ROI
Return on Investment

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What is ROI

- It is ratio of net income
- In simple – Excess of income over expenditure.

Why Profits

- Reward for an entrepreneurs / Distributors.
- Profits are indications of the efficiency of utilization of the resources used in business.
- To meet the expenditure.
- For the purpose of plough backing.

Return on investment – Distributor point of view.

INVESTMENT.

FIXED

- Office building.
- Warehouse.
- Mechanized & Non mechanized units.
- Tables & Chairs.
- File racks.
- Computers & Printers.
- Others.

WORKING

- Stocks.
- Market Credit.
- Due to company.
- Deposit with company
- Unpaid stocks.
- Damaged stocks.
- Paid transit stocks.
- Advance bank drafts.

What is Turnover ?

- In accounting, the number of times an asset is replaced during a financial period.

- In simple – Total business done in a particular period.
- Example-

Total Purchases - $ 100,000.

Stock in hand - $ 10,000.

Net sales - $ 90,000.

So, the business turnover is $ 90,000.

What is rate of turnover ?

- Rate of turnover is number of times the average stocks sold during a period of time.
- **Benefits of fast rate of turnover.**

➢ More rotations

➢ More profits.

➢ More return on investment.

➢ Less capital.

➢ More sales.

➢ Fresh stocks in rotation.

➢ Low interest amount.

➢ Market credit control.

What is rate of turnover ?

- Rate of turnover is number of times the average stocks sold during a period of time.
- **Disadvantages of fast rate of turnover.**
- Requires more investment.
- Low rotations and low average margin.
- Low profits and piled up stocks.
- More market credit.
- Possibility of more expiry stocks.
- Delay in payments.
- More rate of interest.
- Low interest in business.

What is rate of turnover ?

- Rate of turnover is number of times the average stocks sold during a period of time.
- **Ways to increase rate of turnover.**
- Increase in secondary sales.
- Increase in coverage and timely distribution.
- Spread credit to more outlets.
- Less due from company.
- Timely stock dispatches.
- Range selling.
- Management of minimum floor stock levels.
- Proper usage of product and trade promitions

Return on investment calculations

Example -1

Gross Profit : $ 2,000,000

Expenses: $1,000,000

Investment: $ 500,000

Solution:

$$\frac{\text{Gross Profit - Expenses = Net Profit.}}{\text{Investment}} \times 100$$

$$\frac{2{,}000{,}000 - 1{,}000{,}000}{500{,}000} \times 100$$

Return on Investment: 200%

Return on investment calculations

Example -2

Gross Profit : $100,000

Expenses: $30,000

Investment: $ 50,000

Solution:

$$\frac{\text{Gross Profit - Expenses = Net Profit.}}{\text{Investment}} \times 100$$

$$\frac{\$100{,}000 - \$30{,}000}{\$50{,}000} \times 100$$

Return on Investment: 140%

Return on investment calculations

Example -3

Gross Profit : $10,000

Expenses: $5,000

Investment: $ 25,000

Solution:

$$\frac{\text{Gross Profit - Expenses = Net Profit.}}{\text{Investment}} \times 100$$

$$\frac{\$10,000 - \$5,000}{\$25,000} \times 100$$

Return on Investment: 20%

Return on investment calculations

Example -4

Stocks value :	$20,000
Distributor margin :	5%
Expenses:	$ 2,00

Solution:

Gross Profit:	$952
Expenses:	$200
Net Profit:	$752

Solution:

$$\frac{\text{Net Profit.}}{\text{Investment}} \times 100$$

$$\frac{\$752}{\$20{,}000} \times 100$$

Return on Investment: 3.76%

Return on investment calculations

Formula -1 **ROI:** $\frac{\text{Gross Profit - Expenses = Net Profit.}}{\text{Investment}} \times 100$

Net Profit: Gross Profit - Expenses

Rotations $\frac{\text{Turnover}}{\text{Avg investment}}$

Cost price calculations

Simple Formula.

$$\frac{\text{Gross Margin}}{100+\text{Gross Margin}} \times 100$$

Example:1

Gross Margin 3%

$$\frac{3}{100+3} \times 100 \rightarrow 2.91$$

Example:2

Gross Margin 7%

$$\frac{7}{107} \times 100 \rightarrow 6.54$$

Gross profit calculations

Example-1

Invoice price :	$10,000
Distributor margin:	6%
Gross profit	$600
Selling price	$10.600

Example-2

Invoice price :	$20,000
Distributor margin:	5.5%
Gross profit	$1100
Selling price	$21100

Cost price calculations

Example-1

Selling price	$10,000
Distributor margin:	6%
Gross profit	$566
Invoice price	$9,434

Example-2

Selling price	$20,000
Distributor margin:	5.5%
Gross profit	$1,043
Invoice price	$18,957

Note: Selling price inclusive of distributor margin.

Now you know how to calculate “Return on investment”

Step by step calculations

Problem-1

Invoice price $ 22,000

Distributor margin: 5%

Calculate selling price

Solution.

$$\$22{,}000 \times \frac{5}{100}$$

Selling price: $23,100

Problem-2

Invoice price $ 46.300

Distributor margin: 5.76%

Calculate selling price

Solution.

$$\$46{,}300 \times \frac{5.76}{100}$$

Selling price: $48,967

Step by step calculations

Problem-3

Invoice price	$ 22,000
Distributor margin:	5%

Calculate - GP & SP

Solution.

$$\$22{,}000 \times \frac{5}{100}$$

Gross Profit:	$1,100
Selling price:	$23,100

Step by step calculations

Investment

Expenses

Rotations

Margins

Investment calculations

Working Capital

1Paid stocks in warehouse.

2Market Credit.

3Pending claims from company.

4Damageed stocks in warehouse.

5Advances with company.

6Paid stock in transit.

Minus

1Payment due to company.

2Unpaid stocks.

Net profit calculations

Gross profit - Expenses = Net profit

Problem-1

A.	Turnover	$20,000
B.	Gross Margin	5.77%
C.	Expenses	$800

Calculate net profit

A.	Gross profit	$1,091
B.	Expenses	$800
C.	Net profit	$291

(A-B=C)

Net margin calculations

Problem-1

A.	Turnover	$20,000
B.	Gross profit	$3500
C.	Expenses	$1100

Calculate net margin

A.	Gross profit	$3500
B.	Expenses	$1100
C.	Net profit	$2400
D.	Net margin	12%

Formula Net profit/ Turnover x %

Rotations calculations

Formula : $\dfrac{\text{Turnover}}{\text{Average Investment}}$

Problem-1

A. Turnover $20,000

B. Average Investment $500

Calculate number of rotations

Formula $\dfrac{\text{Turnover}}{\text{Average Investment}}$

Rotations: $\dfrac{\$20,000}{\$500}$ 40

Return on investment calculations

$$\textit{Formula :} \frac{\text{Gross profit- Expenses}}{\text{Investment}} \times 100$$

or

$$\textit{Formula :} \frac{\text{Net profit}}{\text{Investment}} \times 100$$

Return on investment calculations

Problem-1

A.	Invoice value	$20,000
B.	Margin	5%
C.	Investment	$ 2,350
D.	Expenses	$ 500

Calculate Return on investment (ROI)

Solution:

Formula $\dfrac{\$1000 - \$\ 500}{\$2350} \times 100$

Formula $\dfrac{\$500}{\$2350} \times 100$

ROI: 2.127%

Return on investment calculations

Problem-2

A.	Turnover	$30,000
B.	Average stock value	$ 1000
C.	Average market credit	$800
D.	Pending claims from company	$ 500
E.	Due to company	$ 300
F.	Due from company	$ 200
G.	Distributor margin	5%
H.	Salaries	$ 300
I.	Discounts	$35
J.	Fuel	$30
K.	Electricity	$20

Calculate Return on investment (ROI)

Return on investment calculations

Solution.

A	Gross Profit	$1428
B.	Investment	$ 2200
C.	Expenses	$385

Formula $\dfrac{\$1428 - \$\ 385}{\$2{,}200} \times 100$

Formula $\dfrac{\$1.043}{\$2{,}200} \times 100$

ROI: 47.40%

Return on investment calculations

Problem-3

A.	Turnover	$30,000
B.	Average stock value	$ 1000
C.	Average market credit	$800
D.	Pending claims from company	$ 500
E.	Due to company	$ 300
F.	Due from company	$ 200
G.	Distributor margin	5%
H.	Salaries	$ 300
I.	Discounts	$35
J.	Fuel	$30
K.	Electricity	$20

Calculate

1 Gross Profit

2 Net Profit

3 Rotations

4 Expenses

5 Invoice Price

6 Investment

7. ROI

Return on investment calculations

Solution

1Gross Profit:	*Turnover x 4.76%*	:$ 1,428
2Net Profit :	*Gross profit- Expenses*	:$ 1,043
3Rotations:	*Turnover/ Investment*	: 13.63
4Expenses:	*Expenses*	*$385*
5Invoice price:	*Turnover x 4.76% (-T/O)*	*$28,572*
6Investment:	(b+c+d+f-e)	*$ 2,200*
7ROI	*Net proft/ Investment x%*	*47.40%*

Return on investment calculations

Investment conversions

Problem-1

A.	Average stock	10 days
B.	Average market credit	6 days
C.	Average pending from company	12 days
D.	Turnover	$100,000

Calculate investment in value($)

Return on investment calculations

Investment conversions

$$\text{Stocks:} \frac{\text{No of days stock}}{\text{days}} \times 100$$

$$\frac{10}{365} \times 100 : 2.74\%$$

$$\text{Market credit:} \frac{6}{365} \times 100 : 1.64\%$$

$$\text{Pending from company:} \frac{12}{365} \times 100 : 3.28\%$$

Investment %: 2.74+1.64+3.28 : 7.66%

Investment $: 100,000 x 7.66% :$ 7,660

Investment conversions

Problem-2

A.	Turnover	$100,000
B.	Average stocks per day	$ 340
C.	Average market credit per day	$230
D.	Average pending claims per day	$210
E.	Average due from company per day	$110

Convert the investment in %

Return on investment calculations

Investment conversions

Solution

$$\text{Turnover in days:} \frac{100{,}000}{365} : 273.97$$

$$\text{Stocksin days:} \frac{340}{273.97} : 1.24$$

$$\text{Crediti in days:} \frac{230}{273.97} : 0.83$$

$$\text{Pending in days :} \frac{210}{273.97} : 0.76$$

$$\text{Due from in days:} \frac{110}{273.97} : 0.40$$

Total investment in days: 3.23

Return on investment calculations

Investment conversions

$$\text{Stocks:} \frac{1.24}{365} \times 100 \quad : 0.33\%$$

$$\text{Crediti :} \frac{0.83}{365} \times 100 \quad :0.22\%$$

$$\text{Pending :} \frac{0.76}{365} \times 100 \quad :0.20\%$$

$$\text{Due from :} \frac{0.40}{365} \times 100 \quad :0.10\%$$

Total investment % 0.85

Return on investment calculations

How to maintain investment record

Investment record all $

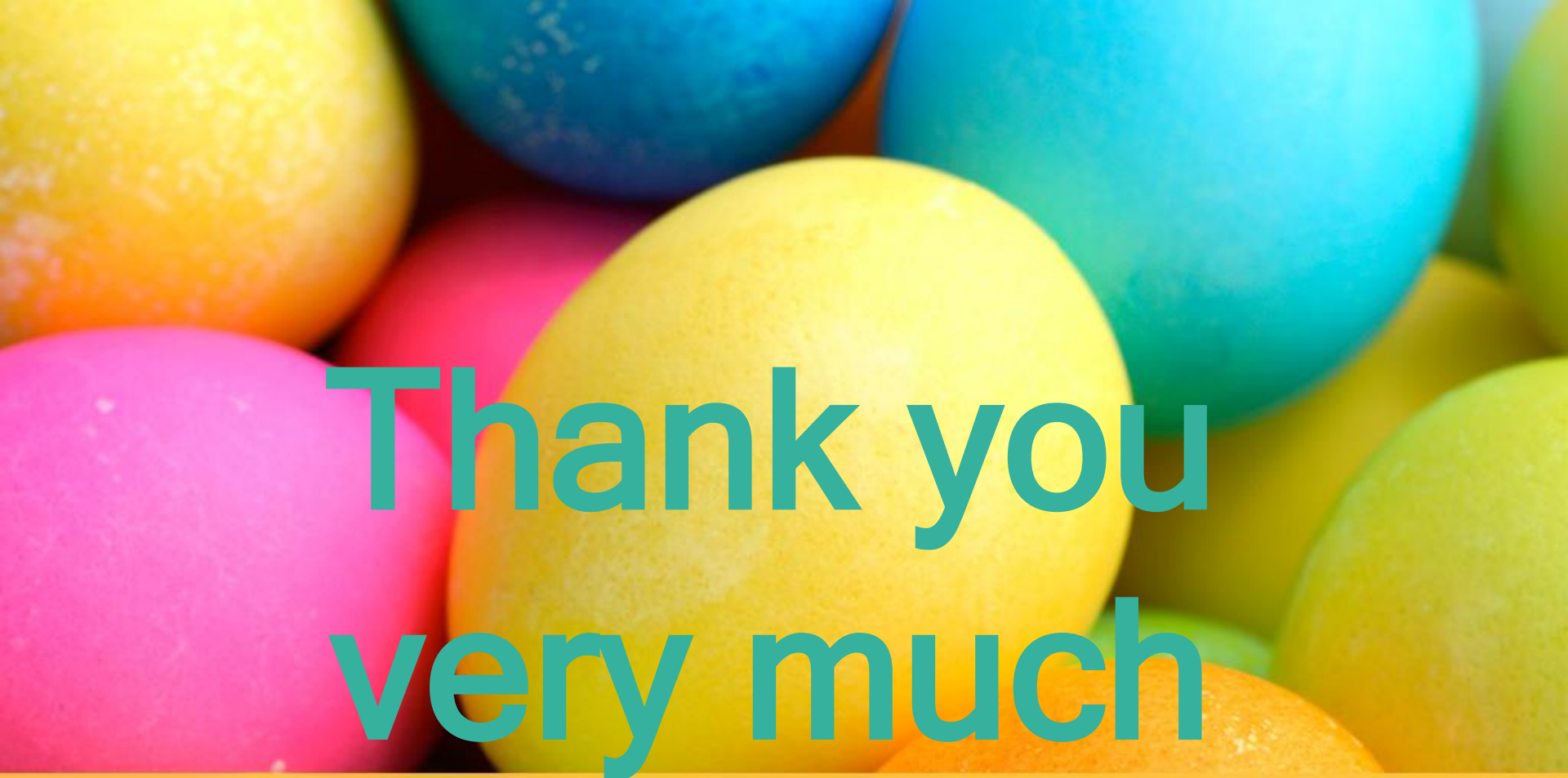
Sales				Investment					
Week	This week	Cumulative week	Expected sales	Stock value	Market credit	Due from company	Total investment	Investment %	Rotations
1	1.00	1.00	52.00	2.00	1.00	1.16	4.16	8.00	12.50
2	2.00	3.00	78.00	2.10	1.00	0.80	3.90	5.00	20.00
3	1.00	4.00	69.00	1.00	1.00	1.00	3.00	4.34	23.00
4	2.50	6.50	84.50	1.80	1.20	0.60	3.60	4.26	23.47
5	3.00	9.50	98.80	0.80	1.20	0.30	2.30	2.32	42.96
6	1.00	10.50	91.00	0.60	0.60	0.60	1.80	1.97	50.56
7	0.50	11.00	81.70	2.00	1.00	1.00	4.00	4.89	20.43
8	0.30	11.30	73.45	2.10	2.10	3.00	7.20	9.80	10.20

Return on investment calculations

How to maintain investment record

Uses of investment record

- Can know week wise sales
- Can know week wise investment
- Can know week wise stocks
- can know week wise market credit
- *can know rotations*
- Can know investment
- Can know margin
- Can know ROI



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