:04)

Information Systems for Finance and Accounting

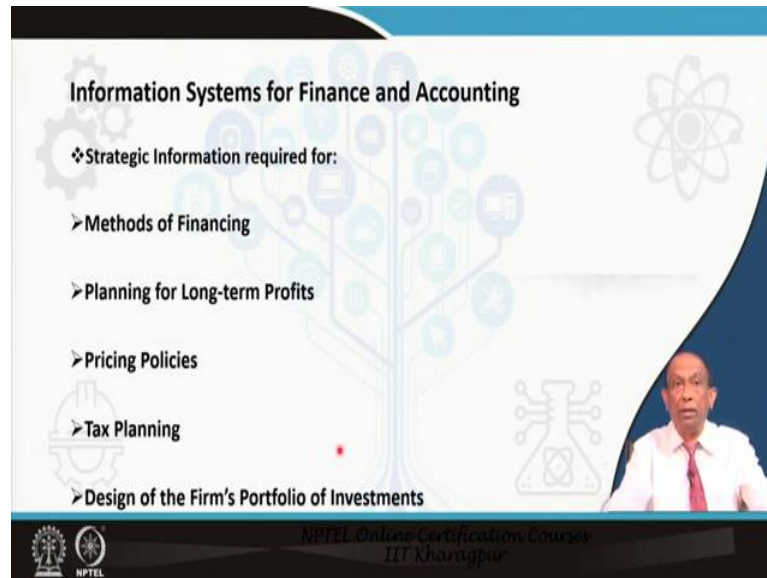
- The accounting function is responsible for maintaining and managing an organization's financial records –
 - ✓ receipts,
 - ✓ expenditures
 - ✓ depreciation,
 - ✓ payroll, and so on

NPTEL Online Certification Course
IIT Kharagpur

The accounting function is primarily responsible for maintaining and as well as managing organizational financial records. For example, all the receipts, expenditure

details, depreciation, payroll and such kind of data is being maintained by this accounting information system.

(Refer Slide Time: 03:36)



The slide is titled "Information Systems for Finance and Accounting". It features a list of strategic information requirements under the heading "Strategic Information required for:". The list includes:

- Methods of Financing
- Planning for Long-term Profits
- Pricing Policies
- Tax Planning
- Design of the Firm's Portfolio of Investments

The slide also includes the NPTEL logo and the text "NPTEL Online Certification Course IIT Kharagpur" at the bottom. A small inset video of a speaker is visible in the bottom right corner of the slide.

Now, in order to perform effectively, all the finance and accounting functions, the type of information which are required can be classified into strategic, tactical; as well as operational. Strategic information; that means, those information's which are required for long range planning which are important for taking financial decisions are the methods of financing.

Planning for long term profits, information required for determining the pricing policies. Strategic information is required for tax planning as well as design of the firm's portfolio of investments.

(Refer Slide Time: 04:57)

Information Systems for Finance and Accounting

❖ Tactical Information required for:

- Preparation of Short-term Budgets
- Variation between Budget And Expenses
- Monitoring Outstanding Payments / Receipts
- Monitoring Credit and Payment Status
- Monitoring Cost Increases and Pricing
- Knowing the Impact of Taxation on Pricing

NPTEL Online Certification Course
IIT Kharagpur

Tactical information which are required for preparation of short term budgets; to determine the variation between the budget and the expenses incurred. Monitoring outstanding payments or receipts, monitoring credit and payment status, monitoring cost increases and pricing details, knowing the impact of taxation on pricing; all these are examples of tactical information which is being maintained by the finance and accounting system.

(Refer Slide Time: 05:59)

Information Systems for Finance and Accounting

❖ Operational Information required for:

- Periodic Financial Report
- Disseminating Budget Status to all Functional Managers
- Tax Returns
- Share Transfer
- Preparing Profit and Loss Account
- Tracking Payments and Receipts
- Maintaining Payroll and Provident Fund (PF) Accounts

NPTEL Online Certification Course
IIT Kharagpur

The finance and accounting management information system also maintain operational information which are required to generate periodic financial report, disseminating the status of budget to all the functional managers. Information related to tax returns, share transfer, generate profit and loss account, tracking payments and receipts, maintaining payroll and provident fund accounts; all these are being maintained by MIS for finance and accounting system.

(Refer Slide Time: 07:10)

Information Systems for Finance and Accounting

- The financial management information system (FMIS) finds extensive application in managing the financial matters of an organization
- An FMIS allows managers to evaluate the sources of funds that would be best suited for the firm, those that bear the least risk, and those that reaps the most gain/profit

NPTEL Online Certification Course
IIT Kharagpur

The financial management information system acronymed as FMIS finds wide application in managing the financial matters of an organization. The finance and management information system allows managers to evaluate the various sources of funds which will be the; which will be best suited for the firm, those sources of funds which bear the least risk and those sources of funds that reaps the most gain or profit.

This is possible if we can design a very effective and efficient finance and management; financial management information system.

(Refer Slide Time: 08:26)

Information Systems for Finance and Accounting

- The FMIS can also be used to decide how much money should be raised from equity and how much from debt
- Such a system has wide application in banks
- It helps to manage all the important daily transactional data from withdrawals to demand draft creation
- It also processes these data and converts them into useful information, and helps to store the information securely

NPTEL Online Certification Course
IIT Kharagpur

The financial management information system can also be used to find out how much money should be raised from equity and how much money should be raised from debt. And this kind of systems have wide applicability in banks.

The system also helps managers to manage all the important transactional data which are generated on a daily basis, from withdrawals to demand draft creation. The system also processes this data and converts them into useful information and this information is also stored in the system, in a secured manner.

(Refer Slide Time: 09:49)

Information Systems for Finance and Accounting

❖ General Ledger (GL) Accounting:

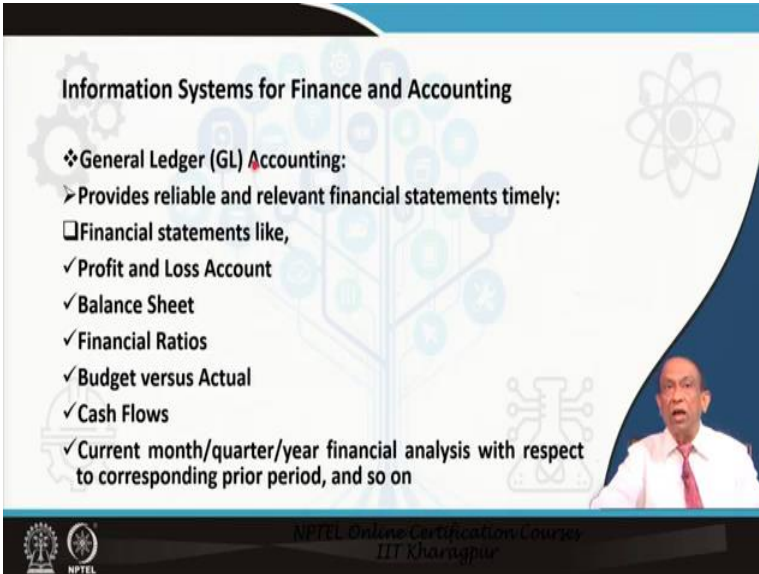
- It is a place to record all the business transactions occurring across the organization
- Acts as a repository of all accounting transactions
- All functions, namely AR, AP, and FA affect the general ledger in terms of passing accounting transactions
- Similarly, other functions like inventory and production also pass accounting entries to the general ledger

NPTEL Online Certification Course
IIT Kharagpur

Now, let us look at the major subsystems that are there, in any information systems which supports finance and accounting functions. So, when we look into that; the first thing that comes to our mind is the subsystem required for general ledger accounting. This system records all the business transactions that occur across the entire organization.

The subsystem acts as a storehouse of all accounting transactions. And general ledger supports all functions; namely accounts receivable, accounts payable and management of financial assets. And all these functions, in turn affect the general ledger in terms of passing accounting transactions. Likewise, other related functions like management of inventory, production management; these functions also generate various types of accounting entries which are captured and maintained in the general ledger subsystem.

(Refer Slide Time: 12:21)



The slide is titled "Information Systems for Finance and Accounting". It features a list of functions for General Ledger (GL) Accounting. The list includes: "Provides reliable and relevant financial statements timely:", "Financial statements like," followed by a list of items: "Profit and Loss Account", "Balance Sheet", "Financial Ratios", "Budget versus Actual", "Cash Flows", and "Current month/quarter/year financial analysis with respect to corresponding prior period, and so on". The slide also includes the NPTEL logo and the text "NPTEL Online Certification Course IIT Kharyapur" at the bottom. A small inset image of a man in a white shirt and red tie is visible in the bottom right corner of the slide.

- ❖ General Ledger (GL) Accounting:
 - Provides reliable and relevant financial statements timely:
 - ☐ Financial statements like,
 - ✓ Profit and Loss Account
 - ✓ Balance Sheet
 - ✓ Financial Ratios
 - ✓ Budget versus Actual
 - ✓ Cash Flows
 - ✓ Current month/quarter/year financial analysis with respect to corresponding prior period, and so on

So, general ledger accounting provides reliable and relevant financial statements at; in a timely manner. And the statements cover profit and loss account, balance sheet, various kinds of financial ratios, lot of variance analysis and reports which depict the difference between the budget and the actual expenditure that has been incurred. Cash flow statements and lot of analysis related to current month or current quarter or year.

And these reports are mainly with respect to corresponding prior period or even you know we can go back further and generate various kinds of financial analysis with respect to those period data.

(Refer Slide Time: 14:18)

Information Systems for Finance and Accounting

❖ **General Ledger (GL) Accounting:**

- The GL subsystem can produce the financial statements at any point of time for the decision-makers
- To consolidate financial statements of multiple units at different locations
 - Records all the transactions of various units (organizations may have several units or entities) at different locations
 - Generate periodic financial statements at the corporate level

NPTEL Online Certification Course
IIT Kharagpur

The general ledger subsystem can produce financial statements at any point of time for the decision makers; that means, the system maintains these things in a perpetual manner. This subsystem consolidates financial statements of various or multiple units of the firm which are located at different locations.

This subsystem records all the transactions which are generated in various units, at different locations; because many organizations might have several units located in a dispersed manner. And transactions which are generated in all these units are recorded in the general ledgers subsystem and it also at the end of a particular period or even on a perpetual basis, the consolidation takes place. So, at the corporate level; financial statements which are required on a periodic basis can be generated from this particular subsystem.

(Refer Slide Time: 16:24)

Information Systems for Finance and Accounting

❖ **General Ledger (GL) Accounting:**

- To perform other control functions:
 - ❑ GL subsystem also accepts standalone inputs such as adjustment transactions from one legal entity to another
 - ❑ Revaluation of foreign currency at the end of each quarter is also taken care of

NPTEL Online Certification Courses
IIT Kharagpur

The general ledger accounting subsystem performs other control functions; for example, the general ledger subsystem accepts standalone inputs such as various adjustment transactions from one legal entity to another. This subsystem also helps in revaluation of foreign currency at the end of each quarter.

(Refer Slide Time: 17:28)

Information Systems for Finance and Accounting

❖ **Accounts Payables (AP) and Accounts Receivables (AR):**

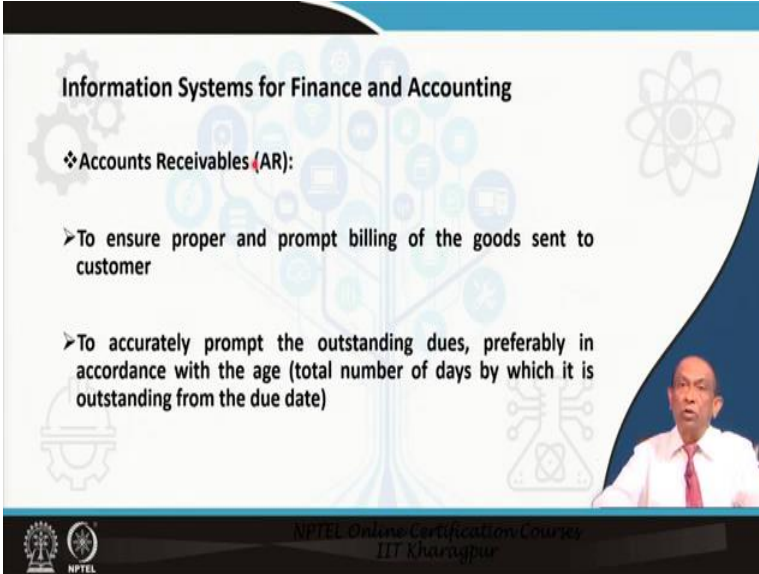
- It is a place where the data pertaining to vendor payments is recorded, along with cash and money received from the customers

NPTEL Online Certification Courses
IIT Kharagpur

Now, let us come to the accounts payable and accounts receivable function and the various kind of information support which are required for performing these functions in an effective manner. So, in accounts payables and account receivables; mainly data

related to all supplier payments is recorded along with all the cash and money received from the customers or which are due from the customers are maintained in AR and AP subsystems.

(Refer Slide Time: 18:26)



The slide is titled "Information Systems for Finance and Accounting". It features a background with a stylized tree of icons representing various business and financial concepts. In the bottom right corner, there is a small video inset of a man in a white shirt and red tie. The slide content is as follows:

Information Systems for Finance and Accounting

❖ **Accounts Receivables (AR):**

- To ensure proper and prompt billing of the goods sent to customer
- To accurately prompt the outstanding dues, preferably in accordance with the age (total number of days by which it is outstanding from the due date)

At the bottom of the slide, there are logos for NPTEL and IIT Kharagpur, along with the text "NPTEL Online Certification Courses IIT Kharagpur".

First, let us discuss about account receivables function. Here the FMIS that is Financial Management Information Systems helps the financial managers to ensure proper and prompt billing of the goods that are sent to the customer.

This subsystem accurately prompt the outstanding dues; preferably in accordance with the age; that means, the total number of days by which it is outstanding from the due date. This particular activity is also known as dunning and various kinds of dunning statements may be generated from the systems and sent to the customers from which the organizations need to collect money.

(Refer Slide Time: 19:56)

The slide is titled "Information Systems for Finance and Accounting". It features a background with faint icons of gears, a tree, and a molecular structure. A small inset video of a man in a white shirt and red tie is visible in the bottom right corner of the slide area. The text on the slide is as follows:

Information Systems for Finance and Accounting

❖ **Accounts Receivables (AR):**

- To identify the potential risk situation with respect to issues of collection
- If the collection of a particular invoice is not realized within certain days (due to a default from sales function or the customer creates an issue like unavailability of funds), then in such a case, the subsystem,
 - ✓ marks this as bad debt and
 - ✓ logically the customer can be put in high risk zone for future reference

At the bottom of the slide, there are logos for NPTEL and IIT Kharagpur, along with the text "NPTEL Online Certification Course IIT Kharagpur".

The accounts receivable subsystem helps financial managers to identify the potential risk situation with respect to various issues related to the collection of dues from the customer.

If the collection of a particular invoice is not realized within certain days and this failure in realization may be due to a default from the sales function or the customer might say that I do not have funds available with me and various such issues. Then, under such circumstances; the subsystem may mark that particular transaction or that invoice as a bad debt, hence it is very difficult to collect that money.

And this logically, this particular customers can be marked or can be put in a high risk zone for future reference. Organizations might not want to supply or to fulfill his orders in future; credit rating of that particular customer might go down.

(Refer Slide Time: 22:18)

Information Systems for Finance and Accounting

❖ **Accounts Receivables (AR):**

- To manage the customer's credit notes

Credit note is passed on to the customer's account when

- ✓ Wrong invoice is made, or
- ✓ Customer has returned the goods

NPTEL Online Certification Course
IIT Kharagpur

Accounts receivable function also pertains to management of customers credit notes. The subsystem helps financial managers in generating or passing credit note on to the customer's account, when wrong invoice is made or the customer might have returned the goods supplied to him; because those goods may be defective ones or may not be according to the customers likings.

And the organization has made a rule that if the customers do not like it or it does not match his specifications or needs and wants, they can return them. And the system generates a credit note and passes it on to the customer's account.

(Refer Slide Time: 23:24)

The slide features a blue and white background with a network diagram of nodes and lines. A small inset video of a man in a white shirt and red tie is visible in the bottom right corner. The text on the slide is as follows:

Information Systems for Finance and Accounting

❖ **Accounts Receivables (AR):**

- To assist in the organization's collection efforts
- ❑ Collection is one of the most important activities for any organization and AR function plays an important role in sending reminders to the customers for payments

NPTEL Online Certification Course
IIT Kharsigpur

The accounts receivable subsystem thereby assist in the organizations collection efforts and collection of dues is one of the most important activity for any organization function. An accounts receivable function plays an important role in sending reminders to the customers for payments, these reminders are also known as dunning notices.

(Refer Slide Time: 24:17)

The slide features a blue and white background with a network diagram of nodes and lines. A small inset video of a man in a white shirt and red tie is visible in the bottom right corner. The text on the slide is as follows:

Information Systems for Finance and Accounting

❖ **Accounts Receivables (AR):**

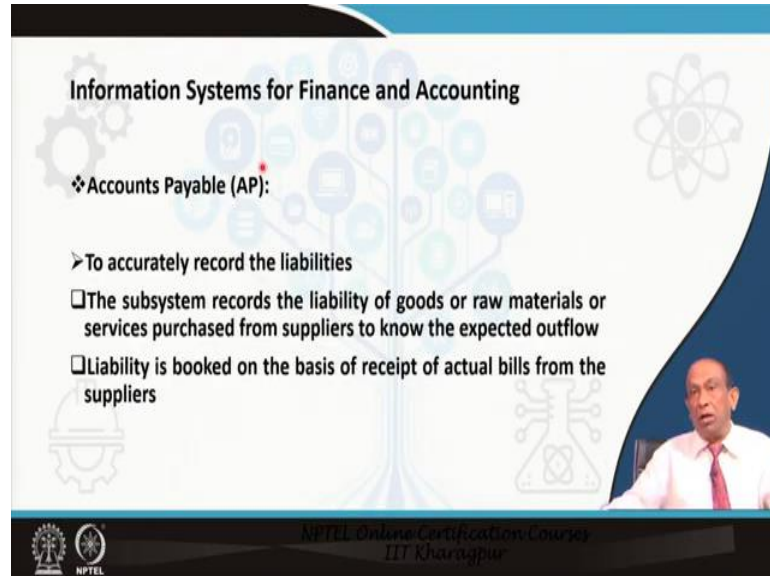
- To provide detailed customer history and sales analysis data for computing the credit limit
- To assist in the cash management function
- ❑ The subsystem helps AR function to coordinate with cash management team to reconcile the bank statements

NPTEL Online Certification Course
IIT Kharsigpur

Accounts receivable subsystems provide detailed history of customers' payment. It also helps in analyzing sales data and thereby the customer's credit limit in the system can be updated. The subsystem assists in the cash management function, the subsystem helps

account receivable function to coordinate with cash management team to reconcile the bank statements.

(Refer Slide Time: 25:10)



The slide is titled "Information Systems for Finance and Accounting". It features a background with a stylized tree of nodes and icons representing various business processes. A small inset video shows a man in a white shirt and red tie speaking. The slide content is as follows:

Information Systems for Finance and Accounting

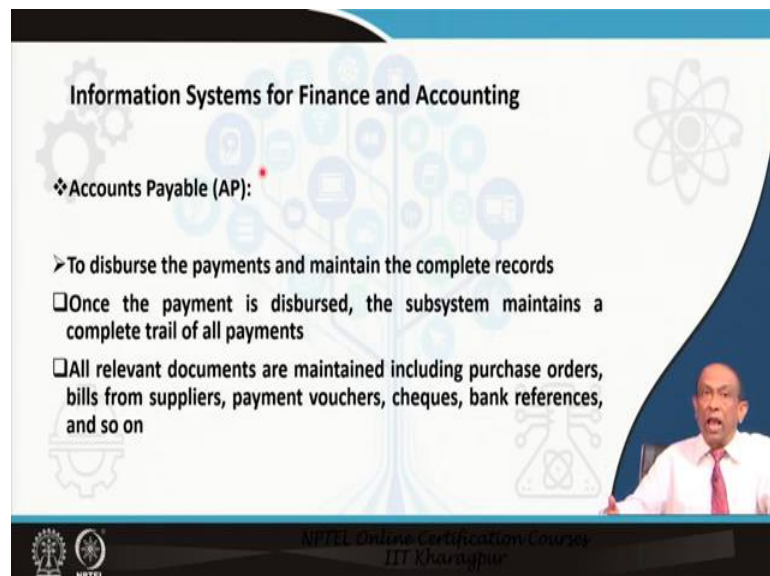
❖ **Accounts Payable (AP):**

- **To accurately record the liabilities**
 - The subsystem records the liability of goods or raw materials or services purchased from suppliers to know the expected outflow
 - Liability is booked on the basis of receipt of actual bills from the suppliers

NPTEL Online Certification Course
IIT Kharagpur

On the other hand, the account payable subsystem records the liabilities of the organization. Liability related to goods or raw materials or services purchased from suppliers are maintained in the system and financial managers, they need what is the total amount of liability because they need to know the expected cash outflow. Liability is booked on the basis of receipt of actual bills from the suppliers.

(Refer Slide Time: 25:56)



The slide is titled "Information Systems for Finance and Accounting". It features a background with a stylized tree of nodes and icons representing various business processes. A small inset video shows a man in a white shirt and red tie speaking. The slide content is as follows:

Information Systems for Finance and Accounting

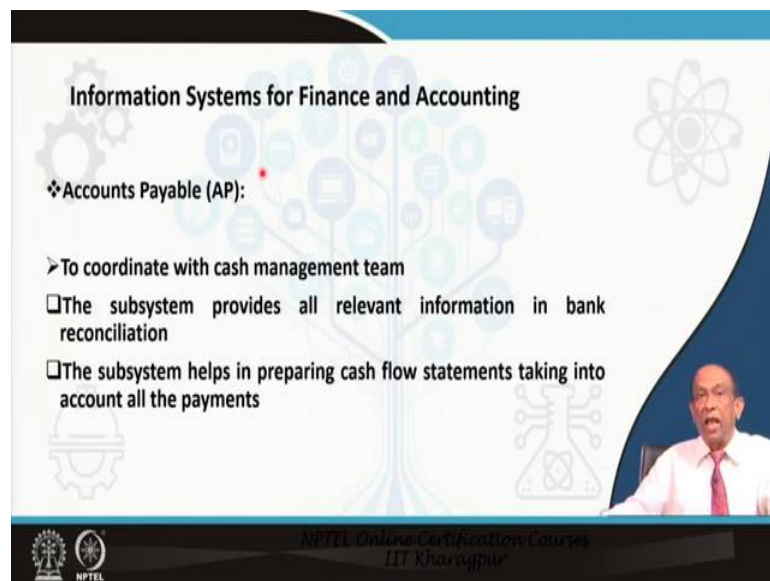
❖ **Accounts Payable (AP):**

- **To disburse the payments and maintain the complete records**
 - Once the payment is disbursed, the subsystem maintains a complete trail of all payments
 - All relevant documents are maintained including purchase orders, bills from suppliers, payment vouchers, cheques, bank references, and so on

NPTEL Online Certification Course
IIT Kharagpur

Accounts payable subsystem maintains in disbursing the payments and maintaining the complete records of all these type of transactions. Once the payment is disbursed, the subsystem can maintain a complete history, complete trail of all the payments that have taken place. All relevant documents are maintained in the subsystem including purchase orders, bills from the suppliers, payment vouchers, cheques, bank references and related transactions.

(Refer Slide Time: 26:42)



The slide is titled "Information Systems for Finance and Accounting". It features a background with a stylized tree of nodes and various icons representing finance and accounting. The text on the slide is as follows:

- ❖ **Accounts Payable (AP):**
- **To coordinate with cash management team**
- The subsystem provides all relevant information in bank reconciliation**
- The subsystem helps in preparing cash flow statements taking into account all the payments**

In the bottom right corner, there is a small video inset showing a man in a white shirt and red tie speaking. At the bottom of the slide, there are logos for NPTEL and IIT Kharyapur.

The accounts payable subsystem coordinates with cash management team, the subsystem provides all related information which are required for bank reconciliation in preparing cash flow statements and related other statement generation.

(Refer Slide Time: 27:02)

Information Systems for Finance and Accounting

❖ **Accounts Payable (AP):**

- To take rejection of materials into account
- Based on rejection of raw material from suppliers, a proper adjustment document (debit note) is sent to the suppliers' account to reduce the liability, thereby decreasing the amount of payment

NPTEL Online Certification Courses
IIT Kharsigpur

Accounts payable subsystem takes care of the rejection of materials. Because based on this rejection of material from suppliers, a proper adjustment document; that is debit note is sent to the suppliers account to reduce the organizations liability, thereby decreasing the amount of payment.

(Refer Slide Time: 27:33)

Information Systems for Finance and Accounting

❖ **Accounts Payable (AP):**

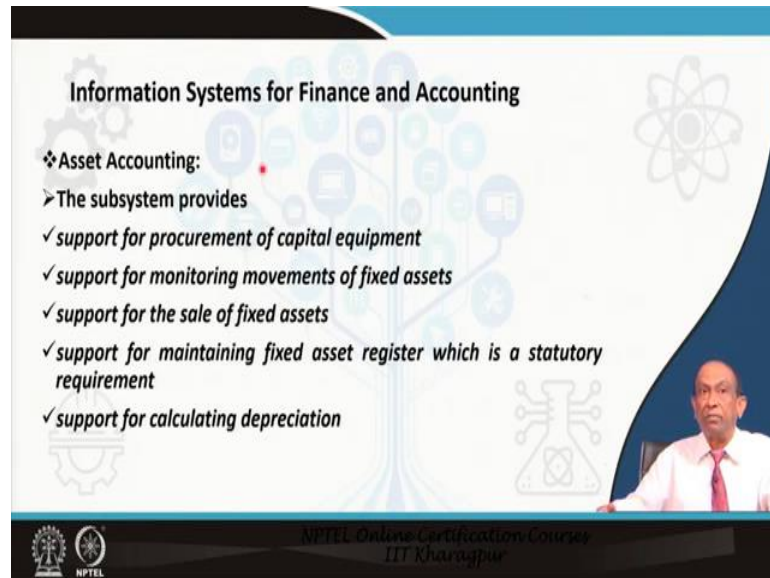
- deals with all payment-related issues covering
 - ✓ payments to the suppliers,
 - ✓ staff payments,
 - ✓ travel expenses,
 - ✓ incidental expenses for office work, and
 - ✓ payments to consultants and other professionals

NPTEL Online Certification Courses
IIT Kharsigpur

So, accounts payable subsystem deals with all payment related issues, covering payment to the suppliers, payments to the staff. All expenses incurred because of the travels that has been you know undertaken by the company executives or the employees. All

incidental expenses that are been carried out for office work and payments to consultants and other professionals.

(Refer Slide Time: 28:02)



The slide is titled "Information Systems for Finance and Accounting". It features a background with a stylized tree of nodes and icons representing various financial and accounting concepts. A small inset video of a man in a white shirt and red tie is visible in the bottom right corner of the slide content area.

Information Systems for Finance and Accounting

❖ **Asset Accounting:**

- The subsystem provides
 - ✓ support for procurement of capital equipment
 - ✓ support for monitoring movements of fixed assets
 - ✓ support for the sale of fixed assets
 - ✓ support for maintaining fixed asset register which is a statutory requirement
 - ✓ support for calculating depreciation

NPTEL Online Certification Course
IIT Kharyagpur

Then, we come to asset accounting subsystem; we will not go into the details of all, but mainly this subsystem provides support for procurement of capital equipment. It provides support for monitoring movement of fixed assets, the subsystems support the sale of fixed assets, provides support for maintaining fixed asset register which is a statutory requirement. And this subsystem also supports calculation of depreciation of several equipment's.

(Refer Slide Time: 28:42)

Information Systems for Finance and Accounting

- ❖ Financial and Accounting Information Systems also provides
 - ✓ Support for managing the cash and bank-related processes
 - ✓ Support for monitoring the organization's regulatory requirements
 - ✓ Overhead cost control
 - ✓ Activity Based Costing
 - ✓ Profitability Analysis
 - ✓ Business Planning and Budgeting

NPTEL Online Certification Course
IIT Kharagpur

So, the financial and accountings systems also provide support for managing the cash and bank related processes. The FMIS provides support for monitoring the organizations regulatory requirements, provides support for overhead cost control, the system supports for; you know provide support for activity based costing.

It provides support for profitability analysis and the subsystem provides support for business planning and budgeting. So, this is entire scope of financial and accounting information systems.

(Refer Slide Time: 29:31)

REFERENCES

- Laudon, K.C., and Laudon, J.P., (2016), Management Information Systems: Managing the Digital Firm
- 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

Thank you! These are the references that I have used for preparing this particular module and communicating.

Thank you all!