CHAPTER 6

WORKING CAPITAL AND WORKING CAPITAL MANAGEMENT

WORKING CAPITAL

It is also known as net working capital and also it is the operating liquidity to an entity.

Working Capital = Current Assets - Current Liability

Here CA & CL means the following 3 accounts are getting more special.

1. Account Receivable
2. Account Payable
3. Inventories / Stock

Internal & external factors that affect working capital needs

1. Internal factors

   * Company size & growth rates
   * Organizational structures
   * Borrowing & investing positions

2. External factors

   * Banking services
   * Interest rates
   * New technologies & new products
   * Competitors

WORKING CAPITAL MANAGEMENT

It is to ensure that the entity is able to continue its operations & that it has sufficient cash flow to satisfy both maturing short term debt & upcoming operational expenses.

WORKING CAPITAL RATIO'S

1. Current Rate / Working Capital Ratio

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liabilities}}$$

2. Quick Asset Ratio / Quick Ratio / Acid Test

$$\text{Quick Asset Ratio} = \frac{\text{Current Asset} - \text{Inventories}}{\text{Current Liabilities}}$$

3. Inventory Days Period

$$\text{Inventory Days Period} = \frac{\text{Average Inventory}}{\text{Cost of Goods Sold}} \times 365$$

or

$$\text{Inventory Days Period} = \frac{365}{\text{Inventory Turnover Ratio}}$$

4. Inventory Turnover Ratio / Stock Turnover Ratio

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

5. Receivable Days Ratio

$$\text{Receivable Days Ratio} = \frac{\text{Average receivables}}{\text{Turnover}} \times 365$$

or

$$\text{Receivable Days Ratio} = \frac{365}{\text{Receivarble Turnover Ratio}}$$

6. <u>Receivable Turnover Ratio</u>

$$\text{Receivable Turnover Ratio} = \frac{\text{Turnover}}{\text{Average A/C Receivable}}$$

7. <u>Payable Days Ratio</u>

$$\text{Payable Days Ratio} = \frac{\text{Average A/C Payable}}{\text{Purchases}} \times 365$$

or

$$\text{Payable Days Ratio} = \frac{365}{\text{Payable Turnover Ratio}}$$

8. <u>Payable Turnover Ratio</u>

$$\text{Payable Turnover Ratio} = \frac{\text{Purchases}}{\text{Average A/C Payable}}$$

WORKING CAPITAL CYCLE

It is the amount of time it takes to turn the Current Assets& Current Liabilities into cash. In another terms it is the length of time between payments for materials entering into stocks & receipts of proceeds of sale.

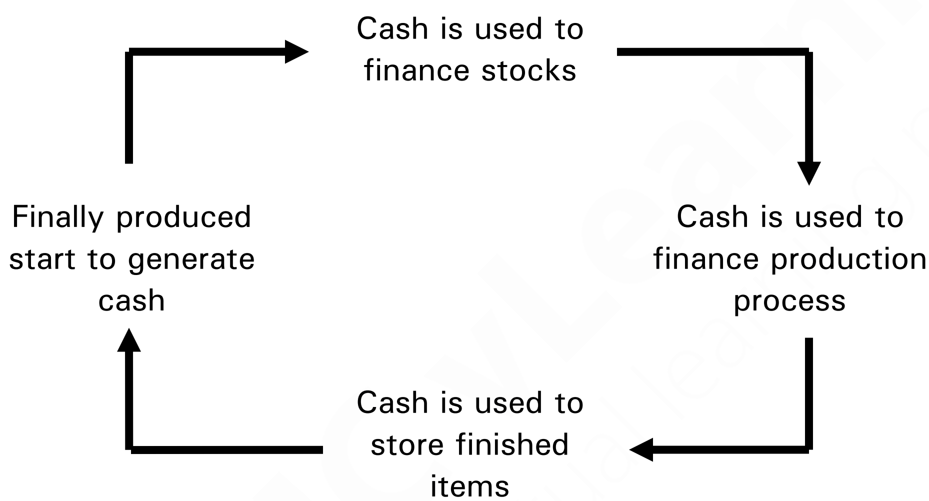
For a trading business it is computed as follows.

WCC = No. of Days of Receivables + No. of Days of Inventories - No. of Days of Payables

For a manufacturing business it can be computed as follows.

WCC = Average No. of Days that R/M Remain in Stock (R/M) - No. of Days taken to produce the goods including WIP - No. of Days of Payables

Working Capital Cycle can be explained from the diagram given below.



Q.1. Following information is given.

No. of days of inventory	65 days
No. of days of receivables	55 days
No. of days of payable	40 days

Required:

1. Calculate the length of WCC for this.

Q.2. Following information was extracted from the annual a/c of K PLC for the past 2 years.

Details	**2014 (Rs. Mn)**	**2013(Rs. Mn)**
Cash & cash equivalents	200	110
Inventory	500	450
Receivables	600	625
Payable	400	350
Revenue	3000	950
COGS	2500	750

Required:

1. Calculate the length of WCC cycle for 2014.

Q.3. Following information is given below

Receivables turnover ratio is	11
Inventory turnover ratio is	9
Payable turnover ratio is	8

1. Calculate the length of WCC.

Q.4. Following information is given below for f/y for 2014.

No. of days	
Raw materials	60 days
WIP	25 days
FG	30 days
Receivables	65 days
Payables	55 days

Required:

1. Calculate the length of WCC.

Q.5. Following information is given below.

Details	**2014 (Rs. Mn)**	**2013(Rs. Mn)**
Stock		
Raw materials	20	15
WIP	25	20
FG	15	10
Material purchases	100	80
COGS	180	130
Sales	225	162
Receivables	40	35
Payables	25	20

Required:

1. Calculate the length of WCC.

OVER TRADING

If often occurs when entities expand it's own operation aggressively.

It happens when a business tries to do too much too quickly with two little long term capital.

Even if over trading business operates at a profit it could easily run into serious trouble because it operates with short of money.

Possible symptoms of over trading

* There is rapid increase in turnover
* There is only a small increase retained earnings.
* The payment period to creditors is likely to lengthen.
* OD often reaches or even exceeds the limit of the facilities agreed by the bank.
* The current ratios and the quick ratio fall.

MANAGING CASH

Different ways of arising cash flow problems.

1. Losses
2. Growth or expansion of business
3. Inflation
4. Seasonal business

Method of easing cash shortage

* Obtaining a bank overdraft
* Obtaining a short term bank loan or intercompany loans
* Post ponding capital expenditure
* Reversing post investment decision by selling assets previously acquired.

Method of investing cash surplus

* Short term deposits
* Short term debt instruments
* Early payment to suppliers to obtain discounts

MANAGING INVENTORIES

1. Stock Models

EOQ & EBQ

2. Just in time Model (JIT)

It is a policy of obtaining goods from suppliers at the latest possible time & avoiding the need of carring any material. This method helps to,

Reduce stock holding cost
Improve the labour productivity
Produce scrap
Reduce the investment in working capital

3. Vendor Management Inventory Model (VMI)

Buyer of a product provide certain information to a supplier of the product & supplier takes full responsibility for maintaining of agreed inventory of materials.

4. ABC Analysis

It is a mechanism for identifying items which will have a significant impact on overall inventory cost while also providing a mechanism for identifying different categories of stocks that will require different management and controls.

Managing Receivable

1. Strategic
   * Extending the credit period
   * Offering discounts for early settlements
   * Factoring
   * Credit insurance
   * Invoice discounting

Managing Payables

1. It involves
   * Attempting to obtain satisfactory credit from suppliers
   * Attempting to extend credit during period of cash storages
   * Maintaining good relations with regular and important suppliers