<u>Working Capital Management</u>

Introduction

Financial management can be divided into two broad areas of responsibility as the <u>management of long-term capital</u> and the <u>management of short-term funds or working capital</u>. The management of working capital which constitutes a major area of decision-making for financial managers is a continuous function which involves the control of the every ebb and flow of financial resources circulating in the enterprise in one form or another. It also refers to the **management of current assets and current liabilities.**

Efficient management of working capital is an essential pre–requisite for the successful operation of a business enterprise and improving its rate of return on the capital invested in short-term assets.

Working capital may be defined in two ways, either as the total of current assets or as the difference between the total of current assets and total of current liabilities. Gross working capital means total current assets; current assets are the assets, which can be converted into cash within an accounting year and includes cash, short-term securities, inventory, debtors and bills receivables. Net working capital refers to the difference between current assets and current liabilities. Current liabilities are claims of outsiders expected to mature with one accounting year and includes creditors, bills payable, and outstanding expenses.

Operating Cycle

A company's operating cycle typically consists of three primary activities:
–Purchasing resources,
–Producing the product and
–Distributing (selling) the product.

These activities create funds flows that are both **un-synchronized** and **uncertain.** Unsynchronized because cash disbursements (for example, payments for resource purchases) usually take place before cash receipts (for example collection of receivables). They are uncertain because future sales and costs, which generate the respective receipts and disbursements, cannot be estimated with complete accuracy.

Operating Cycle = R + W+ F+ D –C

Where,
R = Number of days of raw materials and stores consumption requirements held in raw materials and stores inventory;
W = the number of days of cost of production held in work-in-progress;
F= the number of days cost of sales included in finished goods
D = the number of days sales in debtors
C = the number of days purchases, included in trade creditors;

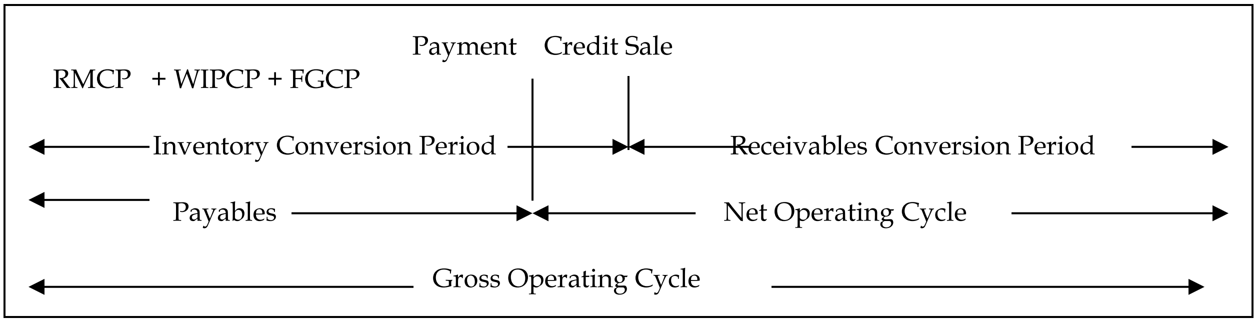

Figure: Operating Cycle in Manufacturing Company

- Raw Material Conversion Period = Raw Material Inventory x (360/ Raw Material Consumption)
- WIP Conversion Period = WIP inventory X (360 / Cost of Production)
- Finished goods Conversion Period= Finished Goods Inventory x (360/ Cost of Goods sold)
- Debtors Conversion Period = Debtors x (360 / Credit sales)
- Creditors Payment Period = Creditors x (360 / Credit Purchases)

Factors affecting determination of working capital

The working capital requirements of a firm depend on a number of factors. It is a common proposition that the size of working capital is a function of sales. Sales alone will not determine the size of the working capital; the economic currents flowing in a business constantly will impact it. The nature of the firm's activities, the industrial health of the country, the availability of materials, the ease or tightness of the money market, are all parts of these shifting forces. Of them, the influence of operating cycle is considered paramount.

- Nature of Business
- Growth and Expansion of business
- Business Cycles
- Production Policy
- Terms of purchase and sale

Problem 1: From given information relating to Nanak Engineering Co., prepare a statement of working capital requirement for a forecasted level of 1,44,000 units of production p.a.

Raw Material Rs.90 per unit
Direct Labour Rs.40 per unit
Overheads Rs.75 per unit
Profit Rs.60 per unit
Selling Price Rs.265 per unit

Raw Materials are in stock on an average for one month
Materials in process on average for 2 weeks
Finished goods are in stock on an average for one month
Credit allowed by suppliers in one month
Time lag in payment from debtors is 2 months
Lag in payment of wages is 1.5 weeks
Lag in payment of overheads is one month.
20% of output is sold for cash.
Cash in hand and at bank is expected to be Rs.60, 000
Note- Assume that production is carried on evenly throughout the year. Wages and overheads accrue similarly and period of 4 weeks is equal to a month.

Problem 2: From the following data, compute the operating cycle in days.

	Rs
Debtors outstanding	480,000
Raw Material consumption	4,400,000
Total production cost	10,000,000
Total cost of sales	10,500,000
Sales	16,000,000
Raw material stock	320,000
WIP	350,000
Finished goods stock	260,000

Period covered is 365 days. Average credit period allowed by creditors is 16 days

Problem 3: Star Agency Ltd sells goods in domestic market at gross profit of 25% on sales. Its annual figures are as under:

	Rs
Domestic sales (1 month credit)	1,200,000
Export sales (3 months credit)	540,000
Materials (2 months credit)	450,000
Wages (1/2 month in arrears)	360,000
Mfg expenses (1 month in arrears)	540,000
Admin expenses (1 month in arrears)	120,000
Sales promotion expenses (payable quarterly in advance)	60,000
Tax payable in four installments of which one falls in 1st qtr of next yr	150,000

The company maintains 1-month stock of raw materials and finished goods and keeps cash balance of Rs 50,000. Assuming safety margin of 15%, ascertain the requirement of working capital on cash cost basis.

Problem 4: Prepare an estimate of working capital requirement at cash cost, adding 10% to the estimated figure to cover unforeseen contingencies.

	Rs
Sales	21,00,000
Cost of goods sold	15,30,000
Admin expenses	1,40,000
Selling expenses	1,30,000

Cost of goods sold has been arrived as follows

	Rs
Material used	8,40,000
Wages and mfg exp	6,25,000
Depreciation	2,35,000
	17,00,000
Less: Stock of finished goods (10% is unsold)	1,70,000
Cost of Goods Sold	**15,30,000**

Goods equal to 15% of the annual output are in progress on an average requiring full material and only 40% of other expenses. The company keeps two months material in stock. Desired cash balance is Rs 40,000. Average time lag in payment of expenses is 1 month. Suppliers extend 1.5 months credit. Sales are 20% cash and rest at two month's credit.

Problem 5: Compute the working capital requirement using following information

a) Stock turnover ratio is 6, GPM is 20%, debtors collection period 2 months, creditors payment period is 73 days, Gross profit is Rs.60,000.. Closing stock is Rs.5000 in excess of opening stock.

b) Current Ratio is 2.5 times. Liquid Ratio is 1.5 times Stock Turnover Ratio is given as 6 times. Debtors Collection Period….2 Months. Gross Profit Margin ……….20%. Net Working capital is Rs 3 lakhs. There is no bank overdraft or prepaid expenses.

Problem 6: Excel Corporation provides you with following details

	Rs
Opening Stock	50,000
Closing Stock	70,000
Sales	
Credit	2,10,000
Cash	1.50,000
Gross Profit	60,000
Year-end debtor	2,0000
Less: Provision for doubtful debts	2,000
Net Debtors	**18,000**
Bills receivable	15000

Assume a year of 360 days. Calculate the inventory turnover ratio and debtors turnover ratio. Also, compute the operating cycle of the company.