Finance

For AKAM Diploma students

The Association for
Key Account Management

Kate Scott

Finance Module Content

This Module contains four sessions:

1. What is financial success?
2. What are the key financial statements?
3. What are the key performance indicators?
4. How might you or your customer make a longer-term investment decision?

Kate Scott – about me

- Trained as a chartered accountant
- Teaching finance and accounting for 25 years
- Multinational client base
- Program Director and executive fellow at leading Business Schools
- Executive coach

What is financial success?

This session focusses on:

1. What is financial success – looking from both an own business and customer business perspective
2. The financial business model.
3. Investors cost of capital

How money flows around a business

Shareholders & banks

Returns

Employees & Suppliers

Four key strategic financial questions

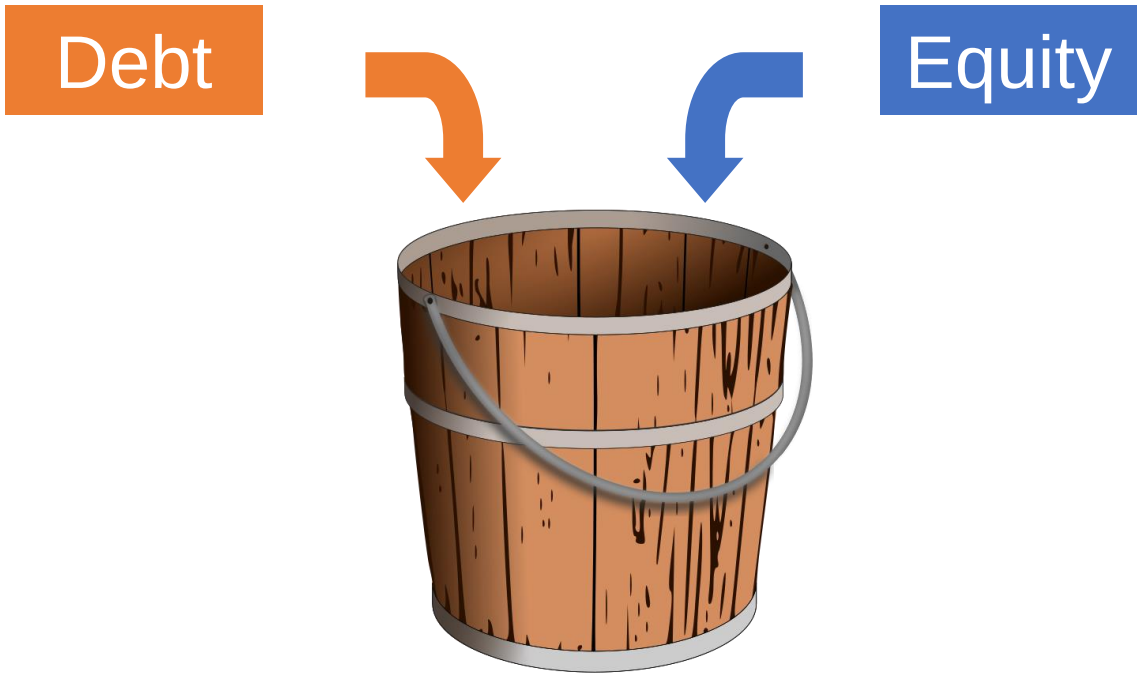
What assets do we need and at what cost ?

How will we fund those assets?

What will we do with any surplus?

How will we fund expansion?

How has the business been financed?



Gearing = debt as a percentage of total funds

The Weighted Average Cost Capital

	Mix		Cost		
Debt	40%	X	5.0% =	2.0%	
Equity	60%	X	10.0% =	6.0%	
Weighted average					8.0%

What does this mean to the business?

What are the three key financial statements?

This session focusses on:

1. The income statement - revenue and cost recognition, below the gross profit line
2. The balance Sheet - assets and liabilities
3. The cash flow - the difference between cash and profit

Three key financial statements …

How fast am I going?

Income Statement
(the speedo)

Enough fuel?

Cash Flow
(the fuel gauge)

Health of the car?

Balance Sheet
(the oil gauge)

The Income Statement

DESCRIPTION	AMOUNT
Revenue, sales, turnover	X
Cost of Sales	(X)
Gross Profit	**X**
Selling , General and Admin	(X)
Operating Profit	**X**
Other Income	X
Profit before Interest	**X**
Finance cost	(X)
Profit before Tax	**X**
Tax	(X)
Profit after Tax	**X**

Revenue

Q. When should we recognise revenue?

A. When goods are despatched and the invoice is raised.

Key Point

- It does not matter if the customer has paid or not. If they have paid the sale is a cash sale, if they have not paid the sale is a credit sale and a debtor is created.

Costs

Q. When should we recognise costs?

A. When the cost is incurred and can be matched to revenue.

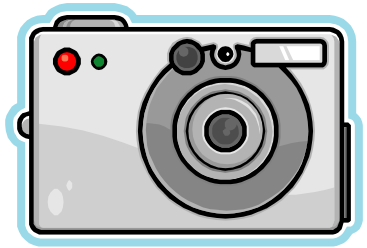
Key Point

- It does not matter if the company has paid or not.

The Balance Sheet

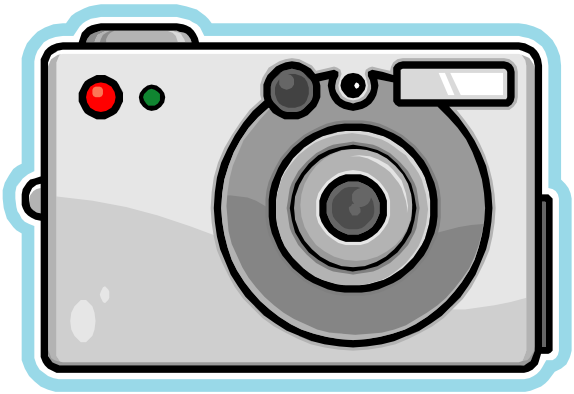
Assets = Liabilities

- Fixed
- Current
- Third Party
- Shareholder Equity



The Balance Sheet

				£
Fixed Assets		Tangible		X
		Intangible		X
Current assets	Stock		X	
	Trade debtors		X	
	Cash		X	
Creditors<1 year	Trade creditors		(X)	
	Overdraft		(X)	
	Accruals		(X)	
Net current assets				**X**
Creditors > 1 year		Loan		(X)
		Provisions		(X)
Net Assets or Liabilities				**X**
Shareholders funds (equity)	Share capital			X
	Retained profit			X
Total shareholders funds(equity)				**X**



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				£
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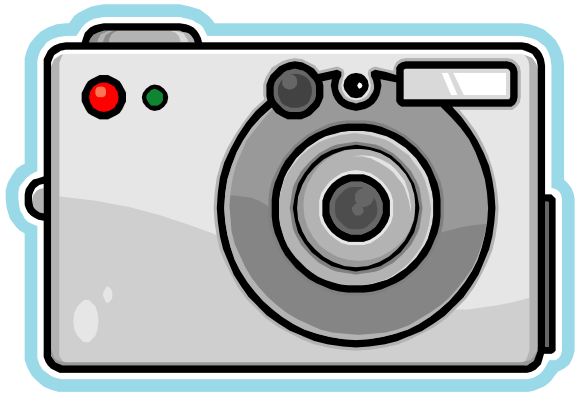

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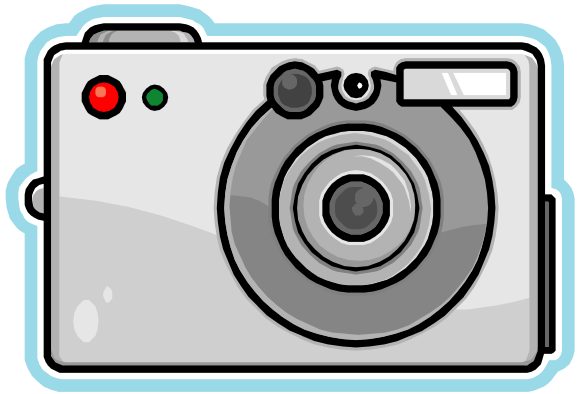

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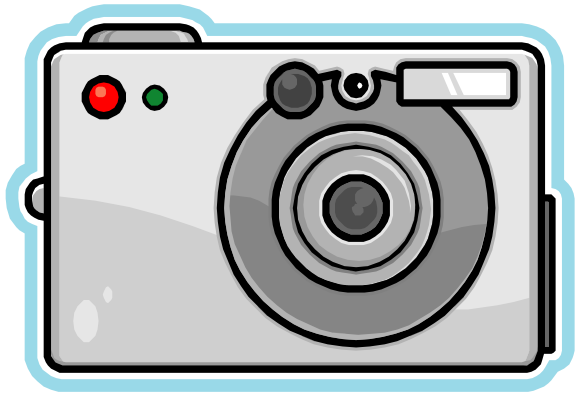

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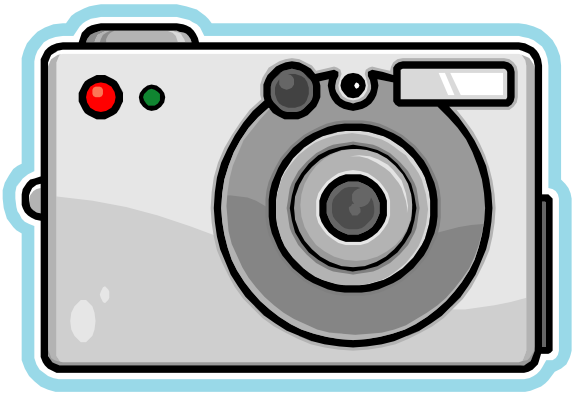


An Asset

An Asset …

- Is owned (controlled by the business)
- Has a value – normally cost
- Will bring benefit in the future

Types of Asset:

- Fixed (Non current asset)– used by the business and typically held for more than a year
- Current asset – assets company expects to turn into cash or consume within the normal operating cycle

Tangible Fixed Assets

Tangible fixed assets:

- Valued at cost then depreciated

Considerations when calculating cost:

- Purchase price
- Costs incurred bringing assets to working condition
- Financing costs

Depreciation Example

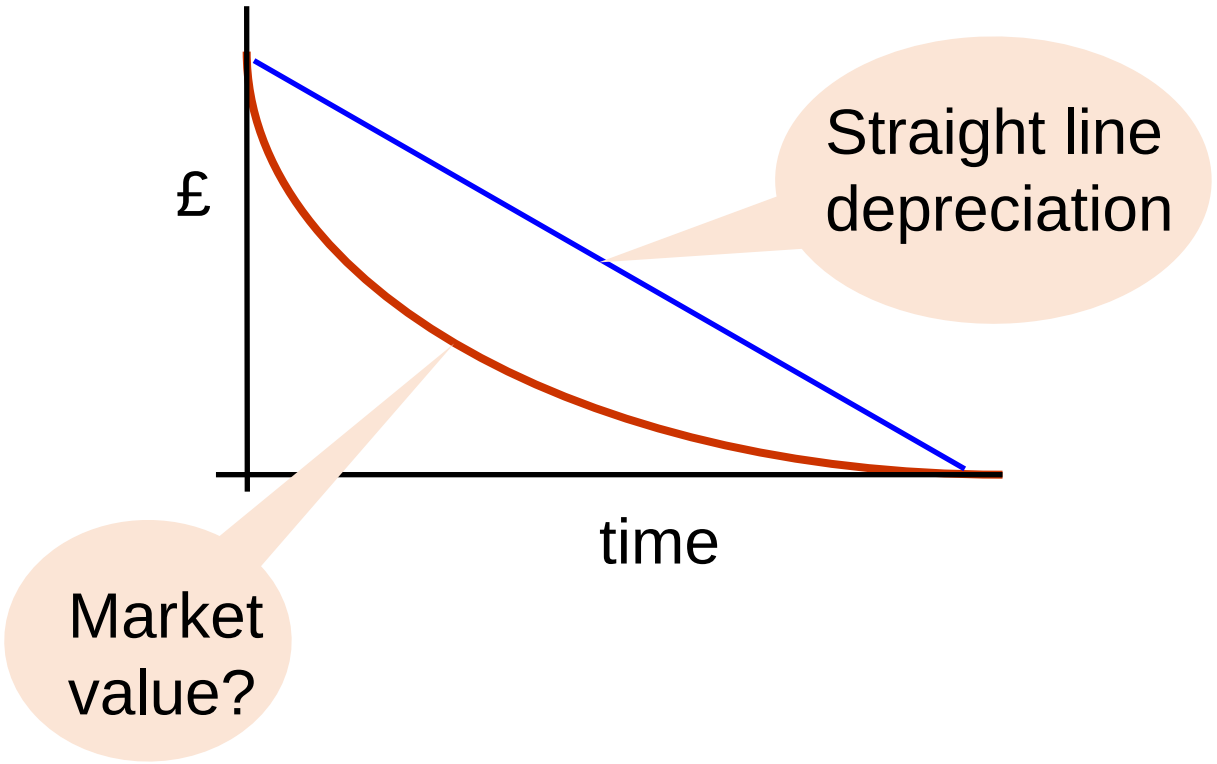
- We buy a car for £10,000.
- It has a useful life of three years.
- It has a £4,000 residual value

Depreciation Example

	Year 1	Year 2	Year 3
Balance Sheet			
Cost	10000	10000	10000
Depreciation	2000	4000	6000
NBV	8000	6000	4000
Income Statement			
Cost	2000	2000	2000

Depreciation

Spreading the cost of a fixed asset over its useful life



Intangible Fixed Assets

- Identifiable long-term assets used in business which have no physical substance and are not financial in nature
  e.g. patents, copyrights or trademarks
- Valued at cost and amortised over useful life

Intangible Fixed Assets – Goodwill

- The excess of the total value of the business over the fair values of the individual, identifiable net assets
- Purchased goodwill is recognised as an intangible asset
- Its value is amortised over its deemed useful life which is assumed as 10 years unless management say otherwise

Intangible Fixed Assets – Brands

- The cost of developing brands internally must be expensed to the profit & loss account
- Acquired brands can be included as intangible assets and are amortised

Current Assets – Stock

- Valued at the lower of cost or Net Realisable Value
- Cost is the purchase price plus any costs incurred in getting stock to its current state and location

Current Assets – Trade Debtors

- Recorded when revenue on a credit sale is recognised
- Valued at realisable value
- Companies will make a provision for bad debts on an estimate basis

Current liabilities - Trade creditors

- Money owed for goods/services received and invoiced but not yet paid

Current liabilities - Accruals

- Accruals - Money owed for goods/services received but not yet invoiced

Working Capital

	£
Trade Debtors	X
Stock	X
Prepayments and accrued income	X
Trade Payables	(X)
Accruals and deferred income	(X)
	X

Liabilities – Provisions

- The amount or timing of the obligation is unknown
- The company should make a provision based on their best estimate of the outlay necessary to settle their obligation

e.g. Restructuring

Warranty

Pension

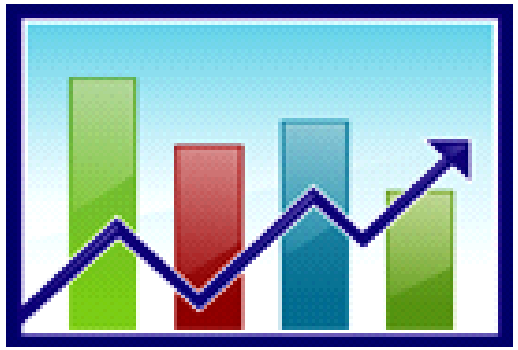
Shareholders' Funds (Equity)

- Represents the shareholders' investment in the company – reflects how the company has been funded and how much profit it has generated over time

- Does not show value of business

Key Differences Between Cash and Profit

- Timing differences:
  - Revenue/cash received from customers
- Accounting differences:
  - Depreciation/ capital expenditure
  - Revenue/Invoice
  - Accruals
  - Provisions



A Typical Cash flow statement

DESCRIPTION	£
Operating activities	X
Investing activities	(X)
Financing activities	X
Net cash inflow (outflow) from activities	**X**
Opening cash	**X**
Closing cash	**X**

EBITDA

DESCRIPTION	AMOUNT
Revenue	X
Cost of Sales (services)	(X)
Gross Profit	**X**
Selling , General and Admin	(X)
EBITDA	**X**
Depreciation	(X)
Amortisation	**(X)**
Operating Profit	**X**

- Earnings before interest, tax, depreciation and amortisation
- Assesses performance of companies without the distortions of accounting for fixed asset depreciation and amortisation
- Sometimes considered to equate to operating cash flow

What are the key financial performance indicators?

This session focusses on:

1. The return on capital employed
2. Profitability and the main drivers of revenue (price and volume) and costs (fixed and variable)
3. Asset turnover - the drivers of fixed asset and working capital efficiency

How does a business make money?

Uses capital to buy assets

100

Uses assets to generate revenue

150

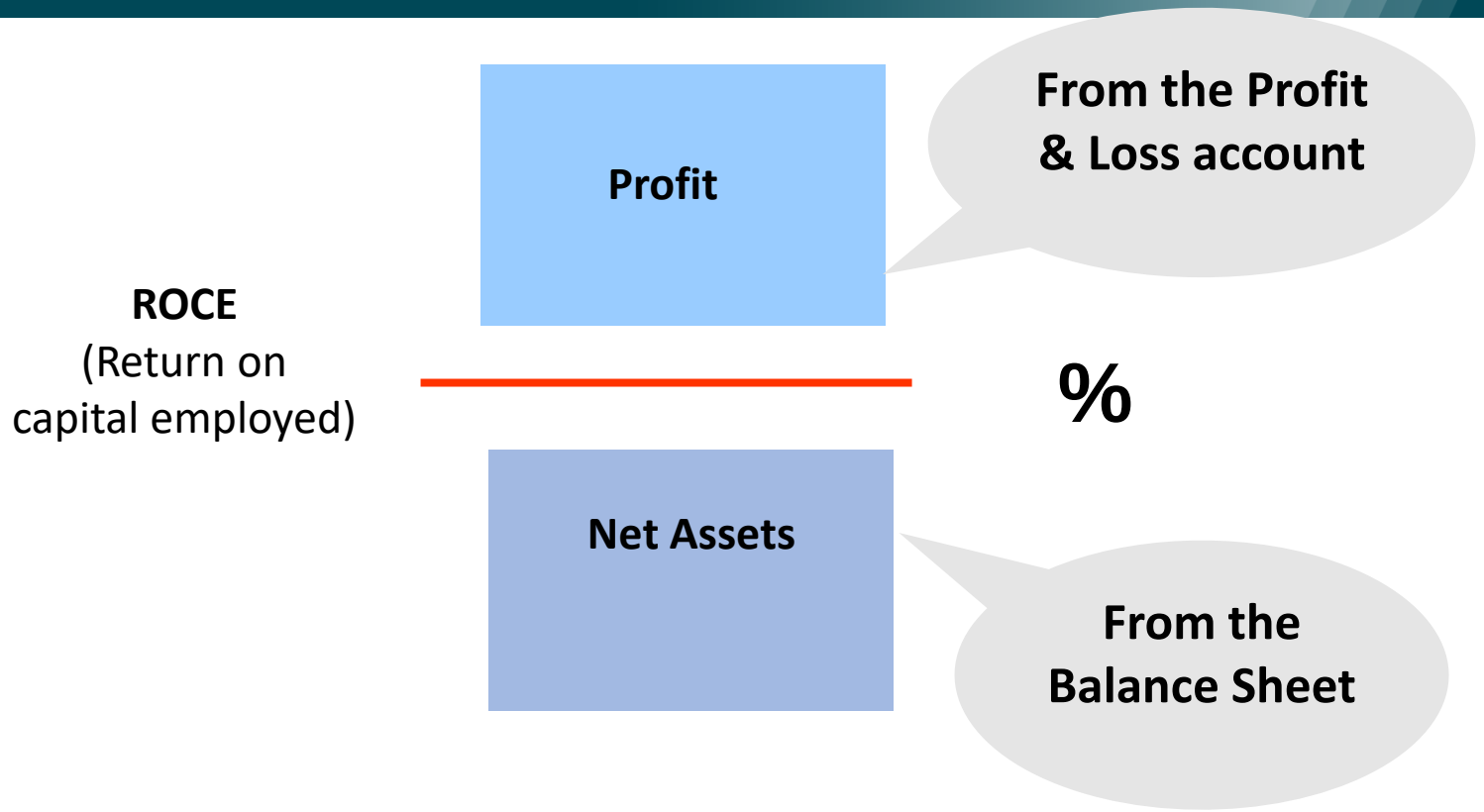
Makes a profit from the revenue

15

1.5 **X** 10% = **15%**

Asset Turnover | Profit Margin | ROCE

ROCE



What is a good rate of return?

NB Net Assets = Fixed assets + Working capital

ROCE – the Primary Ratio

$$\frac{\text{Op Profit}}{\text{Net Assets}} \times 100 = \begin{cases} \frac{\text{Op Profit}}{\text{Revenue}} \times 100 \\ \frac{\text{Revenue}}{\text{Net assets}} \times 100 \end{cases}$$

- **How profitable are sales?**
- **Known as "profit margin"**

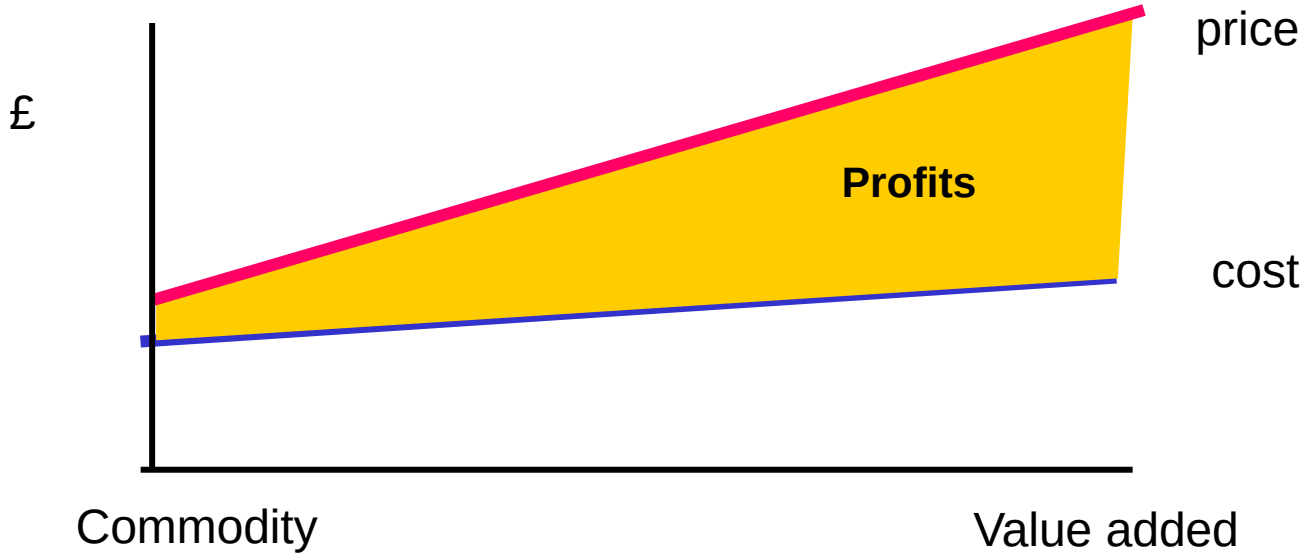
- **How productive is our capital?**
- **Known as "asset turnover"**

What is the return on capital invested in net assets in the business?

Profitability

- Gross Profit Margin
- Operating Profit Margin
- Cost Efficiencies

Value



Add value not cost and thus enhance price and margin

The ultimate value proposition is a ‘soft dollar option’

Benefits

Functional
Examples
Legislative needs
Easy to use
Design
Easy availability
Long life
Credit terms

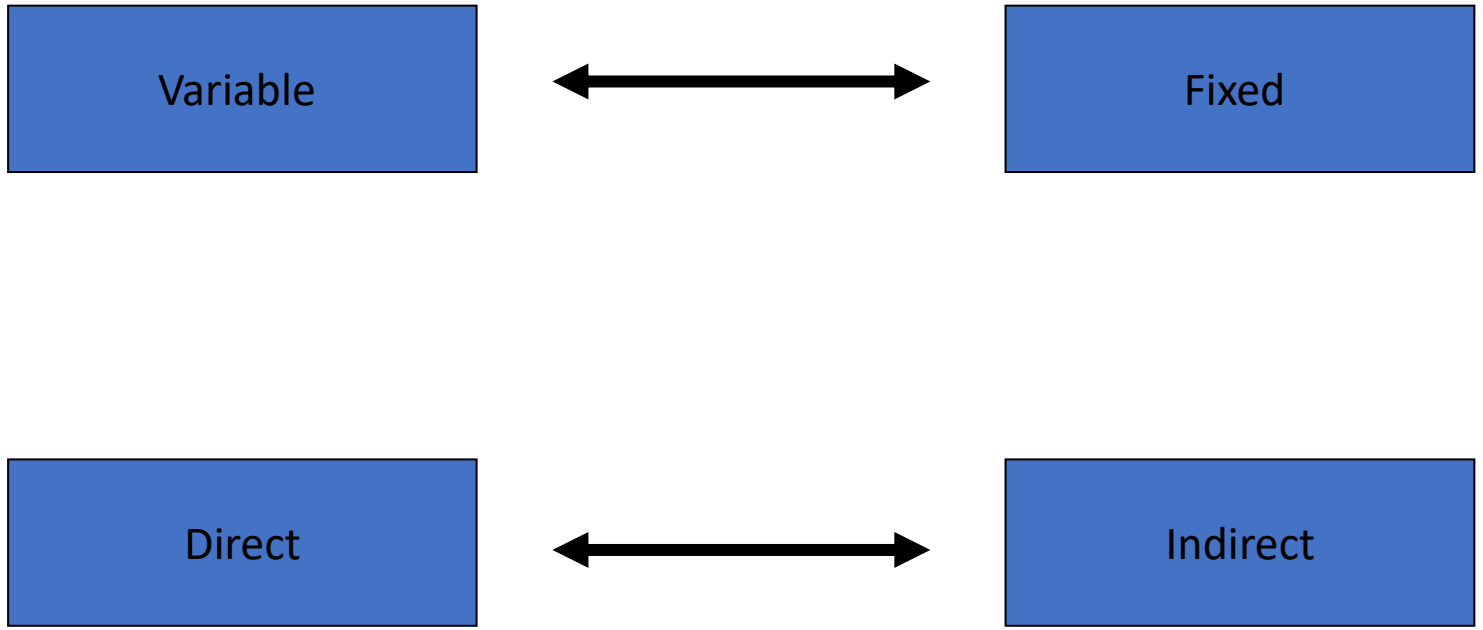
+

Emotional
Examples
Reputable manufacturer
Confidence in quality
Customer acceptability
Easy to obtain
Good for image/reputation
Environmentally acceptable

=

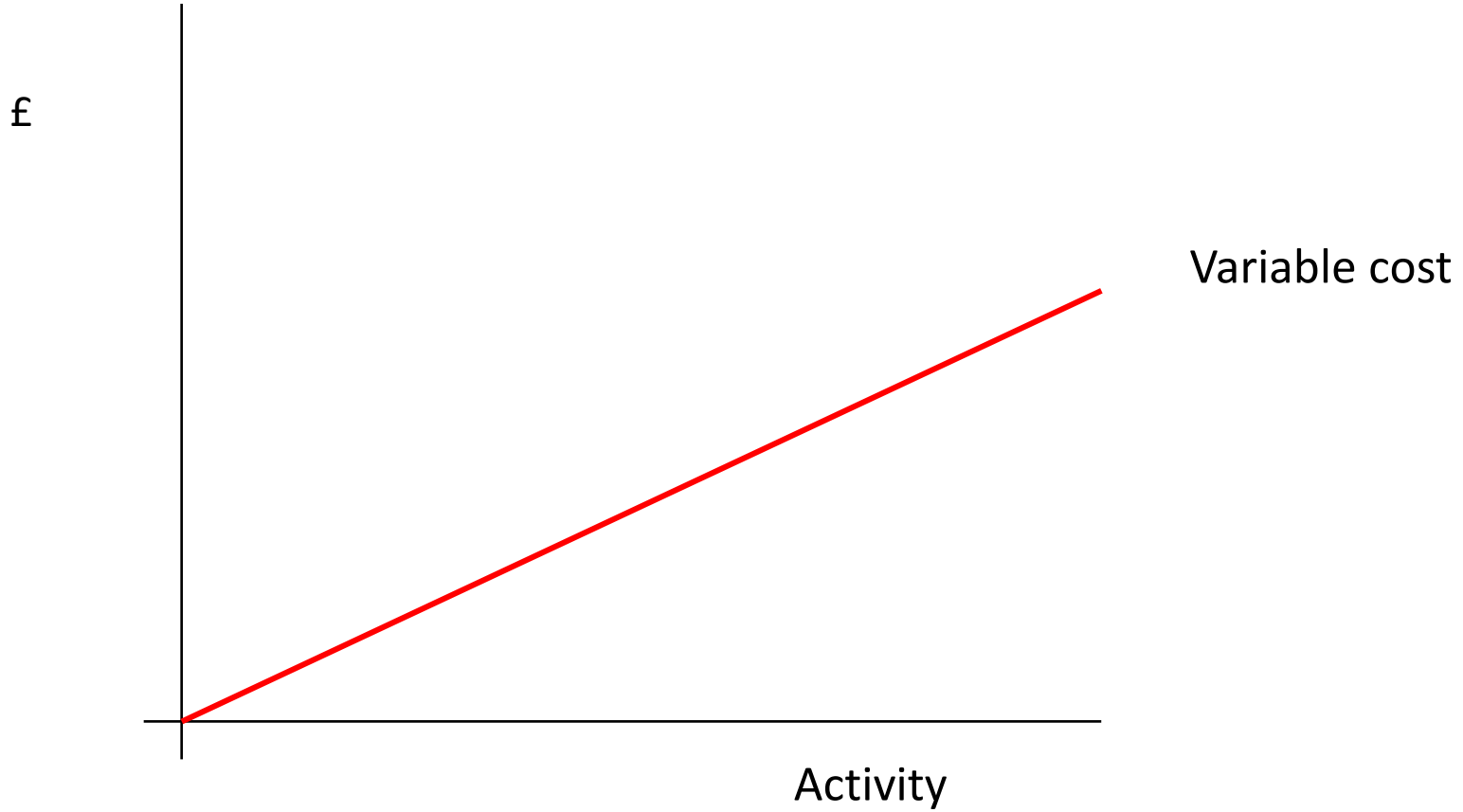
Costs
Examples
Monetary
Time
Energy
Psychic

Cost Terminology



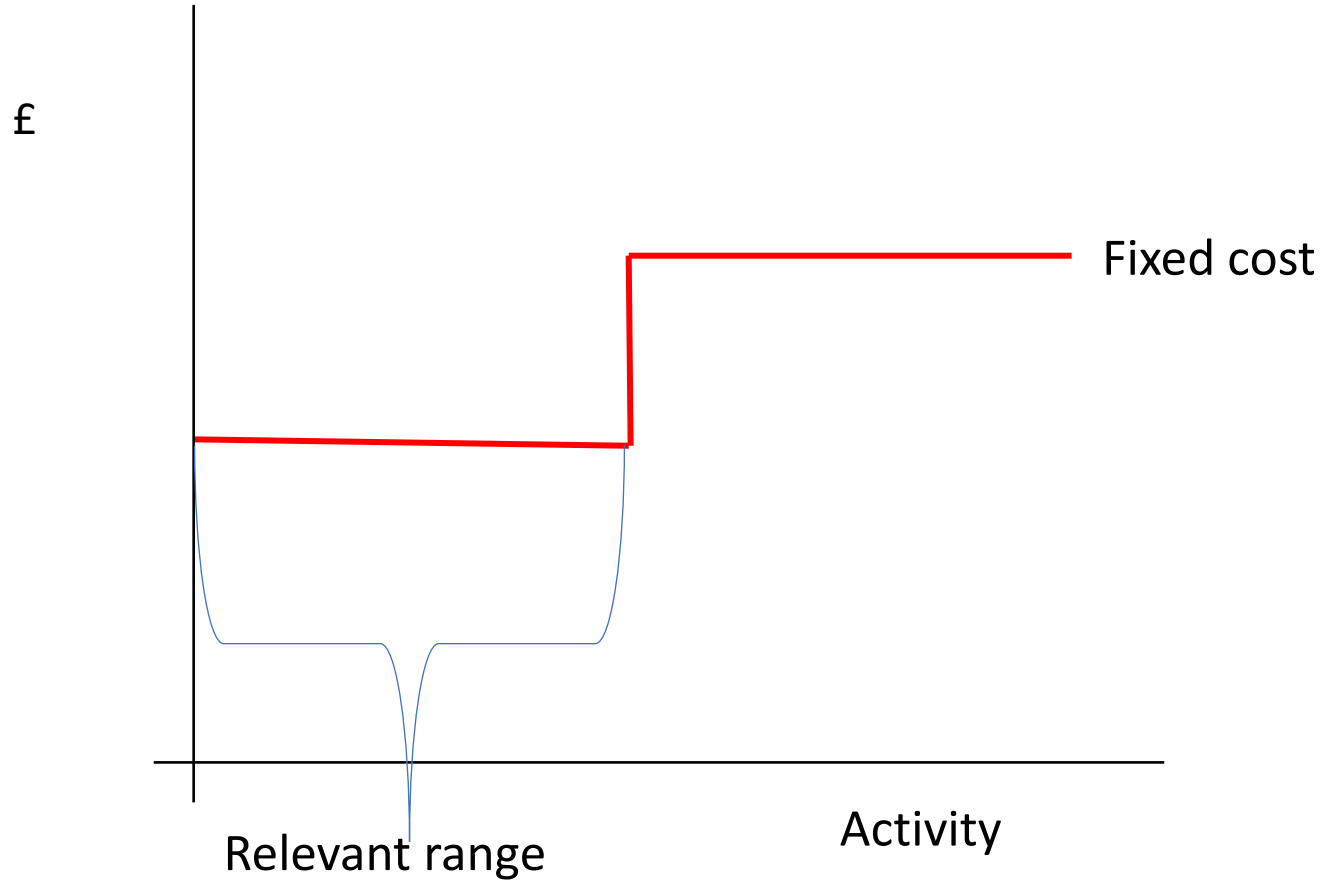
Variable Costs

Vary in direct proportion to the level of activity



Fixed Costs

Stay the same regardless of the level of activity (within a relevant range)



Direct Costs

Cost is directly attributable to a product or service

Indirect Costs

Cost is not directly attributable to a product or service

– sometimes called overhead or S,G&A

Discounts or price reduction

- You offer the following:
  - Revenue (£) 100
  - Cost of Sales (80)
  - Gross Margin 20

- You now offer a 10% discount
  - Revenue (£) 90
  - Cost of Sales (80)
  - Gross margin 10

To recover the lost margin of £10 what volume must you sell?

The Impact of Discounts

Margin	Discount 0%	5%	10%	15%	20%	25%	30%	35%	40%	45%
5%	100									
10%	100	200								
15%	100	150	300							
20%	100	133	200	400						
25%	100	125	167	250	500					
30%	100	120	150	200	300	600				
35%	100	117	140	175	233	350	700			
40%	100	114	133	160	200	267	400	800		
45%	100	113	129	150	180	225	300	450	900	
50%	100	111	125	143	167	200	250	333	500	1000

If a product currently has a margin of 20% and you give 10% discount you effectively need to sell another product to compensate for the lost margin.

Cost Behaviour with volume

	Company A	Company B
Sales	1,000	1,000
Variable Costs	(300)	(700)
Gross Margin	700	300
Fixed Costs	(600)	(200)
Profit	100	100
GM %	70%	30%

Challenge!

Which company would you rather manage ?

- Company A
- Company B

Calculate what profit would be if volumes increased by 25% and then calculate what profit would be if volume decreased by 25%

Volume Up 25%

	Company A	Company B
Revenue	1,250	1,250
Variable costs	(375)	(875)
Gross margin	875	375
Fixed costs	(600)	(200)
Profit	275	175
GM %	70%	30%

Volume Down 25%

	Company A	Company B
Revenue	750	750
Variable costs	(225)	(525)
Gross margin	525	225
Fixed costs	(600)	(200)
Profit	(75)	25
GM %	70%	30%

ROCE – the Primary Ratio

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- **How profitable are sales?**
- **Known as "profit margin"**

- **How productive is our capital?**
- **Known as "asset turnover"**

What is the return on capital invested in net assets in the business?

Productivity

Related to:

1. How efficiently the business uses its fixed assets to drive sales
2. How much money is tied up in working capital:
    - Debtor days
    - Stock days
    - Creditor days

How might you or your customer make a longer term investment decision?

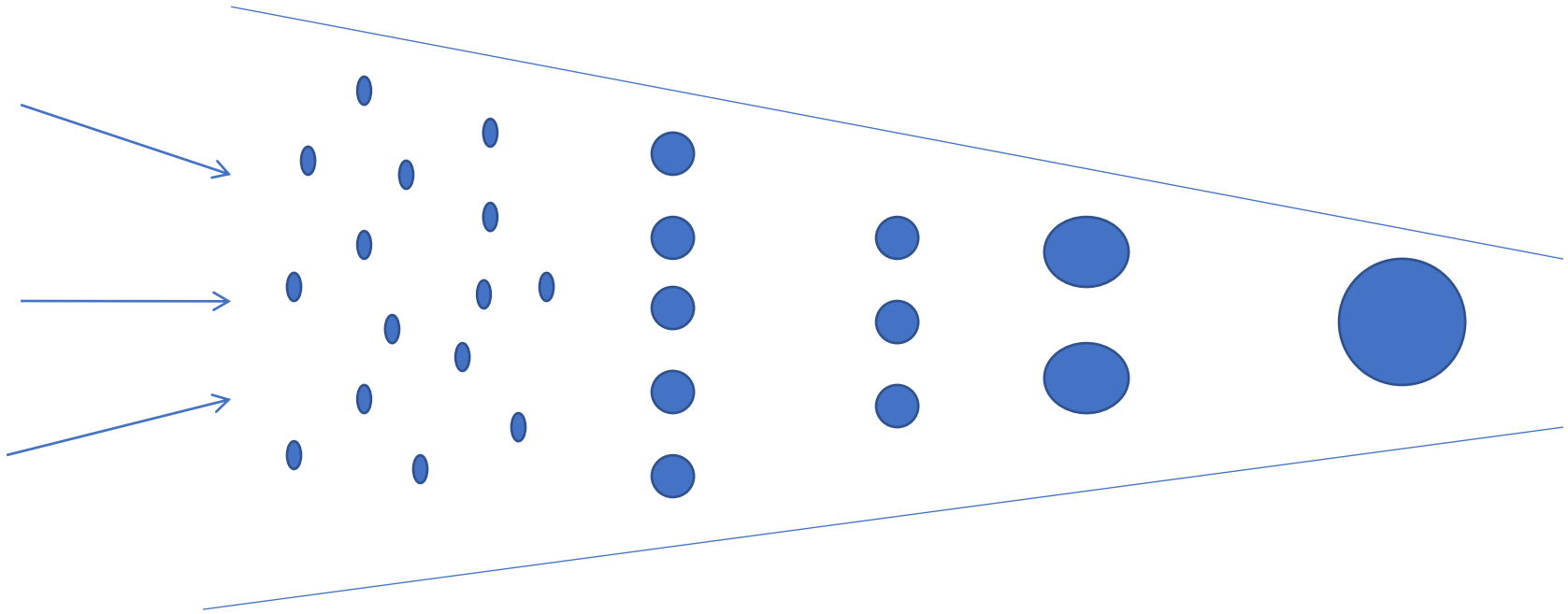
This session focusses on:

1. The decision making process
2. The financials of the decision
3. Risk and decision making

Decision making process

- Define the objective
- Collect relevant information
- Generate feasible options
- Make the decision
- Implement and evaluate

The Lobster pot model



Creative possibilities

Feasible options

Three options

Alternatives

Chosen course of action

What makes a good investment decision?

- Strategic value to the business
- Generates cost savings
- Good return on investment (ROI) relative to risk

What are the main challenges?

- Identifying a range of option
- Anticipating the impact of change
- Forecasting revenues and costs
- Timeframe

What is a "profitable" investment?

	Now	Year 1	Year 2	Year 3
	£'000	£'000	£'000	£'000
Initial outlay - cost	(150)			
Sales revenue		200	250	280
Variable costs		(130)	(170)	(190)
Contribution		70	80	90
Fixed costs		(10)	(15)	(20)
Depreciation		(50)	(50)	(50)
Profit		10	15	20

Base investment decisions on …

Cashflows
(not profit!)

Relevant
… resulting from the decision to invest

Incremental
… the net change resulting from the decision

Whole company
… impact on the company - not just on the business unit

What are the relevant cashflows?

- Rental of kit
- Capital cost of kit
- Service charges for maintenance
- Spare parts
- Other consumables
- Delivery costs for spares/consumables
- Repairs
- Software
- Software support
- Fax costs
- Paper
- Power
- Floor space
- Tax

The main financial measures …

Payback The time taken for the investment to generate cash in excess of the amount invested

NPV **Net Present Value**

What the project's cash flows are worth today given the required rate of return (cost of capital)

IRR **Internal Rate of Return**

The highest interest rate the project can support before making a loss

The rate of return that gives an NPV of zero

A sound investment?

	Now	Year 1	Year 2	Year 3
	£'000	£'000	£'000	£'000
Initial outlay - cost	(150)			
Sales revenue / savings		200	250	280
Variable costs		(130)	(170)	(190)
Contribution		70	80	90

Only include *incremental* cash flows in your calculation!

Payback?

	Now £'000	Year 1 £'000	Year 2 £'000	Year 3 £'000
Initial outlay - cost	(150)			
Sales revenue / savings		200	250	280
Variable costs		(130)	(170)	(190)
Contribution		70	80	90
Cumulative	(150)	(80)	0	

Payback is two years

a sound investment?

	Now	Year 1	Year 2	Year 3
	£'000	£'000	£'000	£'000
Initial outlay - cost	(150)			
Sales revenue / savings		200	250	280
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Time value of money

Would you rather I gave you £100 today or £100 in one year's time?

Compounding and discounting

£100 today is not the same as £100 in a year

To make you wait I would need to offer you what you could get if you invested your money say at 10%

£100 x 1 + 10% ie £100 x 1.1 = £110 – this is compounding

So turning that around if I were to offer you £100 in one year what would I need to offer you today?

100 x 1/1.1 ie 100 x 0.91 = £91

0.91 is the discount factor for 1 year at 10%

a “profitable” investment?

	Now £’000	Year 1 £’000	Year 2 £’000	Year 3 £’000
Initial outlay - cost	(150)			
Sales revenue / savings		200	250	280
Variable costs		(130)	(170)	(190)
Contribution		70	80	90
Discount factor at 10%		0.91	0.826	0.751
Present value @ 10%	(150)	64	66	68

NPV £48k +ve

NPV in summary …

- NPV
  - The value in excess of investors' required return
  - How much it adds to the value of the business
- Steps
  - Forecast cash flows arising from the opportunity
  - Determine appropriate interest rate
  - Calculate NPV
- Decision rule / principle
  - Accept deals with positive NPV
  - Reject deals with a negative NPV

Internal Rate of Return (IRR)

The discount rate which gives a decision an NPV of zero

Discount rate %	PV of cashflows	Initial cost	NPV
0	240	-150	90
10	1,128	-150	48
20	165	-150	15
25	152	-150	-2

This project has an IRR of about 25% so if the cost of capital were 10% it's worth doing

IRR in summary …

- IRR
  - the project's economic return
  - the highest *required* return the deal can support
- Steps
  - forecast cash flows
  - determine NPV at different discount rates
  - estimate IRR
- Decision rule
  - accept deal if IRR > required rate of return
  - reject deal if IRR < required rate of return

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