MGT 388 Finance And Law For Engineers

Overview of Financial Accounting

Terminology

For this module International terminology will be used.

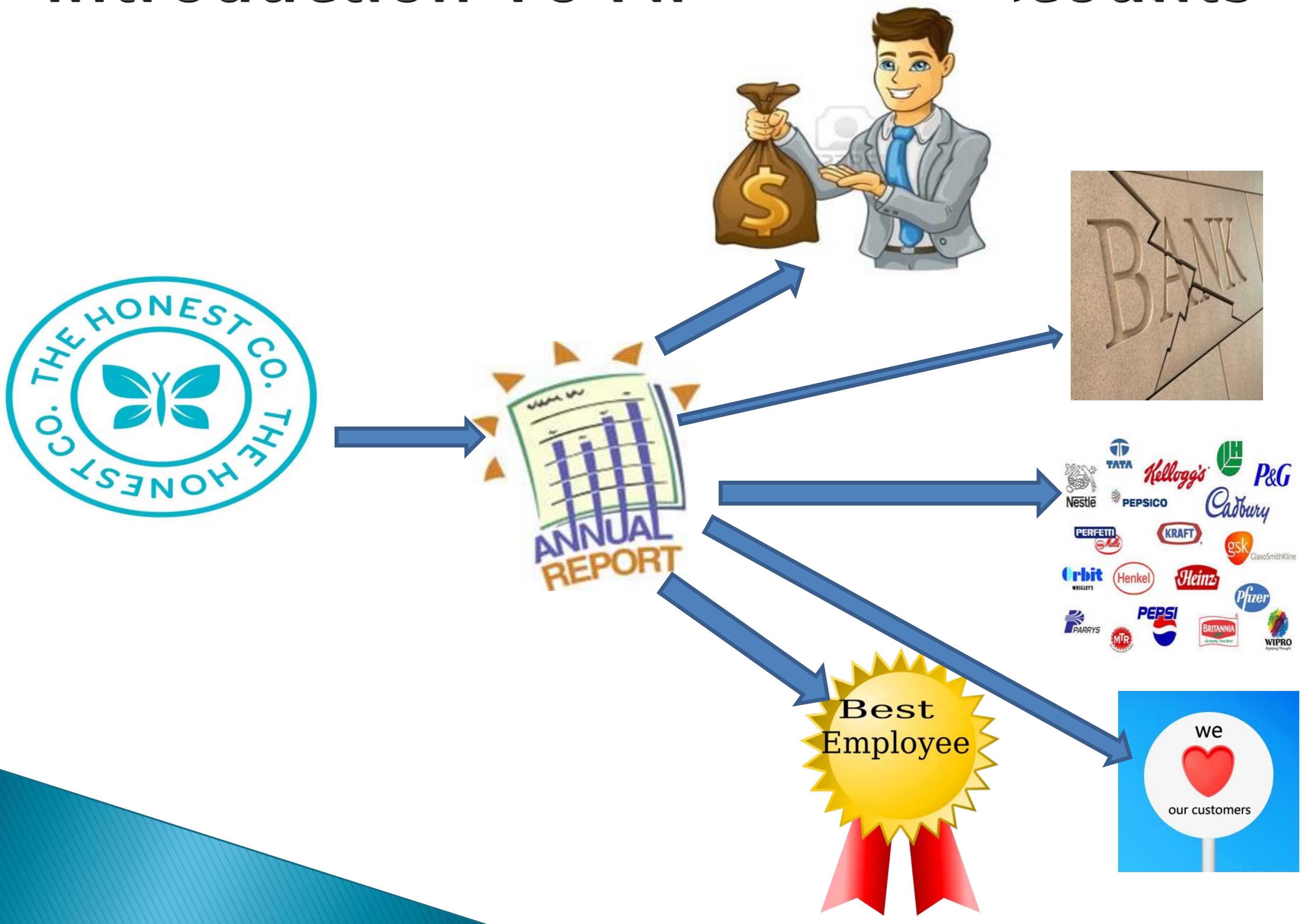
I will on occasion refer to UK terms and you will see them in textbooks and Annual Reports prepared under UK regulations.

In the exam; questions will be set using international terms BUT correct answers will receive the appropriate mark regardless of the terms you use.

Outline of Lecture

- Introduction to financial accounting
- Income Statement
- Statement of Financial Position
- Accruals
- Profit V Cash

Introduction To Financial Accounts



Introduction To Financial Accounting

All incorporated businesses must produce an Annual Report for the shareholders of the company but it is also available to other external users. The annual report is used to make economic decisions so the information is verified by an external audit.

The audit states the information in the report is true and fair, materially correct.

Income Statement

Income statement = Profit and loss account

Income Statement

	£'000
Revenue	X
Cost of sales	(X)
Gross Profit	X
Distribution expenses	(X)
Administration expenses	(X)
Operating profit	X
Other Income	X
Finance charges	(X)
Profit before tax	X
Tax	(X)
Profit for the year	X

Income Statement = Profit and loss Account

Gross profit

Profit from core business. Providing the good or service that the company is known for.

For most companies it is expected that gross profit/sales is a constant percentage over time and comparable with that of similar businesses.

For a clothing retailer the gross profit will just look at the cost of buying the clothes compared to the sales value achieved.

Income Statement = Profit and loss Account

Operating profit – profit from core business less other business costs such as advertising, distribution and administration.

Income Statement = Profit and loss Account

Profit before tax – operating profit plus other income that is not from the main business such as rent, dividends or interest received

less finance costs (interest payments).

Profit for the year – profit after tax

Income Statement– Gross Profit

	£'000
Revenue	X
Cost of sales	(X)
Gross Profit	X

Opening inventory	X
Purchases	X
Less closing inventory	(X)
	X

Inventory = stock = unsold items

Adjusting for unsold items will mean there are the same number of items in sales as there are in cost of sales.

Profit Does Not Equal Cash
Looking at Gross Profit

A company has been set up for the duration of the Wimbledon.

Wimbledon T-shirts are sourced from a supplier at £15 and sold for £25.

Profit per shirt is $\frac{\text{£}25-\text{£}15}{\text{£}25} = \frac{\text{£}10}{\text{£}25} = 40\%$

THE CHAMPIONSHIPS WIMBLEDON

Profit Does Not Equal Cash

Week 1

600 T-shirts bought

350 T-shirts sold

At the end of week one the closing inventory will be 600-350=250 T shirts

Week 2

200 T-shirts bought

450 T-shirts sold

The opening inventory at the beginning of week 2 is 250 T shirts and there is no closing inventory at the end of week 2

After the 2 week period 800 T-shirts have been bought and 800 T-shirts sold

Calculate the weekly profit and cash position.

Profit Does Not Equal Cash
Cash Results

Week One

	£
Sales (350 x £25)	8,750
Purchases (600 x £15)	(9,000)
Cash	(250)

Week TWO

	£
Sales (450 x £25)	11,250
Purchases (200 x £15)	(3,000)
Cash	8,250

Overall cash (250) +8,250 = £8,000

Profit Does Not Equal Cash
Profit Position

Week One	£	£
Sales (350 x £25)		8,750
Opening inventory	*0*	
Purchases (600 X £15)	*9,000*	
Closing inventory (250 X 15)	*(3,750)*	
Cost of sales (350 x £15)		(5,250)
Gross profit		3,500

Gross profit percentage £3,500/£8,750 X 100% =40%

Profit Does Not Equal Cash
Profit Position

Week Two		£	£
Sales	(450 x £25)		11,250
Opening inventory	*(250 x £15)*	*3,750*	
Purchases	*(200 X £15)*	*3,000*	
Closing inventory		*(0)*	
Cost of sales	(450 x £15)		(6,750)
Gross profit			4,500

Gross profit percentage £4,500/£11,250 X 100% =40%

Profit Does Not Equal Cash

	Week One	Week Two	Total
	£	£	£
Cash	(250)	8,250	8,000
Profits	3,500	4,500	8,000

Over time Profit = Cash

Profit reflects the actual performance (40% profitability on each T-shirt)

Cash is more volatile

Cash is needed for a business to survive

Profit and Accruals

Profit gives a fair reflection of actual performance it is based on the accruals (matching) principle.

Accruals revenues and expenses are recognised when they are earned and incurred not when cash flows in or out of the company.

Profit and Accruals

Profits are effectively smoothed using the accruals principle.

The calculation of cost of sales is only one example, all costs will only be included in the income statement when they have been used to make profits.

Items of machinery or vehicles will be bought the cash will leave the company but only a portion of the cost will be charged against revenue as an expense.

Accruals

Cost £30,000

To be used for 3 years

£30,000 cash leaves the business

£10,000 per year for 3 years is taken of the profit figure

A business can go bankrupt or have liquidity problems initially or during an expansion but still show a profit.

Profit and Accruals

A vehicle costs £30,000 and will be used for 3 years.

£30,000 cash will leave the organisation in year 1.

£10,000 will be an expense in the income statement for each of the 3 years *(depreciation*).

The length of time the vehicle will be used in the business and that it is used up equally in all the years are accounting estimates.

Profit

Other accounting estimates are
made when arriving at a profit figure.

It is important to look i
notes to the accounts and
identify any judgments or
estimates the directors
have made in calculating profit.

The extent to which you agree with those judgements and estimates will determine how much faith you have in the profit figure

FT Profit Video

PROFITS

FT Profit Video

Statement of Financial Position

The statement of financial position (Balance sheet) shows the worth of a company. Its format is based on the accounting equation:

Assets = Liabilities + Equity

ASSETS are resources that the company controls

LIABILITIES are amounts owed by the company to third parties

EQUITY is amounts owed by the company to the owners (shareholders)

Statement of Financial Position

The statement of financial position (SofFP) has two parts:

On one side of the SofFP are assets everything OWNED by the company

and

On the other side is everything OWED by the company both to the owners of the company and third parties such as banks.

Statement of Financial Position

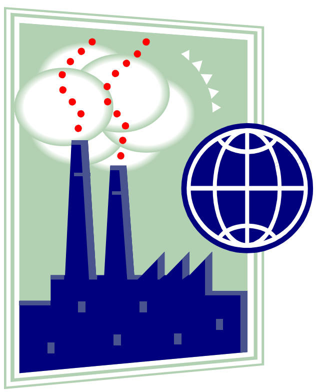
ASSETS	£'000	£'000
Non-current Asset		
Land and Buildings	X	
Plant and machinery	X	
Motor vehicles	X	
Intangible assets	<u>X</u>	
		X
Current Assets		
Inventories	X	
Trade receivables	X	
Prepayment	X	
Cash	<u>X</u>	
		<u>X</u>
Total Assets		<u>X</u>

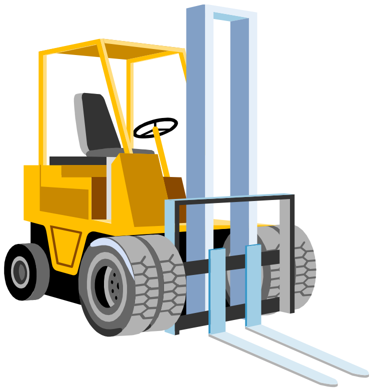
Statement of Financial Position

EQUITY AND LIABILITIES		
Equity		
Share Capital	X	
Share Premium	X	
Revaluation reserve	X	
Retained earnings	X	
		X
Non-current Liabilities		
Debentures	X	
Loans	X	
		X
Current Liabilities		
Trade payables	X	
Tax	X	
Overdraft	X	
		X
Total equity and Liabilities		X

Statement of Financial Position

Does the statement of financial position (SofFP) show the worth of a company?

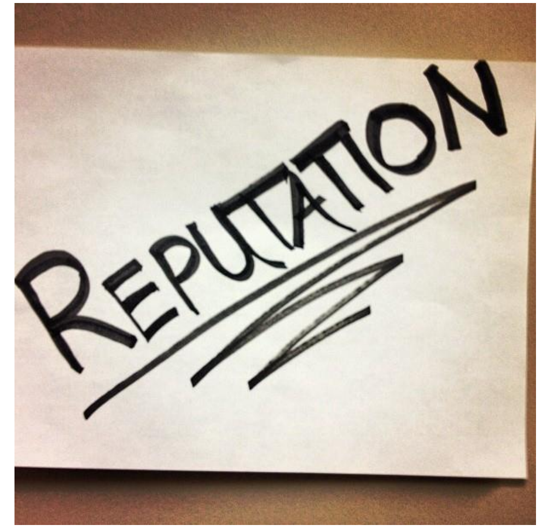




These asset appear at original cost less depreciation.

They do not appear at market value

Statement of Financial Position



Items for which no cash has been paid cannot be included
But ideas, key people and reputation would be included in a valuation if the business

Lecture Summary

Please read the notes they contain a lot more information

For the next fortnight we will look at analysing a set of accounts.

You will struggle with this if you do not understand what accounts are and how they are prepared.