FINANCE
FOR NON-FINANCIAL MANAGERS

Manjit Biant

PLEASE

TURN ME OFF

OR

SET TO SILENT

- Over to you
  - What is your name and job title
  - What are your main areas of job responsibility?
  - How much involvement do you presently have with finance?
  - What kind of financial reports do you see in your work?
  - How will a greater knowledge of finance help you in your work?
  - Which topics would you particularly like to cover?
  - Do you have any specific concerns about the course?

Introduction

Introduction

- Key course topics
  - Understanding Financial Statements
  - Managing Working Capital for strong cashflow
  - Gross margin and pricing for profit
  - Measuring performance
  - Investment appraisal
  - Budgeting

Understanding Financial Statements

Understanding Financial Statements

Sells kitchens imported from Scandinavia

- Floated on the Alternative Investment Market 2001
- Sales of £34m and 120 UK employees
- Who might be interested in Skanda's performance?
- Why might they be interested?

Skanda Kitchens PLC

Understanding Financial Statements

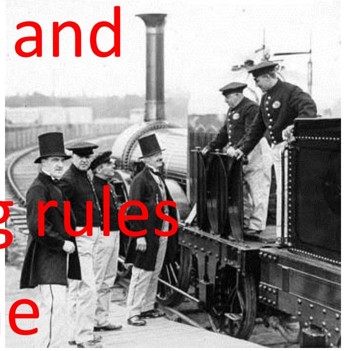
- Who might be interested?
  - Shareholders and prospective shareholders
  - Company's directors and managers
  - Banks
  - Suppliers and prospective suppliers
  - Customers and prospective customers
  - Employees and prospective employees

Understanding Financial Statements

- Why might they be interested?
  - Check investment is safe and performing well
  - Check company performance and their own
  - Check company is good credit risk
  - Check company can and will pay on time
  - Check company can deliver
  - Check long term career prospects

Understanding Financial Statements

- Development of financial statements
  - Joint stock companies proliferated after industrial revolution
  - Financial statements became more widely used
  - 19th century saw accounting scandals and investor frauds
  - Companies Acts set out first reporting rules
  - Fundamental concepts much the same today



Understanding Financial Statements

- Fundamental requirement
  - Show "true and fair view"
  - Prepared in accordance with:
    - Generally Accepted Accounting Principles
    - Financial Reporting Standards
    - Standard Statement of Accounting Practice

Understanding Financial Statements

- Four basic accounting concepts
  - Going concern concept
  - Accruals concept
  - Consistency concept
  - Prudence concept

Understanding Financial Statements

- Various accounting policies
  - Sales income recognition
  - Depreciation of fixed assets
  - Stocks and work in progress
  - Research and development

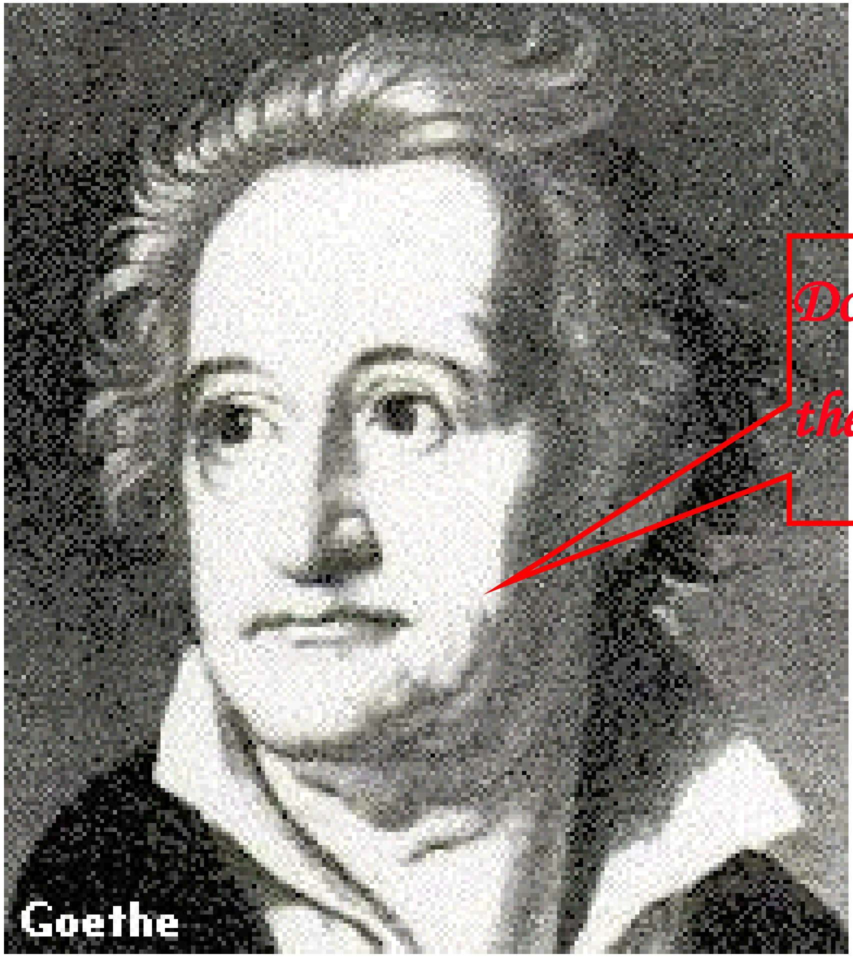
Understanding Financial Statements

'under the bonnet' they all use a well established approach to accounting

Understanding Financial Statements

- Double entry bookkeeping
  - Each transaction shown by two entries
  - Two simple rules apply:
  - DEBIT the account of the RECEIVER of value
  - CREDIT the account of the GIVER of value

Understanding Financial Statements



Double entry bookkeeping:

the finest invention of the human mind

Understanding Financial Statements

Understanding Financial Statements

- Types of accounting entry
  - Capital and revenue
  - Cash and non-cash

Understanding Financial Statements

Accounting entries to 31-3-07	Balance	Transaction 1	New Balance
Racking & equipment			
Bank account		£400,000	£400,000
Stock			
Debtors			
Prepayments			
Creditors			
Accruals			
Share capital		(£400,000)	(£400,000)
Sales			
Cost of sales			
Distribution costs			
Salaries			
Rent			
Marketing costs			
Other overhead			
Depreciation			
Check total	£0	£0	£0

Understanding Financial Statements

Accounting entries to 31-3-07	Balance	Transaction 2	New Balance
Racking & equipment			
Bank account	£400,000	(£30,000)	£370,000
Stock			
Debtors			
Prepayments		£15,000	£15,000
Creditors			
Accruals			
Share capital	(£400,000)		(£400,000)
Sales			
Cost of sales			
Distribution costs			
Salaries			
Rent		£15,000	£15,000
Marketing costs			
Other overhead			
Depreciation			
Check total	£0	£0	£0

Understanding Financial Statements

Accounting entries to 31-3-07	Balance	Transaction 3	New Balance
Racking & equipment		£40,000	£40,000
Bank account	£370,000	(£40,000)	£330,000
Stock			
Debtors			
Prepayments	£15,000		£15,000
Creditors			
Accruals			
Share capital	(£400,000)		(£400,000)
Sales			
Cost of sales			
Distribution costs			
Salaries			
Rent	£15,000		£15,000
Marketing costs			
Other overhead			
Depreciation			
Check total	£0	£0	£0

Understanding Financial Statements

Accounting entries to 31-3-07	Balance	Transaction 4	New Balance
Racking & equipment	£40,000		£40,000
Bank account	£330,000	(£20,000)	£310,000
Stock			
Debtors			
Prepayments	£15,000		£15,000
Creditors			
Accruals			
Share capital	(£400,000)		(£400,000)
Sales			
Cost of sales			
Distribution costs			
Salaries		£20,000	£20,000
Rent	£15,000		£15,000
Marketing costs			
Other overhead			
Depreciation			
Check total	£0	£0	£0

Understanding Financial Statements

Accounting entries to 31-3-07	Balance	Transaction 4	New Balance
Racking & equipment	£40,000		£40,000
Bank account	£310,000	(£18,000)	£292,000
Stock			
Debtors			
Prepayments	£15,000		£15,000
Creditors			
Accruals			
Share capital	(£400,000)		(£400,000)
Sales			
Cost of sales			
Distribution costs			
Salaries	£20,000		£20,000
Rent	£15,000		£15,000
Marketing costs			
Other overhead		£18,000	£18,000
Depreciation			
Check total	£0	£0	£0

Understanding Financial Statements

Accounting entries to 31-3-07	Balance	Transaction 5	New Balance
Racking & equipment	£40,000		£40,000
Bank account	£292,000	(£200,000)	£92,000
Stock		£200,000	£200,000
Debtors			
Prepayments	£15,000		£15,000
Creditors			
Accruals			
Share capital	(£400,000)		(£400,000)
Sales			
Cost of sales			
Distribution costs			
Salaries	£20,000		£20,000
Rent	£15,000		£15,000
Marketing costs			
Other overhead	£18,000		£18,000
Depreciation			
Check total	£0	£0	£0

Understanding Financial Statements

Accounting entries to 31-3-07	Balance	Transaction 6	New Balance
Racking & equipment	£40,000		£40,000
Bank account	£92,000		£92,000
Stock	£200,000	£75,000	£275,000
Debtors			
Prepayments	£15,000		£15,000
Creditors		(£75,000)	(£75,000)
Accruals			
Share capital	(£400,000)		(£400,000)
Sales			
Cost of sales			
Distribution costs			
Salaries	£20,000		£20,000
Rent	£15,000		£15,000
Marketing costs			
Other overhead	£18,000		£18,000
Depreciation			
Check total	£0	£0	£0

Understanding Financial Statements

Accounting entries to 31-3-07	Balance	Transaction 7	New Balance
Racking & equipment	£40,000		£40,000
Bank account	£92,000		£92,000
Stock	£275,000	(£147,000)	£128,000
Debtors			
Prepayments	£15,000		£15,000
Creditors	(£75,000)		(£75,000)
Accruals			
Share capital	(£400,000)		(£400,000)
Sales			
Cost of sales		£147,000	£147,000
Distribution costs			
Salaries	£20,000		£20,000
Rent	£15,000		£15,000
Marketing costs			
Other overhead	£18,000		£18,000
Depreciation			
Check total	£0	£0	£0

Understanding Financial Statements

Accounting entries to 31-3-07	Balance	Transaction 7	New Balance
Racking & equipment	£40,000		£40,000
Bank account	£92,000	(£14,000)	£78,000
Stock	£128,000		£128,000
Debtors			
Prepayments	£15,000		£15,000
Creditors	(£75,000)		(£75,000)
Accruals			
Share capital	(£400,000)		(£400,000)
Sales			
Cost of sales	£147,000		£147,000
Distribution costs		£14,000	£14,000
Salaries	£20,000		£20,000
Rent	£15,000		£15,000
Marketing costs			
Other overhead	£18,000		£18,000
Depreciation			
Check total	£0	£0	£0

Understanding Financial Statements

Accounting entries to 31-3-07	Balance	Transaction 7	New Balance
Racking & equipment	£40,000		£40,000
Bank account	£78,000		£78,000
Stock	£128,000		£128,000
Debtors		£245,000	£245,000
Prepayments	£15,000		£15,000
Creditors	(£75,000)		(£75,000)
Accruals			
Share capital	(£400,000)		(£400,000)
Sales		(£245,000)	(£245,000)
Cost of sales	£147,000		£147,000
Distribution costs	£14,000		£14,000
Salaries	£20,000		£20,000
Rent	£15,000		£15,000
Marketing costs			
Other overhead	£18,000		£18,000
Depreciation			
Check total	£0	£0	£0

Understanding Financial Statements

Accounting entries to 31-3-07	Balance	Transaction 8	New Balance
Racking & equipment	£40,000		£40,000
Bank account	£78,000		£78,000
Stock	£128,000		£128,000
Debtors	£245,000		£245,000
Prepayments	£15,000		£15,000
Creditors	(£75,000)		(£75,000)
Accruals		(£17,000)	(£17,000)
Share capital	(£400,000)		(£400,000)
Sales	(£245,000)		(£245,000)
Cost of sales	£147,000		£147,000
Distribution costs	£14,000		£14,000
Salaries	£20,000		£20,000
Rent	£15,000		£15,000
Marketing costs		£17,000	£17,000
Other overhead	£18,000		£18,000
Depreciation			
Check total	£0	£0	£0

Understanding Financial Statements

Accounting entries to 31-3-07	Balance	Transaction 9	New Balance
Racking & equipment	£40,000	(£2,000)	£38,000
Bank account	£78,000		£78,000
Stock	£128,000		£128,000
Debtors	£245,000		£245,000
Prepayments	£15,000		£15,000
Creditors	(£75,000)		(£75,000)
Accruals	(£17,000)		(£17,000)
Share capital	(£400,000)		(£400,000)
Sales	(£245,000)		(£245,000)
Cost of sales	£147,000		£147,000
Distribution costs	£14,000		£14,000
Salaries	£20,000		£20,000
Rent	£15,000		£15,000
Marketing costs	£17,000		£17,000
Other overhead	£18,000		£18,000
Depreciation		£2,000	£2,000
Check total	£0	£0	£0

Understanding Financial Statements

The Mega Toy Company Limited	Trial Balance at 31-3-07
Racking & equipment	£38,000
Bank account	£78,000
Stock	£128,000
Debtors	£245,000
Prepayments	£15,000
Creditors	(£75,000)
Accruals	(£17,000)
Share capital	(£400,000)
Sales	(£245,000)
Cost of sales	£147,000
Distribution costs	£14,000
Salaries	£20,000
Rent	£15,000
Marketing costs	£17,000
Other overhead	£18,000
Depreciation	£2,000
Check total	£0

Understanding Financial Statements

Balance sheet

Understanding Financial Statements

UK versus US financial terms

There are some differences in terms used

The course manual shows some examples

We will be using UK terminology

Understanding Financial Statements

- Balance sheet
  - A snapshot of the company's financial position
  - As at the balance sheet date
- What does the balance sheet show?
  - What the company owns = **assets**
  - What the company owes = **liabilities**
  - How these are financed = **capital employed**

Understanding Financial Statements

- The accounting equation

  Assets minus liabilities = capital

Understanding Financial Statements

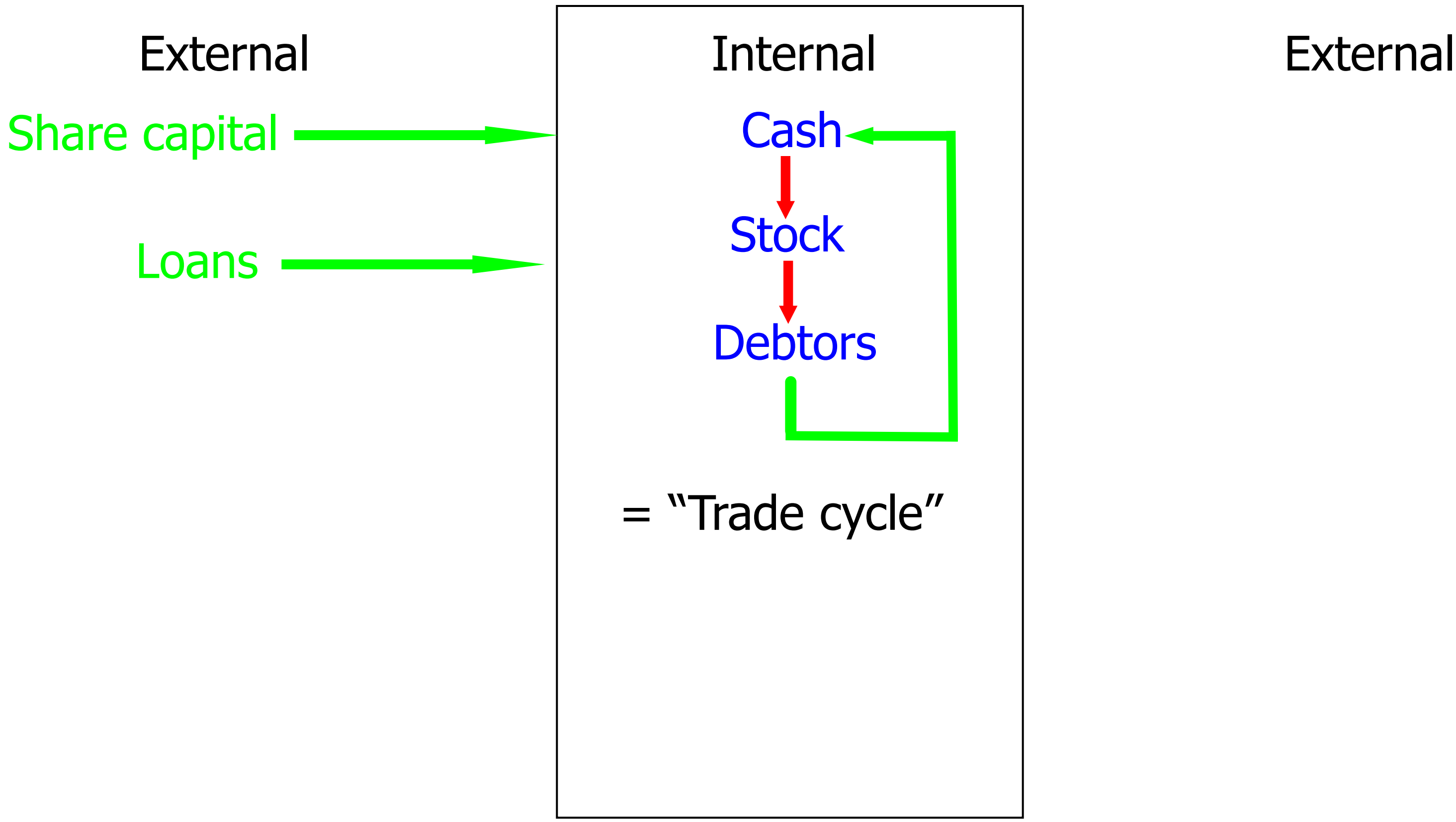
- The Mega Toy Company Limited
  Balance sheet at 31st March 2007

- Racking & equipment at cost £ 40,000
- Less depreciation £ 2,000
- Fixed assets at net book value £ 38,000

- Cash £ 78,000
- Stock £128,000
- Debtors £245,000

Understanding Financial Statements

Business funds flow



Understanding Financial Statements

- The Mega Toy Company Limited Balance sheet at 31st March 2007

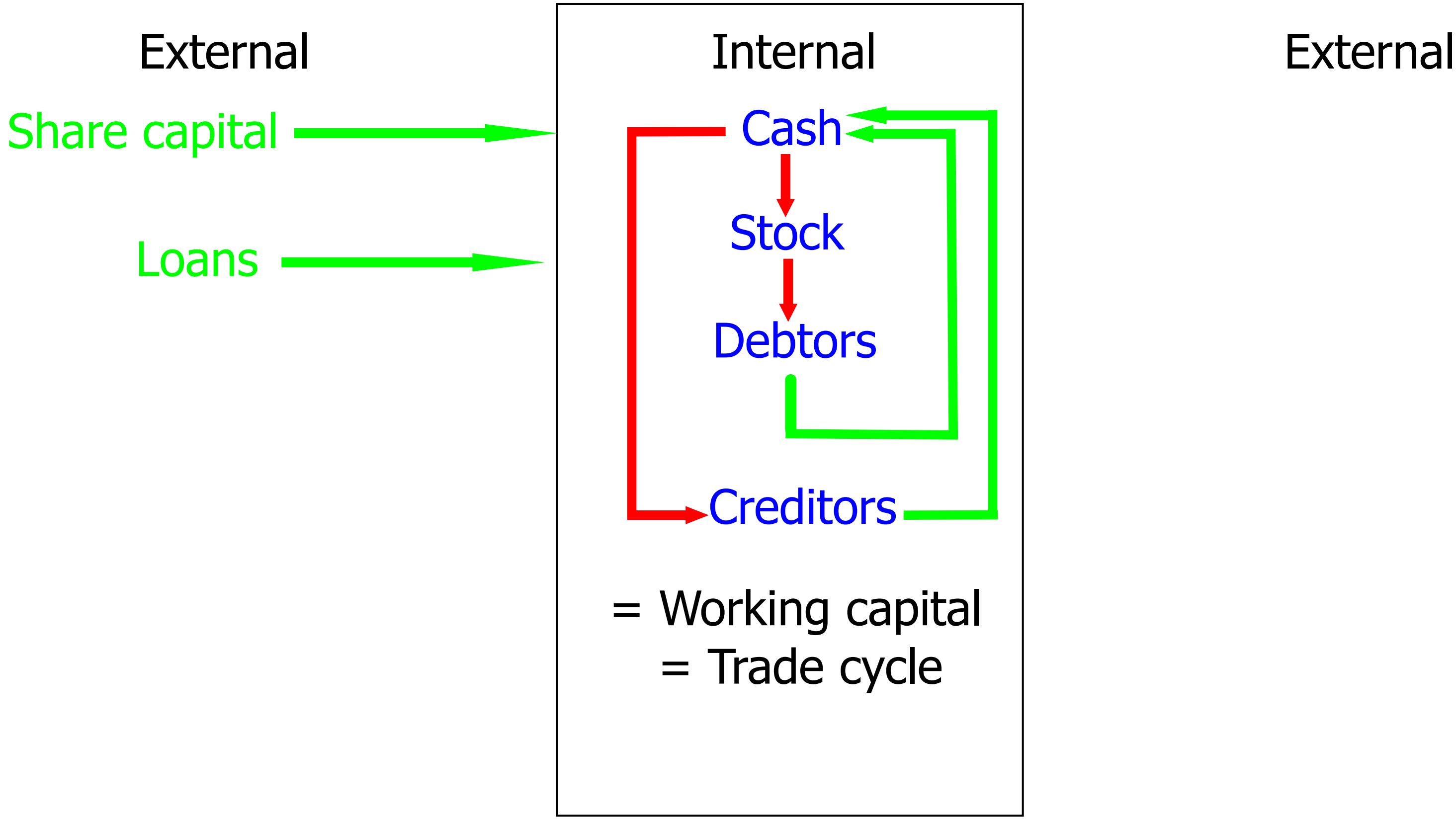
- Racking & equipment at cost £ 40,000
- Less depreciation £ 2,000
- Fixed assets at net book value £ 38,000

- Cash £ 78,000
- Stock £128,000
- Debtors £245,000
- Prepayments £ 15,000
- Current assets £466,000

- Creditors £ 75,000
- Accruals £ 17,000
- Current liabilities £ 92,000

Understanding Financial Statements

Business funds flow



Understanding Financial Statements

- The Mega Toy Company Limited — Balance sheet at 31st March 2007

Racking & equipment at cost	£ 40,000	
Less depreciation	£ 2,000	
Fixed assets at net book value		£ 38,000
Cash		£ 78,000
Stock		£128,000
Debtors		£245,000
Prepayments	£ 15,000	
Current assets	£466,000	
Creditors		£ 75,000
Accruals		£ 17,000
Current liabilities	£ 92,000	
Net current assets		£374,000
NET ASSETS		£412,000
Represented by		
Share capital	£400,000	

Understanding Financial Statements

The Mega Toy Company Limited — Trial Balance at 31-3-07

Racking & equipment	£38,000
Bank account	£78,000
Stock	£128,000
Debtors	£245,000
Prepayments	£15,000
Creditors	(£75,000)
Accruals	(£17,000)
Share capital	(£400,000)
Sales	(£245,000)
Cost of sales	£147,000
Distribution costs	£14,000
Salaries	£20,000
Rent	£15,000
Marketing costs	£17,000
Other overhead	£18,000
Depreciation	£2,000

Check total £0

Understanding Financial Statements

The Mega Toy Company Limited	Balance sheet at 31st March 2007	
Racking & equipment at cost	£ 40,000	
Less depreciation	£ 2,000	
Fixed assets at net book value		£ 38,000
Cash		£ 78,000
Stock		£128,000
Debtors	£245,000	
Prepayments	£ 15,000	
Current assets	£466,000	
Creditors		£ 75,000
Accruals	£ 17,000	
Current liabilities	£ 92,000	
Net current assets		£374,000
NET ASSETS		£412,000
Represented by		
Share capital	£400,000	
Profit for the period	£ 12,000	
		£412,000

Understanding Financial Statements

- Balance sheet shows
  - What the company owns = assets
  - What the company owes = liabilities
  - How these are financed = capital employed
- But does it tell us what the company is worth?

Understanding Financial Statements

SAPPHIRE

SOFTWARE

Understanding Financial Statements

SAPPHIRE SOFTWARE LIMITED

BALANCE SHEET AS AT 31ST DECEMBER 2009

Fixed assets at cost	£120,000	
Accumulated depreciation	£(75,000)	
Fixed assets at net book value		£45,000
Current assets		
Cash	£2,000	
Debtors	£8,000	
	£10,000	
Current liabilities		
Creditors	£7,000	
Net current assets		£3,000
NET ASSETS		£48,000
Represented by		
Share capital		£40,000
Retained profits		£8,000
CAPITAL EMPLOYED		£48,000

Understanding Financial Statements

- Valuable items not usually in the balance sheet
  - Customer lists and goodwill in the business
  - Future earning capability of the business
  - Management talent and workforce skills
  - Good industrial relations
  - Real economic value of fixed assets
  - Brands, logos and trademarks built up in the business
  - Copyrights and patents built up in the business

Understanding Financial Statements

- Accounting policies give a subjective view
  - Stock
  - Long term contracts
  - Research and development costs
  - Valuation of intangible assets
  - Depreciation

Understanding Financial Statements

Profit and loss account

Understanding Financial Statements

- What is the profit and loss account?
  - Technically part of the capital section of balance sheet
  - A statement of trading performance for the period

Understanding Financial Statements

- What does the profit and loss account show?
  - Sales
  - Cost of goods and services sold
  - Gross profit
  - Other costs of running the business
  - Profit

Understanding Financial Statements

The Mega Toy Company Limited — Trial Balance at 31-3-07

BALANCE SHEET

Racking & equipment	£38,000
Bank account	£78,000
Stock	£128,000
Debtors	£245,000
Prepayments	£15,000
Creditors	(£75,000)
Accruals	(£17,000)
Share capital	(£400,000)

PROFIT & LOSS ACCOUNT

Sales	(£245,000)
Cost of sales	£147,000
Distribution costs	£14,000
Salaries	£20,000
Rent	£15,000
Marketing costs	£17,000
Other overhead	£18,000
Depreciation	£2,000

Check total	£0

Understanding Financial Statements

- The Mega Toy Company Limited Profit & loss account to 31st March 2007

- Sales £245,000
- Cost of sales £147,000
- Gross profit £ 98,000

- Distribution costs £ 14,000
- Salaries £ 20,000
- Rent £ 15,000
- Marketing costs £ 17,000
- Other overhead costs £ 18,000
- Depreciation £ 2,000
- Administrative expenses £ 86,000

- Profit before tax £ 12,000

Understanding Financial Statements

Cashflow statement

Understanding Financial Statements

- In the good old days before the recession
  - Around 18,000 UK businesses failed every year
  - Research shows that many were profitable
  - So why do profitable businesses fail?

Understanding Financial Statements

- Why do profitable businesses fail?
  - Many businesses focus on sales and profit
  - Profit is not the same thing as cashflow
  - Many businesses have poor cashflow information
  - No easy access to additional funds
  - Lack of cash causes profitable businesses to fail

Understanding Financial Statements

- The golden rule

  Cashflow is the lifeblood of the business

Understanding Financial Statements

- Vital difference between profit and cashflow
- What is profit?
  - Profit (or loss) arises from trading activity
  - Calculated in accordance with accounting rules

Understanding Financial Statements

- Vital difference between profit and cashflow
- What is profit?
  - Profit (or loss) arises from trading activity
  - Calculated in accordance with accounting rules
  - Profit = net sales income earned

    minus

    trading costs incurred
  - Profit is a matter of opinion

Understanding Financial Statements

- Vital difference between profit and cashflow
- What is cashflow?
  - Cash actually flowing in and out of the business
  - Cashflow is a matter of FACT
  - The biggest mistake any business can make is to assume that profit is an indicator of strength & health
  - Lose control of cashflow and you lose control of the business

Understanding Financial Statements

- Vital difference between profit and cashflow
  - Profit for the period is £12,000
  - Cashflow for the period is £78,000

  - But why are they different?

Understanding Financial Statements

THE MEGA TOY COMPANY

JANUARY - MARCH 2007 TRANSACTIONS : EFFECT ON PROFIT AND CASHFLOW

	Effect on cash		Effect on profit	
	+	-	+	-
1. Shares issued for £400,000 cash to the business partners	£400,000			
2. The company paid £30,000 for six months rent				
3. Racking and equipment bought for £40,000				
4. Salaries of £20,000 paid				
4. Other overheads of £18,000 paid				
5. Cash paid for stock worth £200,000				
6. Stock worth £75,000 bought on credit with 30 days to pay				
7. Sale of toys from stock costing £147,000				
7. Freight costs paid by cheque				
7. Toys sold and invoiced for £245,000 on 60 day terms				
8. Company incurred £17,000 for the toy fair but has not been invoiced				
9. Racking and equipment depreciation charge of £2,000 for first three months				
TOTALS				
NET CASHFLOW / NET PROFIT				

Understanding Financial Statements

- Profit includes
  - Non cash items like depreciation
  - Sales invoiced but not paid for by customer
  - Costs incurred but not paid for

Understanding Financial Statements

- Profit includes
  - Non cash items like depreciation
  - Sales invoiced but not paid for by customer
  - Costs incurred but not paid for
- Profit does not include
  - Stock bought but not sold
  - Prepaid costs
  - Funds received from share issues or loans
  - Fixed assets purchased

Understanding Financial Statements

- Cashflow statement
  - Is a bridge between profit and loss account and balance sheet
- What does the cashflow statement show?
  - Where funds have come from
  - How funds have been applied in the business
  - Cashflow in the period

Understanding Financial Statements

- The Mega Toy Company Limited Profit & loss account to 31st March 2007

Sales		£245,000
Cost of sales	£147,000	
Gross profit	£ 98,000	
Distribution costs		£ 14,000
Salaries		£ 20,000
Rent		£ 15,000
Marketing costs	£ 17,000	
Other overhead costs		£ 18,000
Depreciation	£ 2,000	
Administrative expenses	£ 86,000	
Profit before tax		£ 12,000

Understanding Financial Statements

- The Mega Toy Company Limited Cashflow statement to 31st March 2007
- Profit £ 12,000
- Add back non-cash items: depreciation £ 2,000
- Funds generated from operations £ 14,000
- Proceeds from share issue £400,000
- Source of funds £414,000
- Increase in stock

Understanding Financial Statements

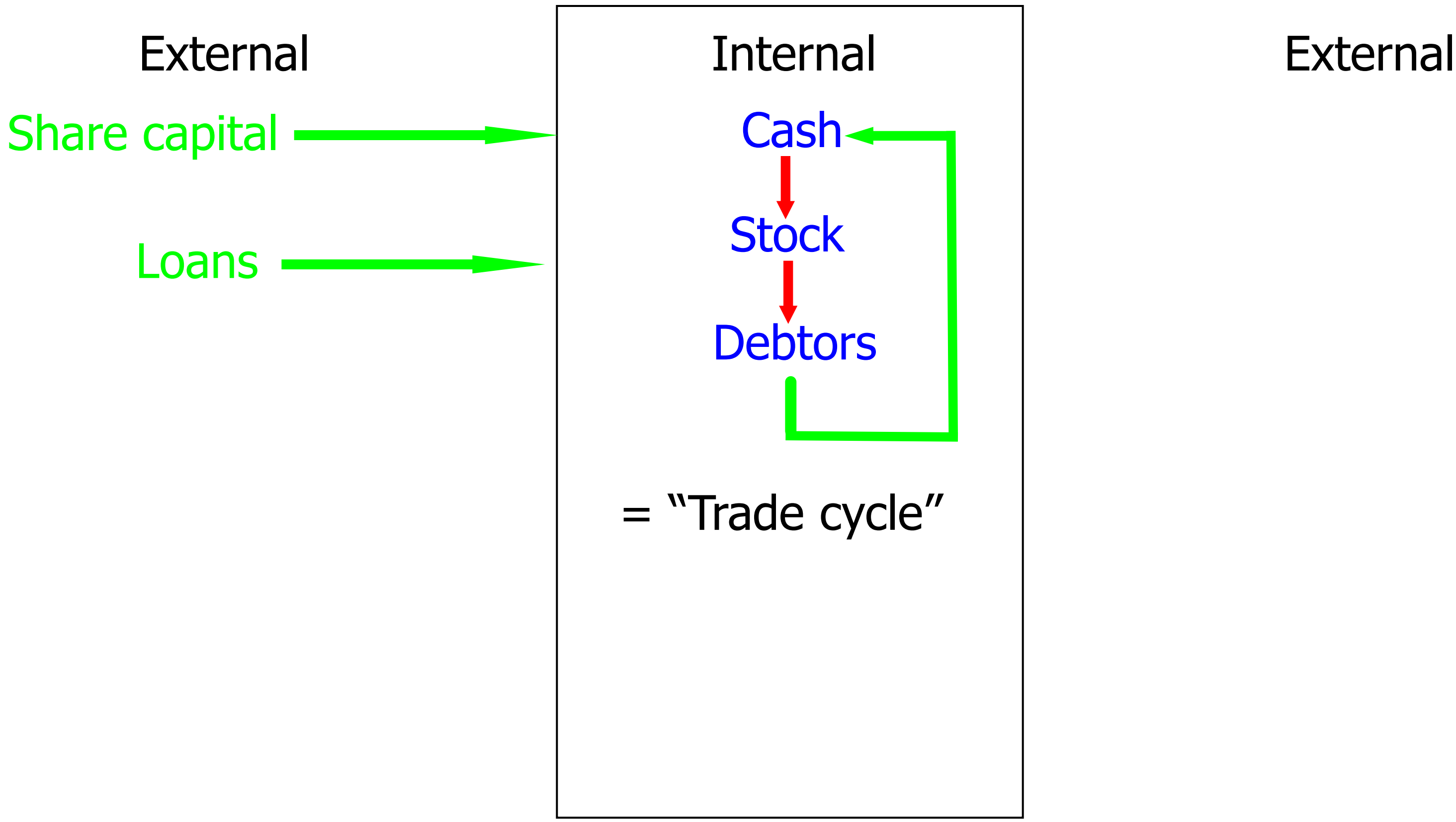
The Mega Toy Company Limited	Balance sheet at 31st March 2007		
Racking & equipment at cost	£ 40,000		
Less depreciation	£ 2,000		
Fixed assets at net book value		£ 38,000	
Cash		£ 78,000	
Stock		£128,000	
Debtors	£245,000		
Prepayments	£ 15,000		
Current assets	£466,000		
Creditors		£ 75,000	
Accruals	£ 17,000		
Current liabilities	£ 92,000		
Net current assets		£374,000	
NET ASSETS		£412,000	
Represented by			
Share capital	£400,000		
Profit for the period	£ 12,000		
			£412,000

Understanding Financial Statements

- The Mega Toy Company Limited Cashflow statement to 31st March 2007
- Profit £ 12,000
- Add back non-cash items: depreciation £ 2,000
- Funds generated from operations £ 14,000
- Proceeds from share issue £400,000
- Source of funds £414,000
- Increase in stock £(128,000)
- Increase in debtors £(245,000)

Understanding Financial Statements

Business funds flow



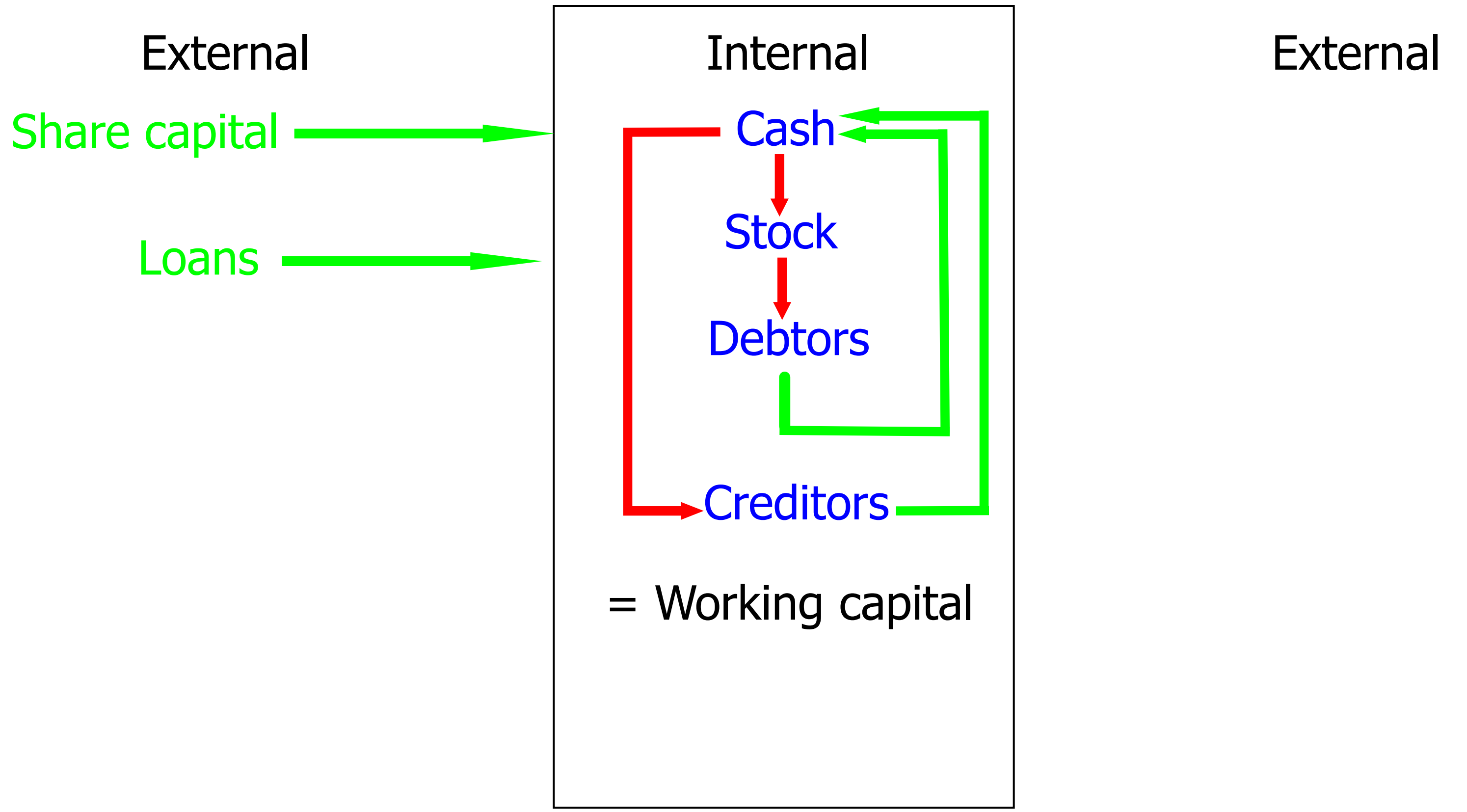
Understanding Financial Statements

- The Mega Toy Company Limited Cashflow statement to 31st March 2007

Profit	£ 12,000
Add back non-cash items: depreciation	£ 2,000
Funds generated from operations	£ 14,000
Proceeds from share issue	£400,000
Source of funds	£414,000
Increase in stock	£(128,000)
Increase in debtors	£(245,000)
Increase in prepayments	£(15,000)
Increase in creditors	£ 75,000
Increase in accruals	£ 17,000
Increase in net working capital	£(296,000)

Understanding Financial Statements

Business funds flow



Understanding Financial Statements

- The Mega Toy Company Limited   Cashflow statement to 31st March 2007

- Profit   £ 12,000
- Add back non-cash items: depreciation   £ 2,000
- Funds generated from operations   £ 14,000

- Proceeds from share issue   £400,000
- Source of funds   £414,000

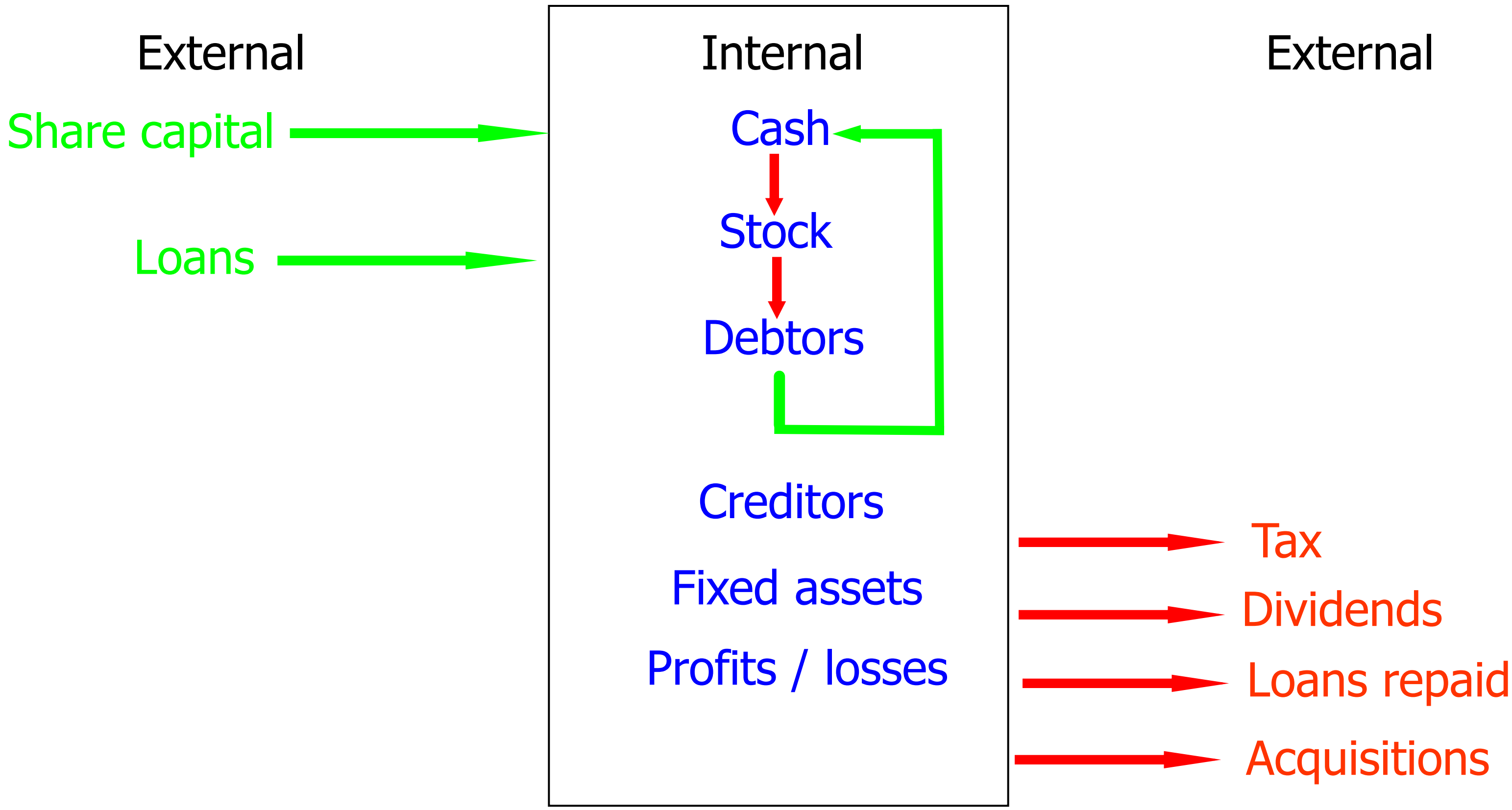
- Increase in stock   £(128,000)
- Increase in debtors   £(245,000)
- Increase in prepayments   £(15,000)
- Increase in creditors   £ 75,000
- Increase in accruals   £ 17,000
- Increase in net working capital   £(296,000)

- Fixed assets purchased   £(40,000)
- Application of funds   £(336,000)

- CASHFLOW   £ 78,000

Understanding Financial Statements

Business funds flow



Understanding Financial Statements

- Cashflow is the lifeblood of the business
  - Weak cashflow causes many business failures
  - Cashflow drives business growth
  - Without strong cashflow business slows and dies

Understanding Financial Statements

- Two ways to improve cashflow

  1. Inject additional funds

     - Debt
     - Equity

  2. Unlock the funds tied up in the business

Understanding Financial Statements

- Inject additional funds
  - Debt
    - Loans and overdrafts from banks and others
    - No dilution of ownership or control of the company
    - Overdrafts provide flexible funding
    - Not easy to get in current climate
    - Can be expensive
    - Must be repaid regardless of conditions
    - Loan covenants may restrict business activities
    - Overdrafts repayable on demand

Understanding Financial Statements

- Inject additional funds
  - Debt
  - Equity
    - Share capital from existing or new investors
    - Usually less expensive than debt
    - Dividends only paid when profit and cas
    - Not always easy to find investors
    - Can mean significant dilution of owners
    - Significant loss of control of business

Understanding Financial Statements

- Unlock the funds tied up in the business
  - Fixed assets
    - Operating leases
    - Asset backed loans
  - Working capital

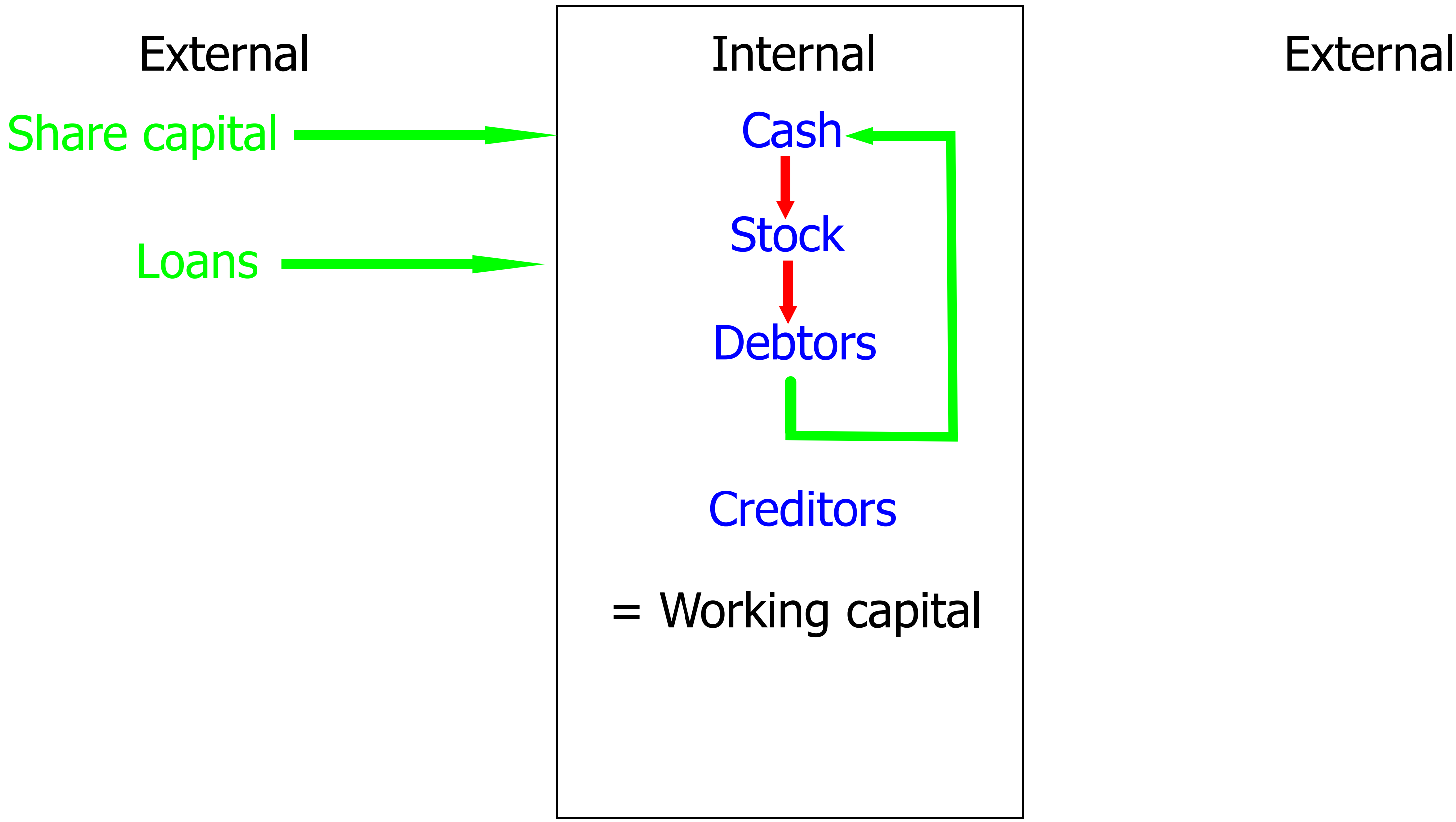
Managing Working Capital

Managing Working Capital

- What is working capital?
  - The “circulating capital” of the business

Managing Working Capital

Business funds flow



Managing Working Capital

- What is working capital?
  - The “circulating capital” of the business
  - Shown in balance sheet as “net current assets”
  - Net current assets = current assets
    minus
    current liabilities

Managing Working Capital

Managing Working Capital

KOSI-KNIT SWEATERS — BALANCE SHEET AS AT 31st DECEMBER

		2007		2006
Fixed assets		£86,000		£121,000
Cash	£25,000		£153,000	
Stock	£680,000		£544,000	
Debtors	£1,001,000		£833,000	
Current assets	£1,706,000		£1,530,000	
Creditors	£341,000		£398,000	
VAT & tax creditor	£75,000		£62,000	
Current liabilities	£416,000		£460,000	
Net current assets		£1,290,000		£1,070,000
NET ASSETS		£1,376,000		£1,191,000
Represented by:				
Share capital		£750,000		£750,000
Retained profits		£441,000		£410,000
Current year profit		£185,000		£31,000
		£1,376,000		£1,191,000

Managing Working Capital

- Kosi-Knit Sweaters Limited Cashflow statement to 31st March 2007
- Profit £ 185,000
- Add back non-cash items: depreciation £ 35,000
- Funds generated from operations £ 220,000
- Source of funds £ 220,000
- Increase in stock £544,000 to £ 680,000 £(136,000)

Managing Working Capital

- Why hold stock?
  - Holding stock is expensive
  - But "stock-outs" also incur costs
  - Holding stock is a trade off

Managing Working Capital

- Kosi-Knit Sweaters Limited Cashflow statement to 31st March 2007
- Profit £ 185,000
- Add back non-cash items: depreciation £ 35,000
- Funds generated from operations £ 220,000
- Source of funds £ 220,000
- Increase in stock £544,000 to £ 680,000 £(136,000)
- Increase in debtors £833,000 to £1,001,000 £(168,000)

Managing Working Capital

- Why give free loans to customers?
  - Providing credit is expensive
  - But the alternative also incurs cost
  - Giving credit to customers is a trade off

Managing Working Capital

Kosi-Knit Sweaters Limited — Cashflow statement to 31st March 2007

Profit		£ 185,000	
Add back non-cash items: depreciation		£ 35,000	
Funds generated from operations			£ 220,000
Source of funds		£ 220,000	
Increase in stock	£544,000 to £ 680,000	£(136,000)	
Increase in debtors	£833,000 to £1,001,000	£(168,000)	
Decrease in creditors	£398,000 to £ 341,000		£(57,000)
Increase in VAT due	£ 62,000 to £ 75,000		£ 13,000
Increase in net working capital			£(348,000)
Application of funds			£(348,000)
CASHFLOW		£~~(128,000)~~	

Managing Working Capital

- Kosi-Knit Sweaters Limited Working capital requirement

	2007		2006	
Sales	£3,650,000	100.0%	£3,400,000	100.0%
Stock	£ 680,000	18.6%	£ 544,000	16.0%
Debtors	£1,001,000	27.4%	£ 833,000	24.5%
Current assets	£1,681,000	46.1%	£1,377,000	40.5%
Creditors	£ 341,000	9.3%	£ 398,000	11.7%
VAT creditor	£ 75,000	2.1%	£ 62,000	1.8%
Current liabilities	£ 416,000	11.4%	£ 460,000	13.5%
Working capital (excluding cash)	£1,265,000	34.7%	£ 917,000	27.0%

- Working capital required to finance sales of £1,000,000 =
- £1,000,000 x 34.7% £1,000,000 x 27.0%
- = £ 347,000 = £ 270,000

Managing Working Capital

- Why is working capital so important?
  - Working capital must be funded
  - Sales growth requires additional working capital
  - So additional funding will be required to finance growth
  - Beware of overtrading
    - Overtrading results in an acute cashflow crisis
    - Caused by a rapid expansion in sales
    - Resulting in an increased working capital requirement
    - Beyond the level that can be funded by the business

Managing Working Capital

- Always consider working capital impact
  - Decisions to improve sales and profit affect working capital
  - Kosi-Knit made smart decisions to improve sales and profit
  - But did not consider impact on working capital
    - Supply from China increased stockholding requirement
    - And reduced a source of funds from creditors
    - New customers' terms increased level of debtors
    - Significant increase in funding required

Managing Working Capital

- Two drivers of strong business
  - Cashflow is the lifeblood of the business
  - Strong cashflow drives business growth
  - Profit is a vital internal source of additional cashflow

Masters in Finance

Gross Margin and Profit

Gross Margin and Profit

- Generating strong profits
  - Profit concept seems straightforward
  - Profit = revenue minus costs
  - But not all costs behave in the same way

Gross Margin and Profit

The barrow boy’s guide to profit

Gross Margin and Profit

- The fruit market:
- Selling price of one box of fruit £15.00
- Cost of one box of fruit £10.00
- Gross margin £ 5.00

- Daily cost of renting market stall £40.00

- So stall rent is paid for after selling £40.00 boxes of fruit
- £5.00

- Stall rent is paid for after selling 8 boxes of fruit

Gross Margin and Profit

- Break-even point
  - The most important dividing line in business
  - Sales level at which the business just covers its costs
  - Below this sales level the business will make a loss
  - Above this sales level the business will make a profit

Gross Margin and Profit

- Two types of business cost
  - Fixed costs
    - not related to activity level - time related
    - e.g. salaries, rent and insurance
  - Variable costs
    - related to activity level
    - e.g. product costs, freight and delivery costs

Gross Margin and Profit

- Gross margin
  - What is left after deducting variable cost from sales
  - Gross margin is the real income of the business

Gross Margin and Profit

- Break-even point

$$\text{Break-even point} = \frac{\text{Fixed costs}}{\text{Gross margin per unit}}$$

Gross Margin and Profit

- The fruit market:
- Selling price of one box of fruit £15.00
- Cost of one box of fruit £10.00
- Gross margin £ 5.00
- Daily cost of renting market stall £40.00
- So stall rent is paid for after selling $\frac{£40.00}{£5.00}$ boxes of fruit
- Stall rent is paid for after selling 8 boxes of fruit

Gross Margin and Profit

- The fruit market:
- Selling price of one box of fruit £15.00
- Variable cost £10.00
- Gross margin £ 5.00
- Fixed costs £40.00
- Break-even point = $\frac{£40.00}{£5.00}$ boxes of fruit
- Break-even point = 8 boxes of fruit

Gross Margin and Profit

- The fruit market:
- Selling price of one box of fruit £15.00
- Variable cost £10.00
- Gross margin £ 5.00

- Gross margin percentage $\frac{\text{Gross margin}}{\text{Selling price}} \times 100$

- Gross margin percentage $\frac{£\,5.00}{£15.00} \times 100$

- Gross margin percentage = 33.3%

Gross Margin and Profit

- Break-even point

$$\text{Break-even point} = \frac{\text{Fixed costs}}{\text{Gross margin per unit}}$$

$$\text{Break-even sales} = \frac{\text{Fixed costs}}{\text{Gross margin percentage}}$$

Gross Margin and Profit

- The fruit market:
- Selling price of one box of fruit £15.00
- Variable cost £10.00
- Gross margin £ 5.00

- Fixed costs £40.00

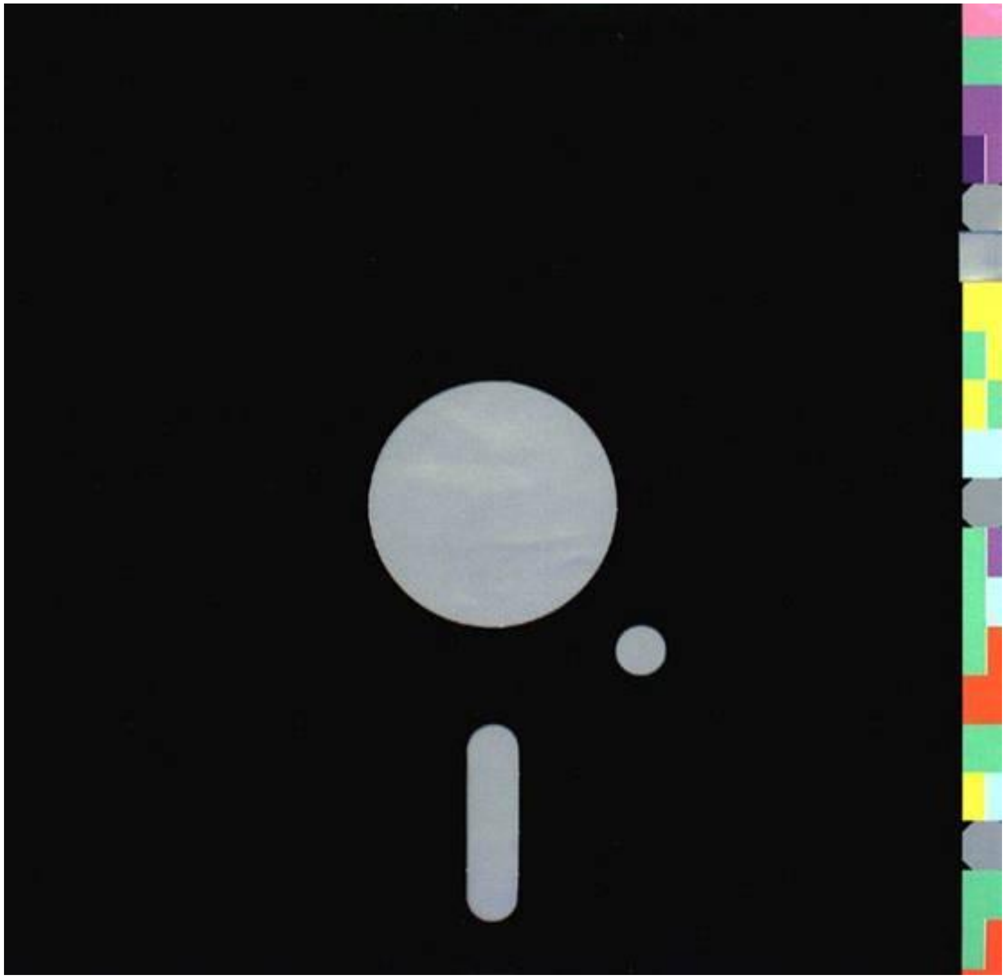
- Break-even sales = £40.00
- 33.3%
- Break-even sales = £120 (sales value of 8 boxes of fruit)
-

Gross Margin and Profit

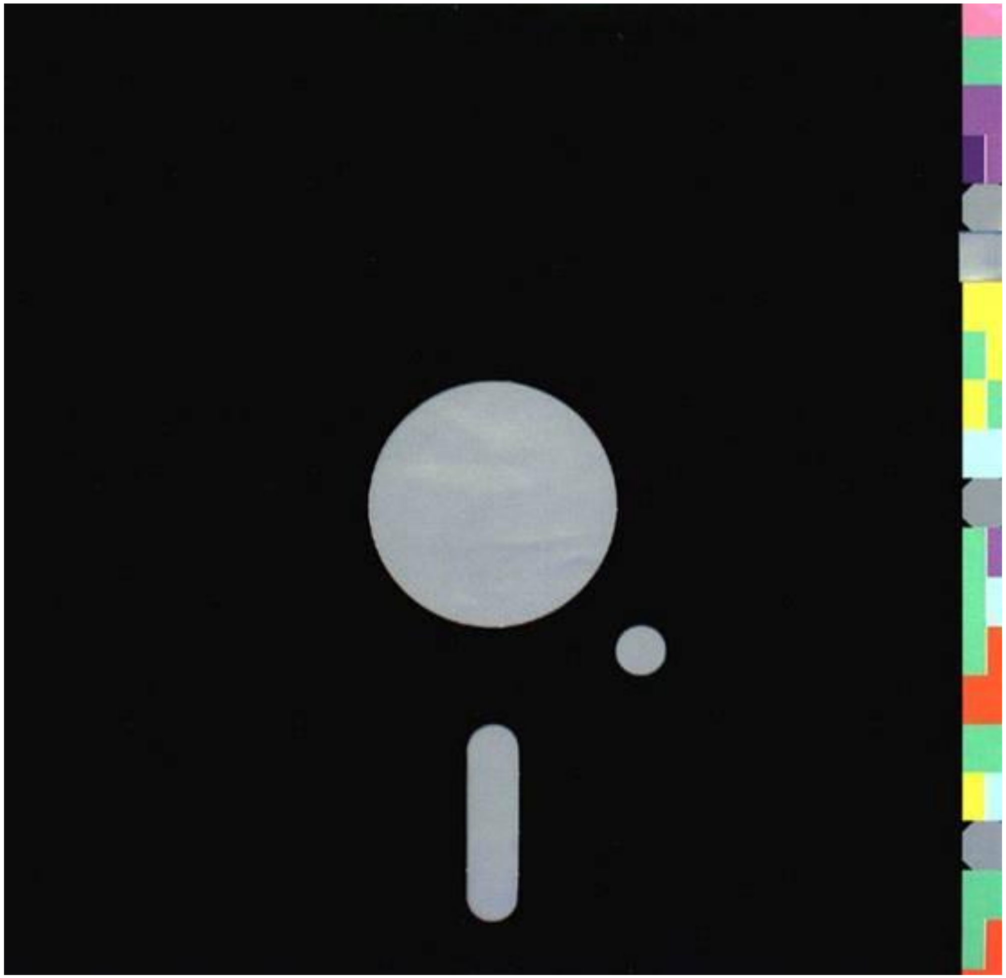
- A business cannot make a profit
  - Until sales exceed break-even point
    or in other words
  - Until fixed costs are covered by gross margin
  - Gross margin is the real income of the business

  - Seems obvious?
  - But the concept is not widely understood

Gross Margin and Profit



Gross Margin and Profit



Gross Margin and Profit

Sales	Gross margin %	Gross margin
£2,000,000	5%	?
£1,000,000	10%	?
£ 500,000	20%	?
£ 333,333	30%	?
£ 200,000	50%	?

- These five businesses have one thing in common

Gross Margin and Profit

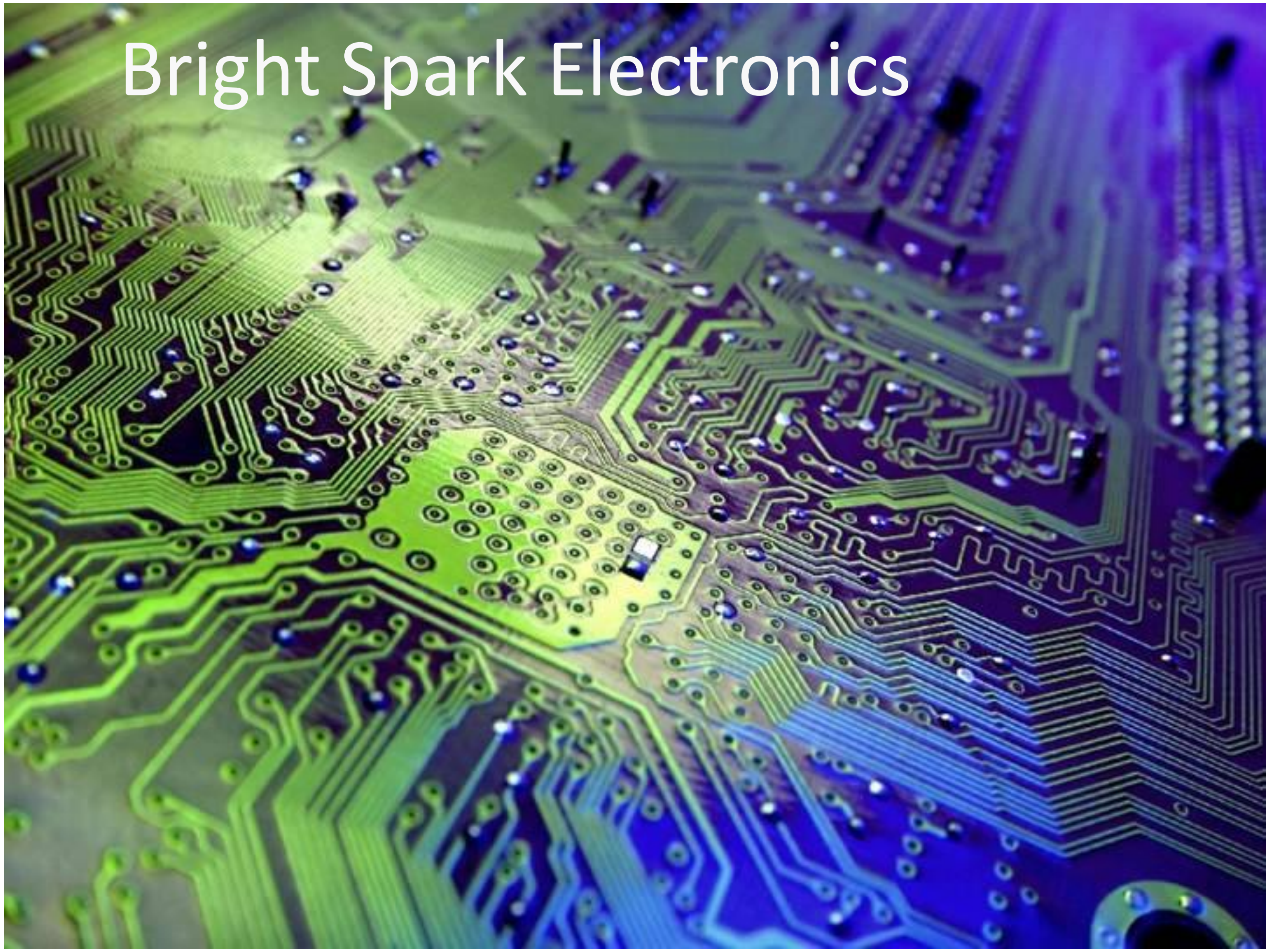
Sales	Gross margin %	Gross margin
£2,000,000	5%	£100,000
£1,000,000	10%	£100,000
£ 500,000	20%	£100,000
£ 333,333	30%	£100,000
£ 200,000	50%	£100,000

- These five businesses have one thing in common
- They all produce a gross margin of £100,000

Gross Margin and Profit

Fixed costs	Gross margin %	Break-even sales
£ 100,000	5%	£2,000,000
£ 100,000	10%	£1,000,000
£ 100,000	20%	£500,000
£ 100,000	30%	£333,333
£ 100,000	50%	£200,000

Gross Margin and Profit



Gross Margin and Profit

The Bright Spark Electronics Company		
Profit and loss account to 31st December	2008	2007
Sales	£2,200,000	£2,300,000
Gross margin	£ 568,000	£ 600,000
Gross margin percentage	25.8%	26.1%
Overhead costs	£ 510,000	£ 475,000
Operating profit	£ 58,000	£ 125,000

- What is the break-even sales point in each of the two years?

Gross Margin and Profit

The Bright Spark Electronics Company		
Profit and loss account to 31st December	2008	2007
Sales	£2,200,000	£2,300,000
Gross margin	£ 568,000	£ 600,000
Gross margin percentage	25.8%	26.1%
Overhead costs	£ 510,000	£ 475,000
Operating profit	£ 58,000	£ 125,000

$$\text{Break-even sales} = \frac{\text{Fixed costs}}{\text{Gross margin percentage}}$$

Gross Margin and Profit

The Bright Spark Electronics Company		
Profit and loss account to 31st December	2008	2007
Sales	£2,200,000	£2,300,000
Gross margin	£ 568,000	£ 600,000
Gross margin percentage	25.8%	26.1%
Overhead costs	£ 510,000	£ 475,000
Operating profit	£ 58,000	£ 125,000

	2008	2007
Break-even sales	$\frac{£\ 510{,}000}{25.8\%}$	$\frac{£\ 475{,}000}{26.1\%}$
Break-even sales	£1,975,352	£1,820,833

Why has the break-even point increased?

Gross Margin and Profit

The Bright Spark Electronics Company		
Profit and loss account to 31st December	2008	2007
Sales	£2,200,000	£2,300,000
Gross margin	£ 568,000	£ 600,000
Gross margin percentage	25.8%	26.1%
Overhead costs	£ 510,000	£ 475,000
Operating profit	£ 58,000	£ 125,000

- Why is profit lower in 2008?

  Because of the combined effect of:

  Higher break-even sales point

  Lower sales volume

Gross Margin and Profit

The Bright Spark Electronics Company		
Profit and loss account to 31st December	2008	2007
Sales	£2,200,000	£2,300,000
Gross margin	£ 568,000	£ 600,000
Gross margin percentage	25.8%	26.1%
Overhead costs	£ 510,000	£ 475,000
Operating profit	£ 58,000	£ 125,000

- How can profit be increased?

Gross Margin and Profit

- The Bright Spark Electronics Company

2Gb special memory chip	Before		After	
Selling price per unit	£10.00		£ 9.00	- 10%
Variable cost per unit		£ 7.50	£ 7.50	
Gross margin per unit		£ 2.50	£ 1.50	**- 40%**
Annual sales units	10,000		11,600	+ 16%
Gross margin from sales	£25,000		£17,400	- 30%

- Increase in sales volume required to achieve same gross margin = 67%

Gross Margin and Profit

Increase in sales volume to offset effect of price reductions on gross margin

	Existing gross margin percentage			
	20%	25%	30%	35%
% price reduction	% increase in sales volume to produce same gross margin			
5	33	25	20	17
7	54	39	30	25
10	100	67	50	40
12	150	92	67	52
15	300	150	100	75

Gross Margin and Profit

- How can profit be increased?
  - Increase price and sell the same volume
  - Action on price is the most effective way to improve profit
  - Increase sales volume at the same price
  - Reduce the break-even point
    - Reduce variable costs : “value analysis” techniques
    - Improve sales mix
    - Reduce fixed costs

Gross Margin and Profit

- A business cannot make a profit
  - Until sales exceed break-even point
    or in other words
  - Until fixed costs are covered by gross margin
  - Gross margin is the real income of the business

Gross Margin and Profit

- How does this work with service businesses?
  - Some service businesses use third party consultants
  - But many retain full time partners and staff
  - These businesses tend to have no variable costs
  - All costs tend to be fixed

Gross Margin and Profit

- How does this work with service businesses?
  - So in these businesses sales = gross margin
  - Break-even is achieved when sales = fixed costs
  - To ensure that the business achieves target profit check that
    - Required sales are achievable at realistic utilisation levels
    - And at a realistic average fee rate

Gross Margin and Profit

Morgan Brown Gillespie Limited

Gross Margin and Profit

- Morgan Brown Gillespie Limited
- Salary and pension costs £2,000,000
- Administration costs £1,350,000
- Fixed costs for 2009 £3,350,000
- Break-even sales = £3,350,000
- Hours to be billed to achieve break-even = Break-even sales / Average hourly rate
- Hours to be billed in 2009 to achieve break-even = £3,350,000 / £280 = 11,965 hours
- Percentage of available chargeable hours 11,965 / 16,500 = 73%

Gross Margin and Profit

- Morgan Brown Gillespie Limited
- Sales to achieve target profit of 20% on sales = fixed costs x 100
- (100 – 20)
- So sales to achieve target profit of 20% on sales = £4,187,500
- Hours to be billed in 2009 to achieve target profit = £4,187,500
  = 14,955 hours
- £280
- Percentage of available chargeable hours = 14,955 = 91%
- 16,500
- It is unlikely that the firm will achieve the level of utilisation required to achieve target profit

FINANCE
FOR NON-FINANCIAL MANAGERS

FINANCE
FOR NON-FINANCIAL MANAGERS

Masters in Finance

Measuring Performance

Measuring Performance

- Financial measures
- Non-financial measures

Measuring Performance

- Financial measures
  - Performance measures: how well the business is run
  - Financial strength measures: ability to meet liabilities
  - Stock market measures: from the investors point of view

Measuring Performance

Skanda Kitchens PLC

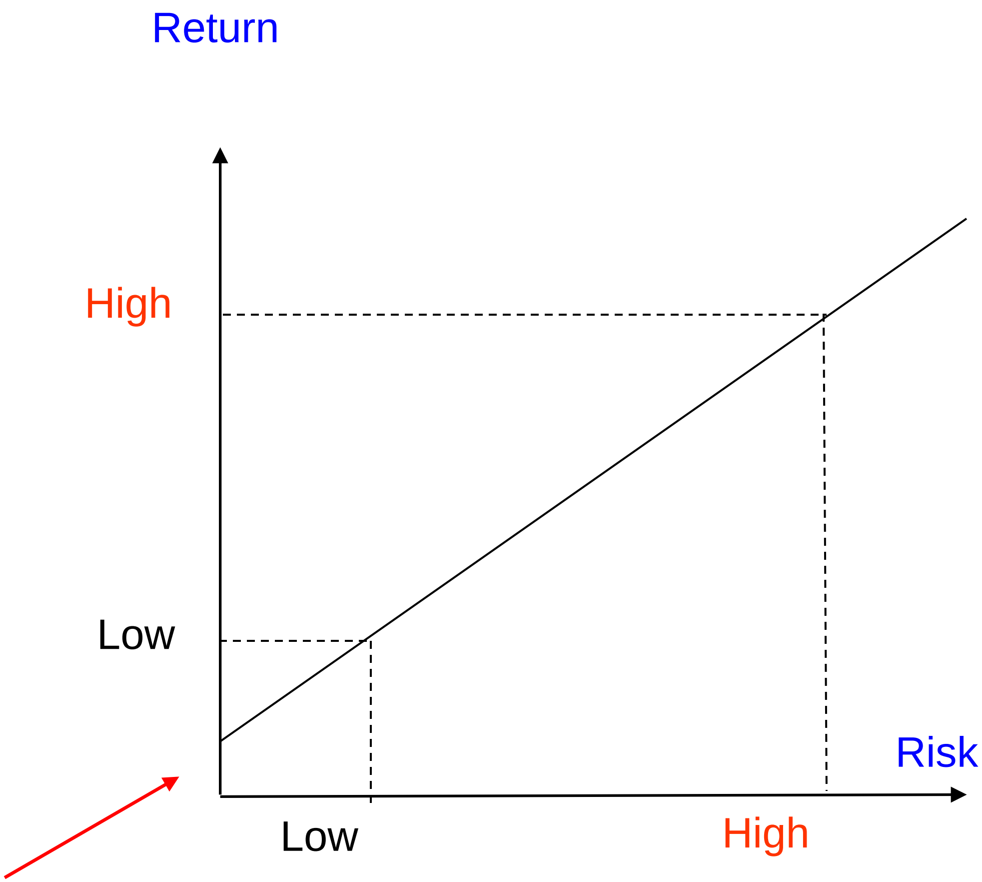
Measuring Performance

- Performance measures
  - How well the business is being run
  - Profit and cashflow are good indications
  - Return on investment (ROI) is a key measure

Measuring Performance

- Return on investment
  - Fundamental business concept
  - Investors’ funds are attracted by best rate of return
  - But different investments carry different risks
  - So rate of return must reflect level of risk taken

Measuring Performance



But why does a zero risk investment still require a financial return?

Measuring Performance

- Return on investment

$$\text{Return on Equity} \quad \frac{\text{Profit after tax}}{\text{Ordinary shareholders funds (Equity)}}$$

Measuring Performance

- Return on investment

Return on Net Assets

$$\frac{\text{Profit before interest payable and tax (PBIT)}}{\text{Net Assets}}$$

Measuring Performance

- Return on Net Assets
  - Determined by two key measures:
    - Profit Margin
    - Net Asset Turnover

Measuring Performance

- Profit Margin

$$\frac{\text{Profit before interest payable and tax}}{\text{Sales}} \times 100$$

Measuring Performance

Skanda Kitchens PLC
Profit and loss account for year ended 31st December 2007

£000's omitted

Sales	34,000
Cost of sales	22,780
Gross profit	11,220
Distribution and administrative expenses	8,800
Operating profit (PBIT)	2,420
Loan interest payable	250
Profit before tax	2,170
Tax	650
Profit after tax	1,520

Measuring Performance

- Profit Margin

$$\frac{£\,2.42\text{m}}{£\,34\text{m}} \times 100 = 7.1\%$$

Measuring Performance

Comparison of Profit Margin

£ millions omitted

Company	Year ended	Sales	Operating Profit	Profit Margin
Skanda Kitchens	Dec 07	34	2.4	7%
Walmart	Jan 09	$405,607	$22,798	6%
South East Water	Mar 09	170	61	36%
Marks & Spencer	Mar 09	9,062	871	10%
British Airways	Mar 08	8,753	875	10%

Measuring Performance

- Why do some have better profits than others?
  - More profitable industry sectors
  - More profitable products
  - More profitable companies

Measuring Performance

- Why are some industries more profitable?

Measuring Performance

Porter's Five Forces: determinants of industry sector profitability

Measuring Performance

Porter's Five Forces: determinants of industry sector profitability

Buyers
- Number of customers
- Buying volumes
- Differentiation
- Price elasticity
- Incentives
- Brand identity
- Switching costs

Measuring Performance

- Why are some products more profitable?
  - Stage in product lifecycle
  - Complexity and cost
  - Perceived customer value and price
  - Availability of substitutes
  - Elasticity of demand
  - Brand premium

Measuring Performance

- Why are some companies more profitable?
  - Industry sector
  - Product type and mix
  - Gross margin / volume
  - Cost management
  - Competitive advantage

Measuring Performance

- Competitive advantage

  Is what enables the enterprise to create superior value for its customers and superior profits for itself

  Michael Porter

Measuring Performance

- Two types of competitive advantage
  - Cost advantage

    The enterprise creates the same benefits as competitors but at a lower cost

  - Differentiation advantage

    The enterprise delivers benefits that exceed those of competitors at the same cost

Here is a real example of a business with a cost advantage

Measuring Performance

Measuring Performance

- Competitive advantage
  - Real competitive advantage has two key attributes
    - It is hard to copy and
    - It is sustainable

Measuring Performance

- Why do some have better profits than others?
  - More profitable industry sectors
  - More profitable products
  - More profitable companies

So how do the companies with low profit margins keep their shareholders happy?

Measuring Performance

- Return on Net Assets
  - Determined by two key measures:
    - Profit Margin
    - Net Asset Turnover

Measuring Performance

- Net Asset Turnover
  - Measures capital intensity of the business

Measuring Performance

- Capital intensity

£ millons

	MARKS & SPENCER March 09			angel Trains Forecast Dec 09		
Fixed assets	£5,868			£3,295		
Net current assets	(£917)			£10		
Net assets	£4,951			3,305		
Sales	£9,062			£422		
Capital intensity	$\frac{£4,951}{£9,062}$	=	55%	$\frac{£3,305}{£422}$	=	783%

Measuring Performance

Capital intensity of different industry sectors			
	High	Medium	Low
National Grid	✸		
Supermarkets			✸
Hotel chain			✸
Tour operator			✸
Advertising agency			✸
Water company	✸		
Motor manufacturer		✸	
Law firm			✸
Electricity generator – nuclear	✸		
Electricity generator – gas		✸	
Airline operator – British Airways	✸		

Measuring Performance

- Net Asset Turnover
  - Measures capital intensity of the business
  - Measures the level of asset utilisation in the business

Measuring Performance

Measuring Performance

- Net Asset Turnover
  - Measures capital intensity of the business
  - Measures the level of asset utilisation in the business
  - Calculated as:

$$\frac{\text{Sales}}{\text{Net Assets}^{1}}$$

Measuring Performance

Skanda Kitchens PLC
Balance Sheet as at 31st December 2007
£000's omitted

Fixed assets at net book value		3,700
Cash	1,184	
Stock	13,288	
Debtors	4,658	
Current assets	19,130	
Creditors due within one year	2,060	
Net current assets		17,070
NET ASSETS		20,770

Measuring Performance

Comparison of Net Asset Turnover

£ millions omitted

Company	Year ended	Sales	Net Assets	Net Asset Turnover
Skanda Kitchens	Dec 07	34	21	1.6
Walmart	Jan 09	$405,607	$108,039	3.8

Measuring Performance

- Return on Net Assets
  - Determined by two key measures:
    - Profit Margin
    - Net Asset Turnover

  - Return on Net Assets =

    Profit Margin x Net Asset Turnover

Measuring Performance

Comparison of Return on Net Assets

Company	Year ended	Profit Margin	Net Asset Turnover	Return on Net Assets
Skanda Kitchens	Dec 07	7%	1.6	12%

Which is the same as:

$$\text{Return on Net Assets} = \frac{\text{Operating Profit}}{\text{Net Assets}} = \frac{£\ 2.4m}{£20.8m} = 12\%$$

Measuring Performance

Comparison of Return on Net Assets

Company	Year ended	Profit Margin	Net Asset Turnover	Return on Net Assets
Skanda Kitchens	Dec 07	7%	1.6	12%
Walmart	Jan 09	6%	3.8	26%
South East Water	Mar 09	36%	0.2	6%
Marks & Spencer	Mar 09	10%	1.8	18%
British Airways	Mar 08	10%	1.1	11%

Measuring Performance

- Return on Net Assets
  = Profit Margin x Net Asset Turnover
  – Provides the basis of 'pyramid of ratios'
  – Pyramid of ratios is a powerful management control tool

Measuring Performance

Pyramid of financial performance ratios

Return on Net Assets

Operating Profit
Net Assets

Profit Margin

Operating Profit
Sales

Net Asset Turnover

Sales
Net Assets

Gross Profit
Sales

Overhead
Sales

Sales
Fixed Assets

Sales
Working Capital

Measuring Performance

Pyramid of financial performance ratios

Net Asset Turnover

Sales
Net Assets

Sales
Fixed Assets

Sales
Working Capital

Sales
Creditors

Sales
Cash

Sales
Stocks

Sales
Debtors

Measuring Performance

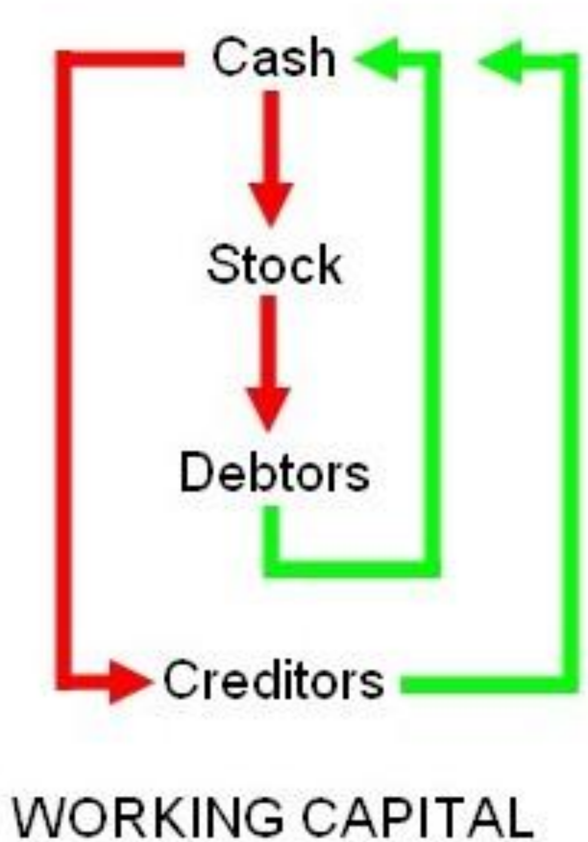
Debtors	Sales / debtors		
	Debtors	Sales	Turnover
Skanda Kitchens	4.66m	£34m	7.3
Walmart	$3,905m	$405,607m	103.9

Debtors is vital component of working capital for most businesses

Days' sales outstanding (DSO)	Debtors / sales x 365		
	Debtors	Sales	DSO
Skanda Kitchens	4.66m	£34m	50
Walmart	$3,905m	$405,607m	4

Measuring Performance

- Working capital management



Measuring Performance

- Working capital management
  - Not only critical for strong cashflow
  - Also affects Net Asset Turnover
  - Can significantly affect Return on Net Assets
  - Working Capital Cycle Days measures ‘speed of circulation’

Measuring Performance

Working Capital Cycle Days		
	Skanda	Walmart
Stock	213	41
Debtors	50	4
Creditors	(34)	(34)
Net Working Capital Cycle Days	229	11

Measuring Performance

Management action to improve performance

Return on Net Assets

$$\frac{\text{Operating Profit}}{\text{Net Assets}}$$

Increase

Profit

Reduce

Net Assets

Increase
Sales

Reduce
Costs and expenses

Reduce
Fixed Assets

Reduce
Working Capital

Reduce
Stocks – Debtors – Cash
Increase
Creditors

Measuring Performance

- Financial measures
  - Performance measures: how well the business is run
  - Financial strength measures: ability to meet liabilities
  - Stock market measures: from the investors point of view

Measuring Performance

- Financial strength measures
  - Measure a company’s ability to meet its liabilities
  - Solvency ratios deal with long term liabilities
  - Liquidity ratios deal with short term liabilities

Measuring Performance

- Solvency ratios
  - Solvency ratios deal with long term liabilities
  - Debt ratio measures “gearing” or “leverage”

$$\text{Debt ratio} = \frac{\text{Debt}}{\text{Capital employed}}$$

Measuring Performance

Skanda Kitchens PLC
Balance Sheet as at 31st December 2007
£000's omitted

Fixed assets at net book value		3,700
Cash	1,184	
Stock	13,288	
Debtors	4,658	
Current assets	19,130	
Creditors due within one year	2,060	
Net current assets		17,070
NET ASSETS		20,770
Creditors due after more than one year		
Long term loan		2,900
Capital and reserves		
Share capital		14,000
Retained profits		3,350
Current year profit		520
CAPITAL EMPLOYED		20,770

Measuring Performance

- Debt ratio

Skanda Kitchens Debt ~~ratio~~ = £ 2.9m

£20.8m

Debt ratio = 14%

So equity = 86% of capital employed

Low "gearing" represents a lower risk

This gives prospective lenders a higher level of safety

Measuring Performance

- Solvency ratios
  - Solvency ratios deal with long term liabilities
  - Debt ratio measures “gearing” or “leverage”
  - Interest cover measures safety of loan interest

$$\text{Interest cover} = \frac{\text{Profit before interest payable and tax}}{\text{Interest payable}}$$

Measuring Performance

- Financial strength measures
  - Measure a company's ability to meet its liabilities
  - Solvency ratios deal with long term liabilities
  - Liquidity ratios deal with short term liabilities

Measuring Performance

- Liquidity ratios
  - Liquidity ratios deal with short term liabilities
  - Current ratio
  - Measures to what extent short term assets cover short term liabilities

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Measuring Performance

- Liquidity ratios
  - Liquidity ratios deal with short term liabilities
  - Current ratio measures to what extent short term assets will cover short term liabilities
  - "Acid test" ratio is a stricter test

$$\text{Acid test ratio} = \frac{\text{Liquid assets (cash + debtors)}}{\text{Current liabilities}}$$

Measuring Performance

Skanda Kitchens PLC
Balance Sheet as at 31st December 2007
£000's omitted

Fixed assets at net book value		3,700
Cash	1,184	
Stock	13,288	
Debtors	4,658	
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Retained profits		3,350
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CAPITAL EMPLOYED		20,770

Measuring Performance

- Acid test ratio

Skanda Kitchens Acid test ratio $= \dfrac{£\ 5.8\text{m}}{£\ 2.1\text{m}}$

Acid test ratio = 2.8 times

Ratio of less than one indicates possible problems

But high ratios should also be carefully examined

Measuring Performance

- Financial measures
  - Performance measures: how well the business is run
  - Financial strength measures: ability to meet liabilities
  - Stock market measures: from the investors point of view

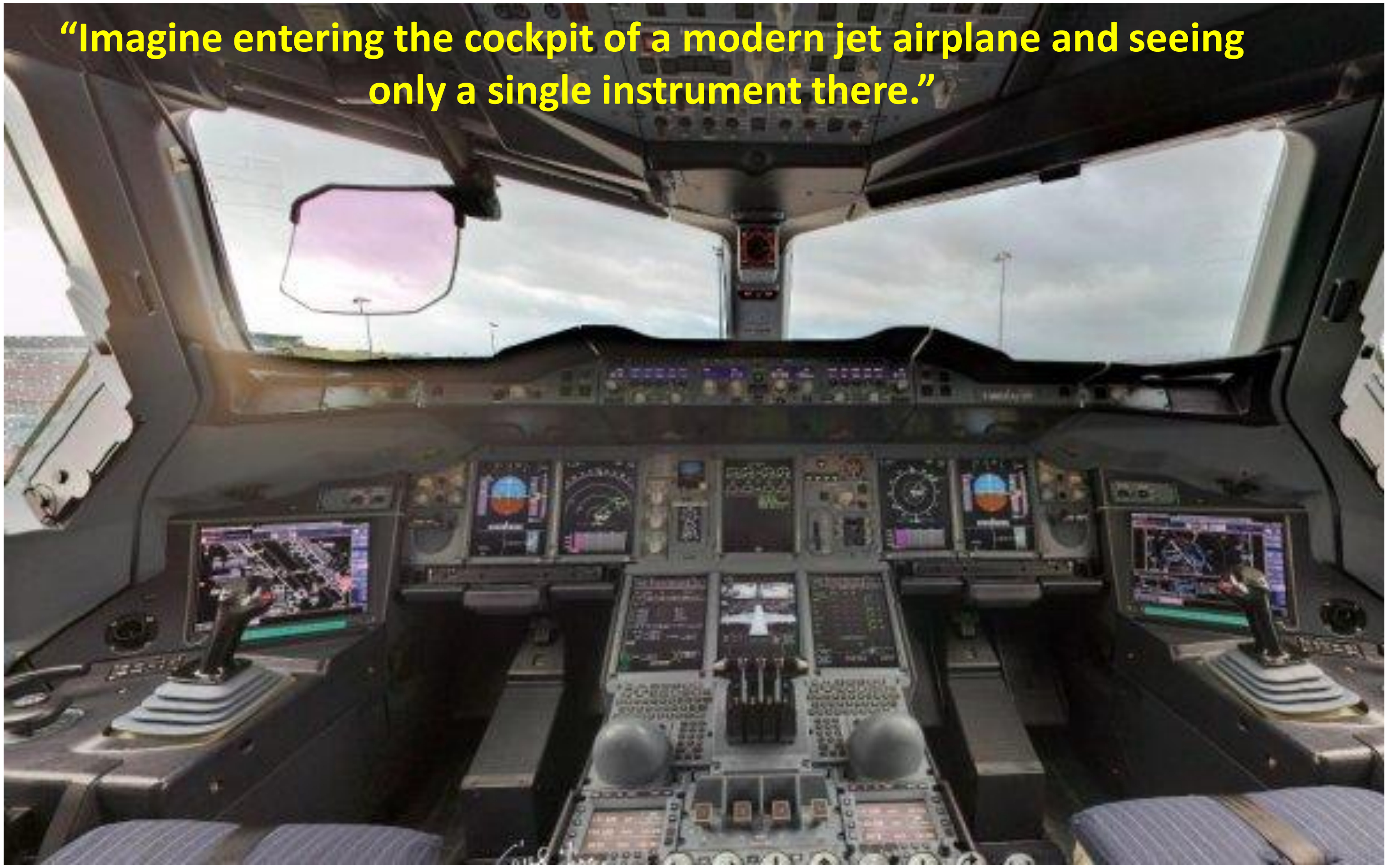
Measuring Performance

- Standards for financial analysis
  - Ratios are useful tools but one year's results do not give full picture
  - Earlier years' results for same business
  - Business segment analysis for same business
  - Internal budgets
  - Other businesses in same industry

Measuring Performance

- Financial measures
- Non-financial measures

Measuring Performance



Measuring Performance

Kaplan & Norton’s Balanced Scorecard

- Supplements traditional financial performance indicators
- BSC adds a variety of non-financial indicators
- Aims to address all areas of performance objectively
- BSC focuses on four different perspectives

Measuring Performance

- Developing a Balanced Scorecard
  - Three stages to development of BSC
    - Answer the question in each perspective to set goals
    - Identify key competencies required to achieve objectives

Measuring Performance

BALANCED SCORECARD		
Perspective	Question	Explanation
Customer	What do existing and new customers value from us?	Gives rise to targets that matter to customers: cost, quality delivery, inspection etc.
Internal	At what processes must we excel to achieve our financial and customer objectives?	Aims to improve internal processes and decision making
Innovation and learning	Can we continue to improve and create future value?	Considers the capacity of the business to maintain its competitive position through the acquisition of new skills and the development of new products
Financial	How do we create value for our shareholders?	Covers traditional measures such as growth, profitability and shareholder value but set through talking directly to shareholders

Measuring Performance

Developing a Balanced Scorecard

Three stages to development of BSC

- Answer the question in each perspective to set goals
- Identify key competencies required to achieve objectives
- Set appropriate measures for key improvement areas

Measuring Performance

BALANCED SCORECARD	
Perspective	Measures
Customer	■ New customers acquired ■ Customer complaints ■ On time deliveries ■ Returns
Internal	■ Quality control rejects ■ Average set-up time ■ Speed of producing management data
Innovation and learning	■ Labour turnover rate ■ Percentage of revenue generated by new products and services ■ Average time taken to develop new products and services
Financial	■ Return on Net Assets ■ Cashflow ■ Earnings per share ■ Return on Capital Employed ■ Revenue growth

Measuring Performance

Using Balanced Scorecard

- BSC becomes main monthly report
- Balanced means equal focus is on all four perspectives
- Related to key elements of organisation’s strategy

Measuring Performance

Using Balanced Scorecard

- BSC becomes main monthly report
- Balanced means equal focus is on all four perspectives
- Related to key elements of organisation's strategy
- Encourages "goal congruence"
- Financial and non-financial measures linked
- Useful where profit is not key performance indicator

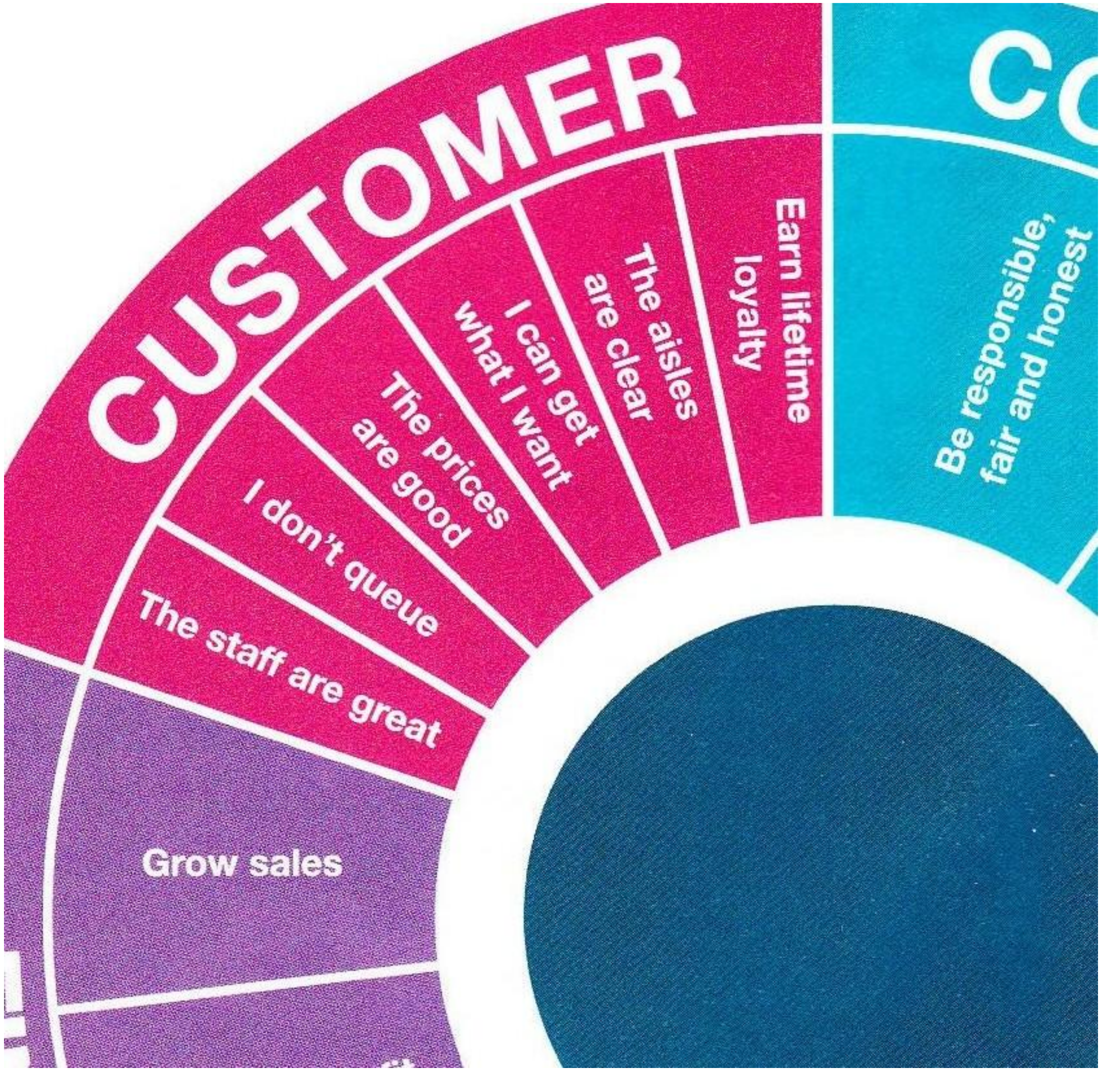
Measuring Performance

The “Tesco Steering Wheel”

- Tesco was early adopter of BSC approach
- Tesco wanted a measurement system to motivate all staff
- Tesco developed a “Steering Wheel”
- “Community” added as fifth perspective to BSC

Measuring Performance

Measuring company performance



Measuring Performance

The "Tesco Steering Wheel"

- Tesco was early adopter of BSC approach
- Tesco wanted a measurement system to motivate all staff
- Tesco developed a "Steering Wheel"
- "Community" added as fifth perspective to BSC
- Every store receives monthly update on its performance
- Kept Tesco focused during period of rapid growth?

Measuring Performance

Criticisms of Balanced Scorecard

- No financial theoretical basis and entirely subjective
- Cannot be used to calculate impact on profit
- Time consuming and can be overly bureaucratic
- Care needed to avoid conflicting measures
- Can result in too many measures
- Expertise needed to analyse “big picture”

Measuring Performance

Key Performance Indicators – KPI’s

- Care must be taken in selecting KPI’s
- Must be relevant and linked to critical success factors
- Act to initiate action
- Not just add to “sea of information”

Measuring Performance

- What is a critical success factor
  - “ an issue or aspect of organisational performance that determines the ongoing health, vitality and well being of that enterprise”
  - Characteristics of critical success factors
    - Usually fairly obvious
    - Influence cuts across several aspects of performance

Measuring Performance

Examples of critical success factors

- Delivery in full on time, all the time, to key customers
- Completion of projects on time and to budget
- Getting the right product in the right place at the right time
- Increasing the gross margin
- Customers being active advocates for our business
- Positive brand recognition

Measuring Performance

Critical success factor:

Timely arrival and departure of aircraft

Measuring Performance

British Airways

Financial KPI: Operating profit margin of 10%

Financial

We must achieve a consistent, strong financial performance if we are to continue investing in the future success of the business and reward our shareholders through the payment of a dividend. Operating margin – which we define as operating profit divided by revenue expressed as a percentage – is the main way we measure our financial performance.

In 2002 we set ourselves a target of achieving a 10 per cent operating margin through the economic cycle. In 2007/08 we set ourselves the goal of hitting a 10 per cent margin for the year for the first time.

Measuring Performance

British Airways

Operations KPI: punctuality target of 48% “ready to go”

Operations

We must run a robust operation if we are to meet our customers’ expectations and create a cost-effective business. Having Heathrow at the heart of our operations, with all its infrastructure constraints, puts a significant strain on delivering operational excellence, day in, day out.

Within our business plan we have focused our efforts on five key areas of operational delivery – the ‘BA Basics’. Among these, departure punctuality is our primary operational performance measure. Punctuality ensures other operational processes run smoothly and remains a key factor in whether customers would recommend British Airways to other travellers.

We call our chosen measure of punctuality ‘Ready to Go’. This measures how many of our flights are prepared for departure at three minutes before the scheduled departure time. So many issues can have an impact on punctuality, but using this measure ensures we focus on the aspects of the departure process within our control. The target range for ‘Ready to Go’ punctuality for 2007/08 was set at 44-48 per cent.

Measuring Performance

British Airways

Customer KPI: 63% of customers likely to recommend BA

Customers

Customer recommendation is a key measure of our success. Our Global Performance Monitor (GPM) survey, an onboard customer survey covering all the key stages of the flight experience, together with a follow-up online survey on the arrivals process, provides monthly insights into customers' views. The survey is carried out by GfK NOP, the independent market research company, and involves more than 55,000 customers each month.

The customer recommendation measure is based on the percentage of customers who, when surveyed, would highly recommend British Airways to friends, family or colleagues. Apart from being extremely important in its own right, we believe that this measure indicates how the customer experience will affect future profitability. Our target for 2007/08 was for 63 per cent of customers to be 'extremely likely' or 'very likely' to recommend British Airways.

Measuring Performance

British Airways

Employees KPI: involvement measure of 74%

Employees

Progressive, high performing organisations are increasingly recognising that involved employees are more committed to organisational goals and values, and more willing to embrace change and improve customer service. Last year we started using an Employee Involvement index, as measured by an all-employee Speak Up! survey. This is run twice a year, with a full version in September and a shorter tracker version in March.

The Speak Up! surveys are conducted and hosted by the independent research organisation, Ipsos MORI, and are completely confidential. As a business we aim to match the involvement scores of other leading service sector organisations, and a target of 73 per cent for Employee Involvement was set for 2007/08.

Measuring Performance

Key Performance Indicators

- Care must be taken in selecting KPI's
- Must be relevant and linked to critical success factors
- Act to initiate action
- Not just add to "sea of information"
- No more than 20 – ideally 10 or less
- Work well where profit is not organisational priority
- But must be regularly monitored to be effective

Investment Appraisal

Investment Appraisal

Why do we need investment appraisal tools?

- Capital is scarce in both public and private sectors
- That's never been more true than today
- We need to know if the investment is worth making
- We need to know if the risk is justified by the financial return
- We need to know if the project meets our investment criteria
- How it compares to other projects competing for same funds

Investment Appraisal

Various methods available

- Accounting rate of return (ARR)
- Payback period
- Net Present Value (NPV) using discounted cashflow (DCF)

Investment Appraisal

Various methods available

Accounting rate of return (ARR)

$$\frac{\text{Annual profit}}{\text{Investment}} \times 100$$

Investment Appraisal

Skanda Kitchens PLC

Investment Appraisal

SKANDA KITCHENS

INVESTMENT APPRAISAL: ACCOUNTING RATE OF RETURN

£000's omitted	OWN	RENTED
Investment	£2,000	£1,000
Profit before tax	£300	£200
Rate of return	15.0%	20.0%

Investment Appraisal

Accounting rate of return (ARR)

- Calculates annual profit as percentage of investment cost
- Advantages
  - Easy to understand
  - Similar concept to ROI calculation

Investment Appraisal

Accounting rate of return (ARR)

- Calculates annual profit as percentage of investment cost
- Advantages
- Disadvantages
  - Based on profit and ignores cashflows
  - Percentage approach ignores size of project
  - Ignores time value of money

Investment Appraisal

Various methods available

- Accounting rate of return (ARR)
- Payback period
- Net Present Value (NPV) using discounted cashflow (DCF)

Investment Appraisal

Payback period

How many years project cashflow to payback initial investment

$$\frac{\text{Investment}}{\text{Annual cashflow}}$$

Investment Appraisal

Investment Appraisal

SKANDA KITCHENS

INVESTMENT APPRAISAL: PAYBACK PERIOD

£000's omitted	OWN	RENTED
Investment	£2,000	£1,000
Cashflow	£400	£300
Payback period	5.0	3.3

Investment Appraisal

Payback period

- How many years project cashflow to payback initial investment
- Advantages
  - Easiest to understand
  - Easy to compare different projects

Investment Appraisal

Payback period

- How many years project cashflow to payback initial investment
- Advantages
- Disadvantages
  - Ignores cashflows after payback point
  - Takes no account of the risk in the project
  - Ignores time value of money

Investment Appraisal

Various methods available

- Accounting rate of return (ARR)
- Payback period
- Net Present Value (NPV) using discounted cashflow (DCF)

Investment Appraisal

Would you like it now or in one year's time?

Investment Appraisal

Reasons for time preference

- Cash received now can be spent now
- Risk disappears when cash is received
- Cash received now can be invested

Investment Appraisal

Net Present Value using DCF analysis

- Recognises time value of money
- Based on projected cashflows
- Reflects risk in investment and capital projects
- Good basis for comparing competing projects
- Based on principle of compound interest

Investment Appraisal

- Future value of £100 invested at 10% interest per year

  Initial investment
  £100

  Interest at 10% £
  10

  Balance at end of year 1
  £110

Investment Appraisal

- Future value of £100 invested at 10% interest per year

Initial investment
£100

Interest at 10% £
10

Balance at end of year 1
£110

Using this approach we can calculate the value to us today of cashflows that we will receive at some point in the future

Interest on balance at 10%

Investment Appraisal

- Present value of £121 received in two years' time after investing at 10% per year

Value in two years time

£121

$$\text{Present value} = \frac{\text{value of investment in two years' time}}{1.21} = £100$$

$$\text{Present value} = \frac{\text{value of investment in two years' time}}{(1 + 0.10)^2}$$

Investment Appraisal

SKANDA KITCHENS

INVESTMENT APPRAISAL: NET PRESENT VALUE RENTED RETAIL STORE

£000's omitted		0	1	2	3	4	5
Investment		(£1,000)					
Operating cashflow			£300	£300	£300	£300	£300
Terminal value:							
Freehold							
Fixtures and fittings							£600
Trade							£1,500
NET CASHFLOW		(£1,000)	£300	£300	£300	£300	£2,400
Discount factor			0.9091	0.8264	0.7513	0.6830	0.6209
NPV	£1,441	(£1,000)	£273	£248	£225	£205	£1,490

SKANDA KITCHENS

INVESTMENT APPRAISAL: NET PRESENT VALUE OWN RETAIL STORE

£000's omitted		0	1	2	3	4	5
Investment		(£2,000)					
Operating cashflow			£400	£400	£400	£400	£400
Terminal value:							
Freehold							£1,300
Fixtures and fittings							£600
Trade							£1,500
NET CASHFLOW		(£2,000)	£400	£400	£400	£400	£3,800
Discount factor			0.9091	0.8264	0.7513	0.6830	0.6209
NPV	£1,627	(£2,000)	£364	£331	£301	£273	£2,360

Investment Appraisal

Which discount rate?

- Frequently used discount measures
  - Borrowing cost
  - Weighted average cost of capital
  - Company's own 'hurdle' return on investment
- Sometimes adjusted to reflect level of risk involved
- Good idea to use sensitivity testing at range of rates
- But should we use the same rate for both options?

Investment Appraisal

Why cashflow and not profit?

- Cashflow is what ultimately counts
- Profit measurement is subjective
- Cash is used to finance growth and pay dividends

Investment Appraisal

Incremental cashflow approach

- Important to use only relevant incremental cashflows
- Careful consideration of
  - Sunk costs
  - Opportunity costs
  - Interest and dividends
  - Taxation
  - Scrap and terminal proceeds

Investment Appraisal

Using a cashflow approach to business valuation

- Estimate NPV of future incremental cashflows generated
  - Identify main drivers of sales and costs
  - Produce high / low forecasts of incremental cashflows
  - Remember timing of cashflows is significant
  - Use spreadsheet models to test sensitivity to variables
  - Use spreadsheet models to test sensitivity to discount factor

Investment Appraisal

Using a cashflow approach to business valuation

- Estimate NPV of future incremental cashflows generated
- Estimate current cash position using "zero balance sheet"
  - Assign "realistic" figures for current assets and liabilities
  - Use DD results to include all potential liabilities
  - Estimate true position for surplus cash on acquisition

Investment Appraisal

Using a cashflow approach to business valuation

- Estimate NPV of future incremental cashflows generated
- Estimate current cash position using “zero balance sheet”
- Business valuation is the sum of the above
- Double check against other valuation methods
  - Normal industry EBITDA or P/E multiples
  - Bank’s valuation for loan purposes
  - What the competition is prepared to pay!

Budgeting

Budgeting

- What is a budget?
  - A plan expressed in money
  - Prepared and agreed prior to the budget period
  - The budget may show
    - Income
    - Expenditure
    - Capital to be employed

Chartered Institute of Management Accountants

Budgeting

- What is a budget?
  - The budget is part of the strategic planning process
  - Organisation gains from the budget process itself
  - And gains from the budget once it is prepared

What is Budgeting About?

PEOPLE

PLANNING

MEASURING

CONTROLLING

What is Budgeting About?

PEOPLE

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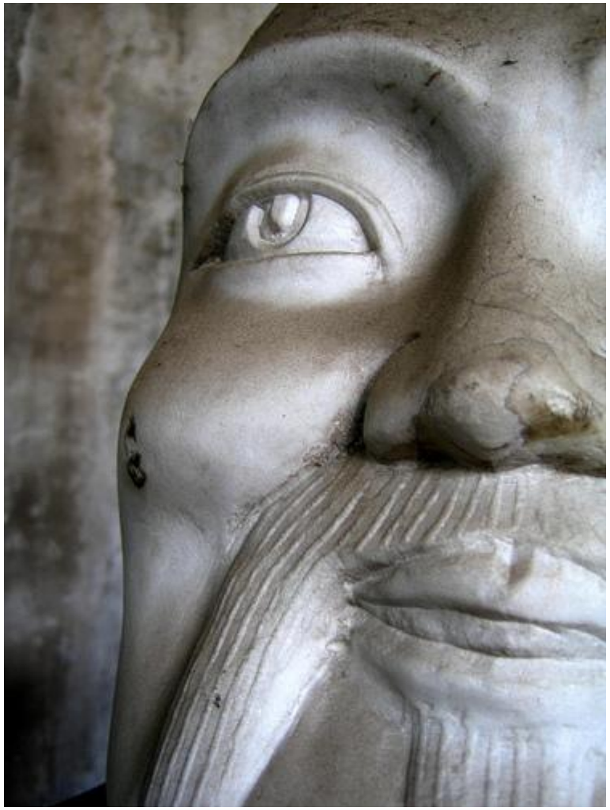
CONTROLLING

Planning



"With careful and detailed planning one can win;
with careless less detailed planning one cannot win.

How much more certain is defeat if one does not plan at all"

Sun Tzu:
"The Art of War" written in 400BC

In other words:

Failing to plan is planning to fail

Planning

- What is planning about?
  - Looking at where we are now
  - Deciding what we want to achieve
  - Taking stock of resources available or needed
  - Anticipating problems
  - Deciding what will need to be done

Planning

- Types of business planning
  - Operational planning
    - Detailed planning
    - Day to day

Planning

- Types of business planning
  - Operational planning
  - Tactical planning
    - Short term annual planning

Planning

- Types of business planning
  - Operational planning
  - Tactical planning
  - Strategic planning
    - Long term planning
    - Three to five years

Planning

THE PLANNING PROCESS

STRATEGIC / CORPORATE / LONG RANGE PLANNING

Covers periods of longer than one year

Involves setting long term objectives of the organisation

Formulation, evaluation and selection of strategies designed to achieve the objectives

Strategies are the basis of long-term plan of action

BUDGETARY / SHORT TERM TACTICAL PLANNING

Covers period of one year

Involves preparing detailed plans for an organisation's functions

Works within framework set by strategic plans

Converts strategic plans in to actions

OPERATIONAL PLANNING

Covers very short term day-to-day activities

Concerned with how the organisation's resources will be used

Work within the framework set by the budget

Converts budgetary plans in to detailed plan of action

Planning

- Types of business planning
  - Operational planning
  - Tactical planning = **Budgeting**
  - Strategic planning

Planning

- Budgeting
  - Uses the strategic plan
  - To identify short term goals and objectives
  - To produce an annual operating plan

What is Budgeting About?

PEOPLE

PLANNING

MEASURING

CONTROLLING

People

- Budgeting and People
  - Responsibility
    - Objectives should be set at departmental level
    - Department manager is made responsible for delivery

People

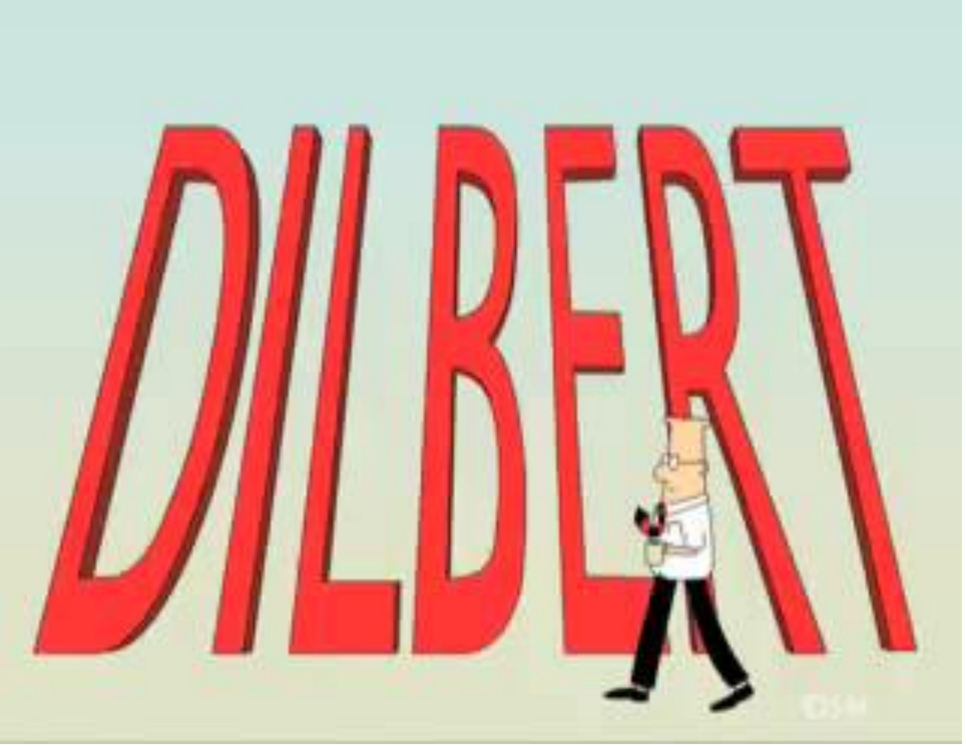
- Budgeting and People
  - Responsibility
  - Integration
    - Individual efforts focussed on common goals
    - Managers and staff “pull in the same direction”
    - Avoids managers following their ‘own agenda’

People

- Budgeting and People
  - Responsibility
  - Integration
  - Motivation
    - Budgeting can be a good way of motivating people

People

- Motivation
  - Budgetary systems can provide good motivation
  - But it's also easy to produce negative reactions
  - Style of budgeting is a major factor
    - Top down – imposed budget
    - Bottom up – participatory budget
    - Negotiated – between budget holders and managers



Style of budgeting is a major factor

People

- Motivation
  - Budgetary systems can provide good motivation
  - But it's also easy to produce negative reactions
  - Style of budgeting is a major factor
  - Style affects attitude and can cause demotivation
  - Attitudes to setting; implementing; controlling budgets

People

- Motivation
  - Most successful budgetary control systems:
    - Set realistic and achievable budgets
    - Are prepared in consultation with the whole team
    - This approach provides the best basis for motivation

People

- Budgeting and People
  - Responsibility
  - Integration
  - Motivation
  - Evaluation
    - Performance of budget holders can be measured
    - Both by attitude and results

What is Budgeting About?

PEOPLE

PLANNING

CONTROLLING

Measuring

- Actual performance must be measured
  - Income and spending must be recorded and monitored
  - Accounted for in sufficient detail
  - Monthly and year to date report at department level
  - Other non-financial KPI’s also calculated monthly

What is Budgeting About?

PEOPLE

PLANNING

MEASURING

CONTROLLING

Controlling

- One of the main purposes of budgeting
  - Actual monthly performance must be measured
  - And compared to monthly phased budget
  - Feedback reporting to budget holder is key

Controlling

- The key to good feedback reporting
  - Clear and comprehensive
  - Timely to allow prompt action to be taken
  - Accurate but without superfluous detail
  - Directed to the responsible manager with authority to act

Controlling

- One of the main purposes of budgeting
  - Actual monthly performance must be measured
  - And compared to monthly phased budget
  - Feedback reporting to budget holder is key
  - Actual results should be compared to budget
  - Variances shown for investigation
  - Appropriate action taken promptly to deal with variance

Controlling

Morgan Brown Gillespie Limited	BUDGET REPORT : JUNE 2009									
	June					June year to date				
	Actual		Budget		Variance	Actual		Budget		Variance
	£000's	%	£000's	%	£000's	£000's	%	£000's	%	£000's
Sales	420	100.0	400	100.0	20	2,000	100.0	2200	100.0	(200)
Direct costs	215	51.2	200	50.0	(15)	1,050	52.5	1100	50.0	50
Gross profit	205	48.8	200	50.0	5	950	47.5	1100	50.0	(150)
Administration costs	136	32.4	130	32.5	(6)	730	36.5	700	31.8	(30)
Operating profit	69	16.4	70	17.5	(1)	220	11.0	400	18.2	(180)

Comments

Action

Controlling

- Appropriate action taken promptly
  - No action if results in line with budget
  - Remedial action if results indicate problem

What is Budgeting About?

PEOPLE

PLANNING

MEASURING

CONTROLLING

Budgeting

- Alternative approaches to budgeting
  - Incremental budgeting is traditional approach
    - Current period budget is base for next period
    - Sales and costs subject to incremental increase
    - Inappropriate for some kinds of costs
    - Inefficient form of budgeting which encourages waste

Budgeting

- Alternative approaches to budgeting
  - Incremental budgeting is traditional approach
  - Zero based budgeting

Budgeting

- Zero based budgeting
  - Each cost element specifically justified
    - In principle budgeted from zero base
    - In practice works back from current cost level
    - Every aspect of budget subject to cost benefit review
    - Encourages managers to develop questioning attitude

Budgeting

- Zero based budgeting
  - Each cost element specifically justified
  - Advantages of ZBB
    - Identifies inefficient operations and processes
    - Avoids wasteful expenditure
    - Can improve motivation

Budgeting

- Zero based budgeting
  - Each cost element specifically justified
  - Advantages of ZBB
  - Disadvantages of ZBB
    - Requires a great deal of management time
    - Depends on large amounts of paperwork

Budgeting

- Alternative approaches to budgeting
  - Incremental budgeting is traditional approach
  - Zero based budgeting
  - Activity based budgeting

Budgeting

- Activity based budgeting
  - Traditional approach
    - Assumes resources consumed evenly
    - Makes managers responsible for activities beyond their control

Budgeting

- Activity based budgeting
  - Traditional approach
  - Activity based approach
    - Identifies specific cost drivers
    - Assigns responsibility for costs on this basis
    - Allows activity related increases in budgeted
    - Allows more efficient allocation of resources

Criticisms of Budgeting

Is Budgeting the Corporate Curse?

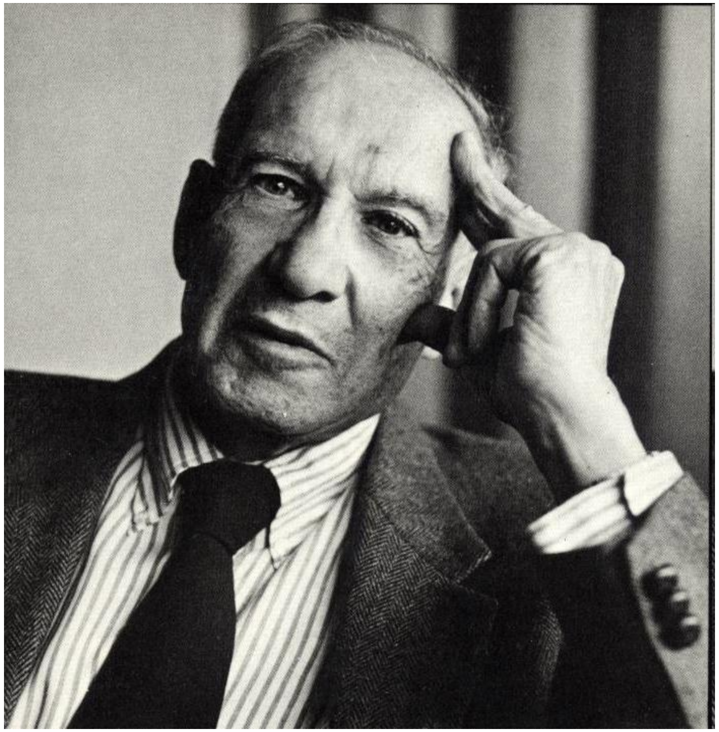
In a recent survey by the CBI senior executives reported that up to 30% of their time was spent in preparing for and carrying out the budget process

Criticisms of Budgeting

Lord Browne : ex-CEO of BP

“The process of management is not about administering fixed budgets, it is about the dynamic allocation of resources’

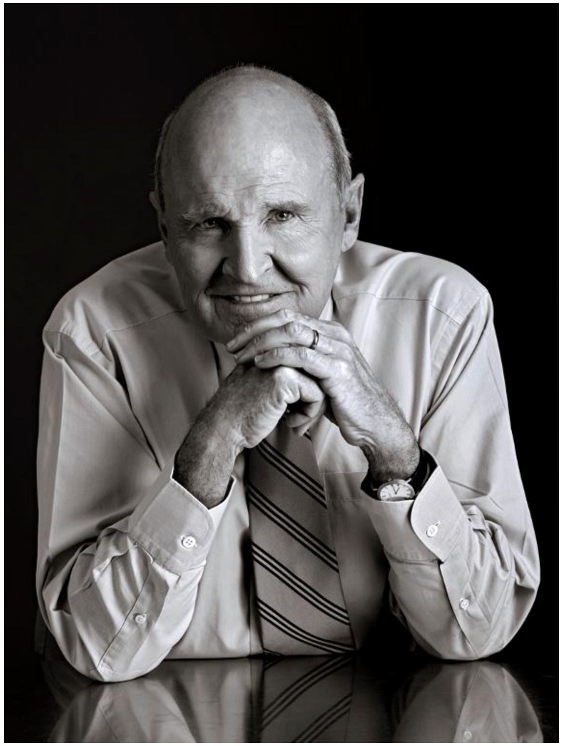
Criticisms of Budgeting



Peter Drucker

"Uncertainty…has become so great as to render futile, if not counterproductive, the kind of planning most companies still practice; forecasting based on probabilities'

Criticisms of Budgeting



Jack Welch : ex-CEO of General Electric

“Budgeting is the bane of corporate America”

Criticisms of Budgeting

- Time consuming and expensive
- Encourages short term thinking
- Discourages risk taking
- Focus on sales rather than customer satisfaction
- Budgets divorced from long term strategy

Budgeting

- To Summarise
  - The budget is part of the strategic planning process
  - Organisation gains from the budget process itself
  - Used correctly they can be a good management tool
  - The most successful budgetary control systems
    - Set realistic and achievable budgets
    - Are prepared in consultation with the whole team
    - Provide the best basis for motivation

FINANCE
FOR NON-FINANCIAL MANAGERS