

Level IV Certificate
In
Business Insight
SAMPLE

Lesson 1

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INTRODUCTION TO BUSINESS INSTIGHT

The IDEAL Schools course, Business Insight, has been produced to prepare you for the ICB exam in this Level 4 Certificate subject, which forms part of the overall award of Level 4 Diploma in Bookkeeping & Accounting.

The course consists six study lessons; at the end of each lesson there is a Tutor Marked Assignment (TMA) to be completed and submitted for correction.

THE ICB SYLLABUS

The Level 4 Certificate in Business Insight is made up of seven topics:

1. Cost behaviour and analysis
2. Forecasting and budgeting
3. Performance measurement
4. Managing the cash operating cycle
5. Short-term financing decisions
6. Short-term decision making
7. Medium-term capital investment decision making

On completion of learning, the candidate will be able to demonstrate competence in the following tasks:

1. Cost behaviour and analysis

- Explain how costs will behave at different levels of activity; distinguishing between fixed, variable, stepped and semi-variable costs and the principle of 'contribution'.
- Compare and contrast value-adding and non-value-adding activities and their associated costs.

2. Forecasting and budgeting

- Explain factors to consider when preparing forecasts of activity levels; factors including:
 - Competition
 - Pricing
 - Economic influences
 - Market trends
- Explain the purposes of preparing budgets.
 - Planning
 - Utilisation of scarce resources
 - Allocating responsibilities
 - Target-setting and performance management

- Prepare an operational budget based on forecasts for sales and resource availability.
 - Prepare flexible budgets to demonstrate possible out-turns for best-case and worst-case scenarios.
- 3. Setting targets to monitor performance**
- Using flexed budgets, identify possible reasons for total budget variances. Note that a break-down of budget variances into component parts (such as price and usage variances) will not be tested; nor will reconciliation of budget to actual profit.
 - Compare and contrast the use of financial and non-financial measures for performance measurement. NOTE that Kaplan and Norton's Balanced Scorecard will not be examined, although it may be a useful learning tool to explore the benefits of incorporating non-financial performance measures.
- 4. The operating cycle**
- Calculate and explain the operating cycle using
 - Stock days (raw materials, W.I.P and finished goods as appropriate)
 - Debtor days
 - Creditor days
 - Evaluate proposals to manage the operating cycle by reducing investment in stock
 - Evaluate proposals to manage the operating cycle by reducing the investment in debtors using either early settlement discounts or debt collection services (factoring)
- 5. Short-term financing decisions**
- Compare and contrast the use of short-term and long-term finance to fund the working capital cycle with specific attention to:
 - Costs
 - Flexibility
 - Risk
 - Identify the relative advantages of funding working capital financing requirements using either an:
 - Aggressive approach (relying mainly on short-term financing), or
 - Conservative approach (raising long-term financing)
- 6. Short-term decision making**
- Identify relevant costs for short-term decision making, including the concept of sunk costs, avoidable costs and opportunity costs
 - Appraise short-term decision scenarios.
- 7. Capital investment decision making**
- Identify relevant cash flows for a capital investment decision.
 - Explain the principle of the time value of money.
 - Evaluate project cash flows using
 - Simple (not discounted) payback period, or
 - Net present value (NPV)

INTROCUCTION TO LESSON 1

This lesson explains the different types of costs in an organization, including direct costs and indirect costs. The concept of contribution is explained, as is the concept of estimated and perceived value.

You will learn:

- The distinction between Financial and Management Accounting
- The different types of costs, by function and by behaviour
- The concept of esteemed value
- The importance of contribution
- Decisions to decide 'make or buy'
- The importance of marginal costs

At the end of the lesson there is a Tutor Marked Assignment (TMA), which should be submitted to your tutor for correction. Feedback will be provided.

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FINANCIAL AND MANAGEMENT ACCOUNTING

Decision-makers, or if you like, users of financial information will be interested in different aspects of the business.

Financial Accounting

At this stage of your studies you might not be aware of the fact that incorporated businesses, such as a limited company, have statutory obligations to provide information to external users. Published annual accounts, with statutory notes attached to the financial statements, must be produced within 9 months of the Financial year-end.

The financial statements are primarily used by external users to assess a business' performance and state of affairs such as:

- Shareholders
- Potential and existing lenders (investors)
- Potential and existing suppliers
- Potential and existing clients
- Employees
- Governmental bodies such HMRC
- The general public

Financial Accounting is generally focused on collecting and classifying historic data in order to produce the financial statements which comply with the provisions of the Companies Act and accounting standards, therefore providing relevant information to users of financial statements. Financial Statements commonly comprise of the Balance Sheet and the Profit & Loss Account.

Based on the size of the business, and the accounting standards, statements can consist of:

- Income Statement (or Profit and Loss account)
- Statement of other comprehensive income
- Statement of Changes in Equity
- Statement of Financial Position (Balance Sheet)
- Statement of Cash Flows.

Directors have the responsibility to ensure the following are carried out:

- promoting the success of the company by exercising reasonable care, skill, diligence and independent judgement
- keeping company records and reporting changes to Companies House and HM Revenue and Customs (HMRC)
- making sure that the company's accounts represent a 'true and fair view' of the business' finances
- filing annual accounts with Companies House and filing company tax returns with HMRC
- filing Annual Return with Companies House
- paying Corporation Tax.

There are many limitations and deficiencies of financial accounting. By the time any information is published it might be irrelevant, data may be useless or have no impact on the decision of the user. All operations are aggregated in the accounts - revenues and costs from different operations are shown as a whole. Sometimes it is presented in a condensed statutory format which may result in users drawing incorrect conclusions. Most financial accounting information is of monetary nature and cannot provide details such as whether a business is eco-friendly or whether employees are satisfied with workplace conditions.

So why is financial accounting useful?

1. The financial accounting system may reveal that the outstanding debtors at a point of time are too high and it endangers the business' liquidity to meet its liabilities. This is an important piece of information for the Director to pass on to the various managers.
2. HMRC is regularly interested whether the correct amount of tax has been calculated and paid based on the historical data.
3. It is also very important to assess the overall health of the business not just at one point in time but throughout the years.

Don't forget the same accounting information is the basis for both financial and management accounting but the analysis is different.

Management Accounting

Management accounting is used to aid management in planning, controlling and in decision making. Its aim is to provide relevant information enabling the management to carry out its functions.

Management accounts are prepared solely for internal use by the management. There is no legal requirement to prepare management accounts and there is no statutory format as to how information should be presented. A business can devise its own management accounting system and the format of reports. Management accounts are based on historical data but consider current and future trends and are a future planning tool for forecasting. Reports produced for internal use often contain estimates and include non-monetary factors.

Let us compare what we know, so far, about financial and management accounting.

	Financial accounting	Management accounting
Users	External users	Internal management
Information	Monetary	Monetary and non-monetary
Format	Statutory as per law	To show relevant information
Based on	Historic data	Historic data and future estimates
Availability	Annually	In time to make an informed decision on day-to-day basis
Purpose	Assess performance over a time period and the state of affairs at the end of the period	To aid management in planning, control and decision-making

Cost Accounting

The centre of attention is COST. Many of the decisions revolve around costs to arrive to an answer to such questions as:

- how much should we sell a product or a service for
- how much does it cost to buy the raw materials or to hire employees
- how much profit we can make on a product
- what level of inventories should we hold
- is there a trend in the costs of a product or service
- will our actual costs meet the budgeted costs?

Cost accounting is part of management accounting and its primary goal is to collect and record data; apply costs to inventory, products and services and prepare statements and budgets, therefore providing a bank of data for management accountant to prepare relevant and useful information for its users.

Later we will get back to what is relevant information and how information to management should be presented. Now let us continue with the management's functions: planning, control and decision-making.

PLANNING, CONTROL AND DECISION-MAKING

A business has to be ready for changes, both short-term and long-term. Simply reacting to these changes is not enough; the management has to plan ahead.

First the management has to establish the objectives of the organisation, then it has to select the appropriate strategy to achieve the established objectives.

Objectives can be different, based on the type of organisation. A non-profit making company would be interested in providing goods and services, minimising the costs involved. A trading (profit making) organisation would be more likely interested in one or a combination of the following:

- maximise profits
- maximise shareholder value
- minimise costs
- maximise income
- increase market share

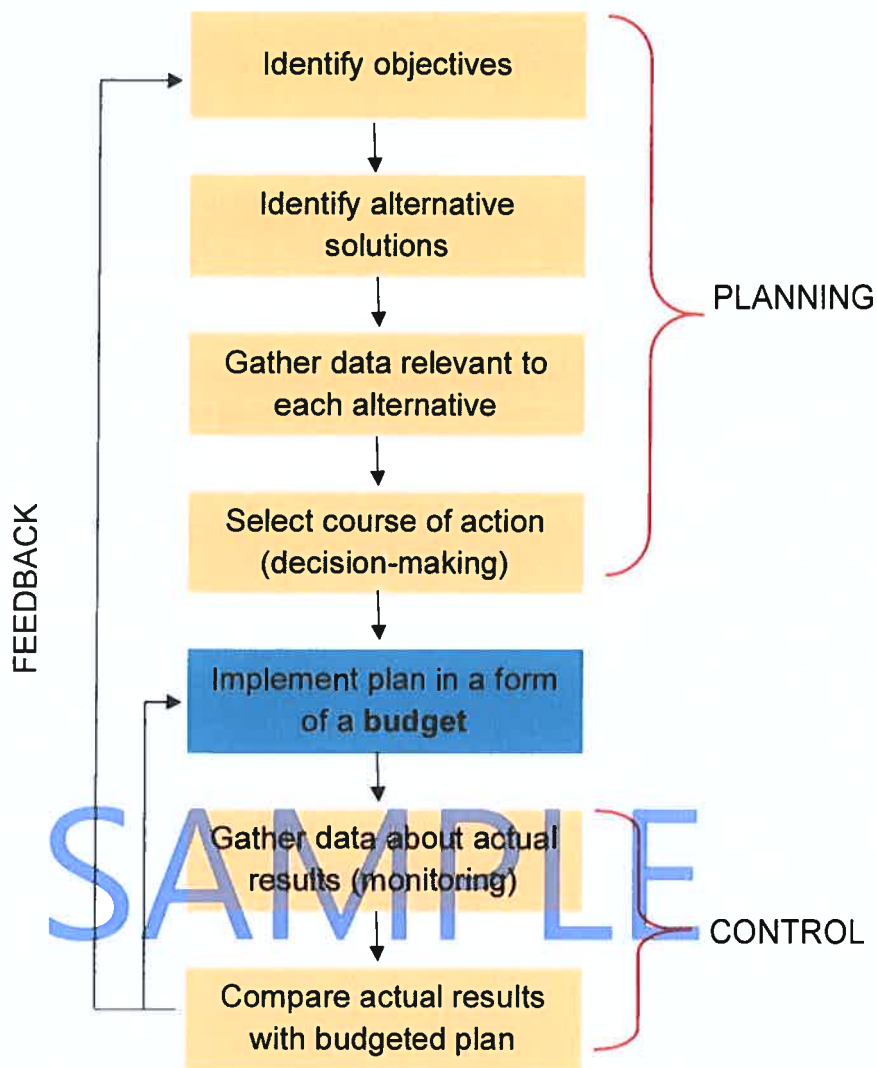
As we have mentioned, management has to think on both short- and long-term basis.

Long-term planning, also referred to as corporate planning or strategic planning, serves as a corporate framework typically based on 2 to 10 years or more, depending on the industry and environment in which the organisation operates.

Short-term plans usually cover 1 year or less and focus on day-to-day business. The goal of the short-term plan is to keep the organisation within the long-term framework and steer it to achieve the corporate goal.

For every decision it is necessary to have alternatives. It is the role of the management accountant to provide necessary information to the management so that the management can reach an informed decision.

Data from short-term production (resources, products, and research and development planning) are gathered into detailed **operational plans**. These implement the corporate plan on a monthly, quarterly or annual basis. This break-down process is called budgeting. The product of the process is a numerical plan for a business, covering a future period called **budget**.



While planning decisions are about what should be done; control decisions relate to monitoring what is actually happening.

After implementing the operational plans it is necessary to compare actual results with budgeted data. If necessary, **control action** must be taken. Either the operational plans or the corporate plan must be adjusted, based on feedback. Recording information of actual events must be compiled in such way that it can be compared with the plans.

COST CLASSIFICATION

In order to be able to forecast a cost, allocate costs to the responsibility centres and construct a budget, we have to understand the nature and behaviour of different types of costs.

Cost classification is an analysis of costs into logical groups so that from the analysis, relevant information can be obtained.

Overview of cost classification

1. capital and revenue expenditure

2. type of cost/expenses

- materials
- labour
- overheads (other expenses)

3. direct and indirect

4. by function

- production
- selling and distribution
- administration

5. by behaviour

- variable
- fixed
- stepped fixed
- semi-variable

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Capital and Revenue Expenditure

Non-current or fixed assets are assets providing economic benefits over more than one accounting period (more than one year).

Capital expenditure is

- purchasing non-current assets
- improving (enhancing) non-current assets

You might recall from your studies that fixed assets are part of the Balance Sheet (Statement of Financial Position) and usually categorised as:

- plant and machinery
- land and buildings
- office equipment
- motor vehicles

Revenue expenditure is

- purchase of goods for resale
- maintenance of the earning capacity of non-current assets
- expenditure incurred in the course of business

Revenue expenses are included in the Profit & Loss account (Income Statement).

The cost of a product or service would be built up from such costs that are revenue in nature whereas capital expenditures/fixed assets, merely facilitate the production of goods or rendering of services.

Example

Which of the following expenditures are capital and which are revenue expenditure? Match the expenditure with the correct category.

- | | |
|---|-----------------------|
| • raw material purchased for production | |
| • new factory building | |
| • advertisement costs | • Capital expenditure |
| • wages of office staff | |
| • warehouse rent | • Revenue expenditure |
| • hire of production machinery | |
| • upgrade of the IT system | |

Example Answer

- raw material purchased for production
 - new factory building
 - advertisement costs
 - wages of office staff
 - warehouse rent
 - hire of production machinery
 - upgrade of the IT system
- Capital expenditure
 - Revenue expenditure
-
- The diagram shows two categories of expenditure on the right: 'Capital expenditure' and 'Revenue expenditure'. Lines connect various items from the left list to these categories. 'raw material purchased for production', 'wages of office staff', 'warehouse rent', 'hire of production machinery', and 'upgrade of the IT system' are connected to 'Revenue expenditure'. 'new factory building' and 'advertisement costs' are connected to 'Capital expenditure'.

Elements of Cost

There are 3 basic components of costs:

- Material costs
- Labour costs
- Overheads (other expenses)

This traditional classification is used both in production and service industries. Each category can be sub classed as direct and indirect costs.

Direct – Indirect Costs

Direct costs: a cost that can be directly traced back (attributed) to a specific product, a service provided or allocated to a department.

Indirect cost: a cost that has been incurred in the course of making the product, providing a service, or running a department, but which cannot be attributed directly to the product, the service or department.

Let us now inspect each subcategory in respect of their direct and indirect elements of cost.

Direct Materials

These materials are incorporated into the finished product essentially becoming part of the product. For example the metal and plastic that are used to make a computer casing.

Direct materials can be (simply) raw material or component parts, part-finished work and primary packing materials as well.

Direct Labour

Basic or overtime wages paid to workers who manufacture the product or provide the service, depending on the industry.

Work required to finish a product such as alteration, inspection, machine operation, analysis and testing are also direct labour in a manufacturing environment.

To provide a service we can identify the workforce involved in rendering such service for example IT engineers to provide IT support or a cashier in a retail shop.

Direct expenses

Direct expenses are any expenses which are incurred on a specific product other than direct material and direct labour.

Such direct expenses can be identified as hire of machinery and tools, maintenance costs of such assets or royalties payable after each product or service.

It is generally fairly straightforward as to what we can directly attribute to a unit of product; it is a little bit more complicated if we are talking about direct costs of service.

Indirect costs

- **Indirect materials:** usually insignificant amounts such as lubricants or spare parts provided with the product.
- **Indirect labour:** wages and salaries of all other staff such as bookkeepers, department leaders, supervisors or maintenance staff.
- **Indirect expenses:** All expenses that are not charged to production such as rent, rates, insurance, depreciation, telephone etc.

Indirect costs together are also called **overheads**.

Example:

Which of the following costs would you class as direct and which as indirect costs? Match the costs with the correct category.

- wages of factory workers of the assembly line
 - plastic to manufacture DVD disks
 - depreciation of the packaging machine
 - taxi drivers' salaries in a taxi company
 - electricity costs of the central office building
 - cost of flyers in an advertisement campaign
 - hair dye products at a hair salon
- Direct cost
 - Indirect cost

Example answer

-
- wages of factory workers of the assembly line
 - plastic to manufacture dvd disks
 - depreciation of the packaging machine
 - taxi drivers' salary at a taxi company
 - electricity costs of the central office building
 - cost of flyers in an advertisement campaign
 - hair dye products at a hair salon
- Direct cost
 - Indirect cost

Costs by Function

In a traditional costing system for a manufacturing organisation, costs would be classed by function, as follows:

- **Production or manufacturing costs:** these costs are associated with the manufacturing of products incurred from supplying the raw materials, to completing the product, ready to be stored and sold.
- **Selling and distribution costs:** costs associated with sales, marketing, warehousing and transporting.
- **Administration costs:** costs associated with general office functions such as management, secretarial, accounting and legal costs in co-ordinating the other functions of the business.

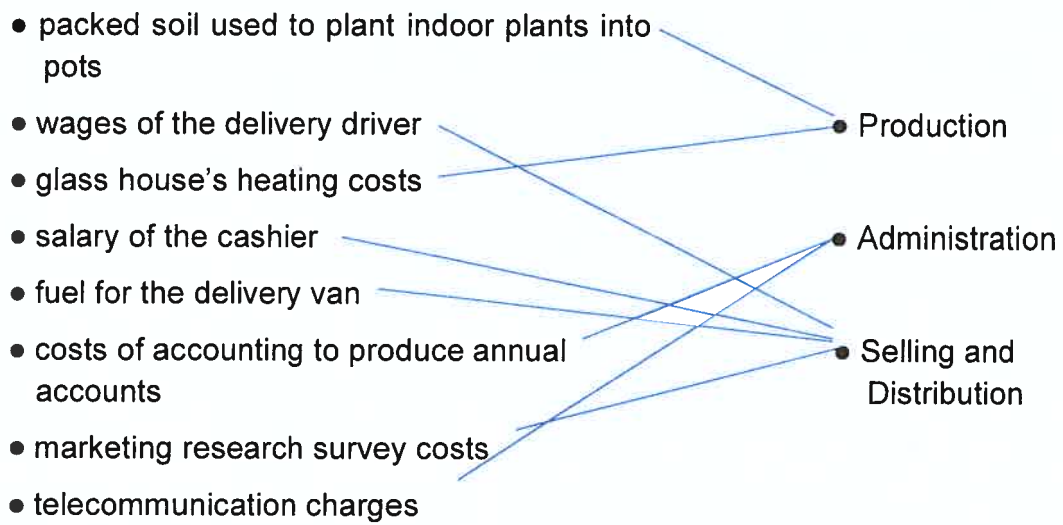
The classification of costs by function is not limited to these three categories. Companies might have such functions as research, financing or training.

Example:

Which of the following costs would you class as production, administration, sales and distribution costs in a garden centre? Match the costs with the correct category.

- packed soil used to plant indoor plant pots
 - wages of the delivery driver
 - glass houses heating costs
 - salary of the cashier
 - fuel for the delivery van
 - costs to produce annual accounts
 - marketing research survey costs
 - telecommunication charges
- Production
 - Administration
 - Selling and Distribution

Example Answer



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Cost Unit and Total Cost

A **cost unit** is a unit of production or a unit of activity to which a cost is measured. A cost unit that is used for a specific organisation will depend on the nature of the industry.

For manufacturing businesses, a cost unit will be each unit, each batch, each job or contract for production.

For an organisation in the service industry different activities will be measured in different ways, according to the nature of the work.

Such cost units can be:

Activity	Cost Unit Per/
Hospital	Patient per day
Passenger transport	Passenger per mile
Hotel industry	Guest per night
Restaurant	Meal served
Textile industry	Yard of textile
Electricity industry	kWh generated

The cost of a cost unit is built up on a **cost card**. The cost card includes all direct and indirect costs and is structured as follows:

COST CARD	
Direct materials	x
Direct labour	x
Direct expenses	x
PRIME COST	x
Production overheads	x
PRODUCTION COST	x
Non-production overheads	
Selling and distribution overhead	x
Administration overhead	x
TOTAL COST	x

Prime cost is a term used for the total of direct material cost, direct labour cost and direct expenses e.g. the total of direct costs.

As we have seen earlier **production costs** are associated with the manufacturing of products incurred from supplying the raw materials until completing the product, ready to be stored and sold. The production costs, therefore, consist the prime cost and the production overheads (indirect costs). Production cost is the basis of inventory valuation therefore it is an important piece of information.

Total cost of a cost unit is its prime cost, the production overheads plus the selling and distribution and the administration overheads (indirect costs).

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Example:

At White Poplar Manufacture hand-made chocolates are being made. Use the following information to build a cost card for a bar of hand-made chocolate.

	£ / bar
Marketing costs	0.20
Electricity and water bill in the manufacture	0.35
Hire of specialised cooling machine	0.02
Cocoa, berries, nuts and butter	0.30
Wages of chocolate moulders, handlers, packing workers	1.20
Primary packaging material	0.20
Office expenses, office staff wages	0.80

COST CARD

Direct materials

Direct labour

Direct expenses

PRIME COST

Production overheads

PRODUCTION COST

Non-production overheads

Selling and distribution overhead

Administration overhead

TOTAL COST

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Example Answer

COST CARD	£
<i>Direct materials</i> (cocoa, berries, nuts and butter + primary packaging material)	0.50
<i>Direct labour</i> (wages)	1.20
<i>Direct expenses</i> (machine hire)	0.02
PRIME COST	1.72
<i>Production overheads</i> (electricity, water)	0.35
PRODUCTION COST	2.07
Non-production overheads	
<i>Selling and distribution overhead</i>	0.20
<i>Administration overhead</i> (office expenses and wages)	0.80
TOTAL COST	3.07

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Costs by behaviour

Cost behaviour is the way in which costs are affected by the changes in the volume of output. The knowledge of such behaviour patterns is essential in decision-making as these costs will vary with the different production or activity levels at which budgets are set.

Costs by behaviour can be:

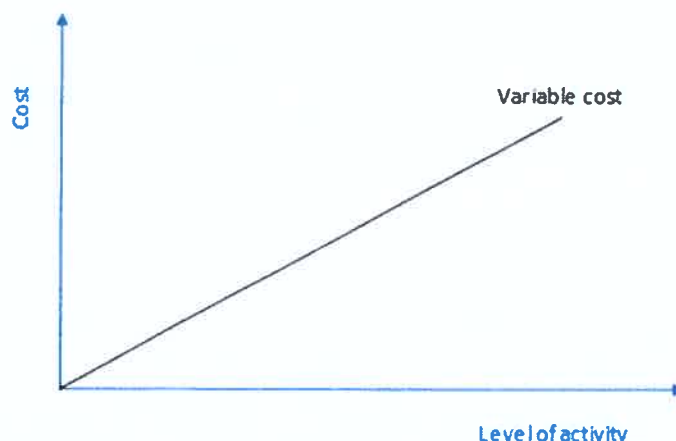
- variable
- fixed
- stepped fixed
- semi-variable

Variable Cost

Variable cost is a cost which tends to vary directly with the volume of output. The variable cost per unit is the same amount for each unit produced.

Such costs can be:

- *Cost of raw materials* is one of the main variable cost as it is quite easy to see that each unit of product will use the same amount of material.
- *Direct labour cost*: although wages and salaries are often fixed per week or month, it is important to know how much work time (minute/hour) is spent on each product and this information can be quantified.
- *Sales commission*: variable in relation to the volume sold.
- *Bonus payments*: once a certain level of output is reached, staff can be rewarded with bonus payment for each variable unit produced.



The above graph illustrates the total variable cost as activity levels change. The total variable cost can be expressed as:

Total **variable** cost = variable cost per unit x number of units

In the case of variable costs the cost per unit is always the same, regardless of the level of activity.

Example:

A computer casing requires 0.5 kg of metal to be manufactured. How much material would be needed to manufacture 200,000 computer casings? If 1 kg of metal costs £8, how much is the total cost of raw material?

If 1 unit requires 0.5 kg then,

200,000 units require $200,000 \times 0.5\text{kg} = 100,000 \text{ kg}$

Total cost of raw material $100,000\text{kg} \times £8 = £800,000$

As we stated, the cost per unit is constant at £4/unit.

Variable costs are rarely pure variable costs. As you can appreciate, raw materials can be defective, impure or can evaporate; workers in a factory might have idle time or inefficiency in knowledge to complete a unit in the time a unit should be completed. These 'losses' result in extra materials and labour required. We will get back to this problem in a later lesson.

Suppliers can also offer bulk buy options which would affect the cost of raw material per unit.

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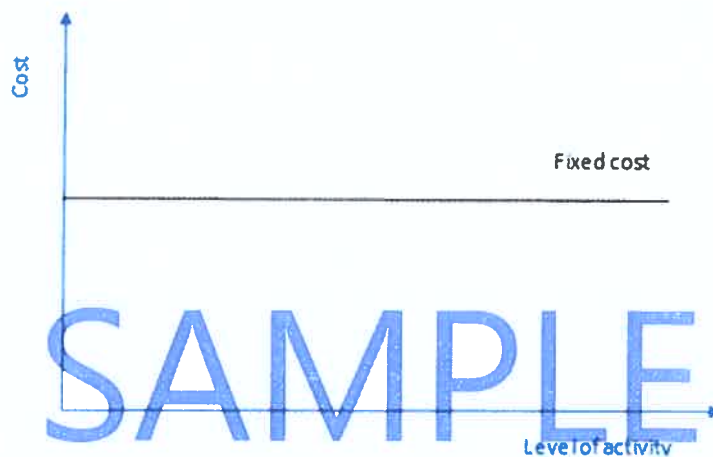
Fixed Cost

Fixed cost is a cost which tends to be unaffected by increases or decreases in the volume or output.

Fixed costs are period charges, they relate to a span of time rather than the level of activity.

Such costs can be:

- *Salary of managers per month or per annum*
- *Rent of a building such as a factory building*
- *Straight line depreciation*



The above graph shows that at any level of activity, the fixed cost will remain the same.

The cost per unit is continuously decreasing as the number of output increase. The fixed cost remains constant, e.g. the cost is split over more units.

As with variable costs, fixed costs are only pure fixed cost if we analyse it over the relevant period. On a long term fixed costs will change with price changes of suppliers, legislation changes or simply because of inflation.

Step-Fixed Cost

Step fixed cost is a cost which is fixed in nature but only within certain levels of activity.

Step fixed costs therefore increase after reaching a certain level of output over a relatively small range of activity. They then become fixed costs again for another small range of activity.