Professional Practices

“Finance and Accounting”

Contents

Finance and Accounting

- Any organization can not be successful unless its finances are soundly managed.
- In this chapter, those aspects of finance and accounting with which the newly graduated software engineer is most likely to come into contact are emphasized.

The need for capital

- It is not uncommon for recent graduates in computing to start their own company that provide software services.
  - Contract hire services
  - Develop packages
- They will be in need of some money to start the venture.

The need for capital

- Capital will be needed for
  - Salaries
  - Rents and bills
  - Equipments
  - Costs of advertising
  - Miscellaneous expenses
  - Interests on any money borrowed

The need for capital

- Present a business plan to potential funders. This plan should include
  - Description of what the company will be doing, together with information to show that it is technically feasible and founders of the company have the necessary expertise.
  - Assessment of the size of market and competition
  - Prediction of financial performane of the campany

Sources of Funds

Sources of Funds

Grant

Loan

Sale of Equity

Sources of Funds

- A **grant** is a sum of money given to the company.
- Company is obliged to demonstrate that it has been used for the purposes for which it was intended.
- Grant is never paid back to the organization who gave it.

Sources of Funds

- A **loan** is a sum of money lent to the company.
- Interest is payable on it, at a rate that may be fixed or variable.
- Loan is usually for a fixed period.
- The company is liable to pay back the loan, and if company dissolves, the lender is entitled to recover the loan from the sale of company's assets.

Sources of Funds

- **Equity capital** is money paid to the company in exchange for a share in the ownership of the company.
- Advantge/ disadvantage

Budgeting and monitoring

- A **budget** is a financial plan for a **defined** period of time, usually a year.
- It is an estimation of revenue and expenses over a specified future period of time; it is compiled and re-evaluated on a periodic basis.
- Budgets can be made for a person, a family, a group of people, a business, a government, a country, a multinational organization or just about anything else that makes and spends money.

Budgeting and monitoring

- A budget is a prediction of the future financial position of an organization covering usually the current or the next financial year.
- A complete budget includes prediction for all of the annual financial statments, but the most concerned aspect of budgeting is income and expenditure budget.

Budgeting and monitoring

- Budgeting is an iterative process.
- First version of the budget is likely to show expenditure exceeding income.
- Adjustment are made repeatedly until a situation is reached where sales exceed expenditure with a reasonable profit margin.

Budgeting and monitoring

- Budget is mostly used as a basis for monitoring the organization’s performance.
- The figures in the budget are split into monthly or weekly figures.
- When the actual figures of a month become available, they are compared with the budgeted figures.
- If real expenditure of any field exceeds the budgeted value, reason is determined quickly and remedial action is taken.

Sales and Order Intake

- A **sale** is a transaction between two parties where the buyer receives goods, services, and assets in exchange for money.
- **Order intake** is a measure of company production in terms of customer offers to buy products or services, it refers to receiving or processing a customer's **order.**

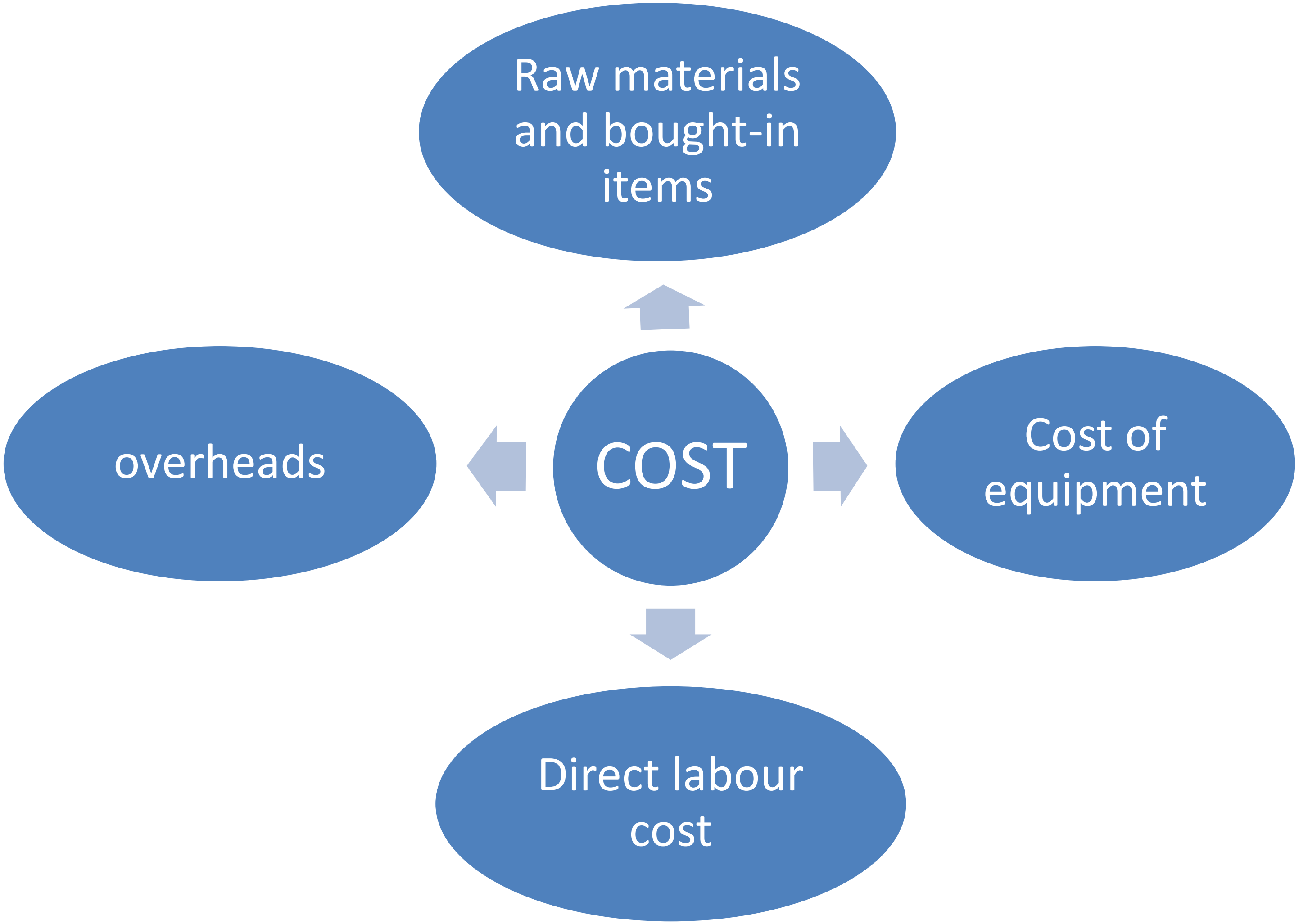
Sales and Order Intake

- A company’s cost, its pricing and the level of overheads that it can afford, all depends critically on the level of sales.
- Monitoring the level of sales is therefore a very important managerial activity.

Costing

- The price at which an organization decides to sell a product or a service depends on
  - The cost of producing and providing it
  - Market conditions
    - Price and availablity of competing products
    - Elasticity of demand

Costing


Raw materials and bought-in items
overheads
COST
Cost of equipment
Direct labour cost

Costing

- Materials which are bought by a campany and processed as part of the campany's manufacturing process are called ***raw materials.***
- ***Brought-in items*** are those items that are bought by a company and incorporated into their products, as it is (unchanged).

Costing

- The **cost of equipment** for a company is simply how much the company paid for the equipment.
- The **cost of labour** is the sum of all wages paid to employees.

Costing

- **Overheads** are the costs that cannot be directly associated with specific products or services but must still be covered by the total revenue.
- Examples are marketing costs, manager's costs and costs related to preparation of bids.

Costing

- ***Departmental overheads*** are associated with specific parts of the organization and should be covered by the revenue earned by those parts.
- ***Corporate overheads*** are associated with the whole organization.

Pricing

- Pricing is the method of determining the value a producer will get in the exchange of goods and services. Simply, pricing method is used to set the price of producer’s offerings relevant to both the producer and the customer.
- The price that a company charges for its products and services is constrained by the fact that revenue must exceed the cost of those products.

Pricing

- Software companies are typically faced with pricing in three contexts
  - Pricing a bid to provide services, such as consultancy, design or programming, with payment based on the effort supplied.
  - Pricing a bid for a contract to supply bespoke software at a fixed price.
  - Pricing a software product which they have developed.

Annual Statements

- All limited companies are required to produce annual accounts and to give a copy of them to the registrar of companies for filing.
- Company accounts should include
  - The balance sheet
  - A profit and loss account

Annual Statements

What is an Asset?

A personal asset is anything that you own that has monetary value. If you own it and you can sell it, it is an asset.

What is a Liability?

A liability is anything that you owe. everything that you have to eventually pay back is a liability. for example a mortgage or credit card debt

What is your Net Worth?

If you would sell all your assets and use the cash you gained to pay off all your liabilities, your net worth is what would remain.

Assets - Liabilities = Net Worth

Annual Statements

- A **balance sheet** is a snapshot of financial state of an organization at a single instant, normally at the end of an organization's financial year.
- It shows the values of organization's assets and its liabilities.
- Normally a balance sheet also shows the twelve months previously position for comparison purpose.

Annual Statements

- As the name suggests....a balance sheet must balance: the total assets and total liabilities should be equal.
- To acieve this a balancing item is added on one side or the other.

Annual Statements

Personal Balance Sheet

Assets			Liabilities		
Cash (Contingency Funds)			Secured Loans		
	Saving Bank Accounts	₹ 50,000		Home Loan	₹ 19,00,000
	Fixed Deposits	₹ 1,00,000		Car Loan	₹ 1,00,000
	Liquid Mutual Funds	₹ 1,50,000	Unsecured Loans		
Investments				Education Loan	₹ 0
	PF/PPF/Bonds etc.	₹ 5,00,000		Personal Loan	₹ 0
	Debt/Bond MFs	₹ 3,00,000		Credit Card Loan	₹ 0
	Gold, Gold MFs	₹ 3,00,000	Other Payables		
	Stocks, Equity MFs	₹ 10,00,000		Loan from family/frien	₹ 0
	Real Estate	₹ 40,00,000		Other dues	₹ 0
Other Assets			Total		₹ 20,00,000
	Car	₹ 4,00,000			
	Jewelry	₹ 2,00,000	**Net Worth**		
	Loan to family/friends	₹ 0		Assets	₹ 70,00,000
	Other receivables	₹ 0		Liabilities	₹ 20,00,000
Total		**₹ 70,00,000**		**Assets - Liabilities =**	**₹ 50,00,000**

Annual Statements

- A **profit and loss account** records the money received and money spend.
- It is also called an income and expenditure account in case of non-profit making organization.

Annual Statements

INCOME	
Contribution from Parents	1,000.00
Income from Summer Job	1,851.35
Total Income	2,851.35
EXPENDITURE	
Course Fees	1,025.00
Hall Fees	1,980.00
Transport	125.78
Food	1,203.40
Entertainment	1,261.33
Depreciation	30.00
Total Expenditure	5,600.51
EXCESS OF EXPENDITURE OVER INCOME	**(2,749.16)**

Capital and its Maintenance

- The concept of capital maintenance has important practical consequences.
- The capital of a company is usually taken as a gurantee that the company will be able to meet its obligations.
- A lender also takes into account a campany's capital, when deciding whether or not to give a loan.

Capital and its Maintenance

- To maintain capital
  - A company is not allowed to issue shares at a discounted value.
  - A company cannot pay back to the shareholders any of their original contributions.

Auditing

- Financial auditing is the process of examining an organization's financial records to determine if they are accurate and in accordance with any applicable rules , regulations, and laws.
- The company accounts should be accompanied by an auditor’s report.
- Purpose of the report is to provide members of the company and public with an assurance that accounts give a “true and fair view” of the state of the affairs of the company.

Auditing

- It is not practicable for auditors to check every financial transaction.
- They work by
  - Examimining the adequacy of the company's financial procedures
  - Making detiled checks on a small sample of transactions and assets.

Auditing

- The primary resposibility for preventing and detecting fraud lies with the directors of the company, not with the auditors.
- However auditors are also expected of finding anything seriously misleading in the financial statements.
- If they find evidence of fraud , they have a duty to report it to directors.