GCSE Business 4

Finance

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Finance

The financial function of a business is very important and has a number of important roles:

- Managing the money that flows into and out of the business
- Looking for sources of finance for start-up, growth and to pay the running expenses of the business
- Creating financial documents, such as profit and loss accounts and cash flow forecasts
- Maintaining financial records
- Analysing financial records and business performance.

It is important that the finance function integrates fully with the other business functions to make sure that the business objectives are achieved. Many actions that take place throughout the business are often decided by the financial management of the business, such as:

- How much to pay employees?
- Can the business afford to purchase new production equipment that will improve product quality?
- Spending money on advertising material to try and boost sales – is this likely to result in covering the cost of the advertising?
- Relocating to new premises – can the business afford this, or are they able to borrow the money?
- Using financial incentives to help improve employee motivation.

This section will look at:

- Sources of finance
- Revenue and costs
- Profit and loss accounts (income statements)
- Cash flow
- Financial performance

Sources of finance

All businesses need money or finance to be able to operate. Finance allows:

- The setting up of the business – this is often known as start-up capital
- The expansion of the business – this usually involves extending buildings, buying new sites, purchasing machinery, vehicles and equipment – this is referred to as capital
- Businesses to pay their day-to-day bills.

Where do businesses get their money?

- Internal sources – internal sources are sources of money from within the business, from the owner, or from previous business income (earned through profit);
- External sources – external sources are sources of money from outside the business, from other people putting money into the business.

For a new business starting out, it is unlikely that external forms of finance will be readily available. Apart from capital provided by the entrepreneur and friends and family, sources of finance are likely to be severely limited.

New businesses are likely to continue to struggle to find external sources of finance until they are established and show that their business can be profitable. A new business will need finance to start the business from nothing, so there will be a need to purchase quite a few items; these will depend on the nature of the business, but tend to include:

- **Premises** – this could be retail, leisure, catering outlet etc., or an office, factory or piece of land. Premises can either be bought or rented. If buying, then this tends to be a large amount of money;

1. Explain why a new business start-up may decide to rent premises rather than buy.
2. What are the disadvantages of renting rather than buying?

- **Equipment** – all businesses will need some sort of equipment in order to operate. Spending on equipment will be higher for manufacturing businesses, although businesses that operate in retail, hospitality or health and beauty, for example, will also need to purchase equipment. As with premises, some new businesses may decide to rent (which is referred to as leasing) the equipment, rather than buying it outright. Many businesses may also need a vehicle in order to pick up stock or deliver/travel to customers;
- **Advertising** and promoting the new business – a new business will not be known by customers, it will have to build up customer awareness to make sure customers notice it and start to buy from it. Creating customer awareness of a new business can be difficult and many new businesses will spend quite a bit of money on advertising material, in order to get it known;
- A new business will have to buy **stock** to get the business up and running, the business will only start creating revenue when they start selling their stock or using materials in completing jobs. When the business starts to create revenue they will then spend this revenue on buying more stock and materials.

Established businesses will have been in operation for some time, this will include small, national and multinational businesses. The reasons that these businesses need to raise finance include:

- **Growth** – in order to expand, a business may need to purchase more premises, more equipment, equipment that allows the business to produce high quantities, CAM or robotics that allows the introduction of flow production, the development of new products or services, or to employ more workers;
- **Financial problems** – businesses of all sizes may experience problems, especially when consumer demand for products and services fall. This can result in cash flow and profit problems, and finance can be sought to help the business get through these difficult times;
- **To increase efficiency and long-term profitability** – a business may invest in new systems and processes that will allow cost savings and greater profitability in the long-term, but an investment is needed to start the improvements.

The most suitable finance option for a business depends on many things, such as:

- How well established the business is
- The amount of profit previously made
- How much security the business can offer, like buildings or other assets (items that the business owns)
- The type of business (sole trader, partnership, private limited companies, public limited companies)
- How much funding is needed
- The amount of time the money is required for
- What the finance will be used for
- The affordability of repayments.

Internal sources of finance

Owner's capital

This is money that is put into the business from the private savings of the owners. Many businesses are started using the owner's own savings, an inheritance, or redundancy pay from a previous employer. For small businesses, further investment through the sole traders, partners or shareholders own capital (savings) may be the only method of raising money. Risk-taking entrepreneurs may sell their own assets (e.g. house) to raise money to invest.

Retained profits

This is regarded as the single most important source of finance and is also the cheapest source of finance. As a business becomes more profitable, it makes sense to build up and retain some profit. A business can pay out the profit to owners or shareholders, or it can reinvest the profit back in to the business. Often, both may occur, with some profits going to owners or shareholders and the rest reinvested in the business.

Reinvesting profit is a good idea as there is no interest to pay on the money invested (there would be interest to pay if all the profits had been given to the owners, and the money for investment had come from loans). Also, the owners should be happy to reinvest profits, as the growth of the business will increase the value of their share of the business, and hopefully, lead to higher profits in the future. However, there is a short-term cost – less profit to be shared amongst owners and lower dividends for shareholders of private limited and public limited companies.

Selling assets

A business can sell some of the assets it owns to raise finance. Businesses may have assets they no longer need, such as an old factory site, which can be sold. Often, the selling of assets only happens when other ways of raising money have failed. Established businesses are able to sell off assets that are no longer required, such as buildings and machinery. Smaller businesses are unlikely to have such unwanted assets and, if growth is an objective, they are much more likely to want to acquire assets, as opposed to losing them.

In some cases the business may lease back the asset, so that it still retains its use. Big businesses often do this, e.g. the sale and lease back of office blocks. Selling assets and leasing the asset back improves cash flow in the short-term. If the cash raised from the sale of the asset is used effectively by the business, cash flow and profitability can also improve in the long-term.

Such assets may include:

- Machinery – which is still usable. It is sold to competitors or to businesses just setting up. If it is not usable, it is sold for scrap;
- Land – property and buildings no longer required;
- Parts of a business – perhaps a brand or whole factory may be sold to a rival, because the business wants to concentrate on producing a smaller range of goods.

1. Explain the difference between owner's capital and retained profit.
2. Why should internal sources of finance be considered before looking at external sources of finance?

External sources of finance

Family and friends

Borrowing from friends and family is a popular source of external finance for many new entrepreneurs. It is useful when only a small amount of capital is needed to start a new business or when a small established business wishes to grow. Normally, family and friends will lend money and not ask for any interest to be paid, so the cost of borrowing is zero. Of course, this is only possible if family and friends have the money to lend and it can cause problems with relationships, if the business is not successful and the money cannot be repaid.

Bank loans

This is lending by a bank to a business. For most businesses, the main source of finance is commercial banks, such as Barclays, HSBC, RBS and Lloyds. A fixed amount is lent for a fixed period of time and normally for a specific purpose. The bank will charge interest on the loan and the interest, plus part of the capital (the amount borrowed) will have to be paid back each month. The bank will only lend if the business is creditworthy, and it may require security. If security is required, this means the loan is secured against an asset of the borrower. If the loan is not repaid, then the bank can take possession of the asset and sell the asset to get its money back.

The following information is supplied by Santander, on loans that they have for sale to businesses:

Could investing in new equipment give your business a boost? Maybe you're looking to refurbish your property or start a new project? Whatever your plans, get them started with a fixed rate business loan.

To be eligible for a Small Business Loan you must also be a Santander Business Current Account holder.

- Put your plans into practice: borrow from **£2000 up to £25 000**
- Terms based on your needs: pay back over **1–5 years**
- Manage your monthly costs with a fixed rate: from **4.9% APR to 24.9% APR**
- No fees: we won't charge you an arrangement fee on our business loans

All lending is subject to status, availability and our lending criteria. The right to decline any application is reserved.

Interest rate
Rates from 4.9% APR to 24.9% APR. The actual interest rate you're offered is based on a credit assessment of your financial circumstances. Once the loan is taken, the interest rate is fixed for the duration of the loan. Interest is calculated daily on the outstanding loan balance.

Fees
There are no arrangement fees for setting up a business loan.
Early repayment charges may apply.

Monthly repayments
See what your monthly repayments could be with our business loan calculator.

Source: http://www.santander.co.uk/uk/business/borrowing-finance/business-loans

Using Santander's business loan calculator http://www.santander.co.uk/info/business-banking/business-banking-loan-calculator:

1. (a) Calculate the cost of a:

    - £5 000 loan
    - £10 000 loan
    - £20 000 loan

    for 60 months.

    (b) Recalculate the same three amounts for 36 months.

2. What happens to the monthly repayments when the time is reduced?

3. What happens to the total amount repayable when the time is reduced?

4. Why would a longer repayment time be better for a new business?

5. Explain the statement '*The actual interest rate you're offered is based on a credit assessment of your financial circumstances*'.

6. What does APR mean?

7. What would happen to the repayments if the APR was (i) reduced, or (ii) increased?

Overdrafts

An overdraft is a form of bank borrowing. A business becomes overdrawn when it withdraws more money out of its account than there is in it, so the business will end up with a negative bank balance. Once an overdraft limit (perhaps £5 000) is agreed with the bank, the business can use as much of the overdraft as it needs at any time, up to the agreed overdraft limit. The bank will of course charge interest on the amount that is overdrawn, and will only allow an overdraft if they believe the business is creditworthy (capable of paying the money back). Interest rates on overdrafts tend to be high.

Unfortunately, a bank can demand the repayment of an overdraft at any time. Many businesses have been forced to cease trading because of the withdrawal of overdraft facilities by a bank. Even so, for short-term borrowing, an overdraft is often the ideal solution and many businesses often have a rolling (ongoing) overdraft agreement with the bank. An overdraft is often the best way of solving short-term cash flow problems, e.g. funding the purchase of raw materials, whilst waiting for payment on goods produced.

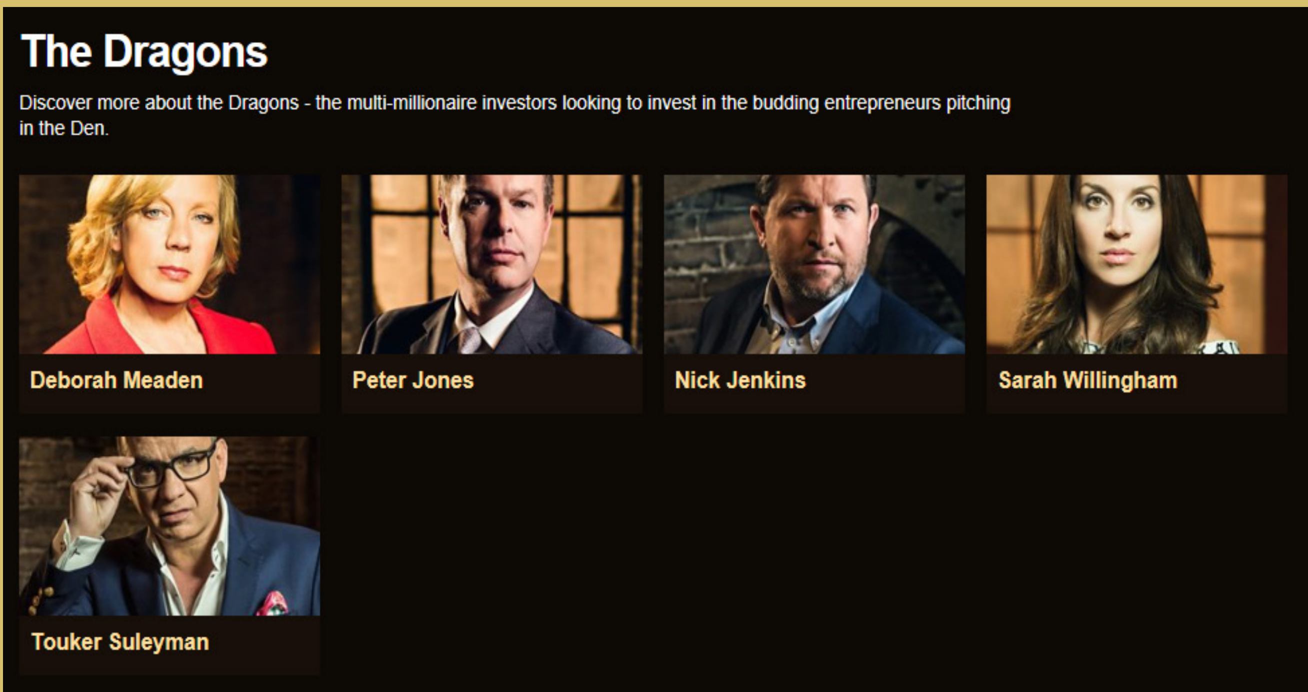
Venture capitalists and business angels

Venture capital is money invested in a business by professional investors (venture capitalists). When venture capitalists invest, they expect a say in how the business will be run and they also expect to make a good profit on their investment within two to three years. The normal method of investment is for the venture capitalists to take an 'equity stake' – this means that in exchange for their investment, they will be given a shareholding in the business. The percentage share will depend upon the amount invested relative to the value of the business. The amount invested can be relatively small – perhaps £50 000, or quite large – say £10m.

Of course, the amount invested depends upon the size of the business and what it is trying to achieve. The venture capitalist expects quick growth, and potentially large profits. From the business's point of view this form of finance comes with no interest payments and ongoing professional advice, so it often makes a great deal of sense. However, it does mean the current owners can potentially lose control of the business they have built if the shares are sold on.

Business angels are similar to venture capitalists, though they tend to focus only on new businesses or relatively new businesses which are looking to grow. They tend to play a more indirect or advisory role, rather than to get fully involved, as venture capitalists tend to do.

The Dragons in the BBC's *Dragons' Den* are examples of business angels.



Source: http://www.bbc.co.uk/programmes/profiles/hsz0Z9sRDbrgL6Bs6BLpdK/the-dragons

1. Explain the benefit of a new business obtaining finance from one of the investors shown above.

2. Use the link above to visit the website and click on each Dragon to read their experiences, and the businesses they have invested in.

New partners

For a sole trader, taking on a partner is a good way of helping fund investment. New partners not only bring in more capital (money) for investment, but can offer new skills which may help a business grow. For existing partnerships, new partners are also an effective way of funding growth. New partners 'buy in', and will be given part-ownership of the business. Their share of ownership, responsibilities and profits should be made clear in a new partnership agreement.

Complete the table below to show two advantages and two disadvantages to a business, of taking on extra partners:

Advantages	**Disadvantages**
1.	1.
2.	2.

Share issue

Limited companies are able to raise extra finance by selling new shares.

A long-term method of providing funds for growth is to sell shares. This means that the business may move from being a partnership or sole trader, to becoming a limited company. There are a number of advantages to being a limited company, which include limited liability and reduction in risk for the owners. However, the main reason is to bring in new shareholders who invest capital for growth.

The question business owners have to answer is how much of a business is the owner willing to give up to gain the finance they need. Share capital is a form of permanent capital; this means it does not have to be repaid. Owners of shares have a say in how the business is run, but the amount of influence they have depends upon the percentage shareholding they own. The major disadvantage of bringing in shareholders is of course loss of control. The business owner or owners will have decisions influenced by new investors. Also, the new shareholder investors may be looking for an exit strategy within a few years. This means that they are expecting the business to grow rapidly and then they expect to be able to sell their shares, taking their capital gain.

Shares can be sold by both private limited companies (Ltd) and public limited companies (PLC), and can be issued at any time in the life of the business, not just when the business is starting up. For the largest PLCs, hundreds of millions of pounds can be raised through issuing shares.

1. What is the difference between public limited companies and private limited companies on where they can sell their shares?

EDF investors agree 4bn euros Hinkley Point fundraising

Shareholders at French energy giant EDF have approved plans to issue new shares to raise 4bn Euros (£3.4bn) to help pay for the nuclear plant at Hinkley Point.

The move comes ahead of Thursday's board meeting where the business is expected to finally approve the project in Somerset – Britain's first new nuclear power plant in decades. The project is expected to cost £18bn.

Hinkley Point C, which would provide 7% of the UK's total electricity requirements, had originally been meant to open in 2017.

But it has been hit in recent months by concerns about EDF's financial capacity to handle the project.

Source: http://www.bbc.co.uk/news/business-36901214

1. Explain why EDF decided to raise the money they need through the issuing of new shares.

Trade credit

Trade credit is a short-term method of financing a business, as it gives the business interest free credit. In other words, it means buy now and pay later.

Trade credit is used to buy stock or materials from a supplier, who allows a period of time before payment is made. This is usually for 30 days, but in some cases, can be as long as 60 days. Large businesses that have large market shares in a market are able to negotiate longer periods of time before they pay the supplier. Trade credit will allow businesses to sell the goods before they need to be paid for, to be able to make a fairly quick profit and improve cash flow.

New businesses or smaller businesses will usually be given shorter payment times, and in some instances, they will not be given any trade credit at all if the supplier is unable or unwilling to give trade credit. Suppliers will wish to be paid straight away (known as COD – cash on delivery) but a business should try to negotiate with the supplier and over time, when the supplier can see that the business is making regular orders and performing well, they may then offer trade credit. A properly prepared financial plan (business plan) can be used to help negotiate trade credit terms.

Leasing

This involves renting machinery, equipment and vehicles. The business never owns these items, but it makes a regular payment to the owners of the asset. This avoids the need to raise large amounts of capital to buy the asset outright. However, in the long term, the cost of leasing can be greater than if the asset was bought.

The main advantages of this are that:

- The cost is split into smaller manageable amounts that are usually paid every month;
- Cash flow can be improved, as the business will pay nothing up front and will know the predictable monthly costs;

- Maintenance and repair costs are paid by the owner of the asset, rather than the owner of the business;
- Updated equipment will be provided by the owner of the asset.

Many businesses, small and large will lease assets such as cars, photocopying equipment and computers. These types of assets are often improved through technical changes over time, and by leasing the business can have these replaced every year or so to make sure they have the most efficient asset being used in their business.

1. A business leases 10 computers from a computer company for two years. The cost of the leasing agreement is £260 per month.

   (a) What is the total cost of the lease for the two years?
   (b) Each computer, if bought from new, would have cost £400. Calculate the difference between the total leasing amount and the amount if the computers were bought outright.
   (c) Using these figures, explain the advantages and disadvantages of leasing as a source of finance.

Hire purchase

Hire purchase is used to fund a specific purchase, such as equipment or a vehicle. The business will pay a deposit, then monthly payments over a period of time. On completion of the final payment, the business will then own the asset. If at any stage the payments are not paid before the final payment, the supplier can reclaim the asset.

Although this is another way of avoiding large upfront payments, which the business might not be able to afford, the interest rates on hire purchase agreements can be high and the final cost can be substantially more than if the asset was bought outright. Hire purchase is a type of short-term loan for a specific asset.

Government grants

There are a whole range of grants made available by a wide number of organisations, including local and national governments, the European Union (this will stop when the UK leave the EU) and organisations such as the Prince's Trust. These grants are there to encourage the set-up of new businesses or to persuade existing businesses to create jobs in areas of high unemployment, or to locate a business in a particular region.

The grants can take a number of forms, such as:

- Money given to support specific projects – grants do not have to be repaid, however, there are also loans available that have low interest rates and are much cheaper than the loans offered by the commercial banks;
- Rent free land or factories;
- New business training and support;
- Tax breaks, so that the business has reduced tax or no tax payments for a certain length of time. There may be no need to pay corporation tax or business rates or employers national insurance.

Grants are not available for all businesses, and the government will have a set of criteria that the business must fulfil, in order to obtain the grant. These grants obviously cut the costs of setting up businesses and encourage businesses to move into a specific region.

Two examples of how businesses used government assistance are shown below:

£7000 Government Start Up Loan Smooths Things Along for Young Entrepreneur

Ben Nichols, a young student on holidays from school, was bored and thought there had to be a better way to spend his time – such as starting a business of his own. Not yet out of his teens in 2011, when he started his company, knowing what he wanted was the first step towards entrepreneurship.

"I wanted to do something productive in my holidays," he said plainly of his inspiration.

Although Ben ran his new business, SoSmoothies Ltd., successfully for nearly two years, when the time came to expand, the budding tycoon knew more business financing than he could manage on his own was required for his small business to continue to grow.

Small business expansion goes smoother thanks to government loan

When the time came to seek the financial assistance his business needed, Ben turned to the United Kingdom Business Funding Centre. "[The] UKBFC was helpful because that's how I found out about the loan scheme," Ben pointed out. "Without [the UKBFC, I would not have secured the loan, and I would still be looking for help."

He went on to say, "[The] UKBFC is the place to find grants and loans. All the funding options across lots of schemes are organised on [the] UKBFC [database], so I would recommend it."

With access to the UKBFC's information business resources at his disposal, Ben was able to locate a £7000 government loan provided by First Enterprise Business Agency –also known as Enterprise Loans East Midlands Ltd. – in Nottingham. This loan funding was approved with little fuss, explained Ben.

"I approached the scheme managers and went about filling out the application, it wasn't too difficult to attain the loan but it took longer than I thought."

In order to qualify to send in a loan application to the funding scheme, which is partially backed by the European Union, Ben had to fulfil several criteria:

- SoSmoothies was required to be located in East Midlands for at least 18 months.
- All legal requirements applicable to the business had to be met, as did all relevant regulations.
- SoSmoothies had to be creating jobs or sustaining them.
- Ben had to be 18 years of age or older.
- Ben had to demonstrate any provided business funding would be going towards a viable
- company. (He had to submit a business plan and six months of financial statements, along with two years of financial projections and two references).

The money was used to expand and upgrade the company's production facilities. This young entrepreneur fully understands how vital this government money was for his business' future.

"It [the loan money] was vital because, without it, we would not be able grow our business at the same pace. We would still be growing slowly, and we would not have our own premises."

SoSmoothies Ltd. currently employs two people, but with this government support for his expansion goals in hand, he believes the resulting production increases will require [more workers]. Hiring new staff is not the sum of Ben's plans for the future, either.

"My business has a very bright future," he told us proudly. "We have won several awards, and we have received lots of press coverage. Our sales are increasing very quickly, and I can't wait for what the future holds."

Considering Ben's company has already sold over ten thousand 250 and 500 ml bottled smoothies after only two years of operations, it is difficult to doubt this student-entrepreneur's enthusiasm. He had some advice to share with other entrepreneurs looking to make their small business dreams come true as he did.

"Don't give up! Keep trying and you will succeed if you work hard enough."

www.sosmoothies.co.uk

Would you like to get funding for your small business, too? There's money available now for qualified existing and start-up businesses. Call Freephone 0800 082 3445.

Source: http://www.ukbusinessgrants.org/articleview.php?id=313&t=e7000-government-start-up-loan-smooths-things-along-for-young-entrepreneur

Airbus to Receive £30 Million in Business Grant Support from Welsh Assembly Government

Plane manufacturers have secured nearly £30 million in government financial assistance from the Welsh Assembly that's to be invested into operations from a plant in Flintshire. It is hoped the Broughton factory will be able to make high-quality composite wings as a result of this government financing, keeping the location competitive and productive.

A spokesperson said that the business financing has [eased] many of the recession's pressures enabling Airbus' Welsh plant to remain open for the foreseeable future. Additionally, one minister spoke of hopes that the business development made at the factory will put the United Kingdom at the forefront of composite manufacturing. The minister added that the benefits of Airbus being based in Wales are equal to the benefits of the government grant money provided to the firm.

It is hoped that the Welsh Assembly's long-sighted decision will enable the tough economic climate's challenges to be overcome, allowing Airbus to get back to business as usual (and better). The promising news followed confirmation that 250 jobs were otherwise going to be chopped at the same factory, with nearly 5% of the workforce being laid off. Airbus stated such staff redundancies were part of a review of their business' needs.

Government grants pave the way for innovation and expediency

After the announcement, the financial aid was provided in response by the Welsh Government, who praised Airbus for preventing the need for job losses, with the company moving to explore other options to deal with a lack in orders resulting in a surplus workforce.

Also thanks to advancements in the aircraft manufacturing industry, the financial assistance for Airbus will help the company remain competitive. The government money is going to create an eco-friendly plant where the new composite wing type can be produced.

The government hopes the business funding shall also result in the Welsh Airbus employees necessarily upgrading their skills whilst also making the area known as a place for innovation.

Would you like to get funding to develop your business idea? There's money available now for qualified existing and start-up businesses. Call Freephone 0800 082 3445.

Source: http://www.ukbusinessgrants.org/articleview.php?id=4&t=airbus-to-receive-e30-million-in-business-grant-support-from-welsh-assembly-government

Prince's Trust

If you're 18 to 30, living in the UK and unemployed, or working fewer than 16 hours a week, and have a business idea or some ideas to explore, our Enterprise programme could be for you.

Kicking off with a free information session in your local area, we'll tell you how we can support you and, if you're still keen, we'll also invite you onto our four-day interactive workshop.

You'll get to meet other like-minded people and have the chance to tap into a business expert, covering everything from business planning and marketing to sales, budgeting and tax.

After this, it's time to start building your business. We'll support you to plan and test your ideas and give you the opportunity to apply for funding. That way, you'll be ready to meet our Business Launch Group at the end of the process.

Once you've launched your business, we'll provide you with an experienced business mentor who will be on hand to share advice every step of the way – for up to two years. From beauticians and barbers to digital agencies and dog groomers, we think we've seen it all. Or have we?

Since 1983 we've helped over 80 000 young people to start their own business.

Source: https://www.princes-trust.org.uk/help-for-young-people/support-starting-business?gclid=COSg6umXjdMCFQ3gGwodh8cCgQ

1. Visit the Prince's Trust website to find out what financial support is given to new businesses.

Choosing the right finance

Businesses have a number of types of finance to choose from. The decision on where to obtain the money will be based on a number of factors, and the best source of finance available will depend on the circumstances of the particular business.
Factors to consider include:

Availability of finance

- Banks may not be willing to lend to certain businesses
- Sole traders and partnerships cannot sell shares
- The business may be in the wrong location for government grants
- Suppliers may not be willing to give trade credit
- There is no retained profit available.

Interest charged

- Some sources of finance will charge higher rates of interest than others, but the total amount of interest paid may be lower if it is over a short time period.
- The rate of interest is often based on the possible risk to the lender, so less risky businesses will usually pay lower rates of interest.

Time for repayment

- Some borrowers will be given a long-term to repay, other loans may need to be paid back sooner.

Amount of money needed

- Some types of finance are more suitable for borrowing small sums of money, others for large sums.

Capital and revenue finance

- Some finance is needed to buy capital goods, some to cover day-to-day running costs of the business.

Long-term and short-term finance

- Some finance is needed for the short-term and some for the long-term.

Effect on business ownership

- Some types of finance may have an impact on the ownership and running of the business, whereas other types of finance just provide money and will not affect ownership.

Liability

- The type of finance may be determined by the effects of limited and unlimited liability.

1. Explain why HP and leasing are external sources of finance for a business.

2. The owner of a website design business needs a new computer. Would you advise the owner to purchase the machinery through HP financing or leasing? Give reasons for your choice.

3. Below are examples of types of finance which may be required by businesses. Select those which are external forms of finance:

    - Bank loan
    - Retained profit
    - Government grants
    - Selling assets
    - Personal savings
    - Selling shares on the stock exchange

4. Jim Hughes and Carol Davies are business partners who sell hiking and cycling equipment in their shop. Suggest and describe two sources of finance Jim and Carol may use to gain the money to buy stock for the shop.

5. Suggest two types of finance which may never need to be repaid.

6. Some finance is needed for the short-term and some for the long-term. Which of the following are likely to be needed short-term and which will be needed long-term?

    - Extending a factory
    - Paying the electricity bill
    - Buying materials
    - Financing a lorry
    - Paying for an advertising campaign

7. Suggest three types of finance which may affect ownership.

8. Halen Môn is natural Welsh sea salt, harvested from the waters around Anglesey. The Anglesey Sea Salt Company Ltd. has developed processes to obtain this traditional product. Halen Môn salt is suitable for kitchen or table use, and is particularly delicious with fresh raw vegetables and salads. The salt is sold by food shops and food catalogues throughout the United Kingdom.

Suggest and evaluate ways in which The Anglesey Sea Salt Company Ltd. could raise finance, if it wishes to expand production.

Revenue and costs

Revenue

Revenue is the money or income a business receives from selling its products or services. It is calculated by multiplying the quantity of products or services sold, by the price of the product or service. It is also called sales revenue or sales turnover.

For example, if a hairdresser has 15 customers in one day for a haircut and charges £20 per person, the revenue will be 15 x £20 = £300 for the day.

As most businesses sell a range of products or services, they are likely to use an average selling price, in order to work out their revenue.

For example, the hairdresser's customers are likely to have different services and not all will pay the same price – some might have just a cut, while others might have their hair coloured and cut, also, some might be children, who will pay a lower price for the service. The £20 used above, is therefore an average selling price, which will be a combination of all the prices charged by the hairdresser.

Calculate the revenue for the following businesses:

1. Assume that McDonald's sell 250 000 Happy Meals each day in the UK. If each Happy Meal costs £2.69 calculate the daily revenue for Happy Meals.

2. A burger van sells burgers and chips to 50 customers per weekday and 80 customers on Saturday and Sunday. The average selling price is £3. Assuming the burger van is open for 7 days calculate its weekly sales revenue.

3. A healthy eating and diet consultant charges £5 per session and works for 4 days every week. They have 2 sessions per day and on average the number of people attending each session is 12. Calculate the weekly revenue for the consultant and then calculate the monthly revenue. Assuming that the consultant has 5 weeks holiday a year, calculate the annual sales revenue for the consultant.

Costs

This is the money that businesses spend to operate the business. A business will have many costs to pay in order to run the business. These include rent, loan repayments, wages, buying equipment, buying stock and materials, power (electricity), advertising, paper and so on.

Make a list of the possible types of costs to a start-up business, setting up a market stall selling fruit and vegetables.

There are two types of cost a business will have to pay:

- fixed costs
- variable costs

Fixed costs

Fixed costs remain the same, no matter how many goods a business produces or sells.

If a business produces one good or if it produces 1 000 goods, it will still have to pay for the rent on the building or for the machinery it uses. Other fixed costs include business rates, insurance and loan repayments.

Fixed costs are costs that do not change with an increase or a decrease in the amount of goods or services produced or sold

Variable costs

Variable costs change according to how many goods a business produces or sells.

If a manufacturer is producing more products, then it will have to buy more raw materials or components. If a shop is attracting more customers and is selling a higher volume of products, then it will have to buy more stock. Its variable costs will increase.

This also applies if the manufacturer or shop is making or selling fewer products – then its variable costs will decrease.

Variable costs are costs that vary with the level of output

1. Give two examples of the fixed costs a business has to pay.
2. Give two examples of the variable costs a business has to pay.
3. Explain the difference between fixed costs and variable costs. Use a numerical example to illustrate your answer.

Total costs

Adding the fixed costs and variable costs will give a business's total costs.

Total cost = fixed cost + variable cost

Profit or loss

To make a profit, a business has to have revenue that is greater than its total costs. If the revenue is lower than the total costs, then the business will make a loss. The formula for calculating profit (or loss) is:

Profit = revenue – total costs (fixed cost + variable cost)

For example, if a business has sales revenue of £50 000 and its fixed costs are £20 000 and its variable costs are £25 000, then its profit will be £5 000.

1. Calculate the profit or loss for the following business for 2016:

   A local pet supplies shop has, on average, 400 customers per week. The shop is open for 48 weeks in a year. The average selling price is £15. Its fixed costs are £100 000 and its variable costs are £150 000.

In 2017, the business has experienced the following changes:

The number of sales per week has remained the same at 400; however, the average selling price has fallen to £12. The fixed costs (an increase in rent and business rates) have increased to £120 000 and the variable costs have decreased to £125 000.

2. Calculate the profit or loss for 2017.

Break-even

Break-even is the point at which a business makes neither a profit nor a loss.

Break-even is where total revenue = total cost

If a business produces or sells one less good, the business makes a loss, if it produces or sells one more, it makes a profit. Break-even point is therefore a very important measure for a business, as it shows how much it needs to produce or sell in order to make a profit.

Break-even charts are used to illustrate the break-even point for a business. In order to draw a break-even chart, the following information is required:

- total revenue
- variable costs
- fixed costs
- total costs

In a break-even chart, these 4 pieces of information are drawn as lines.

1. To start, the **fixed cost** line is drawn.

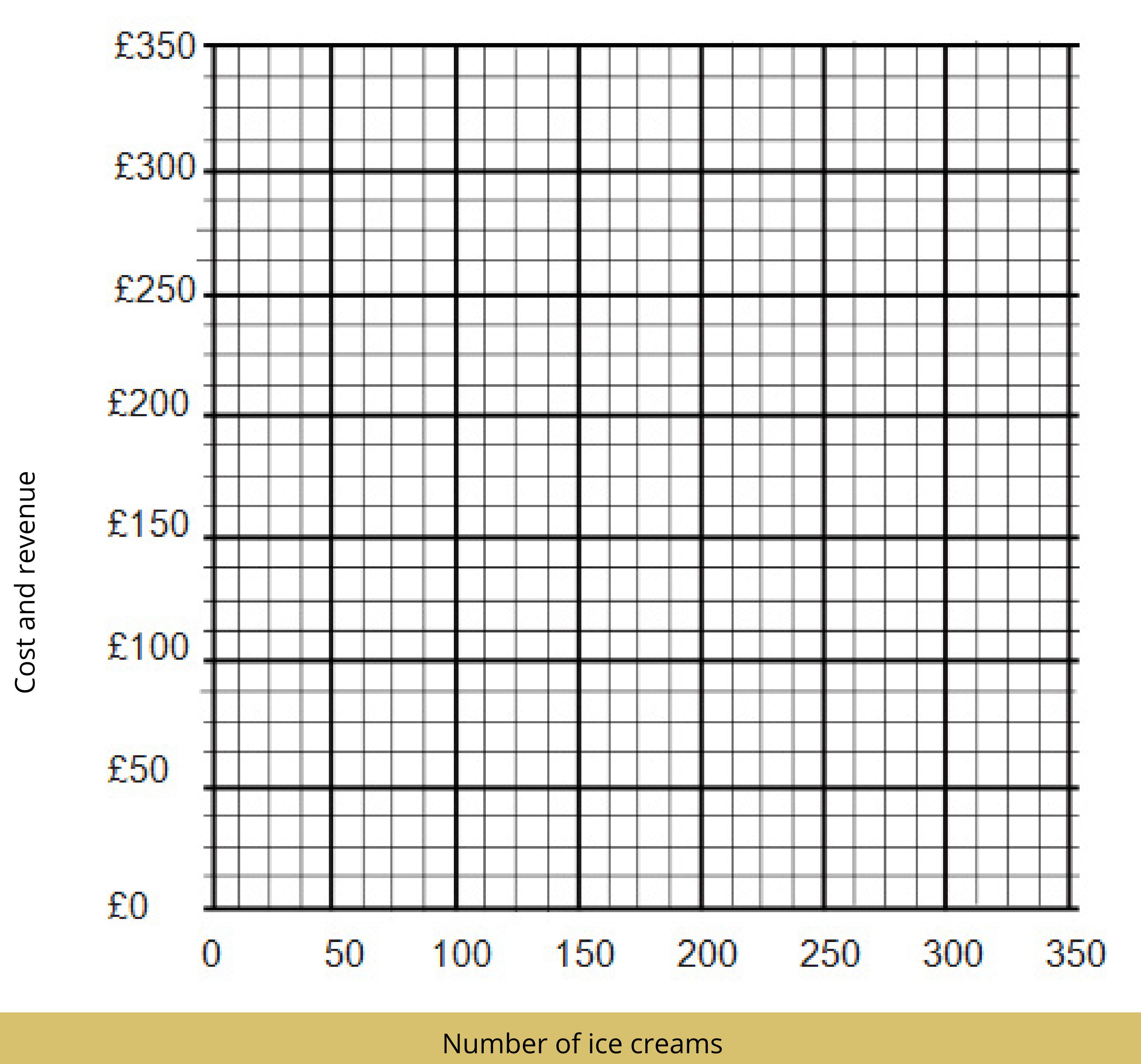
A particular ice cream seller may have to pay £100 per day, no matter how many ice creams are sold.

Complete the table below to show the fixed cost.

Number of ice creams sold	Fixed cost (£)
0	
50	
100	
150	
200	
250	
300	
350	

Your answers can be shown on a graph. On graph paper, draw the fixed cost line. Use the labels and figures on the axis as shown below.

Label your line as fixed cost. Your line should be a horizontal line. Why is this a horizontal line?



2. The **variable cost** line is drawn next.

It costs the ice cream seller 50p for the materials to sell one ice cream. Copy and complete the table below to show the variable cost.

Number of ice creams sold	Variable cost (£) (Number x 50p)
0	
50	
100	
150	
200	
250	
300	
350	

Using your graph, add the variable cost line and label it as variable cost. Your line should slope up from the left to the right. Why does this line slope upward?

You should now have two lines on your graph.

3. The **total cost** line is drawn next. We do this by adding the fixed costs and variable costs:

Total cost = fixed cost + variable cost

Using the same figures from the calculations you have already completed on fixed and variable costs, complete the table to show the total cost.

Number of ice creams sold	Fixed cost (£)	Variable cost (£) (Number x 50p)	Total cost (£)
0			
50			
100			
150			
200			
250			
300			
350			

Using your graph, add the total cost line and label it as total cost. The total cost line should always start at 0 quantity, at the same place that the fixed cost line starts. Why do you think this is the case?

You should now have three lines on your graph.

4. Finally, we draw the **total revenue** line. To do this, we need to calculate the total revenue for each number of ice creams sold.

The ice cream seller sells his goods at £1 each.

Complete the table to calculate the total revenue.

Number of ice creams sold	**Total revenue (£) (Number x £1)**
0	
50	
100	
150	
200	
250	
300	
350	

Using your graph, add the total revenue line and label it as total revenue. The line should slope up from the left to the right and at some point it should cross the total cost line.

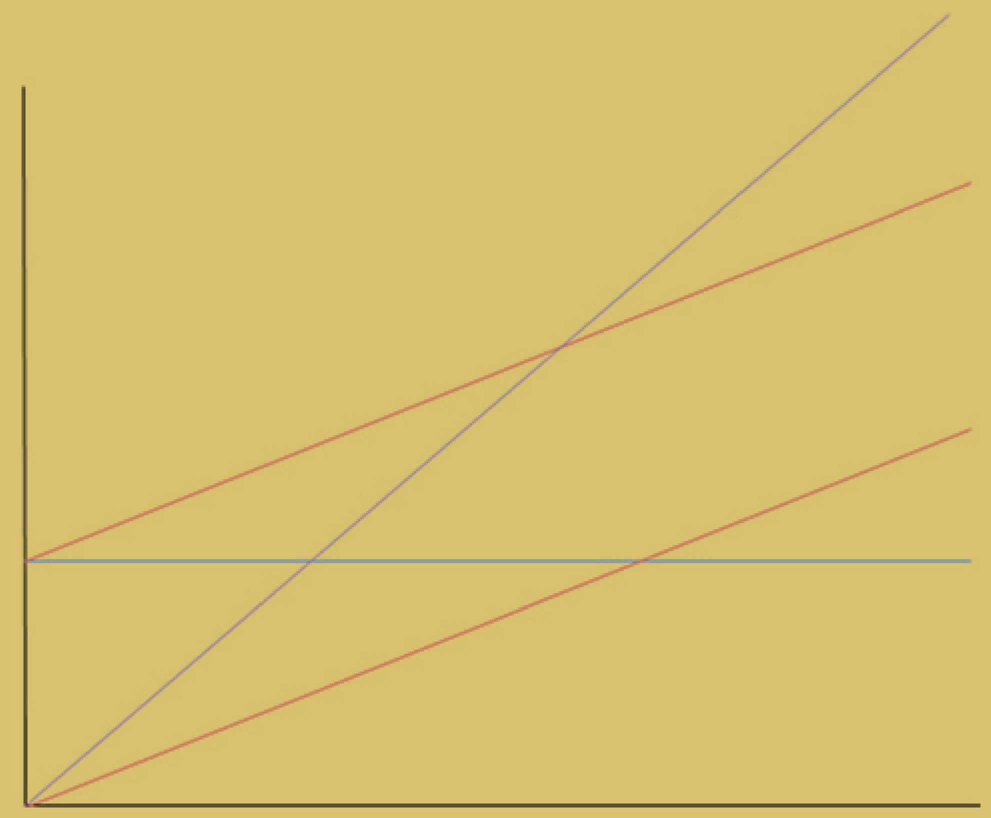
You should now have 4 lines on your graph. All four lines should be straight lines. To save time, you only need to plot the first and last figures, and then join these two points to give you the line.

We can now work out the break-even point from the graph. Break-even is where the total costs equal the total revenue – on the graph this is where the two lines cross. Mark this point and draw a vertical dotted line down to the horizontal axis (number of ice creams). What is the break-even point? Every sale above this point will give a profit and every sale below this line will give a loss. The further you move away from this point is what will give a greater profit or a greater loss.

We can also calculate profit or loss at other levels of sales. For example, if we wanted to work out how much profit would be made if 300 ice creams were sold. Draw a vertical dotted line up from the horizontal line at 300 and where it meets the total cost line, draw a horizontal line across to the cost and revenue axis, and mark the cost. Then, continue the vertical dotted line to where it meets the total revenue line, then draw another dotted line across to the cost and revenue axis, and mark the revenue. The difference between these two figures will be the profit.

When constructing break-even charts, it is very important to use a scale that allows a clear and accurate graph to be drawn. It is also important to clearly label the axis, lines and break-even point.

Label the axis, fixed costs, variable costs, total costs, total revenue and the break-even point on the chart below:



Calculating break-even by contribution

Break-even can also be calculated by using a formula. This formula is known as contribution.

$$\frac{\text{Fixed costs}}{\text{Contribution per unit}}$$

Contribution is the revenue a business receives from the sales of the product, minus the variable cost of the product. This is because any positive figure between selling price per unit and variable cost per unit 'contributes' to paying off the fixed costs. Once all the fixed costs have been covered by the contribution, a business has reached break-even. This is because all costs (fixed and variable) have been covered.

For example, using the same figures we used for the break-even chart, the selling price of the ice cream is £1 and the variable cost is 50p. The contribution is therefore 50p (£1 – 50p).

When the contribution has been calculated, the formula can be used to calculate the break-even point.

For the ice cream business, the fixed costs were £100, so using the formula:

$$\frac{\text{£}100}{.5\ (50\text{p})} = 200 \text{ ice creams}$$

If you constructed your graph correctly, this is the break-even point that you should have calculated.

GHK Ltd makes luxury rugs. The following information about the business for 2017 is available:

- Fixed costs – £50 000
- Variable costs per rug – £260
- Number of rugs sold – 500
- Price per rug – £350

1. Use the contribution formula and the information above to calculate how many rugs the business had to sell to break-even in 2017.

2. Comment on the profit or loss made by the business in 2017.

3. Suggest how the business could use this information for 2018.

Break-even is used by businesses to show the effects of changes in costs and prices. It can be applied to 'what if' scenarios to help businesses analyse what would happen to profit, if costs and revenue rises or falls.

Generally, the following will happen when costs and prices change:

- **A rise in costs** will lead to the break-even point increasing, as more products will have to be produced or sold, as more revenue is needed to cover the higher costs. A business could also increase revenue by increasing the price, as long as this does not reduce demand for the product, as customers shop elsewhere. On a break-even chart, the total cost line will move upwards. The increase in costs could be due to increased fixed costs, variable costs or both.

- **A fall in costs** will lead to the break-even point decreasing, as fewer products will have to be produced or sold to reach break-even. On a break-even chart, the total revenue will cross the total cost line sooner, as the total cost line will move downwards. Once again, the decrease in costs could be due to increased fixed costs, variable costs or both.

- **A rise in prices** will lead to the break-even point decreasing, as fewer products will have to be produced or sold to reach break-even. This will result in increased revenue if the business sells the same quantity of products. On a break-even chart, the revenue line becomes steeper and will cross the total cost line sooner.

- **A fall in prices** will lead to the break-even point increasing, as more products will have to be produced or sold to reach break-even. More products will have to be sold to keep the break-even point the same. On a break-even chart, the revenue line is more gradual and will take longer to cross the total cost line.

Using the following information on GHK rugs in 2017 to answer the questions below:

- Fixed costs last year – £50 000
- Variable costs per rug – £260
- Number of rugs sold – 500
- Price per rug – £350

1. How could the business lower its fixed costs?

2. How could they lower its variable costs?

3. What would happen to the break-even point if they managed to lower the fixed costs to £45 000?

4. What would happen to break-even if the business also increased the price to £375 and sales remained at 500?

5. Why might increasing the price reduce the number of rugs sold?

6. Calculate the new break-even point if the changes in question 3 and 4 were carried out, but sales dropped to 400 rugs.

Complete the table below to suggest what you expect to happen to the break-even point and to the profit, if the following events took place:

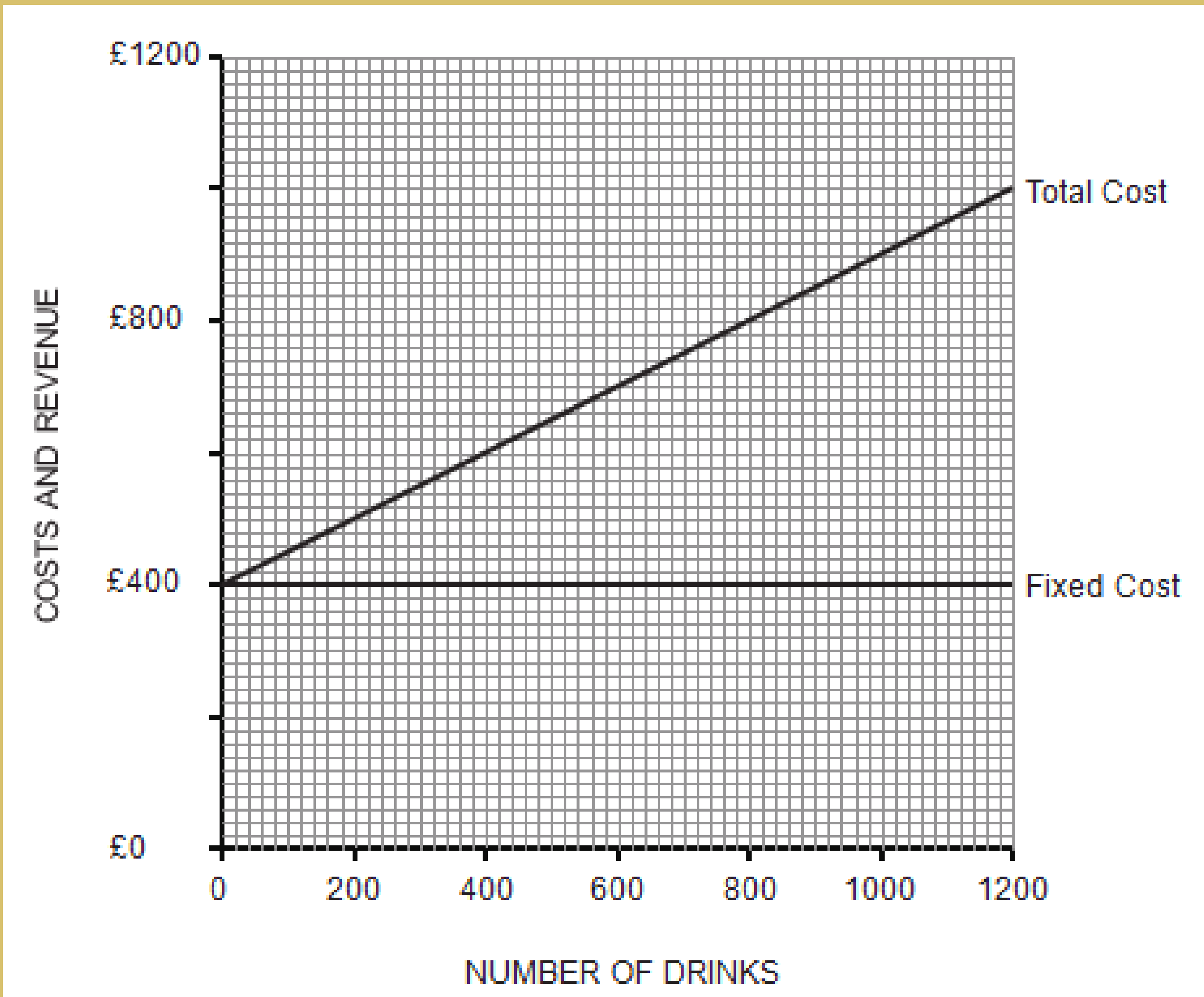
Event	Break-even point	Profit
Price goes up		
Variable costs fall		
Fixed costs rises		

Complete the questions in the Calculating Contribution and Break-even resource for Quantitative skills for GCSE.

http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-25/eng/unit1/calculating_contribution_and_breakeven.pdf

Ali has set up a juice bar in a busy town centre location. He uses fresh fruit, which is processed to create a healthy drink.

Ali wants to find out how many drinks he will need to sell in order to make a profit. To do this, he has drawn up a break-even chart showing weekly costs and revenue. This break-even chart is shown below.



1. The drinks sell for £1 per glass. Draw and label the total revenue line for Ali's business.
2. How many glasses of juice will Ali have to sell each week to break-even?
3. How much profit (or loss) will be made each week, if 1200 juices are sold?
4. Total costs increase to £500. Draw a new fixed cost and total cost line. How many glasses of juice will Ali now have to sell each week to break-even?

Profit as a reward for business activity

Profit is the main measure of business success and is often the main motive for entrepreneurs starting a business and for investors investing in the business. Although there are other business objectives, profit is often seen as the key objective and the long term goal of any business activity. Profit, therefore, is the reward for the hard work by entrepreneurs and also the reward for investors, for risking their money by investing in the business.

Businesses and investors can use the **average rate of return** (ARR) to measure the success of a business investment. The ARR method calculates the average annual percentage return an investment provides for a business. It does this by dividing the average annual profit of an investment by the initial cost of the investment.

For example, if a business invested £20 000 in new production machinery and as a result the profit of the business increased by £5 000, then the ARR would be:

$$\frac{\text{The average annual return}}{\text{The initial outlay}} \times 100 \qquad \frac{£5\ 000}{£20\ 000} \times 100 = 25\%$$

The ARR is always given as a percentage. The higher the figure, the greater the profit that is made. In the example above 25% seems to be a good return on investment. If this is compared to just leaving the £20 000 in a bank account, the annual interest earned would be much less than this (in 2017, the typical rate of interest on savings for this amount varied between 1% and 3%).

However, on its own, this figure doesn't tell a business that much. ARR is more useful when it is used to compare alternative investments.

In the example above, if the business also had a choice in investing of employing more workers, instead of buying the machinery, and that this would cost £15 000 and would increase profits by £3 000, then the ARR would be:

$$\frac{£3\ 000}{£15\ 000} \times 100 = 20\%$$

Compared to the ARR of 25% for the new machinery, the investment in employing new workers is lower; therefore, the investment in the machinery is a better option for the business.

In the example above, the time period is only one year, but most investments are concerned with a longer period of time, so it is more realistic to consider the average annual return over a number of years.

To do this, the following technique is used:

1. Divide the net profit generated by an investment by the number of years the project is expected to last (this is the average annual return).

2. Use the formula above to give the ARR as a percentage.

A business angel is looking to invest some money into a new business start-up. They are looking at investing their money for 5 years for a 20% stake in the business. They are considering two possible business opportunities – they have been given the information below:

Projected profit	Business 1 £65 000 investment	Business 2 £80 000 investment
Year 1	£8 000	£5 000
Year 2	£10 000	£10 000
Year 3	£15 000	£20 000
Year 4	£17 000	£30 000
Year 5	£20 000	£35 000
Total	£70 000	£100 000

The first stage is to divide the total profit by the number of years:

Average annual return	$\frac{£70\ 000}{5 \text{ years}} = £14\ 000$	$\frac{£100\ 000}{5 \text{ years}} = £20\ 000$

The next stage is to use the formula:

$\frac{\textbf{Average annual return}}{\textbf{Initial outlay}}$ **x 100**	$\frac{£14\ 000}{£65\ 000}$ x 100 = 21.54%	$\frac{£20\ 000}{£80\ 000}$ x 100 = 25%

Based on this information, the business angel should invest in Business 2 as it gives a higher return on their investment.

By using ARR the business angel can see quite easily which one is the best option. However, ARR only looks at the projected profit and does not take anything else into consideration.

In addition to the ARR, what other quantitative and qualitative factors should the business angel consider?

Complete the questions in the **Calculating Average Rate of Return (ARR)** resource for Quantitative skills for GCSE:

http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-25/eng/unit1/calculating_average_rate_of_return.pdf

1. Why do investors invest in business projects?
2. Why do businesses and investors use ARR?
3. Calculate the ARR for a fast food business that is planning to open a new outlet. The new outlet will cost £100 000 and is expected to make a profit of £40 000 over 3 years.

Profit and loss accounts (income statements)

A profit and loss account or income statement is a financial statement that shows the revenues and costs of a business and calculates the profit or loss made over a specific period of time. A profit and loss account is used:

- to show how well the business is doing to satisfy its owners (including shareholders)
- to calculate its tax liabilities
- in a business plan, when applying for finance.

The main components of a profit and loss account are:

- **Sales turnover** (revenue) – the money or income a business receives from selling its products or services.
- **Cost of sales** – the costs involved in directly producing or selling products and services. These include the direct materials, components or stock used in producing or selling, direct employee costs in producing or selling, and energy costs used in the direct production or selling of products and services.
- **Gross profit** – this is sales turnover minus the cost of sales.
- **Expenses** (overheads) – the costs that are not directly linked to the production or the selling of products and services. These include rent, insurance, management salaries, maintenance, marketing, general energy costs and interest on loans.
- **Net profit** – this is the gross profit minus the expenses, and gives the final profit for the business. The net profit is the most important profit for a business and is the profit that is used to measure the overall profit (or loss) for the business.

These components are used to construct a profit and loss account. Profit and loss accounts are constructed for a specific trading period, usually for a 6 month or 12 month period. The example below shows the basic way in which a profit and loss account is set out:

Example of a proft and loss account for ABC Ltd for 2017	
Sales revenue	£70 000
Cost of sales	£40 000
Gross profit	£30 000
Expenses	£20 000
Net profit	£10 000

Two calculations are carried out:

Sales revenue – cost of sales = Gross profit £70 000 – £40 000 = £30 000

Gross profit – expenses = Net profit £30 000 – £20 000 = £10 000

So the final overall profit made by the business in 2017 was £10 000.

The net profit will be shared by a number of stakeholders:

- Some will be taken as tax by the Government
- Some will be distributed to the owners
- Some will be ploughed back into the business
- Some will be kept in reserve for future use.

Profit and loss accounts are usually more thorough than the example given above, which just shows the general layout and the order in which the main components are presented and calculated.

The example below is a more detailed profit and loss account:

Stephen Collins owns a newsagents shop, called Newsround, in Liverpool. In his shop Stephen sells newspapers, stationery and sweets.

His profit and loss account for 2017 is shown below:

NEWSROUND PROFIT AND LOSS ACCOUNT FOR 2017

	£	£
Sales Revenue		**200 000**
Cost of newspapers	60 000	
Cost of stationery	20 000	
Cost of sweets	20 000	
COST OF SALES	100 000	**-100 000**
GROSS PROFIT		**100 000**
Wages	30 000	
Gas & electricity	1 000	
Rent	12 000	
Rates	12 000	
Other costs	1 000	
EXPENSES	56 000	**-56 000**
NET PROFIT		**44 000**

This profit and loss account has two columns. The first column adds the different costs, to give the overall cost of sales and then the different expenses which gives the total expenses. The second column shows the main components of the profit and loss account.

1. Complete both of the following profit and loss accounts:

(i)

Sales revenue	£545 000
Cost of sales	£205 500
Gross profit	
Expenses	£285 000
Net profit	

(ii)

Sales revenue	
Cost of sales	£47 000
Gross profit	£15 000
Expenses	
Net profit	£8 500

1. Hannah and Sophie are partners in a business which manufactures designer bedroom furniture. In 2017 their sales revenue totalled £155 000. The direct costs for making the furniture consisted of materials which cost £25 000, wages to the production workers of £16 000, and ready-made components bought from suppliers to finish their furniture of £12 000. In addition, Hannah and Sophie had to pay £7 000 in repayments to the bank for the loan they took out when they started the business, salaries for themselves of £20 000 each, marketing costs of £3 000, business rates of £2 000 and a number of administrative and other costs that totalled £15 000.

   Using this information, construct and calculate the profit and loss account for the business for 2017.

The profit and loss account is an important financial statement, not just for the owners of the business, but also for all the stakeholders of the business. The information and calculations in a profit and loss account can be used to judge the performance of the business and the likely success or failure for future years. These stakeholders include:

The owners – to see how much return they are getting on their investment, or just to see if all the hard work put into the business is worthwhile.

The employees – to see if their jobs are safe and if the business has a long term future. For larger and more established businesses with a high number of employees, the information in the profit and loss account could be used when negotiating wage increases.

Suppliers – use the information to see if the business is likely to continue being a customer and if trade credit is to be given. It is more likely that a business making a large profit will be able to obtain good trade credit arrangements.

Competitors – for incorporated businesses (Ltd and Plc) the profit and loss account must be available for anyone to see. A competitor can use this information to improve their understanding of competitors trading activities and how they make their profit.

Investors and shareholders – the information in the profit and loss account will give an indication of the profitability of the business and how risky investing in the business will be. Shareholders can see if their investment in the business is worthwhile, and if they are likely to receive rewarding dividend payments and an increase value in their shares.

The government – will use the profit and loss account to calculate how much tax the business should pay.

When interpreting the profit and loss account, it is not advisable just to look at one year in isolation. It is much more useful when the main components of a profit and loss account are compared over time and/or with competitors. When judging business profitability and performance, it is important to look at trends and to see how well a business has performed over a number of years.

Using the example of Stephen Collins, who owns the newsagents shop Newsround, in Liverpool, we can add the profit and loss account for the last three years:

	2015	**2016**	**2017**
Sales revenue	£150 000	£190 000	£200 000
Cost of sales	£80 000	£100 000	£100 000
Gross profit	£70 000	£90 000	£100 000
Expenses	£55 000	£55 000	£56 000
Net profit	£15 000	£35 000	£44 000

This table of the main components of a profit and loss account gives a wealth of information about the business. The sales revenue has increased, especially between 2015 and 2016, which means that Stephen has managed to increase his number of customers, or, increased the amount each customer spends in his shop. He might have done this in a number of ways, such as increasing prices, improving the range of items he sells in the shop, or carrying out effective promotional activities.

The cost of sales have increased, which is expected as this is directly linked to the number of products he sells. However, between 2016 and 2017, the cost of sales has stayed the same, even though the sales revenue has increased. This suggests that he may have found alternative suppliers for his products, who charge less for the products, or that he has negotiated lower prices with his current supplier. As his cost of sales did not increase in the last two years, his gross profit has increased by £10 000 – this is a very positive aspect of his business.

The expenses for his business have increased slightly over the three years, but this is very stable, which suggests that Stephen has a good control of the expenses that are not directly linked to his cost of sales. These costs are stable and have resulted in a very good net profit over the last two years. It is possible that in 2015, Stephen was still establishing his business and once he obtained a good number of loyal customers his expenses (overheads) were easily covered by his sales revenue.

By using information over a number of years, it is much easier to analyse the financial performance of a business in order to give an accurate and appropriate summary. However, it may not give a full picture of the business performance. It is, therefore, important to consider other qualitative information that gives a complete picture and a context of the environment the business is operating in. For example, for Stephen's shop in Liverpool, in 2017 another local newsagent, which was Stephen's main competitor, closed down. In this context, he should have gained more customers than he did and it is possible to consider that Stephen's shop did not actually perform as well as expected, and by just looking at the profit and loss account figures, a true picture is not given.

Seif owns and runs an organic food cafe in his local town. There are also many other cafes, restaurants and take away outlets located throughout the town centre, many of which are well known brands.

Seif is a sole trader and he enjoys running the cafe and experiencing the risks and rewards of being an entrepreneur. He has built up an excellent reputation and the cafe often receives excellent reviews on TripAdvisor.

Below is Seif's profit and loss account for 2016 and 2017:

	2017 (£)	**2016 (£)**
Sales revenue	80 000	70 000
Cost of sales	50 000	40 000
Gross profit	?	?
Expenses:		
Salary	15 000	14 000
Gas & electricity	1500	1500
Rent	4000	3500
Business rates	500	700
Other Costs	1500	1500
Total expenses	?	?
Net profit	?	?

1. Complete the profit and loss account for 2017 and 2016 by calculating the missing

figures.

2. Give two possible examples of costs of sales for Seif's business.

3. Use the quantitative data to analyse the profit and loss account for Seif's business over the two years.

4. In addition to the quantitative data, consider the qualitative information, to evaluate the performance of Seif's business.

Sports Direct is a UK based multinational sports retailer. The information below is taken from their annual report for 2016:

	2016 (£'000)	2015 (£'000)	2014 (£'000)
Revenue	2 904 325	2 832 560	2 705 958
Cost of sales	(1 619 681)	(1 591 748)	(1 551 036)
Gross profit	1 284 644	1 240 812	1 154 922
Expenses	1 061 466	945 231	905 791
Gross profit	223 178	295 581	249 131

Adapted source: www.sportsdirectplc.com

Analyse Sports Direct's financial performance.

Complete the questions in the Calculating Costs, Revenues and Profits (P&L Account) resource for Quantitative skills for GCSE:

http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-25/eng/unit1/calculating%20costs.pdf

Profit ratios

Gross profit and net profit will often show how successful a business is, but the figures don't always show the true picture.

Two businesses with net profits of £100 000 will appear to be equally successful, but if one has sales of £1m and the other has sales of £200 000, this is not the case. Therefore, to measure the success of a business, it is more useful to calculate the profit as a percentage over sales revenue. This is done by using two different profit ratios.

Gross profit margin (GPM)

This ratio compares a business's gross profit with the sales revenue for a specific period of time. The following formula is used:

$$\text{Gross profit margin} = \frac{\text{gross profit}}{\text{sales revenue}} \times 100$$

The gross profit margin is always a percentage.

For example, using the information for ABC Ltd in 2017:

Example of a proft and loss account for ABC Ltd for 2017	
Sales revenue	£70 000
Cost of sales	£40 000
Gross profit	£30 000
Expenses	£20 000
Net profit	£10 000

$$\text{Gross profit margin} = \frac{30\,000}{70\,000} \times 100 = 42.86\%$$

This shows that for every £1 received by the business 42.86p is gross profit.

Net profit margin (NPM)

This ratio compares a business's net profit with the sales revenue for a specific period of time. The following formula is used:

$$\text{Net profit margin} = \frac{\text{net profit}}{\text{sales revenue}} \times 100$$

The net profit margin is always a percentage.

Once again using the information for ABC Ltd:

$$\text{Net profit margin} = \frac{10\ 000}{70\ 000} \times 100 = 14.29\%$$

This shows that for every £1 received by the business 14.29p is net profit.

The net profit margin is considered the best ratio to use to analyse a business's financial performance, as it takes into account all of the costs the business has to pay. However, the gross profit margin is useful, as it considers the cost of sales to a business, to see if these are what is expected by the business and is normal for a business operating in a particular market.

It is difficult to fully analyse profit ratios unless they are compared to ratios from different years and/or competitors. Therefore, when judging profit ratios it is important to look at trends and to see how well a business has performed over a number of years (as we did when we analysed the profit and loss account).

Using the information we have on the newsagent owned by Stephen Collins we can calculate the gross profit margin and net profit margin for the three years:

	2015	**2016**	**2017**
Sales revenue	£150 000	£190 000	£200 000
Cost of sales	£80 000	£100 000	£100 000
Gross profit	£70 000	£90 000	£100 000
GPM	**46.67%**	**47.37%**	**50%**
Expenses	£55 000	£55 000	£56 000
Net profit	£15 000	£35 000	£44 000
NPM	**10%**	**18.42%**	**22%**

The use of the profit ratios gives a clear comparison for the business over the three years. It is now very clear to see that the profit margins in 2017, especially the NPM, have grown considerably between 2015 and 2017. If Stephen was looking for an investor, or if he wanted to raise finance with a bank loan, in order to grow the business, the investor and the bank would look at these figures and ratios. The bank and investor may look at other newsagents in the area and discover that the average NPM for newsagents in the Liverpool area was 12%. Therefore, Stephen's business is performing above the average expected for this type of business and would be seen as possible investment. They would be impressed with his profit margins and likely to risk their money in this business, as the chance of success looks very positive.

Calculate (show your workings) the gross profit margin and net profit margin for the following business:

	2016	2017
Gross profit	£12 000	£20 000
Net profit	£5 000	£10 000
Sales revenue	£80 000	£120 000

Did the business perform better in 2016 or 2017? Explain your answer.

Using the data on the previous page on Sports Direct, calculate (show your workings) the gross profit and net profit margins. Comment on their profit margins and the trend they show.

Howeys PLC is a manufacturer of cereals and breakfast snacks. Below is its profit and loss account for 2017 and 2016:

Profit and loss account for Howeys PLC		
	2017	**2016**
	£million	**£million**
Turnover	687.5	
Cost of sales	597.1	543.9
Gross profit		66.9
Expenses	18.6	
Net profit		51.8

1. What is meant by the term turnover?
2. Complete the shaded areas in the profit and loss account.
3. Calculate (show your workings) the gross profit margin and net profit margin for 2017 and 2016.
4. Analyse the financial performance of Howeys PLC.
5. Identify two stakeholders who would be interested in the profit and loss account and explain why they have an interest.

Complete the questions in the Calculating Gross Profit Margin and Net Profit Margin resource for Quantitative skills for GCSE:

http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-25/eng/unit1/calculating_gross_profit_margin_and_net_profit_margin.pdf

Improving profit and reducing costs

The information given in a profit and loss account can be used by businesses to improve revenue and/or reduce costs.

A business can:

increase sales revenue or reduce costs

Sales revenue can be increased in many ways, the strategy used by the business will depend on a number of factors, such as its dominance in the market, how loyal customers are, the behaviour of competitors, if the business has a unique selling point (UPS), and the finance it has available to spend on new products, advertising and improving quality.

A list of possible strategies to increase revenue is listed below. For each strategy explain what is involved, give examples and consider the positive and negative effects of using the strategy:

- increase price
- reduce price
- extend the product range
- improve quality
- increase promotional activities, such as using new advertising media
- sell the product in different countries
- sell the product using different distribution channels.

Reducing costs will increase profit, even if the sales revenue remains the same. The profit and loss account has two types of costs:

- Cost of sales
- Expenses

Cost of sales can be reduced by looking for cheaper supplies of raw materials, components and stock. Workers employed in the direct manufacturing or selling of products could be reduced to save on direct wages and new technology could replace them. Alternatively, large businesses may look at relocating its production to a different country, where labour costs are lower. However, these suggestions could have a negative impact on quality.

1. Explain why changing to a cheaper supplier, reducing the production and sales workforce or relocating the production process to another country, could lead to a drop in sales.

2. What effect will a reduction in cost of sales have on a business's GPM?

Expenses include a wide range of overheads a business has to pay in the operation of the business. These costs include:

- rent
- salaries
- marketing costs
- interest on loans
- business rates

- insurance
- fuel and energy costs
- administrative costs – telephone, internet, paper, stationery etc.

Explain how each of the expenses listed above could be reduced. Consider the possible negative effect on the business for each one of your suggestions.

Whatever strategy is used by a business to increase revenue or to reduce costs, there will be an element of risk, as it is difficult to predict the actual result of the strategy. What might seem like a good idea in the short term to boost the gross or net profit, may, in the long term result in risking the future success of the business.

1. Explain why profit and loss accounts are important for a business.

2. Why should trends in profits be analysed and not singular years?

3. How can the information in a profit and loss account be used by a business to increase revenue or reduce costs?

4. Identify the key stakeholders who would be interested in analysing a business's profit and loss account. Explain why they have this interest.

Read the following article and answer the questions that follow:

Premier Foods shares slide after profit warning

Shares in Premier Foods, owner of the Mr Kipling, Batchelors and Bisto brands, have fallen sharply after the [business] said it expects profits to be significantly lower this year.

The UK food manufacturer said its profits would be 10% lower this year due to rising costs.

The weaker pound has pushed up the price of ingredients such as sugar, cocoa and palm oil.

The company said shoppers were turning to cheaper non-branded products.

Premier Foods' shares fell nearly 11% in Wednesday trading.

The group is about to start a three-year cost cutting plan which aims to make savings of

£10m by next year.

The company said that some of its big brands, including Bisto, Oxo, Loyd Grossman, Ambrosia and Batchelors, were performing well.

And the group sold over 216 million mince pies in 2016, 17% more than the previous year.

However, as in other areas, sales shifted away from the Mr Kipling label in favour of the non-branded equivalent.

Overall, in the third quarter the company's sales were 1% lower than the same period last year. But while branded sales were 3.8% down, non-branded sales were up 11.6%.

Source: http://www.bbc.co.uk/news/business-38661008

1. Why are profits expected to be lower for Premier Foods?
2. What has caused this?
3. Why have shares in Premier Foods fallen in price?
4. Explain what is meant by 'branded' and 'non-branded' sales. Why is this a negative trend for Premier Foods?
5. Explain the strategy Premier Foods intend to use in order to address the fall in profits.
6. Use an example from the data to show how profit and loss information is used to compare the performance of Premier Foods over time.

Cash flow

All businesses need cash. Cash is the money a business has which is readily available to spend. Cash is made up of notes and coins found in the cash boxes and tills of businesses and the money in bank accounts that can be easily accessed.

Cash flows into and out of businesses all the time.

Inflow – this is also known as income or revenue or turnover. It is the money which enters the business's tills or bank account, as a result of selling goods and services.

Outflow – this is expenditure, it is money which leaves the business to pay for the day-to-day costs of the business

Give examples of the possible inflows and outflows for the following businesses:

- tanning salon
- cinema
- florist

Businesses will try to ensure that the amount of money flowing into the business will be greater than the amount of money flowing out of the business. In time, this should give them a positive bank balance.

A business must manage its cash flow in order to have enough money to pay its bills on time. A major reason why many small or new businesses fail is the failure to manage its cash flow – this involves making sure that customers to the business pay their bills on time, as well as making sure that the business can pay their own bills on time.

A business should always try to receive inflows as soon as possible (consideration of promotional offers such as buy now and pay later, can cause a problem if the business does not have a reserve of money in their bank account) and pay outflows as late as possible, or after they have received their inflows.

Without cash, suppliers will not provide materials, electricity will not be available and workers will not work. An important aspect of cash flow is the management of the timing that inflows are received and that outflows are paid. It is possible for a business to be profitable, yet still fail, as it is unable to manage its cash flow effectively.

It is often said in business that 'cash is king' – this is because, at least in the short term, cash is the most important asset a business can have. Without cash, the business will grind to a halt.

Conversely, it is also considered that too much cash is bad for a business. If large amounts of cash are just sitting in the safe or in the bank, then a major resource or asset is not being used effectively to contribute towards business activity and profitability.

It is important to understand that cash is different to profit. Profit is the calculation of revenue minus costs and in most cases, is the primary objective of the business. Cash is the amount of money available to a business to pay its bills. It must not be assumed that just because a business is profitable, it has a good cash flow, likewise it shouldn't be assumed that an unprofitable business has a poor cash flow.

Read the following article and answer the questions that follow:

Cash flow is king for tech savvy small businesses

The Decorus Academy ballet school in Bedfordshire has struggled with late paid invoices, just like many small businesses.

According to owner Laura Pendlebury, students would forget to bring their money in before the start of term and she'd have to spend weeks chasing them up.

"When you've outgoings like premises and heating, late payments can be a real problem," she says.

"If I had a receptionist to help me out, it might have been different, but that kind of overhead isn't feasible for me."

Luckily help was at hand in the form of an app called Zapper Scan-to-Pay.

Through the system Laura attaches a specially created QR code to her invoices that contains payment information. Customers then scan the code using their smartphones, confirm the amount and pay in seconds.

"It's super-quick, much easier than logging into your bank," she says. "Obviously some people don't have smartphones, but they're the minority."

Monies owed

The ballet school says it's now fixed the late payment problem, but many others aren't so fortunate.

According to payment systems provider Sage Pay, nearly two-thirds of UK businesses experience late payments of 90 days or more, with invoices remaining unpaid or outstanding.

Businesses spend on average two weeks a year chasing them.

In January, the Federation of Small Businesses (FSB) reported that more than half of 8 000 surveyed members who provided goods or services to larger private sector businesses had been paid late in the previous 12 months.

"Late payment means reduced profitability, knock-on late payments to suppliers, and reduced business growth," an FSB spokesman said.

"Thousands of small [businesses] even go bust each year purely because the cash flow dries up, not because there's anything wrong with the underlying business."

The good news is that a host of new software platforms are helping to improve the problem.

Take Basware and Tradeshift, for example, which enable companies to issue or pay invoices securely via the cloud.

According to Andrew Jesse, vice-president of Basware UK, "e-invoicing" makes the process more transparent and reduces the time it takes to get paid.

Faster payments

Invoicing isn't the only payment process being streamlined for small-to-medium-sized businesses (SMEs).

Square, a credit card reader that connects simply to a smart device, is proving a benefit for merchants who want to take payments on the hop.

Platforms such as PayPal now have app versions too, reducing a merchant's reliance on cash or card.

The advent of cloud computing has made such technology much more accessible to small businesses.

The cloud has also brought down the cost. In the past, a small business would have to pay for software and hardware upfront and then incur costs maintaining them.

Despite the advances, some are still reluctant to dive in. According to Sage, 67% of small businesses say they prefer paper invoicing. Many small businesses believe that using [accounting] software requires prior knowledge in accounting or payroll and therefore that they might need to employ an expert to be able to use the software.

Decorus Academy's Laura Pendlebury believes this new technology has benefited her. "I was spending so much time chasing small fees, I wasn't really focused on the business," she says. "But now that I get most of my payments in before the start of term, it's a massive benefit. It was definitely worth a shot."

Adapted source: http://www.bbc.co.uk/news/business-26673698

1. Using the information in the article, explain why late payment is a problem for businesses.

2. How has technology been used to improve cash flow?

3. Explain how "Thousands of small businesses even go bust each year purely because the cash flow dries up, not because there's anything wrong with the underlying business."

Cash flow forecasts

In order to help businesses manage their cash flow they should produce a cash flow forecast. A cash flow forecast is a financial document that shows the expected flows of cash into and out of a business over a specific period of time, usually 6 or 12 months. To ensure that the forecast is realistic and reliable, careful and honest considerations of all the inflows and outflows of the business need to be given and the forecast should be for the immediate future – such as the next 6 months.

An accurate forecast (as much as it can be, considering it is a prediction) will allow the business to identify any potential periods of time when there is more money flowing out of the business, than there is flowing in, and the effect this has on the bank balance. These potential cash flow problems can then be identified and strategies can be put in place to solve them.

As with all forecasts (just think of the weather forecast), looking into the future is uncertain. However, with the use of experience, consideration of market factors, economic conditions and knowledge of customer behaviour, a cash flow forecast can help a business obtain a clear understanding of how the business is likely to perform in the next 6 or 12 months. It can also allow owners and managers to be able to identify specific times when the business may need additional funding, or when it may have to reduce its costs.

A cash flow forecast is made up of three parts:

Inflows	Revenue	This will mainly be the income received from selling products or services – this can include cash sales (immediate payment) and debtor payments (when products or services are sold on credit, in other words, buy now pay later). Revenue can also include money invested into the business by the owners or new investors, a bank loan or income from selling assets.
	Total revenue	This is the sum of all the different revenues received.
Outflows	Expenses	This includes any money spent by the business. There are many different types of expenditure – some examples include wages, materials, loan repayments, rent, rates, advertising, electricity, travelling and sundries (various small items with little value).
	Total expenses	This is the sum of all the expenses that have to be paid.
Balances	Net cash flow	This is a calculation that subtracts the total expenses from the total revenue.
	Opening balance	The money available at the beginning of the month.
	Closing balance	The money available at the end of the month. It is calculated by adding the net cash flow to the opening balance. The closing balance for one month becomes the opening balance for the next month.

The cash flow forecast is not a compulsory document required by business regulators (unlike the profit and loss account) therefore, there are a number of different formats or templates a business could use. Most, however, will look like the example shown below:

	OCT	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**
Revenue						
Cash sales						
Bank loan						
Total revenue						
Expenses						
Stock						
Rent						
Gas & electricity						
Wages						
Other costs						
Total expenses						
Net cash flow						
Opening bank balance						
Closing bank balance						

In this example, the cash flow forecast has been set up for 6 months from October to March. There are two types of inflows (revenue) which are cash sales and a bank loan, which would be added together to give the total revenue for each month. It is likely that there will be inflows for each month for the cash sales; however, the bank loan is likely to be given only once, so this will only appear in the month that it is expected. There are 5 different types of outflows that are expected over the next 6 months, and these are totalled every month to give the total expenses. The final part of the cash flow forecast is the net cash flow, and the opening and closing balance for each month. These can only be completed once the expected inflows and outflows have been entered and the totals for each have been calculated.

When entering figures into the cash flow, it is important that the timings of the inflows and outflows are carefully entered into the month when they are expected to come into and out of the business. In the net cash flow opening balance and closing balance rows, a negative amount is shown by the use of brackets, so a negative closing balance in December of £500 would be written in a cash flow as (500).

There are many free templates available on the internet that businesses can use to construct a cash-flow forecast. Also, many businesses will use a spreadsheet, such as Excel, to set up and calculate its cash flow forecast.

For example, www.startuploans.co.uk/cash-flow-forecast-template/ has templates for new businesses. When applying to this organisation for a start-up loan, they 'require a 12-month forecast because, while these figures will no doubt change over that trading period, this is a good period of time for you – and us – to see how sustainable your plans are'.

In addition to providing free templates, they also give advice on the importance of creating a cash flow forecast for a new business:

Why is a Cash Flow Forecast important?

Even if you decide not to proceed with a Start-Up Loan application straight away, a Cash Flow Forecast is an essential business document for helping you keep on top of your finances. While the actual performance of a business will likely [differ] from the projected cash flow, this is still an important document to have in place as part of managing your business. There are several benefits you'll gain from creating and regularly updating a Cash Flow Forecast.

A Cash Flow Forecast tool:

- is great for planning your business activities and resources
- ensures your business activities are correctly aligned with each other
- supports you in making sensible, realistic decisions for your business
- gives you greater control over your business finances
- allows you to better understand your business performance
- helps you plan for the future.

Source: https://www.startuploans.co.uk/cash-flow-forecast-template/

Visit their site to download the template and to read the advice they give for when you are completing a cash flow forecast. This information is also presented on the next page.

How do I complete my Cash Flow Forecast?

A Cash Flow Forecast is made up of three key sections:

1. **Revenue – money coming in**

   This section is where you list any money that you have coming in to the business such as product or service sales, equity or other investments and your Start-up Loan. The number of items you include will depend on your business model, but a typical revenue section includes between three and six items.

   You add all of these sources together to figure out your total income (A).

   If you use our free template (see the link above), this will be automatically calculated for you.

2. **Expenses – money going out**

   This section is where you list any of the expenses your business incurs, like your premises rental, staff wages, council tax, supplier costs, marketing and promotional expenses etc. You'll need to think about costs that do not occur on a regular monthly basis, like VAT which is only payable every quarter. Don't forget to include things like your own salary, Start-up Loan repayments, or specialist expenses you are likely to incur. Again, the number of items you include will depend on your business model, but a typical expenditure section can be anywhere from 10 to 20 line items.

   You add all of these sources together to figure out your total expenses (B).

   If you use our free template (see the link above), this will be automatically calculated for you.

3. **Net cash flow – the balance**

   This final section is the difference between your total revenue (A) and your total expenses (B).

   e.g. "total income (A) – total expenses (B) = Net cash flow"

   If this figure is negative, it means that you are anticipating your expenses will be greater than your revenue in that period; conversely, if the figure is positive, it means you are anticipating your revenue to be greater than your expenses and to deliver a profit.

   If you use our free template, your net cash flow for each month and for the year as a whole will be automatically calculated for you.

Our top tips for creating your Cash Flow Forecast:

These tips have been prepared by our business advisers and loan assessment team to help you understand some of the key things that will strengthen your application:

Be realistic in terms of how many sales you expect to make

While it is great to be ambitious for your business, it's important to be realistic. Particularly in the early stages of trading, you may find that you aren't able to make as many sales while you're focusing on building up awareness about your product or service. It's always better to make conservative estimates and over exceed your targets, than find yourself over committed or under prepared.

Make sure you understand the difference between revenue and expenditure

- **Revenue**, or income, is any money your business generates. In a product-based business, this is likely to be made up of the sales of different products. You may like to include separate line items for your individual products or product categories, particularly if each product contributes a significant amount of revenue.
- Expenses, or costs, are the items you'll need to pay for in order to produce and/or deliver your products or services, promote and manage your business.

Remember that some of your costs will be recurring costs and others will be ad hoc.

- A recurring cost is one that doesn't change over the course of the forecast. For example, your premises rent insurance and Start-up Loan repayments etc.
- An ad hoc cost is one that changes according to your needs. For example, supplier costs, material costs, venue hire, printing and travel expenses etc.

Plan for seasonality and base your figures on a range of typical scenarios (like quiet or busy periods)

Seasonality doesn't affect everyone in the same way. For example, if you're starting a business in an area that has a booming tourist economy in the summer months but is very quiet during winter, this should be reflected in your forecasted sales figures and costs. But even if seasonality doesn't affect you in this way, every business goes through quiet periods (with fewer sales) and busy periods (with more sales). Depending on your fixed and variable costs, this may create more or less pressure on your cost base during this period.

Think about the promotional activities you've got planned and the sales you expect these to generate.

If you expect one of your promotional campaigns to deliver a high volume of new sales during a key month, you should try and reflect this in your numbers. Equally, if there are certain periods where you won't have a large marketing budget in place, think about the impact this is likely to have on your sales.

Source: https://www.startuploans.co.uk/cash-flow-forecast-template/

A cash flow forecast template can also very easily be set up using an Excel spreadsheet. Formulas can be used in the totals and balances rows to allow for the easy calculation and change predicted in the inflows and outflows, as they take place. An example, including the formulas to use, is shown below:

	A	B	C	D	E
1					
2		Jan	Feb	Mar	Apr
3	Sales revenue				
4	Debtor payments				
5	**Total revenue**	=B3+B4	=C3+C4	=D3+D4	=E3+E4
6	Expenses				
7	Rent				
8	Stock				
9	Wages				
10	Other expenses				
11	**Total expenses**	=SUM(B7:B10)	=SUM(C7:C10)	=SUM(D7:D10)	=SUM(E7:E10)
12	**Net cash flow**	=B5-B11	=C5-C11	=D5-D11	=E5-E11
13	**Opening balance**		=B14	=C14	=D14
14	**Closing balance**	=B12+B13	=C12+C13	=D12+D13	=E12+E13
15					

An example of a cash flow forecast with figures for a six month period is shown on the next page. The cash flow forecast has been constructed using the following procedures:

Starting with the first month, the:

- individual revenue items are entered and then added up in order to give total revenue
- individual expenses items are entered and then added up in order to give total expenses.

These individual items are then entered and added up for each month that follows. Once this has been done, it is then time to calculate the net cash flow, the opening balance and the closing balance for each month. Again, start with the first month, and then for each month that follows:

- net cash flow is calculated by deducting total expenses from total revenue
- the opening bank balance is the closing bank balance from the previous month
- the closing bank balance is calculated by adding net cash flow to opening balance.

Benny is forecasting his cash flow for the next six months for his book shop. Using his experience, he has entered his predicted inflows and outflows and calculated the following information:

	OCT (£)	NOV (£)	DEC (£)	JAN (£)	FEB (£)	MAR (£)
Revenue						
Cash sales	7 000	7 000	9 000	5 000	5 000	6 000
Bank loan	0	0	0	500	0	0
Total revenue	7 000	7 000	9 000	5 000	5 000	6 000
Expenses						
Stock	2 500	4 000	3 500	2 000	2 000	2 500
Rent	700	700	700	700	700	700
Gas & electricity	120	120	120	120	120	120
Wages	2 500	2 500	3 500	2 500	2 500	2 500
Other costs	500	750	400	250	700	250
Total expenses	6 320	8 070	8 220	5 570	6 020	6 070
Net cash flow	680	(1 070)	780	(70)	(1 020)	(70)
Opening bank balance	500	1 180	110	890	820	(200)
Closing bank balance	1 180	110	890	820	(200)	(270)

Benny's revenue mainly consists of the sales of his books. He knows from experience that he sells more books in December, due to customers buying books as Christmas presents. In January, he intends to sell some old computer equipment he no longer uses.

One of his biggest expenses is the books he buys from suppliers, which he then sells in his shop – these increase in November as he stocks his shop for the Christmas sales period. It is likely that he bought this stock in October, but received 30 days credit for the books he bought, so it only becomes an expense when he pays his bill.

His rent and electricity are relatively easy to forecast as these expenses are fixed in the short-term, and he hasn't had any indication from his landlord or his gas and electricity suppliers that these will increase in the next 6 months.
The wages he pays to his staff and to himself are another big expense. Again, these are fairly easy to predict, though he knows that over the Christmas period his shop is open for longer, so he will have to pay his workers for the extra hours they work.

He has also forecasted his other costs (sundries). He may have found this difficult as these costs may be more unpredictable – he has attempted to be as accurate as possible, though he knows that these expenses may be different to what he expects.

Benny's cash flow forecast shows that he predicts he will receive more inflows than outflows in November and December only, and that for four months his net cash flow is negative. This prediction will alert him to try and do something to try and increase his revenue and/or reduce his expenses in these months. In the long-term, he will be unable to build a successful business if his net cash flow is negative in most months.

What will worry Benny is the trend in his closing balance – he predicts that this will gradually worsen over the 6 months and by February he will have no money in his bank account. In fact, he will be overdrawn, which means that he will owe the bank money, as he will spend more than he thinks he will receive in revenue. He could arrange an overdraft to cover this, but in the long term he will need to look at how he can use this cash flow forecast to improve his cash flow.

Using a suitable template, create a cash flow forecast for the following business:

Kelly and George own and run a mobile phone repair shop in the centre of town. They are concerned about their cash flow over the next 4 months, so they want to create a cash flow forecast to help them manage their cash. Using their experience of running the business, they have estimated the following:

	Jan	**Feb**	**March**	**April**
Sales revenue (£)	8 000	8 000	8 000	8 000

They expect no other income in these months.

They pay themselves £2 000 **each** every month and do not employ any other workers.

They pay rent of £1 000 every month, however in March this will increase by 20%.

They expect to pay £2 000 every month for the materials they need to use to repair the mobile phones.

When they started the business 2 years ago, they took out a loan with a bank – they arranged to pay this back over the next 5 years and the monthly payment is £350.

In February, they intend to purchase some new equipment that will improve the way in which they can repair the mobile phones. This equipment will cost £1 500.

In March, they have to pay their quarterly utility bill – this includes electricity, telephone and Wi-Fi – they estimate this to be £250.

They have also grouped a number of small expenses together as sundries and estimate that these will be £200 for every month. At the beginning of January, Kelly and George have £500 in their business bank account.

When you have completed the cash flow forecast, advise Kelly and George on their cash situation over the 4 months. Do they need to be concerned?

Interpreting cash flow forecasts

Cash flow forecasts give a detailed breakdown of the predicted inflows and outflows for a business over a specific period of time. They also calculate important balances on monthly and total balances. These figures will help businesses manage their cash and alert them to possible future cash flow shortages. By forecasting future cash flow situations, a cash flow forecast allows a business to react before the situation gets crucial and they have no cash to pay bills, which could cause the business to close down.

Forewarned is forearmed – prior knowledge of possible dangers or problems gives a tactical advantage

The process of producing a cash flow forecast will improve a business's monitoring and management of their cash. Experience is gained in managing the inflows and outflows of cash and it helps businesses to improve business performance.

If a business knows that in the coming months they will experience cash flow difficulties, they will have time to act and put strategies in place to avoid cash flow problems.

Typical reasons for cash flow forecast problems include:

- Sales not being at the expected level, which could be caused by:
    - increased competition
    - bad publicity
    - changing buying habits from consumers
    - economic changes, e.g. recession or lower disposable incomes
    - government influences, e.g. increased taxation on certain products
- Costs increase:
    - raw materials costs increase
    - component parts increase
    - rent increase
    - wages increase
    - interest rates increase
    - service charges increase – electricity, telephone, etc.

In addition, there may be internal factors that affect the cash flow of a business:

- the business is making a loss
- customers are given too long to pay

- late payment of debtors
- poor cash flow predictions
- bad debts – a debt to the business that cannot be collected and has to be treated as a loss of income
- poor budgeting and control of spending.

Returning to Benny's book shop, we can interpret the information in the cash flow forecast to help him improve his cash flow situation. As he predicts that his closing balance in the last two months will be negative, he has to address this straight away to avoid this negative situation. By looking back at his expenses, he could consider a number of different actions:

- He could look for a cheaper supplier for his books, as this is a major contributor to his expenses. Or, he could try to negotiate a discount or late payment terms.
- Wages are his next big expense, so he could look at reducing the hours of work for some of his employees, or even making one of them redundant.
- He could take a closer look at his other costs to see if savings could be made.

He could also look at his revenue and could:

- increase prices, if this does not put off too many customers.
- introduce promotional activities to increase his number of sales, especially in the quiet months that follow Christmas.
- open his shop for longer hours
- try to obtain more money when selling his asset.

In addition to these actions, Benny could also approach his bank and ask for an overdraft facility, that will allow him to have a negative cash balance in the bank. The bank will be willing to give this, as long as Benny can prove that he expects this to be short-term and that he has taken actions to improve the cash flow of his business in the long-term.

1. Interpret the cash flow forecast you produced for Kelly and George and their mobile phone repair shop. Identify any inflows and outflows that could be adapted to improve their cash flow.

2. Suggest any internal factors that may have affected their cash flow situation.

Solutions to cash flow problems

Increase revenue – this may include increasing prices, but this is likely to reduce demand. The success of this action will depend on the loyalty of customers and the availability of similar products from competitors.

Other ways of increasing revenue include: introducing different products or a range of products that will appeal to more consumers; selling the product in different markets – these could be geographical markets or different target markets; using a range of promotional and advertising activities such as BOGOF, using social media to advertise, and having special offers when sales are low; looking at new methods of distribution, such as a website, new outlets or directly to other businesses.

Reduce costs – a business will have a range of costs – some of these will be a large outflow for the business, such as wages and rent. Reducing staffing costs could be a good solution, as long as it does not have a negative effect on quality and customer service. Using new technology to replace workers is another option, though this may require extra cash in the short-term. A business could look for cheaper premises, but again, this could affect sales if the current premises have a good level of loyal customers.

Raw materials and components are also a big expense for a business, so looking for cheaper suppliers or reducing the number of materials used in the business is a good option, as long as this does not affect quality, which in turn, may affect demand for the product or service.

Delay payment – when buying from suppliers, the business could look at delaying payment to these, which will immediately improve the cash flow situation. However, the suppliers (these are called creditors to the business, as they offer credit) may not be willing to do this, as they will have their own cash flow to manage. It could also cause a delay in delivery if the creditor is not happy with the new credit arrangements.

A business could also look at chasing their customers for quicker payment. This will result in the business receiving their revenue quicker, but could upset customers, who may decide to shop elsewhere. The business could offer customers a discount for early payment, which will reduce their overall profit, but will improve their cash flow situation.

Extra funding – this could be an injection of capital from the owner or other investors, or a loan from the bank. However, this could prove risky for the owner, and could mean a loss of control of the business, and a bank may be unwilling to lend to a business with cash flow problems (remember, they will more than likely want to see a cash flow forecast before they agree to lend the money). Also, in the long-term, a loan will have to be repaid, with interest, so this will increase the long-term expenses for the business. An overdraft could be agreed with the bank – this will be straightforward if the business is established and has a good financial management history, but could be difficult for a new business. Also, overdrafts are not free – the business will have to pay for this.

Any solution to cash flow problems is not straightforward – they all have possible negative effects on the business. The solution which is best will depend on the specific situation of the business.

1. Suggest how a restaurant may attempt to increase revenue in order to improve its cash flow forecast. Consider (give the positive and negative outcomes) the impact of your suggestions on the cash flow and financial situation of the restaurant.

2. The list below shows a number of business costs. For each cost shown below, suggest how the outflow of cash can be reduced. In each case, also, suggest the negative effects of the cost-cutting.

    - Raw materials
    - Rent
    - Wages for employees
    - Owner's wages

3. Explain how rescheduling receipts (income from customers) and payments (expenses) can improve cash flow.

Read the following article and answer the questions that follow:

Royal Dutch Shell cost-cutting drive to continue

Royal Dutch Shell plans more asset sales and cost-cutting over the next few years as the energy giant adjusts to prolonged low oil and gas prices.

Shell [is] cutting another 2200 jobs... on top of the 2800 already announced. Shell has announced more than 10 000 job cuts globally over the last two years.

In a statement, [chief executive] Mr van Beurden said: "By capping our capital spending in the period to 2020, investing in compelling projects, driving down costs and selling non-core positions, we can reshape Shell into a more focussed and more resilient company, with better returns and [improving] cash flow".

Shell added that it would forge ahead with $30bn of asset sales over the next two years.

In May, Shell announced that first-quarter profits had fallen to $800m from $4.8bn a year earlier, blaming the slump on lower oil prices.

The price per barrel is now around $50, having risen sharply since the start of the year, but Mr van Beurden told the BBC that he did not know if the price would rise further in the short-to-medium term.

The slump in prices has caused energy groups worldwide to cut spending, slash jobs and sell assets during the past year.

Source: http://www.bbc.co.uk/news/business-36466846

1. What cost-cutting strategies has Royal Dutch Shell implemented?
2. How will these strategies improve cash flow?
3. What has caused the fall in profits and poor cash flow?

The impact of cash flow forecasts on businesses and its stakeholders

A number of different business stakeholders will be impacted by the cash flow situation:

Business owners and managers can use the cash flow forecast to help them manage the business and make plans for future activities. Cash flow forecasts can be used to help make decisions. They also alert the owners to any possible future problems with cash flow and allow them time to try and solve the problem before it happens. Cash flow forecasts are an essential tool in the financial planning of any business.

Investors in the business – a cash flow forecast can help a potential investor (business angel or venture capitalist) to decide if they wish to invest in the business. Also, they can be used by current investors to give advice to the owner, as they are likely to have experienced similar cash flow problems with other businesses they may have invested in. In a worst case scenario they can alert the investor to the likely failure of the business, so that they can look at withdrawing their capital (or some of it) from the business.

Banks – a bank will use the cash flow forecast when an entrepreneur or a current business owner asks for a loan or overdraft. The bank will have a close look at the figures in the cash flow in order to see if the business is viable and likely to be profitable in the long-term. The cash flow forecast should be able to tell a bank if the lender will be able to repay the loan through the monthly repayments.

Customers will be concerned about the cash flow of a business if it has paid the business for products and services before they receive them. Many businesses, such as travel agents, furniture retailers, car manufacturers and catering services, require deposits to order or secure products and services. However, if the business is struggling and cannot fulfil these orders, then the customer may lose their money.

Suppliers – a supplier who is considering giving trade credit to a business may wish to see the cash flow forecast of the business before it agrees to credit terms. If the supplier is concerned that the business is likely to have a cash flow problem, it is unlikely to agree to any trade credit and will only sell or deliver the goods after they have received payment.

1. Explain why a cash flow forecast may be difficult to produce.
2. Describe how an online music and movies retailer could improve cash inflows.
3. Explain why giving customers trade credit could worsen a business's cash flow situation.
4. Outline how a hair salon could reduce outflows of cash from the business.
5. The use of an overdraft facility with a bank will solve a business's cash flow problems. Discuss this statement.
6. Identify the key stakeholders who could be impacted by a business's negative cash flow situation.

Sergio Cruz produces handmade greetings cards which are sold to customers at craft fairs and through craft shops. Sergio has drawn up a cash flow forecast for the rest of the year.

	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Receipts	£	£	£	£	£	£	£
Turnover	2 000	2 000		2 000	2 200		2 500
Payments							
Materials		450	500	550		500	550
Wages	1 500	1 500	1 500	1 500	1 500	1 500	1 500
Electricity						300	
Business rates	5 100						
Insurance	50	50	50	50	50	50	50
Total payments	7 050		2 250	2 100	2 100		2 100
Net cash flow		0	50	(100)	100	50	
Opening bank balance	6 000		950	1 000	900	1 000	1 050
Closing bank balance	950	950	1 000	900		1 050	

1. Give an alternative word for ‘turnover’.
2. What are ‘business rates’?
3. Study the cash flow forecast and fill in the shaded areas.
4. Suggest one way in which a cash flow forecast might be useful to a business such as Sergio’s.
5. Sergio would like to further improve his expected cash flow position. Evaluate ways in which he may achieve this.

Complete the questions in the **Constructing a Cash Flow Forecast** resource for GCSE:

http://resource.download.wjec.co.uk.s3.amazonaws.com/vtc/2016-17/16-17_1-25/eng/unit1/constructing_a_cash_flow_forcast.pdf

Analysing financial performance

Financial data allows business owners, managers and other stakeholders to make judgements on how well the business is being run. This information can then be used in decision making to determine the strategy the business will use to achieve its objectives.

This resource has shown a number of different financial information that is used in a business. These include:

- revenue
- costs – fixed, variable and total
- profit
- break-even
- profit and loss account
- gross and net profit
- average rate of return
- cash flow
- cash flow forecasts

Each section has shown how the data is calculated and used to help to make decisions. All businesses will have to use this financial information in the running of their business and in planning their long term strategy, to make sure they carry out activities in order to achieve their objectives. All bullet points listed above are interconnected, and in order to fully analyse the financial performance of a business, all of these points should be considered.

It is important to remember that when analysing financial data, it is important to look at **trends** and not isolated or singular figures. A business is concerned about the long-term future of its success, and often, there will be times along the way that the business may experience some negative financial performance. These 'blips' must be put into context. However, if these 'blips' start to appear more often, they must be addressed, before they start to become a longer term trend.

When analysing financial data, it is also important to compare the information with other data which is external to the business and which gives a **context**. This data may include the performance of other businesses (competitors) who operate in the same market, or economic data that gives an indication of the economic climate – it might be that the economic conditions have resulted in all businesses within the market experiencing financial difficulties.

Finally, it is also important to look at **other information**, which includes **qualitative data** and **non-financial data**. Qualitative data is information that cannot be measured, but it might give an indication of why a business has performed in the way it has. Non-financial data can be measured, but looks at factors that are not directly concerned with the financial aspects listed above.

Qualitative data may include:

- **Customer satisfaction** – customer satisfaction measures the degree to which customer expectations are met or exceeded, e.g. in terms of price and product/service quality. Methods of measuring customer satisfaction or customer attitude is to consider the level of repeat purchases, amount of customer complaints, percentage of products returned and by gathering feedback by questionnaires and focus groups. The business may be focusing on improving customer satisfaction in the short-term, which may have increased costs, in order to improve profits in the long-term.

- **Employee attitudes** – are employees motivated to work hard, is there good employer/ employee relationships, how do employees react to the introduction of new processes and equipment, are employees leaving the business so the business needs to increase expenses on recruiting and training new employees? Improving employee satisfaction and retention may be an important aim for some businesses that have experienced labour problems in the past, resulting in loss of sales and increased costs.

- **Environmental and ethical impact** – increasingly, businesses are becoming more aware of the impact on the environment and society and try to minimise this impact. Such measures might include recycling or using recycled materials; they may try to ensure suppliers in developing countries get a good deal; they may pay their workers above the minimum wage. These measures will increase costs for a business. For some businesses, their environmental vision and aims and objectives will be far more important than increasing market share or maximising profits.

Non-financial data may include:

- **Market share** – market share is the proportion of total sales a business has in the market. Increasing market share is a common, long-term aim of businesses. Businesses might invest money in advertising and new product development, in an attempt to increase market share, which might reduce profit levels in the short-term but will help them achieve a long-term aim.

- **Sales targets** – sales are important to all businesses, after all, it is sales that generate profits. Setting sales targets for the future might involve spending money in the short-term in order to generate sales revenue, thus reducing profitability. This may involve the use of loss leader products, which result in increased sales in the future.

- **Improve efficiency (productivity)** – if a business invests in new equipment and training in the short-term to improve the amount of products it can produce in the same time, then in the long run, this will improve profits, as costs will fall. However, in the short-term this will be expensive, as new machinery is bought and employees are trained and could result in a fall in profits for a period of time.

1. Enzo's is a new business in the fast food industry. It has been in business for almost one year. Enzo's has one outlet selling a variety of products, from burgers to pizzas. Suggest and explain two ways in which the owners of Enzo's could measure the success of the business at the end of the second year.

2. When analysing business performance, a business should always consider qualitative factors. Explain what is meant by this statement.

3. Explain how short-term performance is often ignored in order to achieve long-term objectives.

4. Profit is always the main measurement of success. Discuss.

5. Consider how stakeholders in the following businesses will judge their performance:

   (a) A new business completing its first year
   (b) A co-operative business with strong ethical values
   (c) An established multinational Plc with high levels of market share

Read the following article and answer the questions that follow:

VW cracks down on executive pay after diesel scandal

Volkswagen will set caps on executive pay, the German carmaker said as it announced a return to profit for 2016 following the "dieselgate" scandal.

Under the new rules, pay will reflect financial performance more closely.

The chief executive's package will be limited to 10m Euros (£8.5m), with a 5.5m euro cap for other board members.

Former chief executive Martin Winterkorn, who quit over the diesel scandal, took home 17.5m Euros in 2011 because of large bonus payments.

VW reported a net profit of 5.1bn Euros for last year, bouncing back from a 1.6bn euro loss for 2015 in the wake of the emissions-cheating scandal.

"While the past year posed major challenges for us, despite the crisis the group's operating business gave its best-ever performance," said chief executive Matthias Mueller after a meeting of VW's supervisory board at its Wolfsburg headquarters on Friday.

The scandal did not stop the group, which also owns the Porsche, Audi and Skoda brands, delivering a record 10.3 million vehicles last year, driven by strong demand in Europe and the Asia-Pacific region.

That allowed VW to overtake Toyota and claim the crown of the world's top-selling car maker.

Revenue was a record 217.3bn – 2% higher than 2015. The company expects that figure to rise 4% this year following a "moderate" increase in vehicle sales.

"Volkswagen is very solidly positioned in both operational and financial terms. This makes us optimistic about the future," Mr Mueller said.

However, the company took higher-than-expected one-off charges totalling 7.5bn Euros, of which 6.4bn Euros were related to the emissions-test rigging. Analysts had forecast provisions of 4.2bn Euros.

VW has now set aside a total of 22.6bn Euros for fines fixing or buying back affected vehicles and compensating owners.

Some 600,000 vehicles in the US were affected and last month the firm agreed to plead guilty to criminal charges.

But no compensation has been offered to the millions of UK or European drivers affected – much to the anger of politicians and regulators there.

Source: http://www.bbc.co.uk/news/business-39082280

1. Using the data in the article, assess the financial performance of VW for 2016.
2. With reference to the qualitative data in the article assess the non-financial performance of VW for 2016.
3. Discuss how the emissions-test rigging could have affected VW's reputation and financial performance.

Read the following article and answer the questions that follow:

Men's sales march Jimmy Choo higher

Designer shoe brand Jimmy Choo has reported higher revenues, partly down to increasing sales of men's designs.

Men's shoes are the fastest-growing sector for the brand, representing 8% of global revenue.

The company also said in its half-year report that the weakness of the pound since the Brexit vote had also helped boost the company's figures.

Revenues hit £173m, up 9.2% compared with the same time last year. Operating profit was up 42.6% at £25m.

Once thought of as the preserve of wealthy women, the brand has seen a surge of interest among men.

"In total, we have 71 dual-gender stores globally and see the potential for continued growth in this sector, so that it will come to represent a proportion of our revenue well into double digits," the company said.

In Japan, where a flagship store is expected to open next year, the sale of men's shoes represented 26% of revenue from the region in the first half.

"The brand's recent decision to focus on expanding men's footwear is proving fruitful," said Nivindya Sharma, senior analyst at Verdict Retail.

Geographically, overall sales figures were mixed, according to the report.

"Geopolitical events" in Europe have damaged sales there, while the brand struggled in the US, with sales down 3.4%.

However, the Asian market continued to perform well, the company said.

"Jimmy Choo outperformed luxury peers such as Burberry and Mulberry to post a strong set of growth figures for H1 2016," said Ms Sharma.

"While competitors struggle with declining luxury demand in Asian markets, Jimmy Choo has bucked the trend and reported an impressive 22.1% growth in Asia."

The company said that as Jimmy Choo was a global business, it was "well placed to take advantage of market dynamics seen since the devaluation of sterling (£)".

With 9.5% of global revenue in sterling and 28% of operating costs [paid for] in the currency, a weaker pound "will lead to a reported upside in business performance at a revenue and profit level", the company said.

Source: http://www.bbc.co.uk/news/business-37182648

1. Comment on the financial performance of Jimmy Choo. Use the data in the article in your answer.

2. Explain how a change in consumer tastes and buying habits have affected the business.

3. Explain how a cheaper pound (sterling) helped to boost the company's figures.

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