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B.Tech

Project Management & Entrepreneurship

KHU-802

With Notes

UNIT-4

Project Financing

(Project cost estimation, Financial statement, funds, Projected balance sheet, etc.)

(in one video)

AKTU Exam

Topics to be covered...

Project cost estimation and its elements
Types of project cost estimation techniques
Working capital
Source of funds
Phases in the process of capital budgeting
Risk and Uncertainty
Prepare a project financial statements for a business
Steps in preparation of projected balance sheet
Preparation of Projected income statement
Cash flow vs Funds flow statement
Detailed Project Report
Project financing and its types
Stages of project financing
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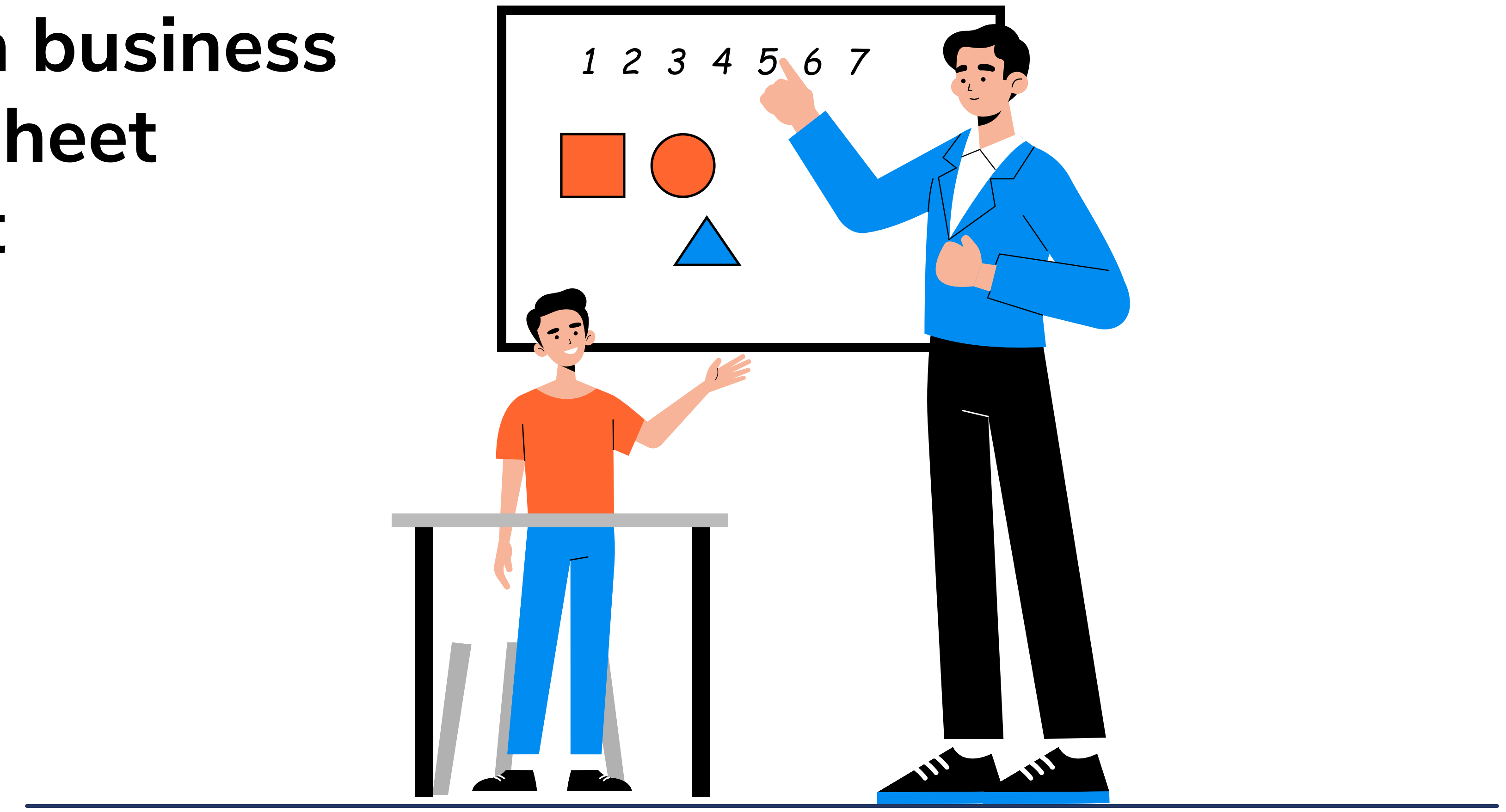


Project cost estimation and its elements

Project cost estimation

- Cost estimation in project management is the process of forecasting the financial and other resources needed to complete a project within a defined scope.

- Cost estimation accounts for each element required for the project—from materials to labor—and calculates a total amount that determines a project's budget.

- **Why project cost estimation is important:**
  - A cost estimate reflects if the project is financially viable
  - Cost estimation helps to stay on schedule and on track

Elements of Project cost estimation

- **Direct costs:** Costs associated with a single area, such as a department or the project itself. Examples of direct costs include fixed labor, materials, and equipment.

- **Indirect costs:** Costs incurred by the organization at large, such as utilities and quality control.

- **Some typical elements**
  - **Labor:** The cost of team members working on the project, both in terms of wages and time
  - **Materials and equipment:** The cost of resources required for the project, from physical tools to software to legal permits
  - **Facilities:** The cost of using any working spaces not owned by the organization.
  - **Vendors:** The cost of hiring third-party vendors or contractors.
  - **Risk:** The cost of any contingency plans implemented to reduce risk.

Working capital

Working capital

- Working capital management is essentially an accounting strategy with a focus on the maintenance of a sufficient balance between a company's current assets and liabilities.

- An effective working capital management system helps businesses not only cover their financial obligations but also boost their earnings.

- **Types of working capital:**
  - Gross working capital
  - Net working capital
  - Negative working capital
  - Permanent working capital
  - Temoporary working capital

Source of funds

Funds

- Funding refers to the money required to start and run a business.
- Funding for projects may be via single source or through multiple investors.

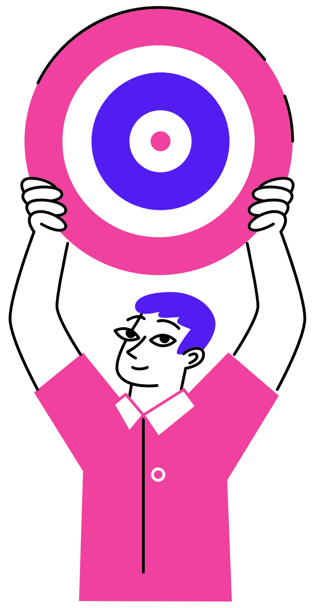
- **Different types of funds for starting a project are:**
    - Government Grants
    - Funds by Partners
    - Borrowed Money
    - Donation
    - Crowd Funding
    - Selling Up

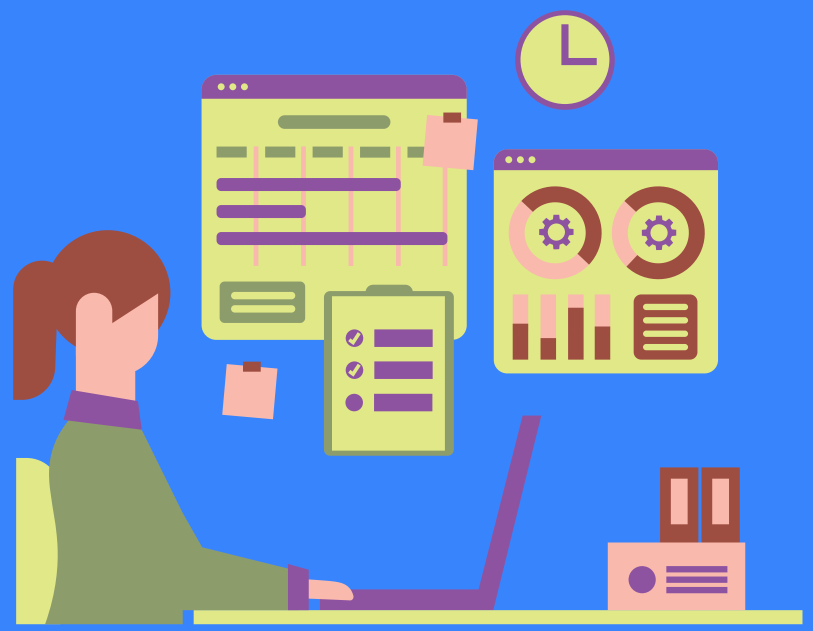
Source of funds

The main sources of funding are retained earnings, debt capital, and equity capital. Companies use retained earnings from business operations to expand or distribute dividends to their shareholders. Businesses raise funds by borrowing debt privately from a bank or by going public.

Classification of sources of funds:

- On the basis of period
  - Long-term
  - Medium-term
  - Short-term
- On the basis of ownership
  - Owner's funds
  - Borrowed funds
- On the basis of source of generation
  - Internal sources
  - External sources

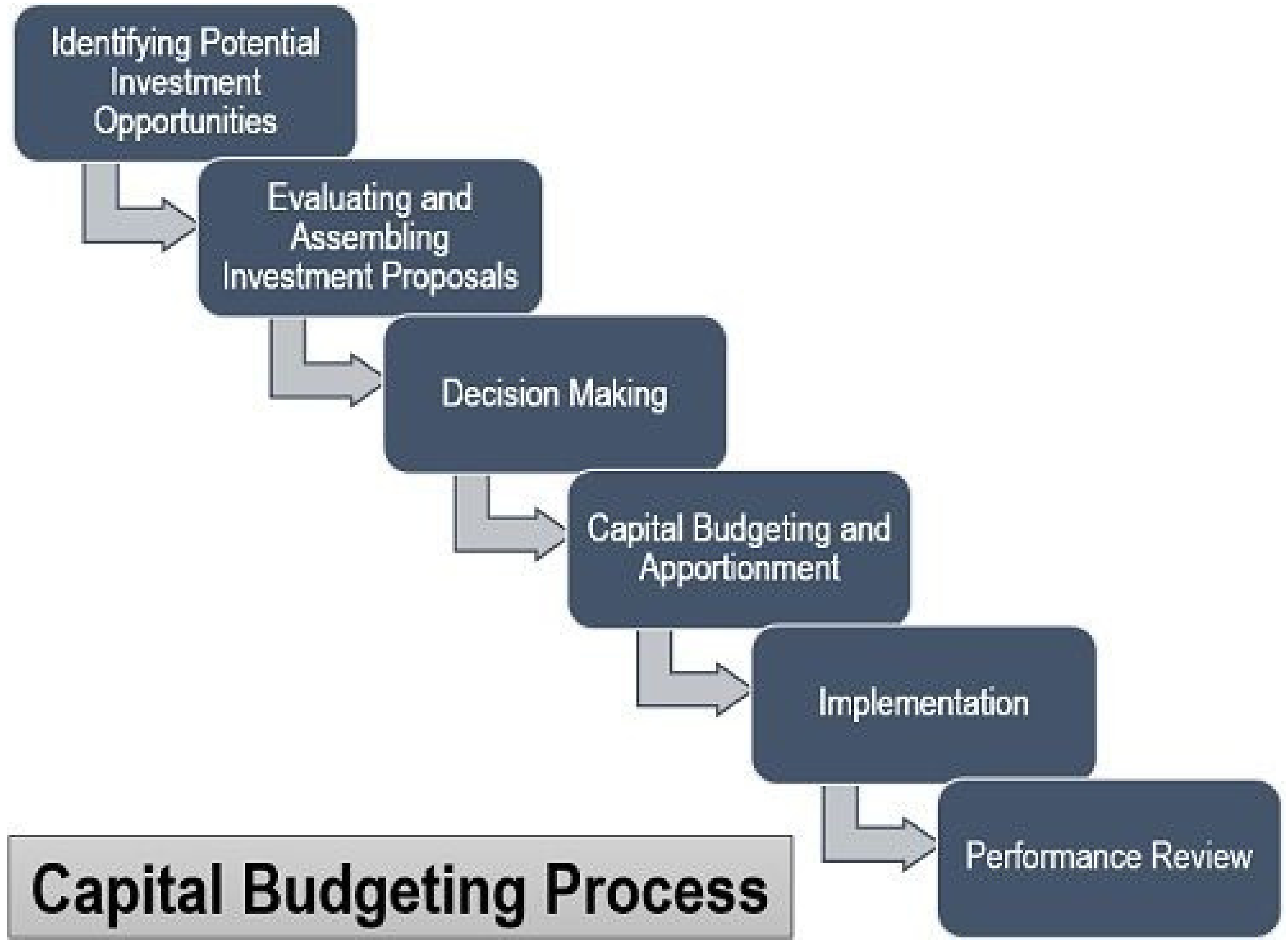




Phases in the process of capital budgeting

Phases in the process of capital budgeting

- Capital budgeting is the process a business undertakes to evaluate potential major projects or investments. Construction of a new plant or a big investment in an outside venture are examples of projects that would require capital budgeting before they are approved or rejected.



Risk and Uncertainty

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Risk

- A risk is an unplanned event that may affect one or some of your project objectives if it occurs. The risk is positive if it affects your project positively, and it is negative if it affects the project negatively.

- There are separate risk response strategies for negatives and positives.

- The objective of a negative risk response strategy is to minimize their impact or probability, while the objective of a positive risk response strategy is to maximize the chance or impact.

Uncertainty

- Uncertainty is a lack of complete certainty. In uncertainty, the outcome of any event is entirely unknown, and it cannot be measured or guessed; you don't have any background information on the event.

- Uncertainty is not an unknown risk. In uncertainty, you completely lack the background information of an event, even though it has been identified.

- In the case of unknown risk, although you have the background information, you missed it during the identify risks process.

Risk vs Uncertainty

Risks	Uncertainties
predictable	unpredictable
forsen	Unforseen
known-unknowns	unknown-unknowns
Use Contingency Reserve	Use Management Reserve
measurable	Unmeasurable

Prepare a project financial statements for a business

Prepare a project financial statements

- Financial statements are a collection of summary-level reports about an organization's financial results, financial position, and cash flows. They include the income statement, balance sheet, and statement of cash flows.

- **6 steps to making financial projections**
    - Project your spending and sales
    - Create financial projections
    - Determine your financial needs
    - Use the projections for planning
    - Plan for contingencies
    - Monitor

Steps in preparation of projected balance sheet

Steps in preparation of projected balance sheet

A projected balance sheet is also referred to as a pro forma balance sheet. It shows the estimation of the total assets and total liabilities of any business.

Steps are:

- Step 1: Calculate cash in hand and cash at the bank
- Step 2: Calculate Fixed Assets
- Step 3: Calculate Value of Financial Instruments
- Step 4: Calculate your Business Earning
- Step 5: Calculate Business's Liabilities
- Step 6: Calculate Business's Capital

Steps in preparation of projected balance sheet

Adam's Lawncare Business			
Assets		**Liabilities**	
Cash	$4,000	Accounts Payable	$500
Accounts Receivable	$5,000		
Inventory	$0	**Total Liabilities**	$500
Land	$0		
Building	$0	**Owner's Equity**	
Equipment	$10,000	Paid in Capital	$14,500
Other Assets	$0	Owner Draws	$0
		Retained Earnings	$4,000
		Total Equity	$18,500
Total Assets	$19,000	**Total Liabilities and Equity**	$19,000

Preparation of Projected income statement

Preparation of Projected income statement

- An income statement or profit and loss account is one of the financial statements a company requires to balance their accounting books and calculate the financial health of the company.
- To write an income statement and report the profits your small business is generating, follow these accounting steps:
  - Pick a Reporting Period
  - Generate a Trial Balance Report
  - Calculate Your Revenue
  - Determine Cost of Goods Sold
  - Calculate the Gross Margin
  - Include Operating Expenses
  - Calculate Your Income
  - Include Income Taxes
  - Calculate Net Income
  - Finalize the Income Statement

Balance Sheet vs Income Statement

Timing:

- The income statement reports financial activity for a specific reporting period, usually a month, a quarter or a year.
- The balance sheet reports financial activity at a specific point in time, for a snapshot view of a business's finances.

Information reported:

- The income statement reports on a business's revenues and expenses and ultimately the amount of profit or loss it generated.
- The balance sheet reports on a company's assets, liabilities and equity.

Significance:

- The income statement is used to report the overall results of the business's financial performance, or how much earnings it's generating.
- The balance sheet is used to analyze whether a company has enough liquid assets to cover its financial obligations.

Income statement

Category	Amount
Sales Revenue	$57,050.68
Cost of Goods Sold (COGS)	$24,984.79
Gross Profit	**$32,101.89**
General Expenses	$11,049.55
*Rent	$9,000.00
*Bank & ATM Fee Expenses	$9.43
*Equipment Expenses	$742.40
*Marketing Expenses	$503.53
*Merchant Fees Expenses	$794.19
Operating Earnings	$21,052.34
Interest Expense	$5,000.00
Earnings Before Income Tax	$16,052.34
Income Tax Expense	$10,000.00
Net Profit	**$6,052.34**

Cash flow vs Funds flow statement

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Cash flow vs Funds flow statement

Basis of Comparison	Cash Flow	Fund Flow
Definition	Cash flow is based on the concept of inflow and outflow of cash and cash equivalents during a particular period	Fund flow is based on the concept of changes in working capital over a period of time
What is calculated?	Cash from the operations is calculated	Fund from the operation is calculated.
What it shows	It shows the short term position of the business	It shows the position of the business in the long term
Purpose	To show the movement of cash during the beginning and end of an accounting period	To show the changes in the financial position of business between previous and current accounting periods
Discloses	Inflows and Outflows of cash	Source and application of the available funds
Accounting Basis	Cash Basis of accounting	Accrual basis of accounting
Part of Financial Statement	Yes	No
Used for	Cash Budgeting	Capital Budgeting

Detailed Project Report

Detailed Project Report

- After the planning and the designing part of a project are completed, a detailed project report is prepared.
- A detailed project report is a very extensive and elaborative outline of a project, which includes essential information such as the resources and tasks to be carried out in order to make the project turn into a success.
- It can also be said that it is the final blueprint of a project.

- **The following points play an essential role in deciding whether a project turns into success:**
    - Completion of the project within the stipulated period.
    - Priority to client satisfaction by delivering quality product after the completion of the project.
    - Completion of the project within the set limits of escalation of cost.

Detailed Project Report

Contents of a detailed project report:

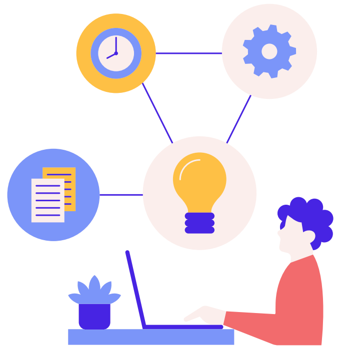
- Brief information about the project
- Experience and skills of the people involved in the promotion of the project
- Details and practical results of the industrial concerns of the promoters of the project
- Project finance and sources of financing
- Government approvals
- Raw material requirement
- Details of the requisite securities to be given to various financial organizations
- Other important details of the proffered project idea include information about management teams for the project, details about the building, plant, machinery, etc.

Project financing and its types

Project financing and its types

- Project finance is the funding (financing) of long-term infrastructure, industrial projects, and public services using a non-recourse or limited recourse financial structure.
- The debt and equity used to finance the project are paid back from the cash flow generated by the project.
- Project Financing is a long-term, zero or limited recourse financing solution that is available to a borrower against the rights, assets, and interests related to the concerned project.

- **Types:**
  - Industrial sponsor
  - Public sponsor
  - Contractual sponsor
  - Financial sponsor



Stages of project financing

Stages of project financing

- **Pre-Financing Stage**
  - Identification of the Project Plan
  - Recognizing and Minimizing the Risk
  - Checking Project Feasibility

- **Financing Stage**
  - Arrangement of Finances
  - Loan or Equity Negotiation
  - Documentation and Verification
  - Payment

- **Post-Financing Stage**
  - Timely Project Monitoring
  - Project Closure
  - Loan Repayment

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