







# Working Capital Management

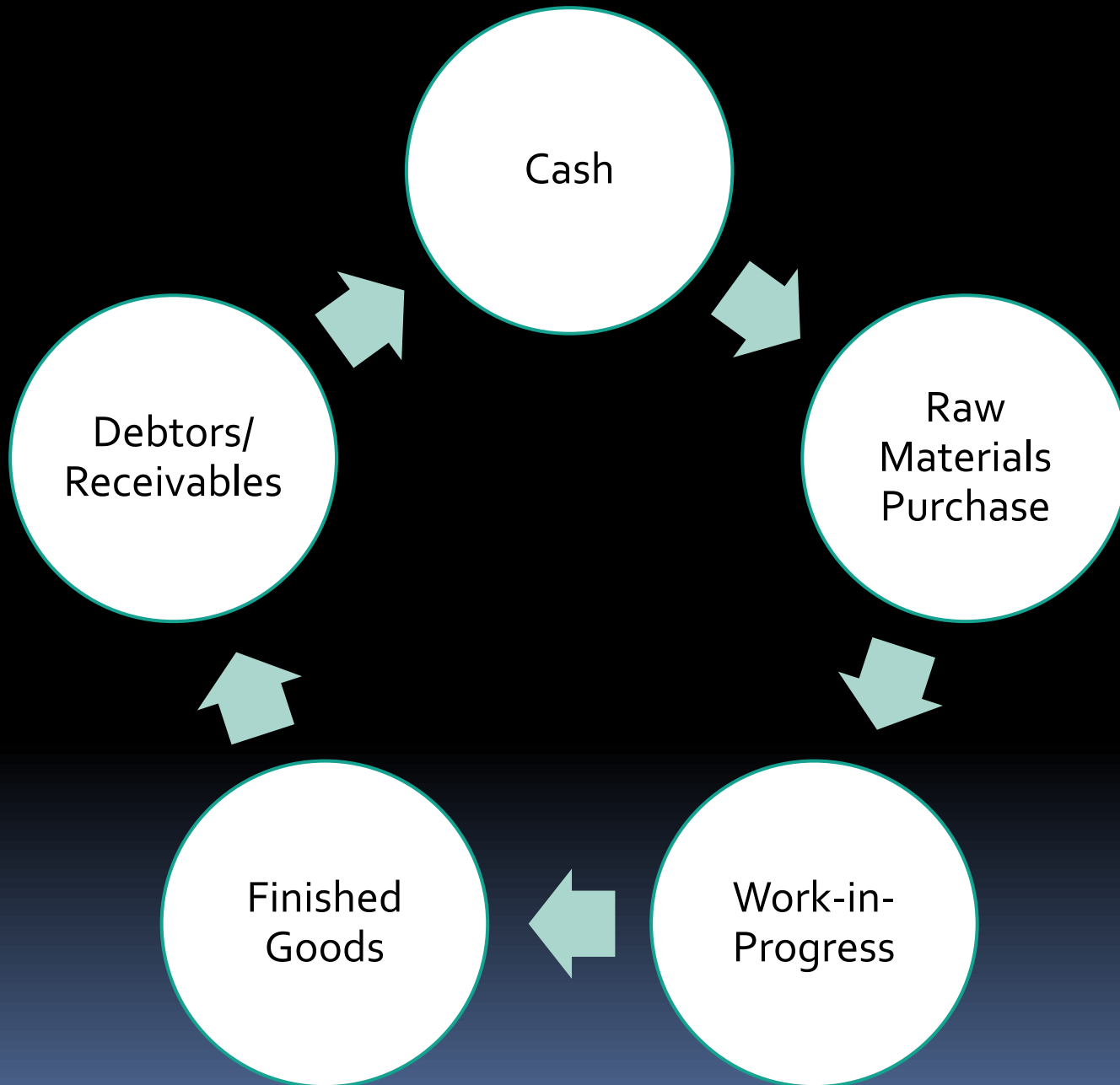
# What Working Capital means?

- For the day-to-day running of any Business a firm needs Cash.
- Typically a Business earns money by selling it's Products and Services.
- In order to sell a product a firms needs raw materials
- Next the raw materials are converted into finished products by use of labour to whom wages have to be paid during the period of manufacture.

- 
- Similarly to manufacture a product a firm purchases raw material which are procured from outside suppliers. The purchase of these raw materials involve payment of either cash or credit.
  - If all the purchases of raw materials are not made by paying cash then it involves credit purchases(Creditors) to whom payments are made later.

- 
- So the period starts when the manufacturing process starts and ends when the money is received from the Debtors.
  - So the entire fund is blocked till the sales are realised are again re-invested in manufacturing process.
  - This Continuous process which is Cyclic in nature is known as Operating Cycle.

- 
- Once the products are manufactured they move to the market for selling purposes and revenue by the firm is earned after these products are sold in the market.
  - These sales could be either cash sales or credit sales. From these credit sales arises debtors and the cycle gets completed when payment from the debtors is received in full.
- 





In the above discussions we have mentioned about the following items

- Cash
- Debtors
- Raw Materials
- Work-in-Progress
- Finished Stock ,

Which are the items of Current Assets and

- Creditors which is Current Liabilities

- 
- So we can say that Working Capital involves both Current Assets and Current Liabilities
- 

# Concepts of Working Capital

- Gross working capital (GWC)

GWC refers to the firm's total investment in current assets.

**Current assets** are the assets which can be converted into cash within an accounting year (or operating cycle) and include cash, short-term securities, debtors, (accounts receivable or book debts) bills receivable and stock (inventory).

# Concepts of Working Capital

- ◎ Net working capital (NWC).  
NWC refers to the difference between current assets and current liabilities.
- ◎ Current liabilities (CL) are those claims of outsiders which are expected to mature for payment within an accounting year and include creditors (accounts payable), bills payable, and outstanding expenses.
- ◎ NWC can be positive or negative.
  - Positive NWC =  $CA > CL$
  - Negative NWC =  $CA < CL$

# Concepts of Working Capital

- GWC focuses on
  - Optimization of investment in current Assets
  - Financing of current assets
- NWC focuses on
  - Liquidity position of the firm
  - Judicious mix of short-term and long-term financing





# Operating Cycle

- Operating cycle is the time duration required to convert sales, after the conversion of resources into inventories, into cash. The operating cycle of a manufacturing company involves three phases:

- *Acquisition of resources* such as raw material, labour, power and fuel etc.
- *Manufacture of the product* which includes conversion of raw material into work-in-progress into finished goods.
- *Sale of the product* either for cash or on credit. Credit sales create account receivable for collection.

- The length of the operating cycle of a manufacturing firm is the sum of:
  - **inventory conversion period (ICP).**
  - **Debtors (receivable) conversion period (DCP).**

- 
- Inventory conversion period is the total time needed for producing and selling the product. Typically, it includes:
    - **raw material conversion period (RMCP)**
    - **work-in-process conversion period (WIPCP), and**
    - **finished goods conversion period (FGCP)**

- 
- The debtors conversion period is the time required to collect the outstanding amount from the customers.


# Length or Duration of the Operating Cycle

It is the Sum of the following:

- Inventory Conversion Period

This Consists of the following:

1. Raw Material Conversion Period
  2. Work-in-Progress Conversion Period
  3. Finished Goods Conversion Period
- Debtors Conversion Period

- 
- The total of Debtors Conversion Period and Inventory Conversion Period is referred to as Gross Operating Cycle.
  - When Credit Period availed is deducted from Gross Operating Cycle it becomes Working Capital Cycle
  - It is expressed as:
  - $=R+W+F+D- C$

## Where

- R=Raw Material Storage Period  
=(Average Stock of Raw Materials / Average Purchases per Day) $\times$ 360
- W=Work-in-Progress Holding Period  
= (Average Work-in-Progress inventory/  
Average Cost of Goods Sold per day) $\times$ 360

- F=Finished Goods Storage Period  
= (Average Stock of Finished Goods/Average Cost of Goods Sold per day) $\times$ 360
- D= Debtors Collection Period  
= (Average Debts/Average Credit Sales Per Day) $\times$ 360
- C= Credit Period Aailed  
= (Average Trade Creditors /Average Credit Purchases per Day) $\times$ 360



From the Following Data Compute the duration of the Operating Cycle for each of the two years and Comment on the following:



<b>Particulars</b>	<b>Rs.(in Thousands)</b>	
	<b>Year 1</b>	<b>Year 2</b>
<b>Raw Materials</b>	<b>20</b>	<b>27</b>
<b>Work-in-Progress</b>	<b>14</b>	<b>18</b>
<b>Finished Goods</b>	<b>21</b>	<b>24</b>
<b>Purchases</b>	<b>96</b>	<b>135</b>
<b>Cost of Goods Sold</b>	<b>140</b>	<b>180</b>
<b>Sales</b>	<b>160</b>	<b>200</b>
<b>Debtors</b>	<b>32</b>	<b>50</b>
<b>Creditors</b>	<b>16</b>	<b>18</b>

Particulars	Year 1	Year 2
1.Raw Material Stock =(Raw Material Inventory/Purchases)x 360	(20/96)x360 =75 Days	(27/135)x360 =72 Days
<b>Add.</b> 2.Work-in-Progress Turnover =(Work-in-Progress /Cost of Goods Sold)x360	(14/140)x 360 =36 Days	(18/180)x360 36 Days
<b>Add.</b> 3.Finished Goods Turnover =(Finished Goods/Cost of Goods Sold)x 360	(21/140)x360 =54 Days	(24/180)x360 =48 Days
<b>Add.</b> 4.Debtors Turnover = (Debtors /Sales)x 360	(32/160)x360 =72 Days	(50/200)x360 = 90 Days
<b>Less:</b> 5. Credit Perod = (Creditors/Purchses) x 360	(16/96)x 360 = 60 Days	(18/135)x360 = 48 Days
Operating Cycle ={(1+2+3+4) – 5}	{(75+36+54+72)- 60} = 177 Days	{(72+36+48+90)- 48} =198 Days