# Training Manual on Accounting for Micro-, Small and Medium-sized Enterprises 



UNITED NATIONS

## Training Manual on Accounting for Micro-, Small and Medium-sized Enterprises

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## Module 1: Accounting: an introduction

## Learning outcomes:

At the end of this module, you should have an understanding of:

- What accounting is, and why it is important
- How to prepare a straightforward balance sheet
- How to prepare a simplified income statement
- How to prepare a simplified cash flow statement
- How to enter your transactions on an accounting worksheet


### 1.1 What is accounting?

Accounting is a vital and pervasive activity in any ordered economic society. It supplies the information which decision-makers will rely on in the allocation of scarce resources. It enables the performance of the business to be evaluated and ensures that rational decisions are taken about the future operations of the business. For example, the business may want to access finance in the future. It would use its financial statements as the basis for its application to a financial institution for a loan.

The diagram below shows how accounting communicates the effects of the transactions which have taken place to the users of that information.

| Transactions <br> take place |
| :---: |

There are three financial statements which are prepared for the users of the financial statements. These are:

- The Balance Sheet (also known as the Statement of Financial Position)

In simple terms, the balance sheet is a snapshot of the business at a point in time. It shows what the business owns (known as assets) and what it owes (known as liabilities). Assuming there is only one owner of the business, the difference between the assets and the liabilities represents the investment of the owner in the business (known as capital or equity).

- The Income Statement (also known as the Statement of Profit or Loss; or the Statement of Comprehensive Income)
In simple terms, the income statement measures whether the business has made a profit or a loss for the period under review. It does this by calculating the revenue (such as sales made by selling a product) for the period under review and deducting from that the expenses which have been incurred to make that revenue.
- The Cash Flow Statement

The cash flow statement shows how much cash was generated by the business and how much cash was utilised by the business for the period under review.

In addition to these three basic statements, a business will also usually prepare some explanatory notes to accompany the financial statements.

### 1.2 Objectives of the financial statements

The financial statements represent a means to communicate the financial position of a business (Balance Sheet) at a given date and the operating results (Income Statement) and the cash flow (Cash Flow Statement) for a specified period.

The financial statements provide information about the reporting enterprise's financial performance and financial position that will be useful to users in assessing the performance of the enterprise and the stewardship of the enterprise's management.

Financial statements provide information that:

- Helps investors, creditors and other current or potential users, to make a rational decision about their investments, credit agreement, etc.
- Helps lenders to decide whether or not to provide finance to the business.
- Helps to assess the amount, timing and uncertainty of future cash flows.
- Helps lenders to see whether or not the enterprise can pay interest on any finance approved and repay the capital sum borrowed.
- Shows the economic resources, rights and obligations of the enterprise, and events that may affect them.

As noted above, the objective of the financial statements is to communicate financial information.

| Preparers prepare the <br> financial statements | $\square$ | Users use the financial <br> statements |
| :---: | :---: | :---: |

Financial statements should have the following qualitative characteristics (requirements) to be useful to users:

- Understandability: The information must be understandable, since it is essential for users to analyse. A basic understanding of the business is also required.
- Relevance: To be useful, the information must be relevant to the decision-making needs to the users. The financial statements should show all the important aspects of the entity.
- Reliability: The content of financial information should be consistent with current operations. The information must not contain errors and should reflect truthfully (undisputed) the economic situation of the enterprise so users can rely on it. It is important that the information can be verified, validated and that is not biased by the person who prepares the statements.
- Comparability: Users should be able to analyse the financial statements of an enterprise over time to identify trends in its economic position and its financial results. They should also be able to compare this information with other enterprises from the same sector.
- Faithful representation: The information must be complete, neutral and free from error.

The balance between benefit (that is, the benefit the users get from the information) and cost of providing the information is a pervasive constraint rather than a qualitative characteristic. The benefit should exceed the cost. However, evaluating such benefits and costs is substantially judgemental.

In practice, trade-offs between the qualitative characteristics are often necessary requiring professional judgement to be applied.

### 1.3 Users and their needs

The financial information should be useful, and therefore should allow its users to evaluate the financial performance of the entity, the economic resources it controls, the structure of its funding sources, and its liquidity and solvency.

A user: refers to any person currently or in the future involved in economic activity and who is interested in the financial information of the entity in order to make decisions based on that information.

User types: equity holders or owners; internal or external supervision bodies; administrators; suppliers; creditors; employees, customers and beneficiaries; Government, etc.

The financial statements are designed to meet the common needs of users. The main users of the financial statements of micro enterprises are:

Business owners use financial statements to:

- Evaluate the performance of the business during the current period and over time.
- Compare with other businesses in the same industry.
- Request external financing (loan, credit).
- Assess daily management and business administration.

Financial institutions, such as banks, use the financial statements to:

- Evaluate people and businesses applying for financing.
- Evaluate credit risk (the possibility that the money is not repaid).
- Establish credit records.
- Assess payment capability and profitability of the entity.
- Monitor the performance of the enterprises that have been given credit.

Suppliers use financial statements to:

- Decide whether to give or not financing.
- Decide the type of financing that will be given to the enterprise and the timeframe to pay the debt.
- Assess its capability to pay.

Government use financial statements for:

- Macro-economic and micro-economic planning purposes.

SME agencies use financial statements to:

- Assess support requests from small businesses (e.g., grant applications, training requests and subsidized business services).

Credit agencies use financial statements to:

- Facilitate the assessment of the advancement of credit from an independent organization that keeps records of the credit status of enterprises.


### 1.4 Separating your economic transactions from your personal transactions

The entity or economic unit which is being accounted for is always regarded as having a separate existence quite apart from its owners and other interested parties. In accounting, this is known as the entity concept. In the case of companies, this separate existence is confirmed or obvious as the company is recognised as a separate legal persona. However, an accounting entity may exist even where there is no separate legal entity as in the case of a sole proprietor. In this case, we have a person conducting a business and in the eyes of the law and tax authorities the person and the business are one entity.

However, the accountant is not interested in the person as an individual (unless a personal statement of affairs is required) and is only interested in the activities of the business entity, which is a separate entity as far as the accountant is concerned. The accountant will draw up financial statements which will be only for the business entity. The contents of the financial statements will be limited to reporting on the transactions of only the business.

Thus, the person owning the business must keep their personal affairs separate from the affairs of the business. This is important because when preparing the financial statements for a business, the personal assets and liabilities of the owner must be excluded from the assets (that is, what the business owns) and the liabilities (that is, what the business owes) of the business.


## Difference between a Natural and Juridical person

Natural or physical person - Refers to all human beings, who from the moment they are born, acquire legal personhood. Therefore, they have duties and rights (e.g., they can provide services, conduct business, lease real estate and work for wages).

Juridical or artificial person - Refers to any legal entity duly constituted that has rights and duties. It also exists physically not as a human being but as an institution that is created by one or more natural persons to fulfil certain objectives. The juridical person's existence is independent from its owners and members and none of them are obliged to cover (pay) the debts of the company with their personal resources.

The existence of the juridical person begins on the day of registration in the respective public record, unless the law instructs otherwise.

The main difference between a natural and a juridical person lies in their responsibility. In the case of a natural person, the individual is legally responsible for his contractual obligations. In contrast, in the case of a juridical person (e.g., a company), the individual (e.g., director or the owner) acts as a representative, and contracts obligations on behalf of the company. It is the latter that is responsible for the obligations undertaken. In the case of bankruptcy, the loss is therefore limited to the net assets (resources) of the legal entity.

```
Objectives, characteristics and users of financial statements: Key points to remember
\(>\) The financial statements communicate the financial position and performance of a business.
\(>\) Financial statements should be understandable, relevant, reliable and comparable to be useful to users. In addition, financial statements should be complete, neutral and free from error.
\(>\) The person owning the business must keep their personal affairs separate from the affairs of the business.
```


### 1.5 Definitions and explanations used in this module

| Accounting policy | Accounting policies are the specific principles, bases, conventions, rules and practices applied by a business in preparing its financial statements. An example would be changing from one basis of assigning cost to inventory to another. |
| :---: | :---: |
| Accrual basis of accounting | The impact of events on assets and liabilities is recognised (recorded) in the accounting records in the period when the service is rendered or the sale (revenue) is earned and the expenses are recognised when incurred (also known as the matching principle). |
| Asset | An asset is a resource controlled by the enterprise as a result of past events and from which economic benefits are expected to flow to the enterprise. |
| Balance sheet or statement of financial position | The balance sheet is a snapshot of the business at a point in time. It shows what the business owns (known as assets) and what it owes (known as liabilities). The difference between what it owns and what it owes represents the owner's investment in the business (i.e., equity). |
| Cash basis of accounting | Transactions are recognised (recorded) only when cash is received or disbursed. |
| Cash flow statement | The cash flow statement shows how much cash was generated by the business and how much cash was utilised by the business for the period under review. |


| Company | A company is an organisation usually governed by a Companies Act (or similar Act). A company can have many shareholders (i.e., owners). A company is a legal, taxable and reporting entity. |
| :---: | :---: |
| Cost | Cost is the amount which is paid to obtain goods or services (also known as transaction cost or historical cost). |
| Cost of sales | This refers to the cost of the items (or goods) acquired which were sold to customers during the reporting period (also known as cost of goods sold). |
| Current asset | Current assets are those assets which are expected to be used or sold in the normal course of the business's operating cycle, usually within 12 months of the balance sheet date. All other assets should be classified as non-current assets. |
| Current liabilities | Current liabilities are liabilities that will be paid either in the normal course of the business's operating cycle or within 12 months of the balance sheet date. |
| Drawings | If a sole proprietor or partner withdraws cash from the business for personal use rather than for business use, then this amount is treated as a reduction in equity and is termed 'drawings'. |
| Expense | In simple terms, expenses are decreases in assets as a result of supplying items for sale or providing a service. A detailed definition is given in Module 2. |
| Income | Income encompasses both revenue and gains. An example of revenue would be the sales of products. An example of a gain would be the increase in the value of a non-current asset, for example land. |
| Income statement | The income statement measures the activities of the business for a certain period by calculating the revenue (such as sales made by selling a product) for the period under review and deducting from that the expenses which have been incurred to make that revenue. |
| Liability | A liability is a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying future economic benefits. |
| Non-current assets | These are assets which are not current assets. |
| Non-current liabilities | These are obligations which must be repaid in a period exceeding one year. |
| Partnership | This is an enterprise where there are two or more co-owners. An agreement between the partners should be drawn up detailing how the profits are to be split and other arrangements affecting their capital |


| Profit | accounts. Although it is not recognised as a separate legal or taxable <br> entity, for accounting purposes, a partnership is a reporting entity. |
| :--- | :--- |
| Reporting entity | This is the remaining amount after all expenses have been deducted from <br> revenue. For a company, this is often referred to as retained earnings or <br> retained income. |
| Revenue | A reporting entity as an entity that is required, or chooses, to prepare <br> financial statements, and need not be a legal entity. |
| Sole proprietor (or sole |  |
| Revenue is the proceeds from selling a product to customers or rendering |  |
| a service to clients. |  | | This is an enterprise where there is only one owner who is usually the |
| :--- |
| manager. Although it is not recognised as a separate legal or taxable |
| entity, for accounting purposes, it is a reporting entity. |

### 1.6 Illustrative example

The next section presents an example to illustrate the three financial statements which are prepared for the users. These are:
(a) A balance sheet (or Statement of financial position);
(b) An income statement (or Statement of Profit or Loss ${ }^{1}$ ); and
(c) A cash flow statement.

Accounting measures transactions using money. All transactions are also measured using cost (also known as historical cost). In other words, transactions are measured according to the cost which applied to the transaction at that time. In the examples which follow, CU is used to denote 'currency unit'.

[^0]
## Illustrative example 1.1: Preparation of financial statements for March 20X0

After the COVID-19 breakout, Joe Ngibe saw there was an opportunity to start a business selling face masks. He started the business on the 1 March $20 \times 0$ taking CU5,000 from his savings account. He bought 1000 masks at CU5.00 each and intends to sell them for CU10.00 each. He named his business "Easy-on Masks".
The business sells the masks outside various places such as schools and shopping malls.
At the end of the first month, he calculates that he sold 900 masks for cash as follows:

- 500 masks at CU10.00 each.
- 400 masks at CU7.50 each. He had to drop his selling price on these masks as the fabric was not considered fashionable.
He also paid CU200 for travelling costs to sell his masks.

He decided to prepare financial statements to check on his financial position and determine whether or not his business is successful.

Required: Prepare an income statement, balance sheet and cash flow statement for Joe Ngibe after the above transactions.

Joe Ngibe first prepares the income statement.

| Solution: |  |  |  |
| :---: | :---: | :---: | :---: |
| J Ngibe trading as Easy-on Masks |  |  |  |
| Income Statement for the month ended 31 March 20X0 |  |  |  |
| ( ) - indicates a minus |  |  |  |
|  | Calculation: |  | CU |
| Revenue (sales of masks - all cash) | (500 x CU10) + (400 x CU7.50) |  | 8,000 |
| Purchases | 1000 masks x CU5 | 5,000 |  |
| Less: Closing inventory (masks unsold) | 100 masks x CU5 | (500) |  |
| Cost of sales | sold 900 masks which cost CU5 each |  | $(4,500)$ |
| Gross profit |  |  | 3,500 |
| Travelling expenses |  |  | (200) |
| Profit |  |  | 3,300 |
| Explanation: The business recorded sales (revenue) of CU8,000. It cost the business CU4,700 (CU4,500 + CU 200) to make those sales. The difference is profit (CU8,000-CU4,700). |  |  |  |

The second statement is the balance sheet.
He started his business with CU5,000 which was his own money. The money he put into the business is known as equity (or owner's equity) or (paid-in) capital.

The balance sheet at the beginning of the month is as follows:

| J Ngibe trading as Easy-on Masks |  |
| :--- | ---: |
| Balance sheet as of 1 March 20X0 |  |
| Assets |  |
| Current assets |  |
| Cash | CU |
| Equity (Owner's equity) |  |
| Explanation: On the 1 March, the business only owns one asset which is cash. It does not owe amounts to anyone. |  |
| The difference is therefore CU5,000 which represents the owner's interest in the business. |  |

The balance sheet at the end of the month is as follows:

| J Ngibe trading as Easy-on Masks |  |  |
| :---: | :---: | :---: |
| Balance sheet as of 31 March 20X0 |  |  |
| Assets | Calculation: | CU |
| Current assets |  |  |
| Cash | 5,000 $+8,000$ (sales for cash) - 5,000 (cost of the masks paid in cash) - 200 (travelling expenses - paid cash) | 7,800 |
| Inventory | Cost of masks not sold and still available for sale | 500 |
|  |  | 8,300 |
| Equity |  |  |
| Owner's equity | 5,000 $+3,300$ (profit from the income statement which belongs to the owner) | 8,300 |
| Explanation: On the 31 March, the business owns two assets (CU7,800 cash + CU500 Inventory). It does not owe amounts to anyone. Owner's equity of CU8,300 is the CU5,000 (original investment) plus the profit of the CU3,300 which belongs to the owner. Note that the two parts of the balance sheet total to the same amount. |  |  |

The balance sheet can also be shown in a horizontal format as follows:

| J Ngibe trading as Easy-on Masks Balance sheet as of 31 March 20X0 |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| CU |  |  | CU |
| Assets |  | Equity |  |
| Current assets |  |  |  |
| Cash | 7,800 | Owner's equity | 8,300 |
| Inventory: Cost of masks not sold | 500 |  |  |
|  | 8,300 |  | 8,300 |

In the example above, the assets are cash and inventory. Both of these items are controlled by the business as a result of the past transactions, and both are available to the business to produce benefits in
future periods. They are current assets because they are expected to be used or sold in the normal course of the business's operating cycle, usually within 12 months of the balance sheet date

The third statement is the cash flow statement.
The cash flow statement shows how the enterprise generates and uses cash.
Information about cash flows is useful in providing users with a basis to assess the entity's ability to generate cash and cash equivalents, and its liquidity needs. It also reveals the origin of resources and their use.

Cash flows are inflows and outflows of cash and cash equivalents.
Cash comprises bank notes and coins held physically or available in the bank.
Cash equivalents are highly liquid short-term investments, that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value.

The cash flows are classified into those generated by operating, investing, and financing activities.

## Operating activities

Operating activities are the main income source for the entity and include other activities that cannot be classified as investing or financing. Some examples are:

- Proceeds from sales of goods and services (i.e., sales).
- Payments to suppliers and third parties for goods and services (i.e., purchases).
- Wages and employer contributions.
- Proceeds and payments from insurance entities for premiums, claims, annuities and other obligations under existing contracts.


## Investing activities

Investing activities are activities related to the acquisition and disposal of non-current assets (fixed) and other investments not included in cash and cash-equivalents. Some examples are:

- Payments for the acquisition (purchase) or sale of property, plant and equipment, intangible assets and other non-current assets.


## Financing activities

Financing activities are activities carried out with financial institutions and the owners of the enterprise. Some examples are:

- Cash received from loans and repayment of loans.
- Contributions by owners and dividend distributions.

In this business, because all the transactions were on a cash basis, the cash flow statement for the month of March would be as follows:

| J Ngibe trading as Easy-on Masks |  |
| :---: | :---: |
| Cash Flow Statement for the month ended 31 March 20x0 |  |
|  | CU |
| Profit per the income statement | 3,300 |
| Adjusted for: (increase) in inventory | (500) |
| Cash generated from operations | 2,800 |
| Cash flow from financing activity |  |
| Owner's contribution | 5,000 |
| Cash provided by financing activity | 5,000 |
| Net increase in cash | 7,800 |
| Cash on 1 March 20X0 | - |
| Cash on 31 March 20x0 | 7,800 |

The cash flow statement articulates (i.e., links) with the income statement as it is important for users to see the connection between the different financial statements. The cash flow statement is a summary of all the cash movements for the period under review, as can be seen below.

| Cash flow movement for the month ended 31 March 20X0 | CU |
| :--- | ---: |
| Cash received from customers | 8,000 |
| Less: Cash paid for masks | $(5,000)$ |
|  | 3,000 |
| Less: Cash paid for other expenses | $(200)$ |
| Cash generated from operations | 2,800 |
| Cash on 1 March 20x0 (or cash introduced by owner) | 5,000 |
| Cash on 31 March 20x0 | 7,800 |
| Note: |  |
| Should a business decide to keep its records on a "cash only" basis, and not use the accrual basis of accounting, |  |
| it would show CU2,800 as its "profit" from operations as it would show the total of its purchases (i.e., CU5,000) |  |
| as an expense for March. |  |

Accounting can therefore be seen to be providing useful information to the owners of businesses. The following diagram was used earlier to explain what is accounting.

| Transactions <br> take place |
| :---: |

We have now recorded the transactions that took place and prepared the financial statements for March $20 X 0$.

Joe Ngibe carries on trading in April 20X0.

## Illustrative example 1.2: Preparation of the financial statements for April 20X0

As the financial statements Joe Ngibe prepared for March 20X0 have shown that the business of selling masks is profitable, he decided to expand his business by taking on an assistant to help sell the masks.

On 1 April, he bought a further 2,000 masks made out of more fashionable material for CU8 each from a supplier (MaskKits). MaskKits allowed him to pay only CU7,000 now and he had to pay the balance on the 2 May.

His sales were as follows:
100 masks at CU7.50 for cash. These masks were the inventory unsold at 31 March $20 \times 0$.
1200 masks at CU10.00 on credit. These sales were the new masks. Customers had only paid half of the amount owing to him by the 30 April 20X0.

To display his masks, on the 30 April he bought a metal stand for CU5,000 from Metalco. He paid CU2,500 immediately and the supplier allowed him to pay the balance in May.

Travelling expenses are CU200, he paid the assistant CU800 and took CU200 for his own use (all in cash).

Required: At the end of April, prepare an income statement for the month of April, a balance sheet at the end of April and a cash flow statement for the month of April.

## Solution:

J Ngibe trading as Easy-on Masks
Income Statement for the month ended 30 April 20X0
() - indicates a minus

|  | Calculation: |  | CU |
| :---: | :---: | :---: | :---: |
| Revenue (sales of masks) | (100 x CU7.50) + (1200 x CU10) |  | 12,750 |
| Opening inventory | 100 masks x CU5 | 500 |  |
| Purchases | 2000 masks x CU8 | 16,000 |  |
|  |  | 16,500 |  |
| Less: Closing inventory | 800 masks x CU8 | $(6,400)$ |  |
| Cost of sales | Check: sold 100 masks which cost CU5 each + 1200 masks which cost CU8 each |  | $(10,100)$ |
| Gross profit |  |  | 2,650 |
| Operating expenses: |  |  |  |
| Travelling expenses |  | (200) |  |
| Wages |  | (800) |  |
| Total operating expenses |  |  | $(1,000)$ |
| Profit |  |  | 1,650 |

Note:
The income statement shows the application of the accrual concept. Purchases were recognised for the amount of CU16,000, although only half had been paid for. Unsold masks are not recognised as an expense, but as an asset. Sales were recognised at an amount of CU12,750 although some of the sales $(C U 6,000)$ were on credit.

| J Ngibe trading as Easy-on Masks Balance sheet as of 30 April 20X0 |  |  |
| :---: | :---: | :---: |
| Assets | Calculation: | CU |
| Fixed asset |  |  |
| Equipment | Metal stand at a cost of CU5,000 | 5,000 |
| Current assets |  |  |
| Cash | $\begin{gathered} 7,800 \text { (beginning balance) }+6,750[(100 \times 7.50 C U)+(600 \times \text { CU10 })]-2,5 \\ \text { (metal stand) }-7,000 \text { purchases) }-200 \text { (travelling expenses) }-800 \\ \text { (wages) }-200 \text { (drawings) } \end{gathered}$ | 3,850 |
| Accounts receivable | (1200 masks x CU10) /2 | 6,000 |
| Inventory | Cost of masks not sold and still available for sale (800 masks x CU8) | 6,400 |
| Total current assets |  | 16,250 |
|  |  | 21,250 |
| Equity |  |  |
| Owner's equity | 8,300 (beginning balance) $+1,650$ (profit from the April income statem which belongs to the owner)- 200 (drawings ${ }^{1}$ ) | 9,750 |
| Liabilities |  |  |
| Current liabilities |  |  |
| Metalco | Still owe half for the metal stand | 2,500 |
| MaskKits | Remaining balance owed for the mask kits | 9,000 |
|  |  | 21,250 |
| Explanation: Current assets were defined as those assets which are expected to be used or sold in the normal course of the business's operating cycle, usually within 12 months of the balance sheet date. All other assets should be classified as non-current assets. In the above balance sheet, cash, accounts receivable and inventory are shown as current assets and equipment is shown as a non-current asset. <br> ${ }^{1}$ If the owner takes money (or an asset) out of the business, it is called drawings, and it reduces the equity of the owner. |  |  |

When Joe Ngibe pays MetalCo and MaskKits (also known as accounts payable or creditors), there will be an outflow of cash from the business. (Note that the amount owing to Metalco is in respect of a fixed asset and is not an accounts payable relating to the purchase of inventory.)

These liabilities are classified as current liabilities because they will be paid either in the normal course of the business's operating cycle or within 12 months of the balance sheet date.

The cash flow statement for the month of April is as follows:

| J Ngibe trading as Easy-on Masks |  |  |
| :---: | :---: | :---: |
| Cash Flow Statement for the month ended 30 April 20X0 |  |  |
|  | Calculation: | CU |
| Profit per the income statement |  | 1,650 |
| Adjusted for: |  |  |
| (Increase) in inventory | 6,400 (ending inventory) - 500 (beginning inventory) | $(5,900)$ |
| (Increase) in accounts receivable | 6,000 (30 April) - 0 (31 March) | $(6,000)$ |
| Increase in trade payables | (9,000 MaskKits) - 0 (31 March) | 9,000 |
| Cash generated from operations |  | $(1,250)$ |
| Cash flow from investing activities |  |  |
| Purchase of equipment |  | $(2,500)$ |
| Net cash used in investing activities |  | $(2,500)$ |
| Cash flow from financing activities |  |  |
| Drawings by owner |  | (200) |
| Net cash used in financing activities |  | (200) |
| Net (decrease) in cash | $(1,450)+(2,500)$ | $(3,950)$ |
| Cash on 1 April 20X0 |  | 7,800 |
| Cash on 30 April 20X0 |  | 3,850 |
| Note: Only half of the equipment was paid for. |  |  |

## Financial statements: Key points to remember

$>$ The financial statements represent a means to communicate the financial position of a business (Balance Sheet) at a given date and the operating results (Income Statement) and the cash flow (Cash Flow Statement) for a specified period.
$>$ The balance sheet is a snapshot of the business at a point in time. It shows what the business owns (known as assets) and what it owes (known as liabilities). The difference between the assets and the liabilities represents the investment of the owner in the business (known as capital or equity).
$>$ The income statement measures whether the business has made profit or a loss for the period under review.
$>$ The cash flow statement shows how much cash was generated by the business and how much cash was utilised by the business for the period under review.
$>$ In addition to these three basic statements, a business will also usually prepare some explanatory notes to accompany the financial statements.
Transactions are measured and recorded using cost.

### 1.7 Recording the transactions using an accounting worksheet

A balance sheet or statement of financial position was previously defined as a snapshot of the business at a point in time. It shows what the business owns (known as assets) and what it owes (known as liabilities). The difference between what it owns and what it owes represent the owner's investment in the business. From the previous examples, you can see how this definition is applied, i.e. the balance sheets prepared so far "balanced", i.e., on one side of the balance sheet we showed "assets", and on the other side of the balance sheet, we showed "liabilities" and "equity" or "capital", and the sum of each side was equal. This can be expressed in the following equation:

$$
\begin{gathered}
\text { assets }=\text { liabilities }+ \text { equity } \\
\qquad A=L+E
\end{gathered}
$$

We can use this principle, also known as the accounting or balance sheet equation, to draw up an accounting worksheet to record the transactions of Joe Ngibe as follows.

## Illustrative example 1.3: Accounting worksheet for March

Required: Using the information from Illustrative example 1.1, enter the transactions into an accounting worksheet.

## Solution:

Joe Ngibe trading as Easy-on-masks
Analysis of transactions for March 20X0

|  |  | Assets |  |  | = | Liabilities | + | Equity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | = | L | + | E |
| Description transaction | of | Cash | + | Inventory | = | $\underline{\text { Liabilities }}$ | + | Owner's equity |
| Initial |  | 5,000 |  |  | = |  | + | 5,000 | investment

2. Purchase of
inventory - 5,000 + 5,000
3. Sales of masks $+8,000(\mathrm{a}) \quad+8,000$ (revenue)
4. Cost of masks - 4,500 (b) = - 4,500 (expense)
sold
5. Travelling costs $-\frac{200}{7,800}+\frac{}{2}+200-\frac{200}{8,300}$ (expense)
Balance 31
March

## Workings:

(a) (500 x CU10) + (400 x CU7.50)
(b) 900 masks X CU5 each (cost)

Note: These transactions could be recorded using a spreadsheet or worksheet program such as Microsoft Excel.

## Note the following:

1. Each line is in balance.
2. The balances at the 31 March are the amounts on the balance sheet at the same date.
3. As the profit (or loss) for the period is a component of owner's equity, revenue and expenses (which are the components of the income statement) are entered into the owner's equity account when recorded.
4. The amounts in the owner's equity column (excluding the beginning and ending balances and any amounts introduced into or withdrawn by the owner) comprise the income statement.
5. The difference between the initial investment by the owner (CU5,000) and the ending balance in the owner's equity column is the profit for the year (i.e., CU3,300).

## Illustrative example 1.4: Accounting worksheet for April

Required: Enter the transactions for April (Illustrative example 1.2) in the accounting worksheet.

## Solution:

Joe Ngibe trading as Easy-on-masks
Analysis of transactions for April 20X0


Workings:
(a) $100 \times$ CU7.50
(b) 1200 masks X CU10 each
(c) (100 masks x CU5 each) + (1 200 masks $x$ CU8 each)
(d) 800 masks x CU8

Notes:

1. When the customers paid CU6,000, this had no effect on revenue as the revenue had already been recognised at the time of the original transaction.
2. $R=$ revenue, $E=$ expense, $D=$ drawings
3. These transactions could be recorded using a spreadsheet or worksheet program such as Microsoft Excel.

## Recording the transactions on a worksheet: Key points to remember

$>$ After each transaction, total assets must always equal total liabilities plus equity.
> Because the net effect of revenue less expenses is profit or loss which belongs to the owner, the effect of a revenue transaction is added to equity and the effect of an expense transaction is deducted from equity.
$>$ Drawings is shown as deduction from equity as the owner is reducing his or her investment in the business by withdrawing cash.

### 1.8 Exercises

Exercise 1.1: Sole proprietor - retail business

Sipho Shange, who has a small business selling second-hand clothing, made the following list of his assets and liabilities at 31 December 20X2. He is uncertain as to what amount his equity (capital) is. All amounts are in currency units (CU).
CU
Cash in the till $\quad$ 5,970
Suppliers - for clothes he has purchased but not yet paid for 2,000
Clothes - which have not been sold 3,200
Wages owing 200
Amount owing to Easy Lending for money he borrowed to start his business - this only
has to be repaid in 18 months' time
Table purchased on 31 December 20X2 to display the clothes 1,500
Customer who has yet to pay 300

## Required:

Prepare the balance sheet of Sipho Shange at 31 December 20X2 by inserting the above amounts into the balance sheet and show the amount of Sipho Shange's equity (capital).

## Suggested solution to Exercise 1.1

| Sipho Shange <br> Balance Sheet as of 31 December 20X2 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | CU |  | CU |
| ASSETS |  | LIABILITIES |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  | EQUITY |  |
|  |  |  |  |
|  |  |  |  |
| TOTAL ASSETS |  | TOTAL LIABILITIES + EQUITY |  |
|  |  |  |  |

Ms Carmen Diaz started a small business on the 1 January 20X1 with $60,000 \mathrm{CU}$ she received as an inheritance at the end of the previous year. The money was deposited into a separate bank account. Her business, "Hot Hot-Dogs", sells hot dogs from a small kiosk outside a school. At the end of the first month, she wanted to see if her business was successful or not.

The following are her transactions for January 20X1 (which were all processed through her bank account).

1. She purchased:

5100 hot dog rolls at CU1 each 5,100
5100 sausages at CU5 each 25,500
Butter, tomato and mustard sauce 780
2. She paid:

Rent for the kiosk 2,000
Wages paid to an assistant 3,000
Fuel used for heating water 620
3. She withdrew $10,000 \mathrm{CU}$ for her personal use.
4. She sold 5000 hot dogs for $10 C U$ each.
5. Her uncle, Mr Ruiz, lent her $5,000 C U$ which she paid into her bank account.
6. Although she had rolls and sausages over at the end of the month, she was confident she could use them in the following month as she could store them in her freezer until required.

## Required:

1. Record the above transactions using an accounting worksheet.
2. Prepare the Income Statement, Balance Sheet and Cash Flow Statement for Ms Carmen Diaz trading as Hot Hot-Dogs for the month ended 31 January $20 \times 1$ and the Balance Sheet at 31 January 20X1.

CC


## Suggested Solution to Exercise 1.2

## Ms Carmen Diaz trading as Hot Hot-Dogs

Income Statement for the month ended 31 January 20x1

| Calculation: |  |  | CU50,000 |
| :---: | :---: | :---: | :---: |
| Sales - all cash | 5000 hotdogs at CU10 each |  |  |
| Purchases - hot dog rolls | 5100 hot dog rolls at CU1 | 5,100 |  |
| Purchases - sausages | 5100 sausages at CU5 each | 25,500 |  |
| Total cost of purchases |  | 30,600 |  |
| Less: Cost of rolls not sold | $100 \times$ CU1 | (100) |  |
| Less: Cost of sausages not sold | $100 \times$ CU5 | (500) |  |
| Cost of selling 5000 hotdogs |  |  | $(30,000)$ |
| Gross profit |  |  | 20,000 |
| Less: Other expenses |  |  |  |
| Rent for the kiosk |  | 2,000 |  |
| Wages paid to an assistant |  | 3,000 |  |
| Fuel used for heating water |  | 620 |  |
| Butter, tomato and mustard sauce |  | 780 | $(6,400)$ |
| Profit |  |  | 13,600 |

## Ms Carmen Diaz trading as Hot Hot-Dogs

Balance Sheet as of 31 January 20X1
Calculation:

## Equity

| Beginning balance | 60,000 |
| :--- | ---: |
| Profit for the month | 13,600 |
|  | 73,600 |
| Less drawings | $(10000)$ |
| Ending balance | 63,600 |

## Liability

Loan from Mr Ruiz

| 5,000 |
| ---: |
| 68,600 |

## Assets

Current assets
Cash

Inventory

$$
\begin{array}{cr}
60,000-5,100-25,500-2,000-3,000-620- \\
780-10,000+50,000+5,000 & 68,000 \\
(100 \times 1 \mathrm{CU}) \text { rolls }+(100 \times 5 \mathrm{CU}) \text { sausages } & 600 \\
\hline
\end{array}
$$

## Suggested Solution to Exercise 1.2

| Ms Carmen Diaz trading as Hot Hot-Dogs |  |
| :--- | ---: |
| Cash Flow Statement for the month ended 31 January 20x1 |  |
| Profit for January | 13,600 |
| (Increase) in inventory | $(600)$ |
| Cash generated from operations | 13,000 |
|  |  |
| Cash flows from financing operations | 60,000 |
| Payment to equity (capital) | 5,000 |
| Payment to loan | $(10,000)$ |
| Owner's drawings | 55,000 |
| Net cash used in financing operations |  |
|  |  |
| Net increase in bank | 68,000 |
| Bank balance at beginning of January 20x1 | $-68,000$ |
| Bank balance at end of January 20X1 |  |

At the end of 20X5, Patrick Ngwenya trading as Karibu Enterprises extracted the following information from his financial records:

- an increase in inventories of 15,000 CU
- accounts payable decreased by 8,000 CU
- a new bank loan of 20,000 CU
- repayment of a previous loan of 5,000 CU
- purchase of new machinery for 6,000 CU
- profit as shown in the income statement is 4,500 CU
- cash balance on December $31^{\text {st }}$ last year was $2,200 \mathrm{CU}$

Required: Prepare the cash flow statement using only the above information.

## Suggested solution to Exercise 1.3:



## Module 2: The accounting cycle

## Learning outcomes:

At the end of this module, you should have an understanding of:

- The concepts and definitions which underlie accounting
- How to enter transactions into a ledger and extract a trial balance
- The importance of the trial balance
- How to close the accounting cycle and start a new cycle
- How to account for depreciation


### 2.1 Underlying concepts

In accounting, two underlying concepts are the going concern concept and the accrual concept.
The going concern concept means that the enterprise will continue in operation for the foreseeable future. As a result, the enterprise measures its transactions at cost and depreciates its fixed assets. Assets are considered to have some use beyond the balance sheet date and existing liabilities will be paid when due.

Most accounting methods are based on the assumption that the enterprise will have a long life. This affects how the assets and liabilities are recorded as they appear at their value to the enterprise in its activities, rather than at liquidation value (usually much lower). For example, a machine may no longer have a "commercial value"; however, for the enterprise, it still has a value or utility for its use in production.

The accrual concept means that the revenue is recognised (i.e., entered into the accounting records) as it is earned and expenses are recognised when incurred (and not when cash is received or paid). The application of this concept was shown in the examples in Module 1 and is further explained using examples in Module 3.

### 2.2 Elements, recognition and measurement

In accounting, the components of the financial statements (balance sheet and income statement) are referred to as elements.

## Definitions of the elements are as follows:

Asset: A resource controlled by the enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise.

Liability: A present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying future economic benefits.

Equity: The residual interest in the assets of the enterprise after all its liabilities have been deducted.

Income: Income encompasses both revenue and gains. An example of revenue would be the sales of products. An example of a gain would be the increase in the value of a non-current asset, for example land. Land may have been purchased for CU10,000 but now its current value
is CU15,000. If the owner decided to measure the land at its current value, a gain of CU5,000 would be recognised. As small-sized enterprises only use cost to measure its transactions, the notion of 'gains' is not applicable

Expenses: Decreases in economic benefits during the reporting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to owners.

The balance sheet is made up of the following elements: assets = liabilities + equity.
The Income statement is made up of the following elements: income (i.e., revenue + gains) and expenses. The difference between income and expenses is profit ${ }^{2}$.

Once an item meets the definition on an element, it is recognised if the recognition criteria are satisfied.
Recognition: An item that meets the definition of an element should be recognised if
(a) it is probable that any future economic benefit associated with the item will flow to or from the enterprise, and
(b) the item has a cost or value that can be measured with reliability.

Measurement refers to assigning a cost: The measurement basis most commonly adopted in preparing financial statements for small businesses is historical cost.

The next section expands on the definitions of assets, liabilities and equity, and also provides examples of the different types of assets and liabilities.

### 2.3 Assets

Assets are the goods and rights of economic value that are owned by the enterprise and that are expected to make a profit through sale or use. Assets are required to be valued in a reliable manner (i.e., give them a value in monetary terms) which is usually cost for a small-sized business.

Assets are classified according to their availability (e.g., how easily they are converted to cash) as either current or non-current.

### 2.3.1 Current assets

Current assets are cash or assets that can easily be converted into cash. They are characterised by their easy availability and are expected to convert into cash or be consumed within the next twelve months.

Current assets comprise all the resources the entity expects to sell or consume during the normal operating cycle. It also includes those items whose maturity, disposal or conversion into cash is expected to occur within one year. All other assets should be classified as non-current (or fixed) assets.

Some examples of current assets are:

- Cash - Bank notes and coins held physically or available in the bank.

[^1]- Accounts receivable - Outstanding debts or amounts to be collected. A distinction and separation between clients or customers and other debts is usually made. A business could have 'clients' debts to the business due to services rendered or 'customer' debts to the business due to sales made. In "Accounts receivable" there may also be amounts for items not related to sales, such as a loan given to an employee.
- Inventories - These are the merchandise or goods that an entity has available for sale in the ordinary course of business operations or to be consumed in the production of goods or services. Inventories include merchandise, raw materials, work in process and finished goods.
- Prepaid expenses - A business may have paid in advance for a service to be rendered. For example, if electricity is paid for 2 months, but the income statement is only being prepared for one month, then the electricity for the month that has still to be consumed is a current asset.
- Adjustments - Represent the loss in value (monetary) of an asset or when the expiration date is uncertain, but are recognised when it is likely to occur. For example: allowance for doubtful accounts, allowance for inventory obsolescence, etc.


### 2.3.2 Non-current assets (fixed)

These resources are used over several years for the economic activity of the entity. Non-current assets are less liquid, subsequently the entity would take longer to convert them into cash. The purpose of noncurrent assets is to help the entity perform its operations. These assets include fixed or tangible and intangible assets. These assets are expensed (i.e., depreciated or amortised) over their useful life.

### 2.4 Liabilities

Liabilities are present obligations of the enterprise to make payments in the future. They are quantified in monetary terms and classified based on when they are expected to be settled by the entity (i.e., when they have to be paid).

### 2.4.1 Current liabilities

Current liabilities are the obligations that are due within one year (e.g., enforceable debts maturing in less than one year). Some examples include:

- Accounts payable - are amounts owing due for payment within a year, such as debts or outstanding amounts. A distinction and separation between some important accounts from the more general accounts payables can be made. The debts generated from the purchase of goods and services related to the activities of the enterprise can be classified in "Suppliers"; in "Wages owing" the salaries of employees; and in "Accounts payable", the amounts owing for other items, e.g., payment to an electrician or for a service not related to the main activity of the enterprise.
- Interest - Accrual of interest on credits and loans, i.e., the interest that is generated over time for a loan that given by an institution and has not been settled or paid.

The amount of the tax liability depends on the applicable tax laws in each country because the amounts of taxable income and authorised deductions that are used to determine the tax liability may differ from the amounts used to calculate the profit (i.e., the accounting income) shown in the income statement.

### 2.4.2 Non-current liabilities

Non-current liabilities are obligations, which must be repaid in a period exceeding one year. Examples are:

- A mortgage bond - the financing entity will require the borrower to make a series of payments which includes interest for a specified period of time. It is necessary to separate the interest from the repayment as the interest will be shown as an expense in the income statement, and the remaining amount (i.e., the instalment less interest) will reduce the capital amount owing.
- Loans - The financing entity lends a fixed amount of capital to the borrower who will repay the total amount plus interest at a specific date or during a certain period of time, of which some amounts will exceed 12 months from the balance sheet date.


### 2.5 Equity

Equity refers to the assets minus the liabilities of the enterprise. It is divided into equity or capital provided by the owners (paid-in capital) and retained earnings, which represents the profits or losses resulting from the operations of the enterprise.

## Concepts and definitions used in accounting: Key points to remember

$>$ Going concern means the enterprise will continue in operations in the foreseeable future.
$>$ The accrual concept means that revenue is recognised when earned and expenses and recognised when incurred.
The components of the balance sheet are assets, liabilities and equity.
The components of the income statement are revenue and expenses.

### 2.6 The accounting equation and the accounting cycle

A pictorial depiction of the accounting cycle is as follows:


The accounting equation is used to record financial transactions and entries in each stage of the accounting cycle. It is also the basis of double-entry accounting.

The accounting equation is as follows:

## Assets = Liabilities + Equity

Although many businesses use software programs to record their accounting entries, extract a trial balance, and prepare their financial statements, it is important to note that these programs require the data to be entered (or processed). Understanding the mechanics of the accounting equation (and therefore debits and credits) will provide the knowledge necessary for processing these transactions using accounting software as these programs base the entering and processing of data on an understanding of debits and credits.

### 2.6.1 Recording the transactions using an accounting worksheet

Module 1 illustrated how financial transactions are recorded using an accounting worksheet. To demonstrate the principles of double-entry accounting, the same accounting worksheets from Module 1 are used.

### 2.6.2 Recording the transactions using journals and ledgers

Account - An account is a line in the financial statements that captures in detail and order the record of the operations carried out by the entity. Sometimes accounts are grouped by their similarity or nature and form categories.

The account name must match the concept or nature of the account. For example, all the enterprise's available money in cash will be allocated to an account labelled "CASH". Each account will have its own ledger account. A ledger may be a hard cover book (commercial bookstores sell books where the pages are configured to act as ledgers), or a number of loose pages in a file, or a computer record. The ledger is used to keep track of how all the transactions affect each asset, liability, revenue and expense. Often these ledger accounts are called T accounts because of their shape.

The General Ledger contains all the accounts for the enterprise. The transactions recorded in the Journal are transferred to the General Ledger. Each account is graphically represented by a letter T with a debit and a credit column. The role of these " T " accounts is to group and synthesize information in order to provide the necessary information for the creation of the Trial Balance which is then used to prepare the Balance Sheet and the Income Statement.

Double-entry refers to the fact that each entry has two aspects: debits and credits. These two represent inverse movements that balance each other and can affect the assets, liabilities or equity and are based on the fact that every transaction affects at least two accounts and every movement has a counterpart. The movement may be only in asset accounts, for example, or assets and liabilities, or liabilities and equity. Double entry is carried out in order to present the Balance Sheet with a double dimension: assets as resources and the sources of such assets are the liabilities and equity.

Many transactions affect more than one account with adding or subtracting in the same line. Consequently, it is necessary to establish several rules in order to indicate the history of each item in the financial statements.

The double-entry system uses the following rules to record transactions in the ledger:

## Account name

| DEBIT | CREDIT |
| :--- | :--- |
| + Assets | - Assets |
| - Liabilities | + Liabilities |
| - Capital | + Equity |
| - Revenues | + Revenues |
| + Expenses | - Expenses |
| + Drawings | - Drawings |

- The left side is called Debit. The right side is called Credit.
- The difference between the two sides is called the balance.
- If the balance is zero, for example for a debtor, the account is considered settled.
- If the debit side is greater than the credit side, the account is said to have a debit balance. The inverse situation is called a credit balance.

The expanded accounting equation is:
Assets + Expenses + Drawings = Liabilities + Equity + Revenue
or

$$
\mathrm{A}+\mathrm{E}+\mathrm{D}=\mathrm{L}+\mathrm{E}+\mathrm{R}
$$

An accounting entry refers to entries made in order to record a transaction or operation.

### 2.6.3 Illustrative example

If Joe Ngibe were to enter his transactions for March 20X0 in a ledger, the ledger would look like this.


Analysis of transactions:

1. Joe Ngibe took CU5,000 from his savings account and used it to start his business. CASH (asset) is increased (debited) and the account EQUITY is increased (credited).
2. He then used the CU5,000 to buy 1000 masks which he paid for in cash.

CASH (asset) is decreased (credited) and INVENTORY (asset) is increased (debited).
3. He then sold 500 masks at CU10.00 each and 400 masks at CU7.50 each. CASH (asset) is increased (debited) with CU8,000 and SALES (revenue) is increased (credited) with CU8,000.
4. He no longer has the 900 masks which he sold. He needs to transfer the cost of the masks sold to an expense account (Cost of sales). The 900 masks which were sold cost CU5 each. INVENTORY (asset) is decreased (credited) by CU4,500 and COST OF SALES (expense) is increased (debited) by CU4,500.
5. He pays CU2OO travelling costs. TRAVELLING COSTS (expense) is increased (debited) by CU200 and CASH (asset) is decreased by CU200.

A trial balance is a list of all the ledger accounts and their balances at a certain date. If Joe Ngibe were to extract a trial balance from his ledger on 31 March 20X0, it would be as follows:

| Joe Ngibe |  |  |  |
| :--- | :---: | ---: | ---: |
| Trial balance at 31 March 2020 | Calculation: | CU <br> Debit | CU <br> Credit |
| Cash | 5,800 |  |  |

## Note the following:

1. The balances in the left-hand column are the debit balances (assets and expenses).
2. The balances in the right-hand column are the credit balances (liabilities and equity).
3. The debit column is equal in amount to the credit column as both columns add up to $\mathrm{CU} 13,000$. The trial balance is said to be 'in balance'.

In practice, a trial balance is extracted from the ledger accounts before preparing the balance sheet and income statement. Compare these balances to the income statement and balance sheet in Illustrative example 1.1. All the figures used in those two statements have been derived from the trial balance. Equity in the balance sheet at 31 March 20X0 is 8,300CU [CU5,000 (beginning balance) + CU8,000 (revenue) CU4,700 (expenses)].

A trial balance is important because:

1. It is the first step of checking the arithmetical accuracy of the entries. If all the debits and credits have been entered correctly, the trial balance should balance.
2. It therefore helps in identifying errors and assists in correcting them.
3. It provides the basis of preparing the financial statements. Before preparing the financial statements, it is important to extract a trial balance and confirm its accuracy.

However, a trial balance may not identify all errors as errors could affect both debits and credits equally, and in such a case, the trial balance would not highlight that an error has been made.

Ledger accounts are only closed off annually. This is demonstrated later in this manual. Assume that Joe Ngibe does not want to prepare an income statement for only March, but wants to prepare an income statement which includes March and April. He decides to carry on entering the transactions for April in his ledger. The ledger accounts would be as follows:


## Note the following:

Transactions 1-5 are the transactions for March. In practice, a transfer from inventory to cost of sales can occur at any time, but at least annually (known as the periodic system). As an example, when you purchase items at a store which uses sophisticated software, an entry is automatically generated at the till removing that item from inventory and placing it in cost of sales. Thus, cost of sales for each item is recognised at point of sale (known as the perpetual system).

Analysis of transactions (continued):
6. Joe purchased inventory for cash (CU7,000). CASH (asset) is decreased (credited) and INVENTORY (asset) is increased (debited).
7. Joe purchased inventory on credit (CU9,000). INVENTORY (asset) is increased (debited) and ACCOUNTS PAYABLE (liability) is increased (credited).
8. He sells 100 masks for CU7.50 each for cash. CASH (asset) is increased (debited) with CU750 and SALES (revenue) is increased (credited) with CU750.
9. He sells 1200 masks for CU10 each on credit. ACCOUNTS RECEIVABLE (asset) is increased (debited) and SALES (revenue) is increased (credited) with CU12,000.
10. Credit customers pay CU6,000. CASH (asset) is increased (debited) with CU6,000 and ACCOUNTS RECEIVABLE (asset) is decreased (credited) with CU6,000.
11. He sold 1300 masks in April. These masks were purchased for CU10,100 (100 masks x CU5 each) + (1200 masks x CU8 each) He transfers the cost of the masks sold to an expense account (Cost of sales). INVENTORY (asset) is decreased (credited) by CU10,100 and COST OF SALES (expense) is increased (debited) by CU10,100.
12. He purchases a stand to display his masks. He pays half immediately and is allowed to pay the other half in May. The stand is a fixed asset. EQUIPMENT (asset) is increased (debited) with CU5,000, CASH (asset) is decreased (credited) with CU2,500 and ACCOUNTS PAYABLE (liability) is increased (credited) with CU2,500.
13. He pays CU200 travelling costs using cash. TRAVELLING COSTS (expense) is increased (debited) by CU200 and CASH (asset) is decreased (credited) by CU200.
14. He pays his assistant CU800 using cash. WAGES (expense) is increased (debited) by CU800 and CASH (asset) is decreased (credited) by CU800.
15. He takes CU200 from the business for his own use. DRAWINGS is increased (debited) by CU200 and CASH (asset) is decreased (credited) by CU200.

The trial balance is as follows:

| Joe Ngibe |  |  |  |
| :---: | :---: | :---: | :---: |
| Trial balance at $\mathbf{3 0}$ April 2020 (including 2 months) |  |  |  |
|  | Calculation: | CU | CU |
|  |  | Debit | Credit |
| Cash | 5,000-5,000 +8,000-200-7,000 +750 |  |  |
|  | $+6,000-2,500-200-800-200$ | 3,850 |  |
| Inventory | $5,000-4,500+7,000+9,000-10,100$ | 6,400 |  |
| Sales (revenue) | $8,000+750+12,000$ |  | 20,750 |
| Equity | Beginning balance (1 March) |  | 5,000 |
| Cost of sales (expense) | 4,500 (March) + 10,100 (April) | 14,600 |  |
| Travelling costs (expense) | 200 (March) + 200 (April) | 400 |  |
| Accounts payable | 9,000 + 2,500 |  | 11,500 |
| Accounts receivable | 12,000-6,000 | 6,000 |  |
| Equipment |  | 5,000 |  |
| Wages |  | 800 |  |
| Drawings |  | 200 |  |
| Totals |  | 37,250 | 37,250 |

The income statement for the two months ending 30 April 20X0 is as follows:

| J Ngibe trading as Easy-on Masks |  |  |  |
| :---: | :---: | :---: | :---: |
| Income Statement for the two months ended 30 April 20X0 |  |  |  |
| ( ) - indicates a minus | Calculation: |  |  |
|  |  |  | CU |
| Revenue (sales of masks) | Trial balance |  | 20,750 |
| Opening inventory | 1 March 20x0 | 0 |  |
| Purchases | $\begin{gathered} 5,000+7,000+9,000(\text { see } \\ \text { worksheet) } \end{gathered}$ | 21,000 |  |
|  |  | 21,000 |  |
| Less: Closing inventory | 30 April - Trial balance | $(6,400)$ |  |
| Cost of sales | Trial balance |  | $(14,600)$ |
| Gross profit |  |  | 6,150 |
| Operating expenses: |  |  |  |
| Travelling expenses | Trial balance | (400) |  |
| Wages | Trial balance | (800) |  |
| Total operating expenses |  |  | $(1,200)$ |
| Profit |  |  | 4,950 |

Note that the balance sheet at 30 April $20 \times 0$ does not change because it is at a point in time ( 30 April 20X0).

Before entering transactions into the ledger, it is usual for the transaction to be first entered into a journal.
Daily operations affect two or more accounts at the same time, requiring entries in each account for every item concerned. To record these daily operations more efficiently a journal is used, which is the starting point to create other financial statements.

A journal is a record of financial transactions ordered by date and it consists of two columns: one for debit and one for credit. When adding each column both should have the same amount. The lines in it are called records or entries.

The information from the journal is grouped, classified and recorded in the General Ledger stating the date and a reference to the journal. A journal also plays an important role as it establishes an audit trail for the transactions. By first recording transactions in a journal and then entering the transactions from the journal into the ledger, a record is kept of all the entries including the reason for the entries.

| Illustrative example 2.3: Journal entries (using the Joe Ngibe example) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Date |  | Ref | Debit | Credit |
| Mar |  |  | CU | CU |
| 1 | CASH (asset) is increased (debited) |  | 5,000 |  |
|  | EQUITY is increased (credited) |  |  | 5,000 |
|  | Joe Ngibe took CU5,000 from his savings account and used it to start his business. |  |  |  |
| 2. | INVENTORY (asset) is increased (debited) |  | 5,000 |  |
|  | CASH (asset) is decreased (credited) |  |  | 5,000 |
|  | He used CU5,000 to buy masks. |  |  |  |
| 3. | CASH (asset) is increased (debited) |  | 8,000 |  |
|  | SALES (revenue) is increased (credited) |  |  | 8,000 |
|  | He sold 500 masks at CU10.00 each and 400 masks at |  |  |  |
|  | CU7.50 each. |  |  |  |
| 4. | COST OF SALES (expense) is increased (debited) |  | 4,500 |  |
|  | INVENTORY (asset) is decreased (credited) |  |  | 4,500 |
|  | He transfers the cost of the masks sold to an expense account. The 450 masks which were sold cost CU10 each. |  |  |  |
| 5. | TRAVELLING COSTS (expense) is increased (debited) |  | 200 |  |
|  | CASH (asset) is decreased (credited) |  |  | 200 |
|  | He pays travelling costs. |  |  |  |
| April |  |  |  |  |
| 6. | INVENTORY (asset) is increased (debited) |  | 7,000 |  |
|  | CASH (asset) is decreased (credited) |  |  | 7,000 |
|  | Joe purchased inventory for cash. |  |  |  |
| 7. | INVENTORY (asset) is increased (debited) |  | 9,000 |  |
|  | ACCOUNTS PAYABLE (liability) is increased (credited) |  |  | 9,000 |
|  | Joe purchased inventory on credit |  |  |  |
| 8. | CASH (asset) is increased (debited) |  | 750 |  |
|  | SALES (revenue) is increased (credited) |  |  | 750 |
|  | He sells 100 masks for CU7.50 each for cash |  |  |  |
| 9. | ACCOUNTS RECEIVABLE (asset) is increased (debited) |  | 12,000 |  |
|  | SALES (revenue) is increased (credited) |  |  | 12,000 |
|  | He sells 1200 masks for CU10 each on credit. |  |  |  |
| 10. | CASH (asset) is increased (debited) |  | 6,000 |  |
|  | ACCOUNTS RECEIVABLE (asset) is decreased (credited) |  |  | 6,000 |
|  | Credit customers pay CU 6,000. |  |  |  |

11. COST OF SALES (expense) is increased (debited) ..... 10,100
INVENTORY (asset) is decreased (credited)10,100He transfers the cost of the masks sold to an expenseaccount (Cost of sales)
(100 masks x CU5 each) + (1 200 masks x CU8 each).
$\begin{array}{lll}\text { 12. } & \mathbf{5 Q U I P M E N T} \text { (asset) is increased (debited) } & \mathbf{5 , 0 0 0} \\ \text { CASH (asset) is decreased (credited) }\end{array}$
ACCOUNTS PAYABLE (liability) is increased (credited)2,500
He purchases a stand to display his masks. He pays half immediately and owes the other half.
12. TRAVELLING COSTS (expense) is increased (debited) ..... 200
CASH (asset) is decreased (credited) ..... 200
He pays CU200 travelling costs using cash
13. WAGES (expense) is increased (debited) ..... 800
CASH (asset) is decreased (credited) ..... 800He pays his assistant CU800 using cash
14. DRAWINGS is increased (debited) ..... 200CASH (asset) is decreased (credited)200He takes CU200 from the business for his own use.

Notes:

1. It is of the outmost importance to note all the elements for each transaction; therefore, a few steps must be followed to record these entries in chronological order:

- Identify which accounts are affected in the transaction.
- Recognise the amounts and their nature: debit or credit.
- Apply the accounting rule recording the amounts in debit or credit accordingly.

2. The explanation at the end of each journal entry is termed "the narration". It is simply the explanation of why the journal entry was made. These narrations can be quite short and need not be as lengthy as shown in the above entries.
3. In the above example, after each entry the words "increase or decrease / debit or credit" were added. In practice, this is not necessary and were simply added as additional explanations.
4. The "Ref" column is used when the items are "posted" or entered into the ledger. Each ledger account should have a reference number, and the reference number is then entered into the column. (Likewise, in the ledger, a reference to the journal page is made to indicate where in the journal the instruction for the entry came from.)

The ledger accounts are shown below with the transactions having been "posted" from the journal.


When the enterprise gets to the end of its financial period (usually annually), the ledger accounts need to be balanced off. The expense and revenue balances must be transferred to the equity account. This is termed the "closing journal entry". With a computerised accounting system, the software does this automatically once the option to run the year end is selected. With a manual system, a closing journal entry is required as follows:


## Note the following:

1. The asset and liability accounts have been balanced and are ready for the recording of the transactions for the next period. The ending balance is usually described as the closing balance which is carried forward ( $C / F$ ) to the next period. It is then brought forward ( $B / F$ ) and becomes the beginning or opening balance of the next period.
2. The revenue and expense accounts (with shading) appear in the income statement and their net effect is then transferred to owner's equity account in one journal entry. Revenue - expenses = CU4,950.
3. The Equipment account was not balanced off. This is because there is only one entry in that ledger account.

### 2.7 Other matters

### 2.7.1 Multiple transactions

In practice, the journal can be kept in a number of different ways. For example, an enterprise could have a:
Purchases journal
Sales journal
Cash receipts journal
Cash payments journal.

There are also many different ways to organise the ledger. For example, Joe Ngibe owed different creditors (accounts payable) for the items he purchased, but they were recorded in one account. A more accurate method would be to have a separate ledger account for each different creditor. With many creditors, it would become difficult to isolate the individual amounts in respect of each creditor. An alternative method would be to have a creditors' control account (in which only the totals of the relevant
transactions are entered) in the main ledger and a separate creditors' ledger (in which the individual amounts for each creditor are entered). The balances of all the individual creditors' accounts in the creditors' ledger must equal the balance in the creditors' control account.

Similar to the above explanation, Joe Ngibe had many debtors who had bought the masks promising to pay him later. All the debtors were entered into one account, but they would have consisted of a number of customers each of whom may have owed him a different sum of money. A more accurate method may have been to have a separate ledger account for each debtor. In this way, Joe can track which customers have paid, and which customers have not paid. However, with many debtors, it is better to have a debtors' control account (in which only the totals of the relevant transactions are entered) in the main ledger and a separate debtors' ledger (in which the individual amounts for each debtor are entered). The balances of all the individual debtors' accounts in the debtors' ledger must equal the balance in the debtors' control account.

Where the cash ledger (or cash book) is used as a journal, multiple columns are used and the totals of the columns are usually posted at month end. In many small businesses, a spreadsheet with suitable column headings can be used to record the transactions of the business before entering the transactions into a ledger (for example). This spreadsheet could even be drawn up in a counter book.

The use of an accounting software program greatly simplifies the recording of multiple transactions.

### 2.7.2 Electronic funds transfer (EFT)

If a bank account is opened, payments from the bank usually involved the writing of cheques. However, many enterprises are using banking apps and use EFTs (electronic funds transfer) to pay any amounts owing. Their customers also pay by making direct deposits through their own banking apps. This means that the balance at the bank can be checked on a daily basis. As banks charge a fee for providing a banking service, the fee they charge is an expense which is usually recorded monthly by increasing (debiting) an expense (service fee or bank charges) and decreasing (crediting) the bank account.

However, it is important to note that all these transactions rely on the recording of accounting entries as has been described.

### 2.7.3 Drawings

As Joe Ngibe is the owner of the business, he needs to reward or pay himself for his hard work. Because he is not an incorporated company where he could pay himself a salary or declare a dividend, he rewards himself by taking "drawings". From a tax point of view, the taxation authorities will tax Joe on the CU4,950 (assuming this is the total amount of profit for the tax year) as the business is not recognised as a separate taxpayer. Joe could take a maximum of CU4, 950 out of the business and leave the equity account at its beginning balance of CU5,000. However, the cash account only has a balance of CU3,850; this means the amount of drawings Joe can take from the business at the end of this financial year is CU3,850 (in addition to the CU200 he has already taken). Joe could also take as asset out of the business for his own use. In this case, the asset account would be credited and the drawings account would be debited. The total amount of drawings is shown as a deduction from equity on the face of the balance sheet or in a note to equity. It is important to note that "drawings" is not an expense which is shown in the income statement.

### 2.7.4 Depreciation and amortisation

At the beginning of this module, it was noted that non-current assets are used over several years for the economic activity of the entity and that these assets are expensed (i.e., depreciated or amortised) over their useful life.

## Illustrative example 2.4: Purchase of a fixed asset and subsequent depreciation

On 1 January, Mr X Nurul bought machinery with a value of $15,000 \mathrm{CU}, 5,000 \mathrm{CU}$ was paid in cash and the remaining balance was paid at the end of the month. He estimates a useful life of 3 years for the machinery. This method of depreciation is known as straight-line.

Required: Record the purchase of the machinery in the journal at date of acquisition, at the end of the month, and at the end of the accounting period.

## Solution:

Journal

|  | Debit | Credit |
| :--- | ---: | ---: |
| At date of acquisition (1 January): | CU | CU |
| 1 | Machinery (Non-current asset) | 15,000 |
|  | Cash |  |
| Accounts payable |  |  |
|  | Purchase of machinery |  |

At the end of the month (31 January)
2. Accounts payable 10,000

Cash 10,000
Payment of accounts payable at 31 January

At the end of the year (31 December)
3. Depreciation (income statement)

5,000
Accumulated depreciation (balance sheet)
5,000
Recognition of one year's depreciation
Calculation: 15,000/3years $=5,000$

Note: In the balance sheet, the machinery will be shown at CU10,000.
A note to the machinery will be shown as follows:

| Machinery - cost | 15,000 |
| :--- | ---: |
| Less: Accumulated depreciation | 5,000 |
| Balance at 31 December | 10000 |

Notes:

1. Amortisation is the same concept as depreciation only it is for intangible assets. It is recorded in a similar way to depreciation.
2. There are different methods of recording depreciation such as the reducing-balance method. A change in the method of recording depreciation is not a change in accounting policy, but a change in accounting estimate.

### 2.7.5 Basic requirements (SMEGA-Level 3) ${ }^{3}$

SMEGA-Level 3 is a guideline that can be used by micro, small and medium-sized enterprises which do not prepare general-purpose financial statements. SMEGA-Level 3 recommends that smaller enterprises should follow a simplified accrual-based accounting system that is closely linked to cash transactions. The minimum set of financial statements includes:

- A balance sheet,
- An income statement; and
- Explanatory notes.

To enhance the overall transparency and quality of the financial information, a cash flow statement could also be included.

The following information should be prominently displayed:

- The name of the reporting enterprise;
- The balance sheet date and the period covered by the income statement; and
- The presentation currency.

Financial Statements should be presented at least once a year.
Financial statements should include comparative figures for the previous period.
The enterprise should present current and non-current assets and current and non-current liabilities as separate classifications on the face of the balance sheet.

An enterprise seeking to obtain finance should produce at least this minimum set of financial statements.

### 2.8 Concluding the accounting cycle

The entire accounting cycle has been demonstrated using the example of Joe Ngibe and his business of selling masks. The process for recording transactions in the accounting cycle can be expanded as follows:


## The Accounting Cycle: Key points to remember

$>$ Assets = Liabilities + Equity.
$>$ Double entry refers to the fact that each entry has two aspects: debit and credit.
> To increase an expense, drawings or an asset, the account is debited (and to decrease an expense, drawings or an asset, the account is credited).
> To increase a liability, revenue or equity, the account is credited (and to decrease a liability, revenue or equity, the account is debited).
A trial balance is a list of all the ledger accounts and their balances at a certain date.

[^2]
### 2.9 Exercises

Ms Li-Na Lau deals in second hand furniture, trading as Cho Furniture. She buys discarded furniture which she restores and updates by painting them and by using modern fabrics. She sells these items from her shop with the help of a part-time assistant. At the beginning of January 20X6, she had 50,000CU in her bank account and furniture inventory of 10,000CU. (Her equity (i.e., capital) account had a corresponding balance of 60,000CU.) She uses a banking app and pays using electronic funds transfers (EFT).

Her transactions for January 20X6 were as follows:

1. She attended an auction and bought items to the value of $12,000 \mathrm{CU}$. Before she could take the items, she was required to pay the auctioneers by EFT the full amount.
2. She visited her neighbour who was moving and bought some unwanted items for which she paid 1,500CU by EFT.
3. She bought a second-hand panel van on 1 January 20 X 6 for $30,000 \mathrm{CU}$ from Speedy Motors to be used in the business. She paid 15,000 immediately by EFT and the remainder was to be paid by the 15 February 20X6. The panel van is expected to have a useful life of 5 years.
4. Most of her customers paid by EFT or mobile money, but some paid with cash which was always banked daily. A summary of the receipts reflecting on her bank statements was as follows:
Direct deposits by customers $\quad 15,000$
Cash takings deposited 18,000
5. She paid the following expenses during the month (all in CUs):

Advertising 240
Air-time 500
Petrol 480
Paint and fabric 1,200
Rent 1,000
Wages - part-time assistant $\quad$ 2,500
6. Ms Lau withdrew $12,000 C U$ for her personal use on the 31 January 20X6.
7. Ms Lau informs you that customers owing $5,000 \mathrm{CU}$ have not yet paid her but will only pay her in February $20 \times 6$.
8. Inventory unsold on 31 January cost $6,500 \mathrm{CU}$. These items have not yet been updated as she did not have any paint or fabric left over from what she had purchased.

## Required:

1. Record the transactions in the ledger, and journalise any transactions which do not affect the bank ledger account. (Ignore the closing journal entry.)
2. Prepare the trial balance at 31 January 20X6.
3. Prepare the income statement for the month of January $20 X 6$ and balance sheet at 31 January $20 X 6$.

## Suggested solution to Exercise 2.1

(Page 1 of 4 pages)
Ms Li-Na Lau trading as Cho Furniture



Journal of Ms Li-Na Lau trading as Cho Furniture 20x6

Debit
Credit
Jan CU

CU
13. Accounts receivable

Sales
5,000
Recording sales for which payment is still owing for January
14. Cost of sales

Inventory
17,000

Recording cost of sales for January
$(10,000+12,000+1,500)-6,500$
15. Depreciation (Income statement)

500
Accumulated depreciation (Balance sheet)
Recording depreciation for January ( $30,000 \times 1 /$ 5years $\times 1 / 12$ months)

## Suggested solution to Exercise 2.1

(Page 3 of 4 pages)
Ms Li-Na Lau trading as Cho Furniture
Trial balance at 31 January 20X6

|  | CU | CU |
| :---: | :---: | :---: |
| Bank balance |  |  |
| Inventory |  |  |
| Equity (i.e., capital) |  |  |
| Vehicle - panel van |  |  |
| Accumulated depreciation |  |  |
| Speedy Motors |  |  |
| Sales (revenue) |  |  |
| Depreciation |  |  |
| Advertising |  |  |
| Telephone (Air-time) |  |  |
| Petrol |  |  |
| Paint and fabric |  |  |
| Rent |  |  |
| Wages |  |  |
| Drawings |  |  |
| Accounts receivable (debtors) |  |  |
| Cost of sales |  |  |
|  |  |  |

Ms Li-Na Lau trading as Cho Furniture
Income statement for the month ended 31 January 20X6

|  | CU |
| :---: | :---: |
| Revenue | 38,000 |
| Direct operating costs |  |
| Opening inventory | 10,000 |
| Purchases | 13,500 |
|  | 23,500 |
| Closing inventory | $(6,500)$ |
| Cost of sales | 17,000 |
| Paint and fabric | 1,200 |
| Total direct operating costs | 18,200 |
| Contribution | 19,800 |
| Indirect costs |  |
| Advertising | 240 |
| Air-time (telephone) | 500 |
| Depreciation | 500 |
| Fuel (petrol) | 480 |
| Rent | 1,000 |
| Wages | 2,500 |
| Total indirect costs | 5,220 |
| Profit for the month | 14,580 |


| Ms Li-Na Lau trading as Cho Furniture Balance Sheet as of 31 January 20X6 |  |
| :---: | :---: |
|  | $20 \times 6$ |
|  | CU |
| Assets |  |
| Non-current assets |  |
| Vehicle (30,000-500) | 29,500 |
| Current assets |  |
| Inventory | 6,500 |
| Accounts receivable | 5,000 |
| Cash at bank | 36,580 |
|  | 48,080 |
| Total assets | 77,580 |
| Equity and liabilities |  |
| Owner's equity as of 1 January | 60,000 |
| Profit for the month | 14,580 |
| Drawings for the month | $(12,000)$ |
| Balance 31 January 20X6 | 62,580 |
| Current liabilities |  |
| Trade payable (financing liability) | 15,000 |
| Total equity and liabilities | 77,580 |

## Exercise 2.2: Sole proprietor - services and retail

Mr JL Ritsono has a business, Compu-lessons, which offers computer lessons. He runs these classes in the evenings to earn extra money. His neighbour has a suitable venue which already has tables and chairs and in which he has installed 10 computers. In addition, he offers photocopying services, internet access and ID photographs. He enters his transactions on a spreadsheet which he has drawn up in a counter book and which shows payments and receipts separately. Most customers pay directly using mobile money or payment apps. (These spreadsheets could also be drawn up using a spreadsheet or worksheet program such as Microsoft Excel.)

1. The spreadsheet for June $20 \times 6$ shows the following details:

| Payments from his bank account: | Total | Paper supplies | Air-time and data | Wages | Sundry expenses | Details |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rent (2 months) | 500 |  |  |  | 500 | Rent (4) |
| AA Stationery Co | 200 | 200 |  |  |  |  |
| Cell-B | 300 |  | 300 |  |  |  |
| Wall's Stationery | 860 | 860 |  |  |  |  |
| ESKOM | 150 |  |  |  | 150 | Electricity (5) |
| Assistant's wages | 1,000 |  |  | 1,000 |  |  |
| Cell-B | 200 |  | 200 |  |  |  |
| Assistant's wages | 1,000 |  |  | 1,000 |  |  |
| Service fees | $100{ }^{1}$ |  |  |  | 100 | Bank fees (6) |
| Drawings | 3,000 |  |  |  | 3,000 | Drawings (7) |
|  | 7,310 | 1,060 | 500 | 2,000 | 3,750 |  |
|  |  | (1) | (2) | (3) |  |  |

${ }^{1} \mathrm{Mr}$ Ritsono saw from his bank statement that the bank had charged him 100CU for service fees in June 20X6.

| Receipts into his |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Renk account <br> bammary) <br> (sumber | Total | Computer <br> lessons | Photo- <br> copying | Internet <br> access | ID photos |
| Direct deposits by <br> customers | 8,640 | 5,600 | 500 | 2,200 | 340 |
| Cash takings <br> deposited | 1,720 | 1,200 | 100 | 360 | 60 |
|  | 10,360 | 6,800 | 600 | 2,560 | 400 |
|  | $(8)$ | $(9)$ | $(10)$ | $(11)$ |  |

2. Mr Ritsono had $11,550 \mathrm{CU}$ in the bank, calculated as follows:

| Balance 1 June | 8,500 |
| :--- | ---: |
| Add receipts | 10,360 |
|  | 18,860 |
| Less payments | 7,310 |
| Balance 30 June | 11,550 |

3. Mr Ritsono purchased the 10 computers on 1 January 20X6 for CU36,000.

He has estimated that their useful life is 3 years. At 31 May 20X6, the accumulated depreciation was $5,000 C U$ calculated as follows: $36,000 \times 5 / 12 \times 1 / 3$ years.
4. Mr Ritsono has calculated that customers still owe him 5,000CU for June lessons. He expects these customers to pay in July.
5. Mr Ritsono asks you to prepare an income statement for June $20 X 6$ and balance sheet at 30 June 20X6. He informs you that the balance in his owner's equity account at the beginning of June 20X6 was 39,500CU.

## Required:

1. Record the transactions in the ledger.
2. Prepare the journal entries for those transactions which did not affect the spreadsheet (entries to close off the revenue, expense and drawings accounts are not required).
3. Prepare the trial balance.
4. Prepare the income statement and balance sheet as requested by Mr Ritsono.

GENERAL LEDGER of Mr JL Ritsono - Compu-lessons


Journal of Mr JL Ritsono trading as Compu-lessons

| 20X6 <br> June |  | Debit <br> CU | Credit <br> 12. |
| :--- | :--- | ---: | ---: |
|  | CU <br> Accounts receivable <br> Computer lessons <br> Recording fees charged for lessons for which payment <br> is still owing at the end of June | 5,000 |  |


| Mr JL Ritsono trading as Compu-lessons |  |  |
| :---: | :---: | :---: |
| Trial balance at 30 June 20X6 |  |  |
|  | CU | CU |
|  |  |  |
| Bank balance |  |  |
| Stationery |  |  |
| Air-time |  |  |
| Wages |  |  |
| Rent |  |  |
| Electricity |  |  |
| Bank fees |  |  |
| Drawings |  |  |
| Computer lessons |  |  |
| Photocopying |  |  |
| Internet access |  |  |
| ID photos |  |  |
| Computers - cost |  |  |
| Computers - accumulated depreciation |  |  |
| Depreciation expense |  |  |
| Accounts receivable |  |  |
| Equity account |  |  |
|  |  |  |

Mr JL Ritsono trading as Compu-lessons
Income statement for the month ended 30 June 20X6

|  | CU |
| :---: | :---: |
| Revenue |  |
| Computer lessons | 11,800 |
| Photocopying | 600 |
| Internet access | 2,560 |
| ID photos | 400 |
| Total revenue | 15,360 |
| Expenses |  |
| Air-time | 500 |
| Bank fees | 100 |
| Depreciation | 1,000 |
| Electricity | 150 |
| Rent | 500 |
| Stationery | 1,060 |
| Wages | 2,000 |
| Total expenses | 5,310 |
| Profit for the year | 10,050 |
| Mr JL Ritsono trading as Compu-lessons Balance Sheet as of $\mathbf{3 0}$ June 20X6 |  |
|  |  |
|  | CU |
| Assets |  |
| Non-current assets |  |
| Computers (36,000-6,000) | 30,000 |
| Current assets |  |
| Accounts receivable | 5,000 |
| Cash at bank | 11,550 |
|  | 16,550 |
| Total assets | 46,550 |
| Equity and liabilities |  |
| Owner's equity as of 1 June 20X6 | 39,500 |
| Profit for the year | 10,050 |
| Drawings for the year | $(3,000)$ |
|  | 46,550 |
| Current liabilities |  |
| Trade payable | - |
| Total equity and liabilities | 46,550 |

## Module 3: The components of financial statements

## Learning outcomes:

At the end of this module, you should have an understanding of:

- The different types of assets
- The different types of liabilities
- Equity accounts for the different entity forms
- The main accounting operations
- How to account for revenue and inventory


### 3.1 More advanced accounting matters

Module 2 introduced the underlying concepts of going concern and accrual.
Module 2 also introduced the elements of financial statements (assets, liabilities, equity, revenue and expenses). This module expands on the accounts making up the elements and introduces more advanced matters relating to accounting for the elements.

### 3.2 Assets

### 3.2.1 Cash

So far, the examples have not made a distinction between cash (physical notes and coins) and money in the bank.

Cash refers to both the legal tender ${ }^{4}$ and the cash equivalents. The banknotes and coins on hand or deposited in the bank that are legally accepted in the country are considered cash. Examples of cash equivalents would be foreign currency and temporary investments.

Cash transactions and bank account balances are recognised at their nominal value also known as face value. Transactions in foreign currency are recognised in the national currency using the exchange rate of the date of the transaction. The remaining balance in foreign currency will be converted using the exchange rate of the balance sheet date.

Illustrative example 3.1: Restatement of foreign currency

Mrs Algu has 1,000 USD in a foreign bank account. This amount was purchased at 2.50 CU per USD. Therefore, the balance of the account in Mrs Algu's ledger is CU2,500. At the end of the current accounting period, the exchange rate is 3.20CU per USD.

Required: Restate the bank account balance at the end of the accounting period.
Solution:

| Journal | Calculation: | Debit | Credit |
| :--- | ---: | ---: | ---: |
| Year end: |  | CU | CU |
| Foreign bank account (balance sheet) |  | 700 |  |
| Foreign exchange gain (income statement) | $(1,000 \times 3.20)-(1,000 \times 2.50)$ |  | 700 |
| Restatement of bank account to exchange |  |  |  |
| rate at end of current accounting period |  |  |  |

[^3]
### 3.2.2 Accounts receivable

Accounts receivable groups all the accounts that represent payment claims held by the enterprise against its clients or customers for goods sold or services rendered being part of its normal activity.

The receivables are initially recognised at fair value, which generally is the price of the merchandise or service rendered at the time of the sale or service (which will also be the cost at that date).

Accounts receivable in foreign currency are restated using the exchange rate of the Balance Sheet date.
When there is evidence that a debt may not be collected partially or completely, this amount must be recorded using a complementary account to offset the accounts receivable (provision for doubtful accounts).

### 3.2.2.1 Provision for doubtful debts

A provision for doubtful debts is the account that is used to recognise the impairment of accounts receivable. When it is confirmed or certain that it is not going to be possible to collect the debt, the amount in both accounts (receivables and allowance) must be removed (and is transferred to the income statement).

## Illustrative example 3.2: Recognition of doubtful debt

On 12 February, the Sahara Company sold on credit goods to Mr Gómez for 30,000 CU. These goods were purchased by the company for 25,000 .

On 10 March, due to economic problems faced by Mr Gómez, the Sahara Company estimates that it will only be able to recover 20,000 CU from Mr Gómez.

Required: Record the transactions in the journal of Sahara Company. Solution:

Journal

|  |  | Debit | Credit |
| :---: | :---: | :---: | :---: |
| Feb |  | CU | CU |
| 12 | Accounts receivable (Mr Gómez) | 30,000 |  |
|  | Sales |  | 30,000 |
|  | Cost of goods sold | 25,000 |  |
|  | Inventory |  | 25,000 |
|  | Sale of goods on credit and recognition of expense (cost of sales) |  |  |
| Mar |  |  |  |
| 10 | Doubtful debts (expense in income statement) | 10,000 |  |
|  | Provision for doubtful debts (balance sheet) |  | 10,000 |
|  | Recognition of impairment of accounts receivable |  |  |

### 3.2.3 Prepaid expenses

Prepaid expense are amounts already paid in respect of services to be rendered. An asset is recognised for the portion of the expense for which the benefit will only be consumed in a future period.

### 3.2.4 Inventories

An entity may be carrying out operations by buying merchandise or goods with the intention to sell them as is. On the other hand, an entity may be carrying out operations by buying raw materials and then using them in the production of goods. The accounting for the latter scenario is explained at the end of this module.

## a) Merchandise

These are goods acquired by the enterprise with the intention to sell them in their current state without any process or transformation. It is possible to have subaccounts for each type of merchandise.

Merchandise is recognised at acquisition cost including all necessary costs incurred to have the goods in their current state and at their current place.
b) Inventories: Raw materials

These are goods acquired by the enterprise with the intention to use them in the production or to be transformed. It is possible to have an account for each type of raw material and are recognised in the same way as merchandise.
c) Inventories: Work in process

These are materials that have been partially converted/transformed/processed at the closing date of the financial statements. Its costs include the raw material cost and the production costs such as direct labour and allocated indirect costs such as factory overheads.
d) Inventories: Finished goods

These are the enterprise's manufactured goods intended for sale. The total amount is the aggregated costs from raw materials, work in process and any incurred costs to have the goods in their current state and at their current place. Finished goods are recognised at their cost or in accordance with FIFO or average inventory methods. These methods are explained in the examples at the end of this section.

When more than one good is produced and the production cost source cannot be identified for each product, the costs are allocated using rational and uniform methods.

## Illustrative example 3.3: Purchase of inventory for cash

Kilimanjaro Enterprises bought merchandise for 10,000 CU and paid in cash.
Required: Record the purchase of Inventory in the journal of Kilimanjaro Enterprises. Solution:

| Journal | Debit | Credit |
| :--- | ---: | ---: |
| 1. | Inventory | CU |

## Illustrative example 3.4: Purchase of inventory for cash and credit

Mr Ruiz bought inventory for 25,000 CU paying 10,000 CU immediately and the rest is payable in six months' time.
Required: Record the purchase of inventory in the journal of Mr Ruiz.

## Solution:

Journal


## Illustrative example 3.5: Purchase of inventory from a foreign supplier

In August, the Mrs Lim bought some inventory from a foreign supplier for an amount of 2,000 USD. The purchase was on credit and it will be paid in March next year. At the time of purchase the exchange rate was 3.20 CU per USD. At the end of the period the exchange rate was 2.90 and at the time the debt was paid it was 3.00.

Required: Record the purchase of inventory in the journal of Mrs Lim.
Solution:

## Journal

|  |  | Calculation: | Debit | Credit |
| :---: | :---: | :---: | :---: | :---: |
| Purchase of material: |  |  | CU | CU |
| 1 | Inventory |  | 6,400 |  |
|  | Foreign supplier (Accounts payable) |  |  | 6,400 |
|  | Purchase of inventory when the exchange rate is CU3.20 = USD1. | $2,000 \cup S D=C U 6,400(2,000 \times 3.20)$ |  |  |
| Adjustment at year end: |  |  |  |  |
| 2. | Foreign supplier |  | 600 |  |
|  | Foreign exchange gain (income statement) |  |  | 600 |
|  | Restating the amount owing to the foreign supplier using the exchange rate at year end. | $2,000 \times 2.90=5,800$. Adjust the amount owing to the foreign supplier by CU600 $(6,400-5,800)$ |  |  |

```
Pay the foreign supplier:
3. Foreign supplier 5,800
    Foreign exchange loss (income
    statement) 200
    Cash 6,000
    Payment of foreign creditor To pay USD 2,000 at the time of
payment, only CU2,000 x 3.00 i.e.,
CU6,000 is required. The difference
    between the previous balance of
    CU5,800 and CU6,000 is a loss
which is recognised in the income
statement.
```


## Illustrative example 3.6: Purchase of inventory with VAT

Mr Messi buys merchandise for CU10,000 $+19 \%$ VAT and pays cash.

Required: Record the purchase of the merchandise in the journal of Mr Messi.
Solution:
Journal

|  | Debit | Credit |
| :--- | ---: | ---: |
| Purchase of merchandise: | CU | CU |
| Merchandise (inventory) | 10,000 |  |
| Input Vat | 1,900 |  |
| Bank |  | 11,900 |
| Purchase of merchandise for cash |  |  |

Note: If the purchaser is not a registered VAT vendor, the input VAT would become part of the cost of the merchandise.

When the goods are sold, the cost of the goods sold must be taken from (credit) the inventory account and be added to (debit) the cost of sales account. There are three methods which could be used:

- The specific identification method;
- The weighted average method; or
- First-in first-out (FIFO) method.

If prices did not fluctuate, all methods would show the same results when measuring cost of goods sold or the cost of inventory at year end. However, as prices do fluctuate, the choice of method will affect the amount shown as cost of sales (and therefore the gross profit of the business). The choice of a method for measuring the cost of sales will constitute an accounting policy of the business.

The specific identification method is used if the enterprise deals in unique items or can physically link the item to the actual item sold.

The FIFO method assumes that the items received first, are the items sold first.

The weighted average method assumes that the items available for sale are best measured by a weighted average.

Inventory can also be recorded using the periodic inventory method or the perpetual inventory method.
The periodic inventory method means that only once ending inventory has been determined on at least an annual basis, can the cost of sales be calculated.

The perpetual inventory method means that cost of goods is calculated on a daily basis (or as sales take place). However, a physical stock take is also needed to ensure that the accounting records are correct.

## Illustrative example 3.7: FIFO and the weighted average method

A retailer who commenced trading in 20X7 recorded the following movements in inventory during the year ended 31 December 20X7.

|  | Purchases <br> Units | Purchases <br> 20X7 | CU | Sales |
| :--- | :---: | :---: | :---: | :---: |
| 1 August | $1000^{1}$ | 10,000 | Units | Sales |
| 15 August |  |  |  | CU |
| 1 November | $400^{2}$ | 6,000 | 200 | 4,000 |
| 1 December | $200^{3}$ | 4,000 |  |  |
| 14 December |  | 700 | 35,000 |  |
| ${ }^{1}$ CU10 per unit |  |  |  |  |
| ${ }^{2}$ CU15per unit |  |  |  |  |
| ${ }^{3}$ CU20 per unit |  |  |  |  |

Required: Calculate the closing inventory in the following scenarios:

Scenario A: Cost of inventory is calculated using the FIFO method.

Scenario B: Cost of inventory is calculated using the weighted average (WA) method (calculated on an annual basis).

Scenario C: Cost of inventory is calculated using the weighted average (WA) method (calculated on a transaction-by-transaction basis).

## Solution:

Scenario A: FIFO

|  | Calculation: | CU |
| :---: | :---: | :---: |
| Closing inventory | $\left(100^{4} \times\right.$ CU10 $)+(400 \times$ CU15 $)+(200 \times$ CU20 $)$ | 11,000 |
| Cost of sales | $900 \times$ CU10 | 9,000 |
| ${ }^{4}$ Bought 1000 units | ld 900 units |  |

Scenario B: WA and on annual basis

|  | Calculation: | CU |
| :--- | :---: | :---: |
| Closing inventory | $(C U 10,000+C U 6,000+C U 4,000) / 1600$ units $\times 700$ units | 8,750 |
| Cost of sales | 900 units $\times 12.50 C U^{5}$ | 11250 |
| ${ }^{5}$ CU10 $000+$ CU6 $000+$ CU4000 $) / 1600$ units $=12.50$ per unit |  |  |


| Scenario C: WA and on a transaction-by-transaction basis (W2) |  |  |  |
| :---: | :---: | :---: | :---: |
| Calculation: |  |  | CU |
| Closing inventory | 700 units $\times 12.86$ |  | 9000 |
| Cost of sales | $2,000+9,000$ |  | $11000{ }^{1}$ |
| ${ }^{1}(200$ units $\times 10 \mathrm{CU})+(700$ units $\times 12.86 \mathrm{CU})$ |  |  |  |
| Working 1: |  |  |  |
| Number of units in closing (31 December 20X7) inventory |  |  |  |
|  | Calculation: |  | Units |
| Units purchased | $1000+400+200$ |  | 1600 |
| Less: Units sold | 200+700 |  | 900 |
| Units in closing inventory |  |  | 700 |
| Working 2: |  |  |  |
| WA and transaction by transaction |  |  |  |
| ( ) = deduction | Units | Total cost | Average cost per |
| 20x7 |  | (CU) | unit (CU) |
| 1 August | 1000 | 10,000 | 10 |
| 15 August | (200) | $(2,000)$ | 10 |
| 1 November | 400 | 6,000 | 15 |
|  | 1200 | 14,000 | 11.67 |
| 1 December | 200 | 4,000 | 20 |
|  | 1400 | 18,000 | 12.86 |
| 14 December | (700) | $(9,000)$ | 12.86 |
| 31 December | 700 | 9,000 | 12.86 |

Once the inventory is recognised at cost, on the evidence of value deterioration an adjustment must be made. A write-down in value must be recognised as the total value is no longer recoverable.

Is an inventory write-down made for each inventory item?
It can be done for each item or group of items as long as they are similar.

## How is the inventory value measured when it has deteriorated?

If the value of inventory is lower than its cost because it has deteriorated, it is impaired. This means that it is recorded at its net realisable value, that is, the estimated selling price less the estimated cost of completion less the estimated costs necessary to sell. The reason for this is that this expected loss must be recognised immediately.

## Which accounting entry must be made?

A loss or expense is recognised that is equal to the difference between the cost and the net realisable value.

A business using the periodic method to record inventory annually will apply this rule at year-end when inventory is measured at the lower of cost or net reliable value.

## Illustrative example 3.8: Impairment of inventory at year end

Ms Santiago purchases merchandise (inventory) for CU12,000 for cash. At the year end, this merchandise is still on hand. Due to the economic situation in the market, Ms Santiago estimates that she will only be able to sell that merchandise at a price of CU10,000 with selling costs of CU500.
Required: Record the purchase of the inventory and its subsequent impairment in the journal of Ms Santiago.

## Solution:

| Journal |  | Debit | Credit |
| :---: | :---: | :---: | :---: |
|  |  | CU | CU |
|  | Inventory | 12,000 |  |
|  | Cash |  | 12,000 |
| Purchase of merchandise for cash |  |  |  |
| Year end: |  |  |  |
|  | Cost of goods sold/ Impairment of inventory (expense) | 2,500 |  |
|  | Inventory (balance sheet) |  | 2,500 |
| Recognition of impairment of inventory |  |  |  |
| Workings: |  |  |  |
| At year end, Ms Santiago has to measure inventory at the lower of cost and the estimated selling price less selling |  |  |  |
| $\text { Cost }=12,000$ |  |  |  |
| Selling price - selling costs $=10,000-500=9,500$ |  |  |  |
|  | Inventories recorded for | 12,000 |  |
|  | Less: Recoverable value | 9,500 |  |
|  | Adjustment | 2,500 |  |

### 3.2.5 Property, plant and equipment

- Land: includes the value of the property intended for use by the entity.
- Buildings: includes those items which are used in the production process or administrative use.
- Machinery and operating equipment: includes those items used in the production process.
- Other equipment: includes equipment not used directly in the production process, in addition to those for administrative support.
- Tools and replacement units: contains important tools and assets whose purpose is to replace others in use.

The assets in this account should be initially recognised at acquisition cost or construction cost. This cost includes the purchase price plus all necessary costs to have the asset in place and in proper condition for its intended use (for example, import duties, non-refundable purchase taxes). This also includes installation and dismantling costs. Any trade discounts and rebates are deducted when arriving at the purchase price.

After initial recognition, all property, plant and equipment items must be kept in the accounting records at net value, which is the acquisition cost minus impairments and accumulated depreciation.

Minor maintenance and repair costs to these assets are recognised as expenses when they are incurred.
Land normally has an unlimited life and is therefore not depreciated.
Buildings have a limited useful life and therefore are depreciated.
Accumulated depreciation collects and reflects the systematic allocated value of an asset throughout its useful life. Each asset must be recognised individually given the fact that each asset has a different life span. This useful life must be assessed at least once every year at the end of the accounting period.

Accumulated depreciation reflects the consumption of future economic benefits embodied in the related assets. This is a complementary account that reduces the value of the related assets.

## Illustrative example 3.9: Depreciation

A machine worth CU10,000 is purchased and has an estimated useful life of five years. Each year the machine will be depreciated by CU2,000 for 5 years. This will be reflected as an increase in accumulated depreciation (and is shown in the balance sheet as a deduction from the cost of the asset) and as a cost or expense for the same amount which is shown in the Income Statement where it is associated with helping to generate income during the period.

| Year | Acquisition Cost | Accumulated Depreciation | Net Value |
| :---: | :---: | :---: | :---: |
| 1 | 10,000 | 2,000 | 8,000 |
| 2 | 10,000 | 4,000 | 6,000 |
| 3 | 10,000 | 6,000 | 4,000 |
| 4 | 10,000 | 8,000 | 2,000 |
| 5 | 10,000 | 10,000 | 0 |

Explanation: 10.000/5 = 2,000 CU
The expense to be recognised each year in the income statement is CU2,000 each year for five years.

Note: Depreciation is calculated for each asset individually and depends on the amount and the useful life of each asset.

### 3.2.6 Intangible assets

Intangible assets are a category of assets that cannot be touched physically but which have a quantifiable value to the enterprise, e.g., patents. Each intangible asset has a useful life for the entity that is an estimation of the time during which the asset is used. As time passes, the asset will contribute to the entity's operations while reducing its useful life. Therefore, intangible assets also have complementary accounts called "accumulated amortisation" that reduces their value.

## Illustrative example 3.10: Amortisation

A patent is bought for a price of CU40,000. This patent lasts for 20 years. Dividing 40,000/20 = 2,000 each year. This amortisation will be reflected as an increase in accumulated amortisation (and is shown in the balance sheet as a deduction from the cost of the intangible asset) and as a cost or expense for the same amount which is shown in the Income Statement where it is associated with helping to generate income during the period.

Note: Amortisation is the same concept as depreciation only it is for intangible assets. Amortisation is calculated for each intangible asset individually and depends on the amount and the useful life of each asset.

### 3.2.7 Impairment of non-current assets

An asset is impaired when it is unlikely to generate cash flows to absorb the carrying amount of the item over its useful life. In this situation, the carrying amount of the asset should be reduced to the cash flows to be recovered from the asset. The cash flows could come from either the disposal value of the asset or from its continuing use and need not be discounted. Indicators of impairment would include a significant decline in market values or obsolescence. The accounting entry is similar to the entry for depreciation or amortisation, i.e., debit impairment (expense) and credit an account 'Provision for impairment' (balance sheet).

| Illustrative example 3.11: Pictorial presentation - property, plant and equipment reconciliation Note: This example is for illustration purposes only. |  |  |  |
| :---: | :---: | :---: | :---: |
| Balance Sheet at 31 December 20X2 | Note | 20X2 | 20X1 |
|  |  | CU | CU |
| Assets |  |  |  |
| Non-current assets |  |  |  |
| Property, plant and equipment | 4 | 176,500 | 142,000 |
| Notes to the Balance Sheet |  |  |  |
| 4. Property, plant and equipment |  |  |  |
|  | Land | Plant and equipment | Total |
| 20×2 |  |  |  |
| Cost | 100,000 | 55,000 | 155,000 |
| Accumulated depreciation and impairments | - | $(13,000)$ | $(13,000)$ |
| Balance at the beginning of the year - 1 January 20X2 | 100,000 | 42,000 | 142,000 |
| Additions | 50,000 | - | 50,000 |
| Disposals | $(10,000)$ | - | $(10,000)$ |
| Depreciation | - | $(5,500)$ | $(5,500)$ |
| Balance at the end of the year - 31 December 20X2 | 140,000 | 36,500 | 176,500 |
| Cost | 140,000 | 55,000 | 195,000 |
| Accumulated depreciation and impairments | - | $(18,500)$ | $(18,500)$ |
|  | 140,000 | 36,500 | 176,500 |


| 20X1 |  |  |  |
| :---: | :---: | :---: | :---: |
| Cost | 100,000 | 50,000 | 150,000 |
| Accumulated depreciation | - | $(5,000)$ | $(5,000)$ |
| Balance at the beginning of the year - 1 January 20X1 | 100,000 | 45,000 | 145,000 |
| Additions | - | 5,000 | 5,000 |
| Disposals | - | $(2,000)$ | $(2,000)$ |
| Depreciation | - | $(5,500)$ | $(5,500)$ |
| Impairments | - | (500) | (500) |
| Balance at the end of the year - 31 December 20X1 | 100,000 | 42,000 | 142,000 |
| Cost | 100,000 | 55,000 | 155,000 |
| Accumulated depreciation and impairments | - | $(13,000)$ | $(13,000)$ |
|  | 100,000 | 42,000 | 142,000 |

### 3.3 Liabilities

Liabilities are the obligations arising from taxes and other operations of the enterprise.

### 3.3.1 Accounts payable

Accounts payable refer to the obligations contracted by the enterprise from the purchase of goods and services arising from the normal operations, e.g., suppliers. These accounts are recognised at the nominal value of the transaction less payments made.

### 3.3.2 Accrued expenses

Accrued expenses are recognised when a benefit has been received or used in the reporting period but has not been paid. For example, wages are the obligations towards the employees as compensation for their work in terms of salary, shares and social benefits. Wages are recognised as an expense when paid and would only form a liability if there are amounts unpaid in respect of work carried out during the period under review.

### 3.3.3 Loans and credits

Loans and credit are obligations contracted by the enterprise with financial institutions for financing operations, e.g., loans from banks, lines of credit, leasing contracts. When recognising them, the accessory costs related to obtaining the financing must be included.

### 3.3.4 Provisions

Provisions represents the estimated value of a liability for which the amount or date is uncertain, e.g. post-employment employee benefits. A provision must be recognised only when:
a) The enterprise has a present obligation arising from a past event.
b) It is probable that the enterprise will have to use resources to settle the obligation.
c) The amount of the obligation can be estimated reliably.

### 3.3.5 Taxes

Taxes include Value Added Tax (VAT) or General Sales Tax (GST), customs duties, income tax, regional and local taxes, and tax on financial transactions. Taxes are generally different in different jurisdictions.

In some jurisdictions, businesses (vendors) over a certain revenue threshold are required to register for VAT. This means that these businesses are obliged to levy VAT on their sales (output VAT). All businesses are charged VAT on their inputs (such as purchases etc.) (input VAT) if they purchase items from suppliers who are also registered for VAT. A business which is a registered vendor will compare output VAT to input VAT at periodic intervals. If output VAT exceeds input VAT, the difference is paid to the taxation authority. If the opposite is true, the business will claim a refund from the taxation authority.

### 3.4 Equity

Equity refers to the assets minus the liabilities of the enterprise. It is divided into capital provided by the owners (paid-in capital) and retained earnings, which represents the profits or losses resulting from the past operations of the enterprise.

The paid-in capital accumulates all contributions made by shareholders/owners whether they are in cash or kind. The capital amount is recognised at nominal value of the shares when issued by a company. In the case of contributions in kind, the amount recognised is the fair value of the asset.

## Illustrative example 3.12: Paid-in capital

Five individuals decide to form the Five Exports Company by contributing 20,000 CU each.

Required: Record the above transaction in the journal.
Solution:

Journal

| Date: | Debit <br> CU | Credit <br> Cash |
| :--- | ---: | ---: |
| Paid-in capital (Equity) | 100,000 |  |
| Recognition of cash received on formation of company |  |  |
| Note: When a company is formed, shares (or stock) are |  |  |
| issued to designate each shareholder's interest in the |  |  |
| company. For instance, this company may have issued |  |  |
| 100000 shares with each shareholder receiving a |  |  |
| certificate showing a holding of 20000 shares. |  |  |

The presentation of equity in the balance sheet is different for each of the three entity forms noted in Module 1. Assume that the enterprise traded for only one month in the following examples.

## Illustrative example 3.13: Equity account of a sole proprietor

Using the example of Joe Ngibe in Module 1, the equity account in the balance sheet is as follows:

Equity

| Balance at the beginning of the period (1 April 20X1) | 8,300 |
| :--- | ---: |
| Profit | 1,650 |
|  | 9,950 |
| Less: Drawings |  |
| Balance at the end of the period (30 April 20X1) | $(200)$ |

Alternatively, this detail could be shown as a note to equity in the balance sheet.

## Illustrative example 3.14: Equity account of a partnership

Using the above example, assume there were two equal partners, with a profit-sharing ratio of 50\%.

|  | Partner A | Partner B | Total |
| :---: | :---: | :---: | :---: |
| Equity |  |  |  |
| Balances at the beginning of the period (1 April 20X1) | 4,150 | 4,150 | 8,300 |
| Profit | 825 | 825 | 1,650 |
|  | 4,975 | 4,975 | 9,950 |
| Less: Drawings (assuming each partner withdrew 100CU) <br> (100) <br> (100) <br> (200) |  |  |  |
| Balances at the end of the period (30 April 20X1) | 4,875 | 4,875 | 9,750 |
| Alternatively, this detail could be shown as a note to eq | ty in the b | nce sheet. |  |

Accounting for a partnership and any agreements between partners can be complicated. The agreement may allow partners to receive interest on their capital accounts, or may require them to pay interest on their drawings.

For a company, equity consists mainly of three accounts:

- Paid-in capital - Refers to the resources contributed by the owners of the enterprise (contributed capital).
- Profit or loss - Refers to the difference between revenue and expenses for the period. It can be positive, which means the enterprise made a profit, or negative, which shows that the enterprise made a loss. It is the profit or loss for the year (earned capital) (also known as net income).
- Retained earnings - Refers to the results from previous years remaining in the entity after creating reserves and paying dividends. This amount is used for reinvesting into the business, i.e., results from previous years that were not distributed to owners.

| Illustrative example 3.15: Equity account of a company |  |  |  |
| :---: | :---: | :---: | :---: |
| Assuming Joe Ngibe is trading as a company with many shareholders and issued share capital of CU8,300 on 1 April 20X1, the equity account in the balance sheet is as follows: |  |  |  |
| Balance Sheet |  |  |  |
| Equity | Calculation: |  |  |
| Issued capital (or Paid-in Capital) |  |  | 8,300 |
| Retained earnings | (1,650 | 00* dividend) | 1,450 |
|  |  |  | 9,750 |
| *a company would pay a dividend to its shareholders. |  |  |  |
| Statement of Changes in Equity |  |  |  |
|  | Share capital | Retained earnings | Total |
| Balance at beginning of the period | 8,300 | - | 8,300 |
| Profit | - | 1,650 | 1,650 |
| Dividends | - | (200) | (200) |
| Balances at end of period | 8,300 | 1,450 | 9,750 |
| Note: *If a company pays a dividend, the deduction is shown as above in a separate statement entitled "Statement of Changes in Equity". |  |  |  |

## Components of the financial statements: Key points to remember

> Assets, when shown on the balance sheet, must be separated into Non-current assets and Current assets.
> Liabilities, when shown on the balance sheet, must be separated into Non-current liabilities and Current liabilities. Equity (or capital) represents the owners' investment in the enterprise.
> Retained earnings are the profits not distributed and accumulated losses from previous years.

### 3.5 Main accounting operations

A transaction must be recorded only after it has happened, i.e., when the enterprise has had an economic impact on its financial structure, e.g., it has acquired a right or obligation; had a loss or gain; or had an increase or decrease in assets or liabilities.

The main transactions of an enterprise relate to revenue recognition and inventory management.

### 3.5.1 Revenue recognition

A business may record as revenue, interest received, revenue from the rendering of services or revenue from the sale of goods.
a) Interest received

An enterprise which has deposited money in a fixed deposit or other interest-bearing account at a bank (or similar institution) may receive interest on these funds. An entry is required to record the interest in the ledger of the enterprise showing the increase in the investment and recognising the interest in the income statement.

## Illustrative example 3.16: Recognition of interest

Ms Mkhize has $10,000 \mathrm{CU}$ in a bank account that generated interest of 50 CU at the end of the month.
Required: Record the interest received in the journal of Ms Mkhize.

## Solution:

| Journal | Debit | Credit |
| :--- | ---: | ---: |
| Bank (balance sheet) | CU | CU |
| Interest received (Income statement) | 50 |  |
| Interest income for the month |  | 50 |

## b) Rendering of services

Revenue from the rendering of services is recognised taking into consideration the proportion of services rendered or stage of completion at the end of the period. In order to recognise the transaction, the following conditions must be met:

- The amount of revenue can be measured reliably.
- It is probable that the entity will receive the economic benefits associated with the transaction (that the service will be paid).
- The progress or completion of the service can be measured reliably at the end of the period.
- The costs incurred or to be incurred can be measured reliably.

When the rendering of services cannot be measured reliably the revenue arising from it should only be recognised to the extent of the expenses (costs) considered recoverable.

## Illustrative example 3.17: Business providing services

LimpiaTodo provides cleaning services. The Clover Cheese Company hires LimpiaTodo SA to clean its factory 2 times. The first cleaning was performed during the current accounting period leaving the second for the next. LimpiaTodo SA received advance payment for both cleanings ( $30,000 \mathrm{CU}$ ) and it estimates reliably that each cleaning costs 8,000 CU.

Required: Record the above transactions in the journal of LimpiaTodo.

```
Solution:
Revenue of 30,000CU can be measured reliably. The completion can be measured at 50% complete.
Each cleaning has a measured cost of 8,000 CU.
Journal of LimpiaTodo
\begin{tabular}{lrr} 
& \begin{tabular}{r} 
Debit \\
CU
\end{tabular} & \begin{tabular}{r} 
Credit \\
CU
\end{tabular} \\
1. \begin{tabular}{l} 
Cash \\
Deferred Revenue (Balance Sheet)
\end{tabular} 30,000 & \\
& & 30,000
\end{tabular}
LimpiaTodo has not provided any cleaning services at the time it receives the cash.
2 Deferred Revenue (Balance Sheet) 15,000
Revenue
LimpiaTodo provides the first cleaning service and recognises one half of the revenue
3. Cost of cleaning service rendered 8,000
Salaries payable
Assuming that the only cost in the cleaning are the salaries of the staff concerned and the staff have been paid for their work, then that portion of their salaries which related to the cleaning contract is shown as an expense relating to the cleaning contract
Notes:
1.The narrations are longer than necessary as they have been used for explanations.
2. The balance sheet will show under liabilities: Revenue received in advance of CU15,000. This relates to the cleaning still to be carried out in the next accounting period.
```


## Illustrative example 3.18: Business providing services

Flower Enterprises hires Transformation SA to renovate its offices. Flower Enterprises pays in advance the total amount for the service, $15,000 \mathrm{CU}$. Renovation work started this period but it will be only be finished during the next period. Transformation SA has incurred in costs of 7,000 CU.

Required: Record the accounting entries in the journal of Transformation SA assuming that it is unable to measure the progress it has made on the renovation project.

## Solution:

$\left.\begin{array}{lrrr}\text { Journal of Transformation SA } & \text { Debit } \\ \text { CU }\end{array} \quad \begin{array}{r}\text { Credit } \\ \text { CU }\end{array}\right\}$

```
2 Deferred Revenue (Balance Sheet) 7,000
    Revenue (B,00
    Cost of renovation work completed to date 7,000
    Cash (assuming costs were paid in cash)
    7,000
    7,000
    Transformation SA is unable to measure how much of the
    renovation it has completed. In this case, revenue equal to the
    amount of costs incurred is recognised, i.e., profit measured is 0.
```

Notes:
1.The narrations are longer than necessary as they have been used for explanations.
2. Compare this example to the previous example where the percentage of completion was measured at $50 \%$.

## c) Sale of goods

The sale of goods represents the revenues arising from the primary activity of the enterprise and must be recognised in the financial statements when:

- The enterprise has transferred all the risks and benefits linked to the ownership and control of the goods to the buyer.
- The revenue amount can be measured reliably.
- It is probable that the enterprise will receive the economic benefits associated with the transaction (that the service will be paid).
- The costs incurred can be measured reliably.

Most of the time the risks and benefits linked to ownership are transferred at the same time as the legal entitlement or the physical transfer of the goods. The transaction is recognised when the buyer assumes responsibility for the goods, normally at delivery. The sale of goods may be subject to certain conditions: installation and inspections, consignment, etc.

With the sale of goods, it is important that the cost of those goods is expensed to the income statement at the same time the revenue is recognised.

### 3.5.2 Inventory management

Inventories are assets:

- Held for sale in the ordinary course of business (bought in or finished goods).
- In the production process to be sold (work in process).
- In the form of materials and supplies to be consumed in production or rendering services.

As indicated previously, an entity may be carrying out operations by buying merchandise or goods with the intention to sell them as is. On the other hand, an entity may be carrying out operations by buying raw materials and then using them in the production of goods.
a) Held for sale in the ordinary course of business (bought in or finished goods)

Inventories which are purchased with the intention of resale are held for sale in the ordinary course of business are measured at cost at the date of acquisition.

Inventories which are being manufactured by the enterprise are recognised at their production cost. The production cost of inventories is illustrated in the following diagram.

Production cost of inventories


What it is included in the production costs?
Raw materials (at acquisition cost), depreciation or production machinery, production wages, and administrative production expenses.

What is not included in the production costs?
Distribution expenses, commercial personnel wages, publicity expenses, and depreciation of assets not related to production (e.g., use of administrative offices).

Which expenditures are specifically excluded from the cost of inventories and are recognised as expenses?

- Abnormal quantities of waste materials, labour and other production costs.
- Storage costs that are not necessary for production.
- Administrative overheads unrelated to production.
- Selling costs such as sales commissions.

b) Inventories In the production process to be sold (work in process)

At the end of the reporting period, it may happen that some goods have not been completely finished. These inventories are classified as work in process (WIP).

## Illustrative example 3.20: Work in process (manufacturing business)

A business that manufactures jeans had a beginning WIP inventory at the beginning of the year of $1,000 \mathrm{CU}$. During the year the business incurred manufacturing costs of 5,000 and produced finished jeans costing 4,900CU.

Required: Calculate the cost of ending WIP.

| Solution: | CU |
| :--- | ---: |
| Beginning WIP | 1,000 |
| Manufacturing costs | 5,000 |
|  | 6,000 |
| Less: cost of finished jeans | 4,900 |
| Closing WIP | 1,100 |

Note: This is basically an estimate of the cost of the WIP. If the production process is very short, such as in this case with the manufacturing of jeans, the business will probably not have any jeans in the process of manufacture at the year end.
c) Materials and supplies to be consumed in production or rendering services (raw materials)

Materials and supplies to be consumed in production are valued at the end of the reporting period at the lower of cost and net realisable value.

To conclude this section on inventory management, the following Illustrative example illustrates how inventory is disclosed in the financial statements of a business.

| Illustrative example 3.21: Pictorial presentation of inventory (Manufacturing business) |  |  |  |
| :---: | :---: | :---: | :---: |
| Balance sheet |  |  |  |
|  | Note | $20 \times 2$ | 20x1 |
| Assets |  | CU | CU |
| Current Assets |  |  |  |
| Inventories | 1,2 | 62,200 | 38,100 |
| Notes to the financial statements |  |  |  |
| 1. Summary of significant accounting policies |  |  |  |
| Inventories are valued at the lower of cost or net realisable value. The cost of raw material is determined on a first-in first-out basis. The cost of work in process and finished goods include the cost of raw materials plus an allocation of direct and indirect manufacturing costs. |  |  |  |
| 2. Inventories |  |  |  |
| Raw materials |  | 18,200 | 9,100 |
| Work in process |  | 10,000 | 8,000 |
| Finished goods |  | 34,000 | 21,000 |
|  |  | 62,200 | 38,100 |

## Main accounting operations: Key points to remember

$>$ An enterprise's main operations are focused on revenue recognition and inventory management.
> Revenue may consist of sale of goods, rendering of services and interest received.
$>$ Inventories can be finished goods, work in process or raw materials and consumables.
> Inventories may consist of a number of components, such as the costs of purchase, costs of conversion, and other costs to bring the inventories to their present location and condition.
Inventories are valued using either the specific identification, FIFO or WA method.
Inventories are valued at the lower of cost or net realisable value.

### 3.6 Exercises

Exercise 3.1: Partnership - retail business
(Page 1 of 1 page)
Mr and Mrs SA Fridi are in a partnership sharing equally in any profits or losses.
At the end of December 20X4, the following balance sheet was prepared:

# Mr and MRS SA Fridi <br> Balance Sheet as of 31 December 20X4 

| CU |  |  | CU |
| :---: | :---: | :---: | :---: |
| ASSETS |  | LIABILITIES |  |
| Non-current assets |  | Current liabilities |  |
| Furniture | 150 | Accounts Payable | 150 |
|  |  | Bank loan | 280 |
|  |  | Total Liabilities: | 430 |
| Current assets |  | EQUITY |  |
| Inventories | 350 | Capital accounts - 1 January 20X4 | 1,000 |
| Accounts receivable | 280 | Profit for the year | 400 |
| Cash at bank | 450 |  | 1,400 |
|  | 1,080 | Less: drawings | (600) |
|  |  | Capital accounts - 31 December 20X4 | 800 |
| TOTAL ASSETS | 1,230 | TOTAL LIABILITIES + EQUITY | 1,230 |

During January 20X5, the partnership does the following:

1. Merchandise was bought for 60 CU but has not yet been paid for.
2. Purchase of a computer for 75 CU was paid in cash.
3. A sale of merchandise for 160 CU was received in cash. The cost of the sold goods was 80 CU .
4. Furniture is shown in the above balance sheet at a cost of 180 CU less accumulated depreciation of 30 CU . Depreciation of 5 CU must be recorded for the furniture for January 20X5.
5. Depreciation of the computer was recorded for the amount of 10 CU .
6. The salaries for the month amounted to 40 CU and was paid from bank. This included a salary for Mrs SA Fridi of 10 CU as she was actively running the business.
7. A customer paid 50 CU that was owed from a past purchase.
8. Monthly loan payment of 30 CU was made, of which 20 CU was to reduce the principal amount owing and 10 CU was for interest.
9. Mr Fridi and Mrs Fridi each withdrew 5 CU from the partnership at the end of January 20X5.

## Required:

Record the above transactions for January 20X5 in the ledger of Mr and Mrs SA Fridi, extract a trial balance and prepare:
(1) An income statement for the month of January 20X5, and
(2) A balance sheet at 31 January $20 X 5$.

## Suggested solution to Exercise 3.1

## GENERAL LEDGER of Mr and Mrs SA Fridi



## Suggested solution to Exercise 3.1

| Sales | Equity account /Capital Mrs Fridi | Equity account /Capital Mr Fridi |  |
| :---: | :---: | :---: | :---: |
| 160 (3) | 400 Beg Bal |  | 400 Beg bal |
| Mr and Mrs SA Fridi |  |  |  |
| Trial balance at 31 January 20X5 |  |  |  |
|  |  | CU | CU |
| Bank balance |  | 505 |  |
| Accounts receivable |  | 230 |  |
| Inventories |  | 330 |  |
| Computer |  | 75 |  |
| Furniture - cost |  | 180 |  |
| Accumulated depreciation - furniture |  |  | 35 |
| Accumulated depreciation - computer |  |  | 10 |
| Accounts payable |  |  | 210 |
| Bank loan |  |  | 260 |
| Drawings - Mr Fridi |  | 5 |  |
| Drawings - Mrs Fridi |  | 5 |  |
| Equity account (Capital) - Mrs Fridi |  |  | 400 |
| Equity account (Capital) - Mr Fridi |  |  | 400 |
| Sales |  |  | 160 |
| Cost of goods sold |  | 80 |  |
| Depreciation expense |  | 15 |  |
| Interest |  | 10 |  |
| Salaries |  | 40 |  |
|  |  | 1,475 | 1,475 |

Suggested solution to Exercise 3.1
(Page 3 of 3 pages)


Mrs Lau starts her own company in January 20X5, and performs the following operations all in currency units (CU):

## January 20X5

1. She calls her business Lau SA and establishes it with an initial contribution of CU420,000. The contribution is made as follows: Land 90,000; Building 120,000; Equipment 50,000; and 160,000 was paid in cash.
2. An insurance policy for the building is taken out for one year for the amount of CU2,400. The amount is paid in cash.
3. Furniture is purchased for the amount of CU25,000 on 1 January 20X5. It is paid in cash.
4. Merchandise is purchased for the amount of CU25,000 (1000 units).
5. Merchandise worth 10,000 USD was purchased from a foreign supplier; the purchase is on credit; the exchange rate is 3.20CU/USD. 1200 units are purchased.
6. 500 units of goods are sold for CU30 per unit. The amount is paid in cash.
7. CU200 are paid for electricity and CU500 for the telephone.
8. The insurance fee (corresponding to one month of the total fee) is recognised as an expense.
9. The depreciation of the building ( $5 \%$ annually), furniture ( $10 \%$ annually) and equipment ( $25 \%$ annually) is recorded.
10. 1,500 units are sold and paid in cash. Each unit is sold for CU35 per unit.
11. Lau SA records all expenses, except cost of sales, to one expense account called "Administrative expenses".

## Required:

For January 20X5:

1. Record the operations in the Journal calculating the inventory using the average cost method,
2. Prepare the General Ledger and Trial Balance, and
3. Prepare the financial statements (Balance Sheet, Income Statement and Cash Flow Statement).

Note: No income taxes are applicable.

Suggested solution to Exercise 3.2
JOURNAL

| January 20x5 |  |  | Calculation: | DEBIT | CREDIT |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | CU | CU |
| 1. | Land (B) | ( $B=$ balance sheet) |  |  |  |
|  | Building (B) |  |  |  |  |
|  | Equipment (B) |  |  |  |  |
|  | Cash (B) |  |  |  |  |
|  |  | Paid-In capital / Equity (B) |  |  |  |
|  |  |  |  |  |  |
| 2. | Advance payment (B) |  |  |  |  |
|  |  | Cash (B) |  |  |  |
|  |  |  |  |  |  |
| 3. | Furniture (B) |  |  |  |  |
|  |  | Cash (B) |  |  |  |
|  |  |  |  |  |  |
| 4. | Inventories (B) |  |  |  |  |
|  |  | Cash (B) |  |  |  |
|  |  |  |  |  |  |
| 5. | Inventories (B) |  |  |  |  |
|  |  | Suppliers (B) |  |  |  |
|  |  |  |  |  |  |
| 6. | Cash (B) |  |  |  |  |
|  | Cost of goods sold (I) (I = income statement) |  |  |  |  |
|  |  | Sales (I) |  |  |  |
|  |  | Inventories (B) |  |  |  |
|  |  |  |  |  |  |
| 7. | Administrative expenses (I) |  |  |  |  |
|  |  | Cash (B) |  |  |  |
|  |  |  |  |  |  |
| 8. | Administrative expenses (I) |  |  |  |  |
|  |  | Advance payment (B) |  |  |  |
|  |  |  |  |  |  |
| 9. | Administrative expenses (I) |  |  |  |  |
|  |  | Acc. Dep. Building (B) |  |  |  |
|  |  | Acc. Dep. Equipment (B) |  |  |  |
|  |  | Acc. Dep. Furniture (I) |  |  |  |
|  |  |  |  |  |  |
| 10. | Cash (B) |  |  |  |  |
|  | Cost of goods sold (I) |  |  |  |  |
|  |  | Sales (I) |  |  |  |
|  |  | Inventories (B) |  |  |  |

## Suggested solution to Exercise 3.2

(Page 2 of 5 pages)
GENERAL LEDGER - LAU SA



| Acc. Depreciation <br> building |  |
| :--- | :--- |
|  | 500 |

Acc. Depreciation equipment

|  | 1,042 |
| :--- | :--- |
|  |  |

Acc. Depreciation furniture

## Suggested solution to Exercise 3.2

(Page 3 of 5 pages)
Workings for cost of sales:

|  | Units | Cu |  |
| :---: | :---: | :---: | :---: |
| Purchased | 1,000 | 25,000 |  |
| Purchased | 1,200 | 32,000 | 500/2200 x 57,000 |
|  | 2,200 | 57,000 |  |
| Sold | (500) | $(12,955)$ |  |
| Balance | 1,700 | 44,045 |  |
| Sold | $(1,500)$ | $(38,864)$ | 1500/1700 $\times 44,045$ |
| Balance - 31 January 20X5 | 200 | 5,181 |  |


| LAU SA - Trial balance - 31 January 20X5 |  |  |
| :---: | :---: | :---: |
|  | Debit | Credit |
|  | CU | CU |
| Cash |  |  |
| Advance payments |  |  |
| Inventories |  |  |
| Suppliers |  |  |
| Buildings |  |  |
| Acc depreciation - buildings |  |  |
| Furniture |  |  |
| Acc depreciation - furniture |  |  |
| Equipment |  |  |
| Acc depreciation - equipment |  |  |
| Land |  |  |
| Paid-in capital (Equity) |  |  |
| Sales |  |  |
| Cost of goods sold |  |  |
| Administration expenses |  |  |
|  |  |  |
|  |  |  |

LAU SA
Income Statement for the month ended 31 January 20X5
(in currency units)

|  | CU |
| :--- | ---: |
| Sales | 67,500 |
| $(-)$ Cost of goods sold | $(51,819)$ |
| Gross profit | 15,681 |
| $(-)$ Selling expenses | 0 |
| $(-)$ Administrative expenses | $(2,650)$ |
| $(-)$ Finance expenses | 0 |
| Profit before tax | 13,031 |
| $(-)$ Income tax expense | 0 |
| Profit after tax | 13,031 |

## LAU SA

## Balance Sheet as of 31 January 20X5

(in currency units)

## ASSETS

Current assets

Cash
Advance payments Inventories

Current assets

LIABILITIES
Current liabilities

174,400
2,200
5,181
181,781

Non-current assets
Furniture
Acc. Dep. Furniture
Equipment
Acc. Dep. Equipment
Building
Acc. Dep. Building
Land
Total non-current assets

TOTAL ASSETS

25,000
(208)

50,000
$(1,042)$
120,000
(500)

90,000
283,250 Total equity

TOTAL LIABILITIES +
465,031 EQUITY

420,000
13,031

433,031
$\qquad$

465,031

LAU SA
Cash Flow Statement for the month ended 31 January 20X5
(in currency units)

| Cash flows resulting from operating activities |  |
| :---: | :---: |
| Profit before tax | 13,031 |
| Depreciation and amortisation ( $500+208+1,042$ ) | 1,750 |
| (Increase) Decrease in Advance payments | $(2,200)$ |
| (Increase) Decrease in Inventories | $(5,181)$ |
| Increase (Decrease) in Suppliers | 32,000 |
| Increase (Decrease) in Accounts payable | - |
| Paid interest | - |
| Paid income taxes | - |
| Net cash provided by operating activities: | 39,400 |
| Cash flows resulting from investing activities | - |
| Sale (purchase) of non-current assets ${ }^{1}$ | $(25,000)$ |
| Net cash provided by investing activities: | $(25,000)$ |
| Cash flows resulting from financing activities | - |
| Receipt (Payment) of Bank loans | - |
| Contributions (Repayment of capital) | 160,000 |
| Net cash provided by financing activities: | 160,000 |
| Net increase (Decrease) in cash | 174,400 |
| Cash at the beginning of the period | - |
| Cash at the end of the period, 31 January 20X5 | 174,400 |

${ }^{1}$ Only furniture was purchased using cash

## Module 4: Interpretation of financial statements and access to finance

## Learning outcomes:

At the end of this module, you should have an understanding of:

- The horizontal method of financial analysis
- The vertical method of financial analysis
- The financial ratio method of financial analysis
- The importance of a cash budget
- How to access finance through various options
- The importance of timely and accurate financial statements
- The difference between simple interest and compound interest


### 4.1 Financial statement analysis

Financial statement analysis is used to assess the performance of the enterprise over a specific period of time, its financing needs, its ability to make investments and its ability to meet obligations (i.e., to pay the liabilities). Furthermore, financial statement analysis helps to evaluate whether the resources of the enterprise have been used efficiently and if the enterprise is meeting the objectives for which it was created. In addition, it is used to forecast the future operations of the enterprise based on its historical performance. If the analysis of the financial statements shows the business in a favourable position, the business is more likely to be able to access finance should it need additional finance to expand. It is important to remember that the significance of the financial analysis will always depend on the quality of the information/data on which it is based. While financial ratios are easy to calculate, it has to be borne in mind that the most important parts are the analysis and interpretation of the results. Additionally, one has to be aware that external factors, such as interest rates, unemployment and inflation, might have influenced the results.

Different methods exist to analyse and interpret financial statements, three common methods are:

- The horizontal method;
- The vertical method; and
- The financial ratios method


### 4.1.1 Horizontal method

The horizontal method shows the last two accounting periods in side-by-side columns and directly compares the changes in the amounts of the corresponding items. This allows the reader to easily analyse how the enterprise's financial performance has developed during the last year. It is also referred to as trend analysis.
To calculate the variation from one period to another a simple formula is used:
(Current - Previous) $\times 100$
Previous

Taking the financial statements of the business 'Angus and Sipho (Proprietary) Limited' (see next page), the calculation for the cash row would be as follows:

$$
\frac{(71,500-69,500)}{69,500} \times 100=2.87 \%
$$

All other items of the financial statements are calculated the same way.
Illustrative example 4.1: Horizontal method of financial statement analysis (Balance sheet)
Angus and Sipho are two brothers who formed a company on 1 March $20 \times 5$ selling and customising clothing. As their first month of trading showed positive results, early in April they took out a loan for 50,000CU from the bank to open another shop in a different part of the city. They bought land for $45,000 \mathrm{CU}$ and paid for it immediately. At the end of April, they paid $1,500 \mathrm{CU}$ to the bank of which 500 CU was to reduce the total amount owing and $1,000 \mathrm{CU}$ was for the interest.

Required: Using the balance sheets of Angus and Sipho (Pty) Limited, calculate the percentage for each of the items of the balance sheet and analyse the results.

Solution:
Angus and Sipho (Pty) Limited - Balance Sheets


## Analysis of the results:

Usually, the analysis goes from the general to the specific. This means from the total to the individual accounts.

In this exercise, it is noted that the totals in the balance sheet have increased by $39 \%$ from one period to another. To explain this variation, it is necessary to have a look at the specific accounts to see that the non-current assets have increase significantly ( 1.5 times), which is explained by the acquisition of land. Also, the current assets have increased slightly which is mainly due to the growth in inventories. These data confirm that the company intends to expand its business by opening another store. For this, premises and inventory are needed.

Looking at the liabilities and owners' equity, the impact of the new loan for the purchase of land is noted. One question that comes up when looking at the data is why the company took a loan even though they had enough cash to invest in the new business. Another important change noticed is that there has been a decline in profit, which means there is almost no profit after tax in April. In this case it is necessary to determine whether this is simply due to a month of low activity, poor market conditions or even due to poor management practices. In order to get this information, it is necessary to analyse the Income Statement.

For the Income Statement the same formula is used (e.g., sales):

$$
\frac{(18,500-37,500)}{37,500} \times 100=-50.67 \%
$$

Illustrative example 4.2: Horizontal method of financial statement analysis (Income statement)

Required: Using the income statements of Angus and Sipho (Pty) Limited, calculate the percentage for each of the items in the income statement and analyse the results.

## Solution:

Angus and Sipho (Pty) Limited
Income Statements

|  | March <br> CU | April Cu |  |
| :---: | :---: | :---: | :---: |
| Sales | 37,500 | 18,500 | -51\% |
| (-) Cost of goods sold | $(21,000)$ | $(10,360)$ | -51\% |
| Gross profit | 16,500 | 8,140 | -51\% |
| (-) Selling expenses | (500) | - | 100\% |
| (-) Administrative expenses | $(14,500)$ | $(6,917)$ | -52\% |
| (-) Finance expense (Interest) | - | $(1,000)$ |  |
| Profit before tax | 1,500 | 223 | -85\% |
| (-) Income tax expense | (390) | (58) | -85\% |
| Profit after tax | 1,110 | 165 | -85\% |

## Analysis of the results:

The first thing to notice is the decline in sales by $-51 \%$. Also, the cost of goods sold has decreased respectively. The decrease in profit after tax is even higher with a rate of $-85 \%$. However, when a
business has just started its operations, a delay between the investment and first benefits derived from the investment is considered normal. Additionally, it is necessary to be aware of the individual characteristics of the business, as in some types of business sales can be seasonal with strong variations throughout the year.

Further it can be noted that almost all the income of March is almost the same amount of the interest on the loan, i.e., the 1,000 CU was used to pay the interest on the loan.

When performing the analysis, it is important to review the different financial statements jointly and to pay attention to the relevant accounts, i.e., large changes in cash, inventories (in the case of a retailing business), liabilities, suppliers and accounts receivable. Additionally, the accounts that have had major changes from one period to another should be checked.

In the case of the income statement, attention should be paid to the various expense accounts in order to verify whether any particular expense is reducing income.

### 4.1.2 Vertical method

The vertical analysis reviews the financial statements of one year only by converting the numbers into percentage terms. For this analysis, a base figure is needed to which all other numbers are related. In the case of the balance sheet, the total of assets is generally used as base figure. All individual assets are then shown as a percentage of total assets. The current liabilities, long-term debts and equities are instead shown as a percentage of the total liabilities and equity. In the case of the Income Statement, the revenue (sales) is generally considered as the base (i.e., 100\%) while all other items are shown as a percentage of sales.

The vertical analysis is also known as "common-size analysis" because all financial items for a given year are converted into percentages of one key financial statement component.

When applied to the balance sheet, this method is useful to display the changes in an enterprise's investments in working capital and fixed assets. It further shows whether the balance between the current assets and current liabilities is adequate. For the income statement, it is used to identify ups and downs in expenses and to determine which expenses are so small that they may not be worth any management attention.

The formula used for the vertical analysis is:

$$
\frac{\text { Individual item x } 100}{\text { Total base figure }}
$$

In the case of the item Cash:

$$
\text { Cash/Total assets }=\frac{71,500}{182,723} \times 100=39.1 \%
$$

Illustrative example 4.3: Vertical method of financial statement analysis (Balance sheet)

Required: Based on the above formula, calculate the percentage for the other items in the balance sheet and analyse the results.

Solution:
Angus and Sipho (Pty) Limited
Balance Sheet as at 30 April

| ASSETS | LIABILITIES |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | CU |  |  | CU |  |
| Current assets |  |  | Current liabilities |  |  |
| Cash | 71,500 | 39\% | Suppliers | 26,500 | 15\% |
| Accounts receivable | 26,000 | 14\% | Accounts payable | 5,000 | 3\% |
| Inventories | 10,640 | 6\% | Taxes payable | 448 | 0\% |
| Total current assets | 108,140 | 59\% | Total current liabilities | 31,948 | 17\% ${ }^{1}$ |
|  |  |  | Non-current liabilities |  |  |
|  |  |  | Bank loan | 49,500 | 27\% |
|  |  |  | Total non-current liabilities | 49,500 | 27\% |
| Non-current assets |  |  |  |  |  |
| Net furniture | 29,583 | 16\% | Total liabilities | 81,448 | 45\% ${ }^{1}$ |
| Land | 45,000 | 25\% | EQUITY |  |  |
| Total non-current assets | 74,583 | 41\% | Paid-in capital | 100,000 | 55\% |
|  |  |  | Profit after tax | 165 | 0\% |
|  |  |  | Retained earnings | 1,110 | 1\% |
|  |  |  | Total equity | 101,275 | 55\% ${ }^{1}$ |
| TOTAL ASSETS | 182,723 | 100\% | TOTAL LIABILITIES + EQUITY | 182,723 | 100\% |
| ${ }^{1}$ rounding differences |  |  |  |  |  |

## Analysis of the results:

This example immediately shows the importance of the cash account in the balance sheet. $39 \%$ of the balance sheet corresponds to the cash account, which raises the following questions: Is this high amount of cash really needed? Is there an investment plan for which the cash will be used? Is it used to repay the loan? If the answers are no, then the company does not allocate its resources in an optimal way and should look for options to use them more efficiently.

Also, the percentage of current assets is quite high but considering that the company is in the retail business, a good proportion of the assets should be in the inventory and accounts receivable. For a manufacturing company, the non-current assets would be more important accounts due to the cost of machinery and factory buildings used for production.

On the liabilities side, it shows that the company uses its own funds (equity) and thirdparty funds (liabilities) almost equally to finance its operations. The balance between the customer (accounts receivable) and supplier accounts, of which one is financing the other, means that no extra resources are needed.

For the income statement, each item is compared to total sales.

$$
\frac{\text { Item }}{\text { Total sales }} \times 100
$$

The calculation for the cost of goods sold is as follows:

$$
\text { Cost of goods sold } / \text { sales }=\frac{10,360}{18,500} \times 100=56 \%
$$

Illustrative example 4.4: Vertical method of financial statement analysis (Income statement)
Required: Calculate the percentage for all items in the income statement and discuss the results.

## Solution:

Angus and Sipho (Pty) Limited
Income Statements

|  | March <br> CU |  | April CU |  |
| :---: | :---: | :---: | :---: | :---: |
| Sales | 37,500 | 100\% | 18,500 | 100\% |
| (-) Cost of goods sold | $(21,000)$ | 56\% | $(10,360)$ | 56\% |
| Gross profit | 16,500 | 44\% | 8,140 | 44\% |
| (-) Selling expenses | (500) | 1\% | - | 0\% |
| (-) Administrative expenses | $(14,500)$ | 39\% | $(6,917)$ | 37\% |
| (-) Finance expense (interest) |  | 0\% | $(1,000)$ | 5\% |
| Profit before tax | 1,500 | 4\% | 223 | 1\% |
| (-) Income tax expense | (390) | 1\% | (58) | 0\% |
| Profit after tax | 1,110 | 3\% | 165 | 1\% |

[^4]profit. Additionally, it is important to consider that some goods are seasonal and sales can therefore increase and decrease rapidly from one month to another, as in the case of toy companies. For them, the months of December and January are the best in terms of sales.

### 4.1.3 Financial ratios

Financial ratios are commonly used to make financial decisions. A ratio compares one item from the financial statements to another. Mathematically, this is a simple division problem as already used in the vertical and horizontal analysis. Financial ratios are used to compare different figures from the financial statements over one or more periods in order to gain information about an enterprise's performance. They are also used to compare one enterprise with similar companies from the same sector.

In order to make a deep analysis, it is also good to have additional market information, such as commodity prices, inflation rate, relevant exchange rates, interest rates, the market share of competitors, etc. This allows monitoring the variables that are key to the performance of the entity.

The main financial ratios are as follows:

### 4.1.3.1 Liquidity ratios

This ratio helps to evaluate an enterprise's liquidity, i.e., the ability to transform its assets into cash and to repay its short-term debt (current liabilities). The higher the ratio, the better is the liquidity of the enterprise in the short term.
a) Current ratio: The current ratio shows how many times or how well the current assets can cover the current liabilities.

## Current assets

Current liabilities

Ideally the value of the ratio is greater than 1.0, because the higher the current ratio, the more capable is the enterprise in paying its short-term obligations. However, if the ratio is too high, this implies that the enterprise has too many unused resources.

## Illustrative example 4.5: Calculation of current ratio

## Required:

Take the data from the balance sheets of Angus and Sipho (Pty) Limited and determine the current ratio for March and April and discuss the results.

## Solution:

March: $3.34=101,500 / 30,390$
April: $3.38=108,140 / 31,948$

Discussion: Looking at the results, it can be concluded that the company has sufficient resources to meet its short-term liabilities. However, the results also indicate that the company might have too many unused resources. Therefore, it is necessary to look more in detail. In the case of the two brothers, it
can be seen, that they have too much cash available in the cash account. Consequently, the company should consider either spending the cash in inventories (e.g., new store, furniture), or reimbursing a portion of the loan since the interest on the loan is much higher than the interest received by having it in the bank account.

Again, it needs to be remembered that every time when analysing these data, the particularities of the industry have to be taken into account. For example, there are certain industries that are required to have large sums of cash available (e.g., long product production cycles, such as in manufacturing or construction) or in industries with high uncertainties and risks that require a "safety cushion" in case of any eventuality.
b) Acid-Test Ratio: The acid-test ratio is a strong indicator of whether a firm has sufficient shortterm assets to cover its immediate liabilities. Also knows as the quick ratio, this metric does not consider less liquid assets such as inventory:

## Current assets - inventory <br> Current liabilities

Ideally, the ratio should be between 0.5 and 1.0. An alternative method is to use only cash in the calculation.

## Illustrative example 4.6: Calculation of acid-test ratio

## Required:

Take the data from the balance sheets of Angus and Sipho (Pty) Limited and determine the asset-test ratio for March and April and discuss the results.

## Solution:

March: $3.11=(101,500-7,000) / 30,390$
April: $3.05=(108,140-10,640) / 31,948$

Discussion: The company has sufficient funds to meet its short-term debt and as already indicated above, it has even too much cash in the account. The possibility of increasing cash to secure inventory for the new premises may be a probable reason.

### 4.1.3.2 Profitability ratios

Profitability ratios help to evaluate the periodic financial success of a firm and its ability to generate income:
a) Profit Margin: The profit margin is the percentage of profit or loss after tax related to each currency unit obtained for the sales of goods. (This ratio is also known as profit to revenue.)

$$
\frac{\text { Profit after Tax }}{\text { Sales }}
$$

Profit can be calculated by product depending on the needs of the enterprise and the relative importance to the products.

## Illustrative example 4.7: Calculation of the profit margin

## Required:

Take the data from the income statements of Angus and Sipho (Pty) Limited and determine the profit margin for March and April and discuss the results.

## Solution:

March: $2.96 \%=1,110 / 37,500 \times 100$
April: $0.89 \%=165 / 18,500 \times 100$

Discussion: The ratio shows that the profit margin is very low (for any industry) and it even gets worse from one month to another. One possible factor could be the seasonality of the product, i.e., the merchandise has very little demand during March and April. Another reason could be that the company has difficulties in finding and keeping its customers, which is not unusual for newly established businesses. Also, the reason behind the low ratio could be a price increase or even an external, noncontrollable factor.

Gross profit on sales (or gross profit margin) is calculated in a similar way to the above, instead using gross profit.

1. Return on Assets (ROA): This ratio shows how profitable an enterprise is in relation to the enterprise's assets, i.e., the profit generated from the investment in assets. It further indicates how efficient the management uses the assets to generate the profit. The ratio is calculated by dividing the enterprise's annual profit after tax by the total assets.

## Profit after tax <br> Total Assets

## Illustrative example 4.8: Calculation of return on assets

## Required:

Take the data from the balance sheets and income statements of Angus and Sipho (Pty) Limited and determine the return on assets for March and April and discuss the results.

## Solution:

March: $0.80 \%=(1,110 / 131,500) \times 100$
April: $0.11 \%=\{165 /[(182,723+131,500) / 2] \times 100\}=165 / 157,111.5 \times 100$
Discussion: Again, it is shown that the company has a very low profitability in March and in April. By analysing the income statement, it can be seen during the second period, the expenditures of the company were halved yet still the profit has decreased. The company is operating on a minimum volume of sales to cover its operating expenses. To overcome this situation the company needs to
increase its sales volume. The price cannot be the reason for the low ratio since the company obtains a profit of CU2.20 for each unit sold at CU5.

Note: When amounts for more than one reporting period are available, using an average may show a more accurate picture.
2. Return on Equity (ROE): The return on equity ratio shows how much profit each currency unit is generated by equity. This means that it measures the ability of the enterprise to generate income from the investments made by the shareholders.

The ratio is calculated by dividing the profit after tax by the equity of the shareholders.

## Profit after Tax <br> Equity

The percentage will be considered high, low or acceptable depending on the expected returns of the shareholders and when compared to similar companies.

## Illustrative example 4.9: Calculation of return on equity

## Required:

Take the data from the balance sheets and income statements of Angus and Sipho (Pty) Limited and determine the return on equity for March and April and discuss the results.

## Solution:

March: $1.0 \%=(1,110 / 101,110) \times 100$
April: $0.1 \%=(165 / 101,275) \times 100$

Discussion: This ratio shows that the company is not profitable at all. Normally, this situation would be considered serious, however, since the company has just begun operations and the profit already covers the expenses, the company is doing fine.

### 4.1.3.3 Activity ratios

The activity ratios measure how effectively an enterprise is using its resources. The most common ratios used are:

1. Accounts Receivable Turnover: The ratio reflects the number of times per year that an enterprise is able to collect its average accounts receivable, i.e., it shows the ability of an enterprise to efficiently issue credit to its customers and collect the debt from them again in time.

Net credit sales
Average accounts receivable

By dividing the number of days in a year ( 360 or 365 , in the case of an annual period or 30 in the case of a monthly period) by the turnover of the accounts receivable, it is possible to obtain the average number
of days an enterprise provides credit to its customers. It is also interpreted as the average number of days that the enterprise has to wait to collect the funds (receive cash) after a sale. If the ratio is high, it means that the enterprise is collecting its receivables more frequently during the year.

## Illustrative example 4.10: Accounts receivable turnover

The following information relates to March.
Net credit sales: 25,000
Accounts receivable: 25,000
Accounts receivable turnover: $25,000 / 25,000=1.0$
In days: 30/1 = 30 days
Required: Calculate the ratio for April and discuss the results for the two months.

## Solution:

April:
Net credit sales: 11,000
Average Customer Accounts Receivable $(26,000+25,000) / 2=25,500$
Accounts Receivable turnover: 11,000 / 25,500 = 0.43
In days ${ }^{1}$ : $30 / 0.43=69.76$ days
${ }^{1}$ days are used as the calculation is only for one month.
Discussion: In March, it took the company 30 days to get paid by its customers while in April it took 70 days. The reason for this might be that the company has problems regarding its accounts receivable, for example, the accounts receivable might have trouble in paying their debts. However, another possibility could be that the company has changed its payment policy.
2. Inventory Turnover: The ratio indicates how many times the inventory is sold (i.e., turns over) during a period.

For the calculation, the cost of goods sold during a specific period is divided by the average inventory for the same period.

## Cost of goods sold <br> Average inventory

This ratio can be calculated for each type of product depending on the enterprise needs and the importance of the products. It indicates whether or not the enterprise has inventory problems. A slow rotation can help to anticipate problems regarding the deterioration or obsolescence of the inventory. This is especially important for an enterprise that sells products which expire quickly.

By dividing the number of days in a year ( 365 or 360 days) by the inventory turnover ratio the average number of days that it took the enterprise to sell the average inventory held can be calculated.

Illustrative example 4.11: Inventory turnover
The following information relates to March.
March:
Cost of goods sold: 21,000
Average inventory: 7,000
Inventory turnover ratio: 21,000 / 7,000=3
In days: 30/3 = 10 days
Required: Calculate the ratio for April and discuss the results for the two months.

## Solution:

April:
Cost of goods sold: 10,360
Average inventory: $(10,640+7,000) / 2=8.820$
Inventory turnover ratio: $10,360 / 8,820=1.17$
In days: $30 / 1.17=25.64$ days
Discussion: With the declining sales from March to April, the company has an increase in the inventory. In April it took the company almost three times longer to sell its inventory. Again, a detailed analysis has to be done to find the root causes of this problem.
3. Accounts Payable Turnover ratio (Suppliers): This ratio measures how long it takes the enterprise to pay its suppliers (creditors).

Inventory purchases
Average accounts payable

In order to calculate the number of days it takes the enterprise to pay its suppliers, the days of the year (i.e., 360 or 365 ) are divided by the turnover ratio.

## Illustrative example 4.12: Accounts payable turnover ratio

The following information relates to March.
Inventory purchases: 25,000CU
Suppliers: 25,000
Turnover Ratio: 1
In days: 30/1 = 30 days
Required: Calculate the ratio for April if inventory purchases for April on credit are 14,000CU and discuss the results for the two months.

## Solution:

Inventory purchases: 14,000
Suppliers: $(25,000+26,500) 2=25,750$
Turnover Ratio: 0.54
In days: $30 / 0.54=55.5$ days

Discussion: The decline in the ratio indicates that the company pays the suppliers less frequently. The reason could be that the suppliers provide the company with the possibility to pay much later, which would be good for the company because then it is more flexible to cover its debts. However, it can also indicate that the company is not able to pay its debt on time and the financial condition of the company is worsening.

An analysis that should be done further is to compare the Accounts Receivable Turnover with the Accounts Payable Turnover ratio. This way it can be seen that there is a small difference between the time the company provides to its clients to pay their debt and the time the company has to pay its debts. It would be more favourable, if the company limited the payment period for its clients and extended the time to repay its suppliers.

### 4.1.3.4 Debt management ratios

If an enterprise has a high amount of debt, this indicates a riskier position for the enterprise as it must be able to pay back the loan together with any interest. If an enterprise has too much debt, it may find it difficult to access finance in the future.

1. Debt Ratio: This ratio shows the proportion of assets that have been financed with liabilities, i.e., the enterprise's ability to pay off its liabilities with its assets.
```
Total liabilities (i.e., debt)
    Total assets
```


## Illustrative example 4.13: Calculation of debt ratio

## Required:

Take the data from the balance sheets of Angus and Sipho (Pty) Limited and determine the debt ratio for March and April and discuss the results.

## Solution:

March: $23 \%=(30,390 / 131,500) \times 100$
April: $44 \%=(81,448 / 182,723) \times 100$
Discussion: The company went from financing $23 \%$ of its assets by external funds to $44 \%$. Here, the impact of the loan can be clearly observed. A company with a debt ratio of about $40 \%$ is considered in good financial condition because having some debt can improve the return to the shareholders. A similar company with the same equity can have twice as many assets if it is financed by debt. However, companies with high levels of debt compared with assets are considered riskier for lenders.
2. Debt-equity Ratio (also known as a leverage ratio): This ratio also indicates the risk of the enterprise as it shows the proportion of finance supplied by the non-current liabilities. It therefore compares the non-current liabilities of an enterprise to the total assets or equity.

## Non-current Liabilities

## Equity

## Illustrative example 4.14: Calculation of the debt-equity ratio

## Required:

Take the data from the balance sheets of Angus and Sipho (Pty) Limited and determine the debt-equity (leverage) ratio for March and April and discuss the results.

## Solution:

March: 30,390 / 101,110 $=0.30$
April: 81,448 / 101,275 = 0.80

Discussion: Again, the impact of the loan can be observed since the ratio changes dramatically from one month to another.
3. Interest Coverage: This shows the number of times that the enterprise can cover the finance costs (i.e., interest) with the profit or loss for the period.

Profit / loss before tax + Interest expense
Interest expense

This ratio must be greater than 1.0, otherwise it means that the enterprise does not cover its financial expenses (i.e., interest) with its profits for the year.

## Illustrative example 4.15: Calculation of the interest expense coverage

## Required:

Take the data from the income statements of Angus and Sipho (Pty) Limited and determine the interest coverage for March and April and discuss the results.

## Solution:

March: No finance (interest) expenses
April:

$$
\text { Profit before tax }=223
$$

Interest Expense $=1,000$

$$
(223+1000) / 1000=1.23
$$

Discussion: As shown in the result, the company is producing sufficient revenue to cover its finance expenses (i.e., interest).

Financial analysis: Key points to remember
$>$ Although the calculations may be easy, the real value of financial analysis is in the interpretation of the ratios.
$>$ The industry the business operates in must also be considered when interpretating the results (and also the state of the economy).
$>$ In practice, there are many different ways of calculating ratios and many other different ratios which can be calculated.

### 4.2 Access to finance

When a business owner first starts operations, the business owner will most probably use his or her own funds in the beginning stages. Friends and family may also help with financing the business, but may want some payment in the form of interest for the use of their money. The business owner could also access some funds from a micro-lender who will also charge interest on the amount borrowed. A business owner could also approach a government agency which specializes in small business development for start-up capital or a loan.

At some point, a business may need additional funds for various reasons, such as expansion or for funding a new asset. If the business operates a bank account, one alternative may be to ask the bank for access to additional funding by way of a bank overdraft, or as a separate loan which is separate to the bank account, and which scheduled repayments must be made. Alternatively, the business could decide to lease an asset or enter into a hire-purchase agreement.

Business owners should:

- Investigate the funding options and types of finance available to micro, small and medium-sized enterprises in their jurisdiction,
- Know what is required of them when applying for funding,
- Be able to make an informed decision when considering the various options, and
- Avoid any pitfalls in their applications for funds.


### 4.2.1 Budgeting

A budget is a carefully prepared schedule of the predicted results of the business, including the timing and amounts of cash receipts and payments in order that the lenders of finance can evaluate the future outlook of the business. In Module 1 it was noted that:

Financial institutions, such as banks, use the financial statements to:

- Evaluate people and businesses applying for financing.
- Evaluate credit risk (the possibility that the money is not reimbursed).
- Establish credit records.
- To assess payment capability and profitability of the entity.

For small businesses, managing cash is critical to the survival of the enterprise and to managing relationships with banks and other providers of finance. If Joe Ngibe goes to a financial institution to ask for a loan, the manager at the financial institution will not only want to see the financial statements (which show the past performance of the enterprise) but will also want to see if Joe can pay back any loan from
his future operations. For this, Joe will need to prepare a cash budget or forecast which shows what his future cash flow is likely to be.

To prepare a budget or forecast, a software program (such Microsoft's Excel) is useful as formulae can be built into the worksheet.

## Illustrative example 4.16: Example of a cash budget or forecast (amounts in CU)

Joe Ngibe prepares the following cash flow budget and uses it, together with his financial statements, to ask his bank manager for a loan or overdraft facilities to buy a sewing machine. Joe explains that if he can purchase a sewing machine, he will be able to buy kits and make masks which he will be able to sell faster. To do this, he will need to employ someone to sew the masks for him. He is confident that he will be able to increase the number of masks he sells every month, and that he will also be able to increase the selling price of each mask to CU15. He intends to conduct his business on a cash only basis (receipts and payments) going forward.

|  | Maractual | Aprilactual | May budget | May actual | June budget | June actual | July budget | July - <br> actual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales |  |  |  |  |  |  |  |  |
| No of units | 900 | 1300 | 1500 |  | 2000 |  | 2000 |  |
| Cash received | 8,000 | 6,750 | 22,500 ${ }^{6}$ |  | 30,000 ${ }^{6}$ |  | 30,000 ${ }^{6}$ |  |
| Cash - May (Bank) | - | - | 6,000 |  | - |  | - |  |
| Inflow: | 8,000 | 6,750 | 28,500 |  | 30,000 ${ }^{6}$ |  | 30,000 |  |
| Outflow: |  |  |  |  |  |  |  |  |
| April creditors to be paid in May | - | - | 9,000 |  | - |  | - |  |
| Purchases - cash | 5,000 | 7,000 | 15,000 ${ }^{1}$ |  | 20,000 ${ }^{1}$ |  | 20,000 ${ }^{1}$ |  |
| Travelling | 200 | 200 | 300 |  | 300 |  | 400 |  |
| Wages | 0 | 1,000 | 1,500 |  | 1,500 |  | 1,500 |  |
| Other expenses | 0 | 0 | 100 |  | 150 |  | 150 |  |
| Total outflow: | 5,200 | 8,200 | 25,900 |  | 21,950 |  | 22,050 |  |
| Net inflow (outflow) before |  |  |  |  |  |  |  |  |
| capital items | 2,800 | $(1,450)$ | 2,600 |  | 8,050 |  | 7,950 |  |
| Payments: |  |  |  |  |  |  |  |  |
| Metal stand | 0 | $(2,500)$ | $(2,500)$ |  | 0 |  | 0 |  |
| Sewing machine |  |  | $(6,000)$ |  |  |  |  |  |
| Repayment: |  |  |  |  |  |  |  |  |
| Loan | 0 | 0 | $(1,000)^{2}$ |  | $(1,000)$ |  | $(1,000)$ |  |
| Interest on loan | 0 | 0 | $(50)^{3}$ |  | $(42)^{4}$ |  | $(33)^{5}$ |  |
| Net cash inflow | 2,800 | $(3,950)$ | $(6,950)$ |  | 7,008 |  | 6,917 |  |
| Cash at beginning | 5,000 | 7,800 | 3,850 |  | $(4,000)$ |  | (992) |  |
| Drawings | 0 | 0 | (900) |  | $(4,000)$ |  | $(4,000)$ |  |
| Cash at end | 7,800 | 3,850 | $(4,000)$ |  | (992) |  | 1,925 |  |
| Notes: |  |  |  |  |  |  |  |  |
| ${ }^{1}$ Assuming a cost of CU10 per sewing kit/mask if the sewing machine is purchased. |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Joe wants the bank to loan him 6,000CU to buy a sewing machine. He plans to pay it back over 6 months. |  |  |  |  |  |  |  |  |
| ${ }^{3}$ Assuming interest at $10 \% .{ }^{3} 10 \% \times 6,000 \times 1 / 12=50.410 \% \times 5,000 \times 1 / 12 .{ }^{5} 10 \% \times 4,000 \times 1 / 12$ |  |  |  |  |  |  |  |  |
| ${ }^{6}$ Selling price is expected to be 15 CU per mask. He is unsure if inventory at 1 May can be sold. |  |  |  |  |  |  |  |  |

The bank manager will need to ensure that Joe is not being too optimistic regarding the number of masks he thinks he can sell and the proposed selling price, and that he has not underestimated some of the other costs he may incur. In addition to the financial statements and the cash flow forecast, the bank manager may also ask Joe for the following:

- a cash flow analysis which has three scenarios: a best, average and worst scenario,
- an explanation of any internal controls he has in his business,
- whether his masks are bio-degradable to ensure that any discarded masks are not polluting the environment,
- a financial analysis using one of the methods of financial analysis,
- whether he foresees his business being affected by the vaccine roll-out programme,
- whether he has done any cost accounting analysis, and
- whether he foresees his business being affected by macroeconomic variables such as inflation, unemployment and interest rates.

The bank manager may also recommend that Joe Ngibe prepare a SWOT analysis for his business. This will require Joe to consider his business's strengths, weaknesses, opportunities and threats. This may help Joe position his business more strongly in the market.

### 4.2.2 Leases

One option available to a business that needs the use of an asset (for example, a delivery vehicle) but which does not have enough funds to buy the asset is to enter into a lease. A lease is an agreement that allows one party (the lessee) the right to use an asset for a period in return for a payment or series of payments to another party (the lessor).

At the end of the lease term, ownership of the leased asset may or may not pass to the lessee.

SMEGA-Level 3 requires all lease payments, whether derived from an operating lease or finance lease, to be recognised as an expense as they become payable. If the payments are material, these should be disclosed in the notes to the financial statements.

The value of the lease should not be shown either as an asset or a liability on the balance sheet. However, if the total remaining payments on the lease are material, then this should be disclosed in the notes to the financial statements.

## Illustrative example 4.17: Recording a lease

Market Enterprises leases a delivery van from Auto Traders on 1 January 20X1. In terms of the lease, Market Enterprises must pay Auto Traders CU1,000 per month for five years. The lease was approved after Market Enterprises provided its latest financial statements to Auto Traders including a detailed forecasted cash budget.

## Required:

Show how Market Traders would disclose this lease in its financial statements for the year ending 31 December 20X2.

Solution:
Market Enterprises
Income statement for the year ended 31 December 20X2

|  | Note | 20X2 <br> CU | 20X1 <br> CU |
| :--- | :---: | :---: | :---: |
| Expenses: |  |  |  |
| Lease payments | 1 | 12,000 | 12,000 |

## Notes to the financial statements

1. Lease payments

The remaining lease payments at 31 December 20X2 are 36,000CU (20X1: 48,000CU).

### 4.2.3 Asset-based financing

Asset-based financing is a method of providing businesses with loans to use as working capital. Assets such as accounts receivable, inventory, machinery, equipment, or land and buildings can be used as security or collateral. It is important to note that any financing or borrowing attracts interest. Interest is discussed in detail in section 4.4 of this module.

## Illustrative example 4.18: Asset-based financing

Market Enterprises requires money to use as working capital. The owner approaches Auto Banking and enters into an agreement to acquire a loan for 5,000CU using the equipment of the business as collateral on 1 January 20X1. The loan was for 5 years bearing interest at $10 \%$ per annum. At the end of 5 years the full amount of the loan must be repaid. The loan was approved after Market Enterprises provided its latest financial statements to Auto Banking including a detailed forecasted cash budget.

## Required:

Show how Market Enterprises would disclose this asset-based financing in its financial statements for the year ending 31 December 20X2.

| Solution: |  |  |  |
| :---: | :---: | :---: | :---: |
| Market Enterprises |  |  |  |
| Income statement for the year ended 31 December 20X2 |  |  |  |
|  | Note | 20x2 | 20x1 |
|  |  | CU | CU |
| Expenses: |  |  |  |
| Interest expense |  | 500 | 500 |
| Notes to the financial statements |  |  |  |
| 2. Note to equipment (Balance Sheet) |  |  |  |
| The equipment is subject to a securitization loan repayable at the end of 31 December 20X5 bearing interest at 10\% per annum. |  |  |  |

### 4.2.4 Government grants

In some circumstances, a business may become eligible for a government grant. For example, some governments responded to the COVID-19 pandemic by making relief packages available to small businesses provided they met certain criteria. Government grants or assistance are not required to be paid back.

If the grant relates to income (for example, the business has lost revenue as a result of the lockdown enforced by government), the grant is presented as income in the income statement.

## Illustrative example 4.19: Government Grant

Because of the COVID-19 pandemic, the government has made a once-off grant payment of CU2,000 to all small businesses provided they have up-to-date financial records. Joe Ngibe receives his grant on the 1 September 20X1.

Required:
Prepare the journal entry to record the receipt of this government grant.
Solution:
Joe Ngibe
Journal

|  | $\mathbf{2 0 X 2}$ | $\mathbf{2 0 X 1}$ |
| :--- | ---: | ---: |
| CU | CU |  |
| Cash received (balance sheet) | Cebit | Credit |
| Government grant received (Income statement) | 2,000 |  |
| Government grant received on 1 September 20X1 |  | 2,000 |

### 4.2.5 Using your financial statements to attract new partners or shareholders

A business with only one owner has usually only that one owner's contacts from which to source loans and funds. If the owner decides to take on a partner, then there would be two partners' contacts to source funding and so on. The sole owner or partnership may decide to expand the ownership by forming a private or public company. These multiple owners (or shareholders) will pay for their shares when the shares are first issued, bringing more funding into the company. Listing a public company on the stock exchange will bring even more funding to the business as the public can then buy shares when the company initially lists. In all the above scenarios, it would be important for the business seeking business partners or making a new issue of shares to be able to produce up-to-date financial statements and a forecast of the future prospects of the business using a cash flow statement.

### 4.3 Accessing finance

This module has explained the various financial tools which could be used when accessing finance. A provider of finance will ask for supporting documentation before issuing any loans. The provider of finance (i.e., the lender) will usually want some evidence that the borrower will be able to pay back the loan together with any interest.

Each jurisdiction or finance provider will have different requirements for documentation. Such documentation could be:

- Latest financial statements,
- Latest bank statements,
- Cash flow projections,
- Business plan, including a business profile and a financial analysis,
- Certified copies of identity documents,
- Copy of a lease agreement if operating from rented premises,
- Copy of any license which was required to start a business,
- Proof of being up-to-date with any tax authorities, and
- Registration with the relevant authorities as an SME or small business.

Before applying for finance, the person(s) seeking finance should ensure that all documentation is in order.

To be able to provide up-to-date financial statements, a small business could consider using an accounting software program to maintain their accounting records. There are free accounting Apps which could be used, or alternatively, a worksheet program such as Microsoft's Excel could be used to keep track of transactions. There are also many on-line tutorials which could be used to gain knowledge on how to record transactions using a worksheet program or other accounting tools.

## Using financial statements to access finance: Key points to remember

$>$ To obtain finance, it is important that you can produce up-to-date financial statements as well as a forecasted cash flow.
$>$ Providers of finance may require you to enter into an agreement whereby one of your assets is held as collateral.
$>$ Before applying for finance, ensure that you are familiar with all the requirements of the provider of finance.

### 4.4 Interest

Any amounts borrowed by the business attracts interest. Lenders also want to be sure that the borrower can repay the funds; for this reason, the borrower will need to produce financial statements which show that the business is in a healthy position and will be able to pay the interest on the loan as well as repay the loan according to any agreement. Lenders may also want the borrower to produce a budget which shows the predicted results of the business. All loans involve an interest cost. It is important to know how interest rates affect the business and the cost of any additional financing obtained by the business.

When a person (physical or juridical) or a financial entity lends money to another it is expected that the amount is paid back after a certain period of time plus a compensation, such as interest. Such compensation must take into consideration three things:

- The risk of not recovering the money that is assumed by the lender.
- The opportunity cost of not having that amount available.
- The value deterioration of the lent amount due to inflation. This means that the amount would not have the same purchasing power when it is returned.

To summarise it can be said that the interest is the payment or cost to use/have that money. Interest is commonly expressed as a percentage of the total amount borrowed.

## Illustrative example 4.20: Interest

A bank lends $1,000 \mathrm{CU}$ with the agreement that in one year the total amount to be repaid is CU1,050. The difference between the initial and final amount, CU50, represents the interest. If CU50 are paid for a CU1,000 loan it can be said that the interest paid is $5 \% .50 / 1,000=0.05$. Therefore, the bank lent the money at a $5 \%$ interest rate.

Note: Interest rates are usually expressed on annual basis. A small calculation needs to be done in order to convert an annual rate into a monthly rate.

### 4.4.1 Simple interest

Simple interest is calculated by taking into consideration either only the initial amount (principal) or the unpaid part of the initial amount. It represents the performance (i.e., revenue) (for the lender) or the cost (for the borrower) of the initial amount from one period to the other.

Simple interest $=$ Initial amount x rate x number of time periods
To calculate the monthly interest rate, the annual rate must be divided by 12 .

## Illustrative example 4.21: Simple interest

A: The bank lends CU1,000 for three years with a simple interest rate of $5 \%$ (annual rate). This means a reimbursement of the borrowed 1,000 CU at the end of the 3 years plus 50 CU of annual interest for a total of $150 .(1,000 \times 5 \%=50 \times 3=150)$.
B: The company has a loan for $2,000 \mathrm{CU}$ with a $13 \%$ simple annual interest rate (calculated monthly). After six months the accrued interest is: $(0.13 / 12 \times 2,000) \times 6=130$. In order to reimburse the loan a CU2,130 payment would be needed.

## Illustrative example 4.22: Simple interest

A bank offers a loan of $20,000 \mathrm{CU}$ for 24 months with a simple interest rate of $29 \%$.
Required: Calculate the monthly and annual amount to be paid as interest.

## Solution:

Annual interest to be paid: $20000 \times(0.29)=5,800 \mathrm{CU}$

Monthly Rate: $0.29 / 12=.02416=2.42 \%$
Monthly amount to be paid as interest: 20,000 x . $02416=483.33 \mathrm{CU}$

### 4.4.2 Compound interest

At the beginning, the compound interest is similar to simple interest. However, over time the difference becomes larger since the interest is calculated on the initial amount plus the accrued interest that has not yet been paid. Therefore, this interest can be thought of as "interest on interest," and will make a deposit or loan grow at a faster rate than the simple interest.

Illustrative example 4.23: Compound interest
A1: A bank provides $1,000 \mathrm{CU}$ for three years with a compound interest of $5 \%$ (annual interest; compounded annually). The interest for the first year is calculated the same way as the simple interest which means $1,000 \mathrm{CU} \times 5 \%=50$. However, since the interest is capitalized and added to the initial amount, the interest for the following year is calculated on the $1,050 \mathrm{CU}$ instead of the $1,000 \mathrm{CU}$, i.e., $1,050 \mathrm{CU} \times 5 \%=52.5 \mathrm{CU}$. For the third year the interest would amount to $55,125 \mathrm{CU}(=1,000+50+52.5$ $=1102.5 \mathrm{CU} ; 1102,5 \times 5 \%)$.
B1: The company has a loan for $2,000 \mathrm{CU}$ with a $13 \%$ compound annual interest rate (calculated monthly). After 6 months the accrued interest is $\left.2,000 \mathrm{CU} \times\left[(1+(0.13 / 12))^{\wedge} 6\right)-1\right]=133,572 \mathrm{CU}$ Compound Interest = 133,572 CU .

Note: when comparing this answer to the one in Example B (Illustrative example 4.21), although there seems to be no big difference between the amount of the simple and the compound interest, this is due to the short period and the low amount used for the example.

## Interest: Key points to remember

$>$ The cost associated with obtaining finance is interest (which is an expense in the income statement).
> It is important to compare interest rates to ensure that the finance you choose to use, has the lowest interest rate.
> A loan agreement normally contains certain fees or expenses in addition to the interest, which also have to be taken into account when calculating the total costs of the loan.

### 4.5 Exercises

Exercise 4.1: Financial statement analysis
Senegal Limited is a distributor of photographic equipment to the safari sector in Western Africa. The company needs additional financing as it wants to expand its operations into Eastern Africa, and thereafter Southern Africa. The owner of the company has asked you to calculate relevant ratios so that he can understand better the performance of the company. He plans to take these ratios to a financial institution together with the annual financial statements to request additional funding. He has extracted the following information from the financial statements.

|  | 20x3 | 20X2 | 20x1 |
| :---: | :---: | :---: | :---: |
| Summarised Income statement: | CU | CU | CU |
| Revenue | 550,000 | 525,000 | 500,000 |
| Expenses | $(525,000)$ | $(400,000)$ | $(300,000)$ |
| Profit | 25,000 | 125,000 | 200,000 |
| Summarised balance sheet: |  |  |  |
| Non-current assets | 500,000 | 400,000 | 300,000 |
| Current assets: |  |  |  |
| Inventory | 220,000 | 200,000 | 80,000 |
| Accounts receivable | 250,000 | 80,000 | 20,000 |
| Cash at bank | 55,000 | 85,000 | 80,000 |
| Total assets | 1,025,000 | 765,000 | 480,000 |
| Current liabilities | 395,000 | 240,000 | 130,000 |
| Non-current liabilities | 180,000 | 100,000 | 50,000 |
| Total liabilities | 575,000 | 340,000 | 180,000 |
| Equity | 450,000 | 425,000 | 300,000 ${ }^{1}$ |
| Total liabilities and equity | 1,025,000 | 765,000 | 480,000 |

${ }^{1}$ Paid-in capital is 200,000CU

## Required:

1. The financial statements provide users with much important financial information. Can you think of any information which is not provided by the financial statements?
2. Calculate the following ratios.

- Current ratio
- Acid-test (quick) ratio
- Profit to revenue (profit margin)
- Return on total assets
- Return on equity
- Debt as a \% of total assets (debt ratio)
- Debt as a \% of equity (leverage ratio)

3. Using your calculations, what conclusions can you come to regarding the changes in the current ratio and the acid-test ratio?
4. Using your calculations, what conclusions can you come to regarding the Profit to revenue, Return on total assets and Return on equity?
5. Using your calculations, what conclusions can you come to regarding the debt and leverage ratios?
6. How could the company strengthen its case for additional finance?

Note: Ignore taxation

## Requirement 1

Financial information not included in the financial statements include:

- Future orientated information. Will the business continue to operate successfully in the future?
- How the business compares to similar businesses.
- The market value of the assets of the business.
- Any non-financial factors concerning the business. Some examples are the productivity of the employees or management; the possibility that fraud is taking place; any pollution effects of the business etc. (At some stage any negative effects will be reflected by poor financial results.)


## Requirement 2

| Ratios for the past three years: | 20X3 | 20X2 | 20X1 |
| :--- | :---: | :---: | :---: |
| Current ratio = current assets/current | $525,000 / 395,000$ | $365,000 / 240,000$ | $\mathbf{1 8 0 , 0 0 0 / 1 3 0 , 0 0 0}$ |
| liabilities | 1.33 | $=1.52$ | $=1.38$ |
| Acid-test (quick ratio) = (current | $305,000 / 395,000=$ | $165,000 / 240,000$ | $100,000 / 130,000$ |
| assets - inventory) /current liabilities | 0.77 | $=0.69$ | $=0.77$ |
| Profit to revenue (profit margin) | $25,000 / 550,000 \times$ | $125,000 / 525,000$ | $200,000 / 500,000$ |
|  | $100=4.55 \%$ | $x 100=23.81 \%$ | $\times 100=40 \%$ |
| Return on total assets | $25,000 / 1,025,000$ | $125,000 / 765,000$ | $200,000 / 480,000$ |
|  | $x 100=2.44 \%$ | $\times 100=16.34$ | $\times 100=41.67 \%$ |
| Return on equity | $25,000 / 450,000 \times$ | $125,000 / 425,000$ | $200,000 / 300,000$ |
|  | $100=5.56 \%$ | $x 100=29.41 \%$ | $\times 100=66.67 \%$ |
| Debt ratio (total debt to total assets) | $575,000 / 1,025,000$ | $340,000 / 765,000$ | $180,000 / 480,000$ |
|  | $=0.56$ | $=0.44$ | $=0.375$ |
| Leverage ratio (total liabilities to | $575,000 / 450,000=$ | $340,000 / 425,000$ | $180,000 / 300,000$ |
| equity) | 1.28 | $=0.80$ | $=0.60$ |

Write down your answers to requirements 3 - 6 below:

Takalani Enterprises has just started operations as a distributor of catering equipment to the informal catering sector. The company needs additional financing as it has seen that there is an increasing demand from its customers to obtain better quality items for their own businesses. The owner has prepared the following cash flow forecast and asks you what recommendations you can make as to the usefulness of the forecasted cash flow statement.

| Beginning | January | February | March | April |
| ---: | ---: | ---: | :---: | ---: |
| CU | CU | CU | CU | CU |
|  |  |  |  |  |
| 55,000 | - | - | - | - |
| 15,000 | - | - | - | - |
| - | 40,000 | 15,000 | 10,000 | 25,000 |
| - | - | 18,000 | 36,000 | 32,000 |
| $\mathbf{7 0 , 0 0 0}$ | $\mathbf{4 0 , 0 0 0}$ | $\mathbf{3 3 , 0 0 0}$ | $\mathbf{4 6 , 0 0 0}$ | $\mathbf{5 7 , 0 0 0}$ |

Cash (money) payments

| Purchases of inventory | 15,000 | 28,000 | 34,000 | 42,000 | 48,000 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Equipment purchased | 10,000 | - | - | - | - |
| Wages | 3,000 | 4,000 | 8,000 | 8,000 | 10,000 |
| Rent, electricity and water | 1,000 | 1,000 | 1,000 | 1,000 | 1,200 |
| Telephone (cell phone and airtime) | 800 | 900 | 1,100 | 1,200 | 1,200 |
| Total spent in each month | $\mathbf{2 9 , 8 0 0}$ | $\mathbf{3 3 , 9 0 0}$ | $\mathbf{4 4 , 1 0 0}$ | $\mathbf{5 2 , 2 0 0}$ | $\mathbf{6 0 , 4 0 0}$ |
|  |  |  |  |  |  |
| Net cash flow in each month | $\mathbf{4 0 , 2 0 0}$ | $\mathbf{6 , 1 0 0}$ | $\mathbf{( 1 1 , 1 0 0 )}$ | $\mathbf{( 6 , 2 0 0 )}$ | $\mathbf{( 3 , 4 0 0 )}$ |
| Cash balance brought forward | - | $\mathbf{4 0 , 2 0 0}$ | $\mathbf{4 6 , 3 0 0}$ | $\mathbf{3 5 , 2 0 0}$ | $\mathbf{2 9 , 0 0 0}$ |
| Cash balance | $\mathbf{4 0 , 2 0 0}$ | $\mathbf{4 6 , 3 0 0}$ | $\mathbf{3 5 , 2 0 0}$ | $\mathbf{2 9 , 0 0 0}$ | $\mathbf{2 5 , 6 0 0}$ |

${ }^{1}$ Projected cash to be received from customers who purchase items on credit

Required:

1. What are your first impressions of this forecasted cash flow?
2. What advice can you give the owner of Takalani Enterprises regarding this forecasted cash flow.
3. If you were approached by the owner of Takalani Enterprises to extend additional finance for the business operations, what would your answer be, giving reasons.

Write down your answers to requirements 1 - $\mathbf{3}$ below:


## Solutions to exercises

## Suggested solution to Exercise 1.1

(1 page only)

|  |  | Shange |  |
| :---: | :---: | :---: | :---: |
|  | Sheet | f 31 December 20X2 |  |
|  | CU |  | CU |
| ASSETS |  | LIABILITIES |  |
| Non-current assets |  | Non-current liabilities |  |
| Equipment | 1,500 | Easy Lending | 5,400 |
| Current assets |  | Current liabilities |  |
| Inventory | 3,200 | Wages owing | 200 |
| Accounts receivable | 300 | Suppliers | 2,000 |
| Cash | 5,970 |  | 2,200 |
|  | 9,470 |  |  |
|  |  | Total liabilities | 7,600 |
|  |  | EQUITY |  |
|  |  | Balance 31 December 20X2 | 3,370(a) |
| TOTAL ASSETS | 10,970 | TOTAL LIABILITIES + EQUITY | 10,970 |

(a) Balancing figure

## Suggested solution to Exercise 1.2

## Ms Carmen Diaz trading as Hot Hot-Dogs

Worksheet for the month ended 31 January 20X1

## Solution:

Analysis of transactions for January 20X1

|  |  |  |  | Assets |  |  |  | = |  | Liabilities | + | Equity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Description of transaction |  | Cash/Bank | + | Inventory |  |  | = |  | Loan | + | Owner's equity |
|  |  |  |  |  | $\frac{\text { Hot dog }}{\text { rolls }}$ |  | Sausages |  |  |  |  |  |
|  | Paid-in capital |  | 60,000 |  |  |  |  | = |  |  |  | 60,000 |
| 1. | Purchase of inventory | - | 5,100 | + | 5,100 |  |  |  |  |  |  |  |
|  | Purchase of inventory | - | 25,500 |  |  | + | 25,500 |  |  |  |  |  |
|  | Purchase of condiments | - | 780 |  |  |  |  | = |  |  | - | 780 E |
| 2. | Paid rent | - | 2,000 |  |  |  |  | = |  |  | - | 2,000 E |
|  | Paid wages | - | 3,000 |  |  |  |  | = |  |  | - | 3,000 E |
|  | Paid fuel | - | 620 |  |  |  |  | = |  |  | - | 620 E |
| 3. | Drawings | - | 10,000 |  |  |  |  | = |  |  | - | 10,000 D |
|  | Sales | + | 50,000 |  |  |  |  | = |  |  | + | 50,000 R |
| 4. | Cost of rolls sold |  |  | - | 5,000 (a) |  |  | = |  |  | - | 5,000 E |
|  | Cost of sausages sold |  |  |  |  | - | $25,000$ <br> (b) | = |  |  | - | 25,000 E |
| 5. | Loan from uncle | + | 5,000 |  |  |  |  | = | + | 5,000 |  |  |
|  | Balances 31 January |  | 68,000 | + | 100 | + | 500 | = |  | 5,000 |  | 63,600 |

Workings:
(a) Used 5,000 hot dog rolls which cost CU 1 each
(b) Used 5,000 sausages which cost CU 5 each

Note: $R=$ revenue, $E=$ expense, $D=$ drawings

| Suggested solution to Exercise 1.3 | (1 page only) |
| :--- | ---: |
| Patrick Ngwenya trading as Karibu Enterprises |  |
| Cash Flow Statement for the year ending 31 December 20X5 | 20X5 |
|  | CU |
| Profit for the year | 4,500 |
| (Increase) Decrease in Accounts receivable | $(15,000)$ |
| (Increase) Decrease in Inventories | $(8,000)$ |
| Increase (Decrease) in Accounts payable <br> Net cash generated from operations <br> Cash flows resulting from investing activities <br> Sale (purchase) of non-current assets <br> Net cash used in investing activities <br> Cash flows from financing operations <br> Receipt (Payment) of bank loan <br> (Repayment) of loan <br> Net cash used in financing activities <br> Net increase (Decrease) in cash <br> Cash at the beginning of the year, 1 January <br> Cash at the end of the year, $\mathbf{3 1}$ December | $(6,000)$ |

${ }^{1}(18,500)+(6,000)+15,000$
${ }^{2}$ balancing figure

## Suggested solution to Exercise 2.1

Ms Li-Na Lau trading as Cho Furniture
GENERAL LEDGER


## Suggested solution to Exercise 2.1

| Wages |  | Drawings |  |
| :---: | :---: | :---: | :---: |
| 2,500 (11) | (12) | 12,000 |  |
| Deprec |  | Accou | receivable tors) |
| 500 (15) | (13) | 5,000 |  |

Ms Li-Na Lau trading as Cho Furniture
Trial balance at 31 January 20X6

|  | CU | CU |
| :--- | ---: | ---: |
| Bank balance | 36,580 |  |
| Inventory | 6,500 |  |
| Equity (i.e., Capital) | 30,000 | 60,000 |
| Vehicle - panel van |  | 500 |
| Accumulated depreciation |  | 15,000 |
| Speedy Motors |  | 38,000 |
| Sales (revenue) | 500 |  |
| Depreciation | 240 |  |
| Advertising | 500 |  |
| Telephone (Air-time) | 480 |  |
| Petrol | 1,200 |  |
| Paint and fabric | 1,000 |  |
| Rent | 2,500 |  |
| Wages | 12,000 |  |
| Drawings | 5,000 |  |
| Accounts receivable (debtors) | 17,000 |  |
| Cost of sales | 113,500 | 113,500 |
|  |  |  |

GENERAL LEDGER of Mr JL Ritsono - Compu-lessons

| Stationery |
| :---: |
| 1,060 (1) |
| Rent |
| 500 (4) |

(2)
Air-time and data
(3)

(5)
Electricity
(6)

| 100 |
| :--- |

Drawings


(8)
(12)

| ID photos |  |
| :--- | :--- |
|  | 400 |
|  |  |

(11)


| Mr JL Ritsono trading as Compu-lessons |  |  |
| :--- | ---: | ---: |
| Trial balance at 30 June 20X6 | CU | CU |
|  | 11,550 |  |
| Bank balance | 1,060 |  |
| Stationery | 500 |  |
| Air-time | 2,000 |  |
| Wages | 500 |  |
| Rent | 150 |  |
| Electricity | 100 |  |
| Bank fees | 3,000 |  |
| Drawings |  | 11,800 |
| Computer lessons |  | 600 |
| Photocopying |  | 2,560 |
| Internet access | 36,000 | 400 |
| ID photos |  | 6,000 |
| Computers - cost | 1,000 |  |
| Computers - accumulated depreciation | 5,000 | 39,500 |
| Depreciation expense | 60,860 | 60,860 |
| Accounts receivable |  |  |
| Equity account |  |  |
|  |  |  |

## Suggested solution to Exercise 3.1

## Mr and Mrs SA Fridi <br> Income Statement <br> for the month ended 31 January 20X5

in currency units (CU)
Sales 160
Cost of goods sold $\quad$ (80)
Gross profit 80
Depreciation (15)
Interest expense (10)
Salaries (40) (10)
Profit for the month $\quad 15$

Mr and Mrs SA Fridi
Balance Sheet
as of 31 January 20X5
(in currency units)

ASSETS
Non-current assets

Furniture and computer equipment
(180+75-35-10)
210

Current assets
Inventories 330
Accounts receivable 230
Bank $\quad \begin{array}{r}505 \\ \hline 1,065 \\ \hline\end{array}$
TOTAL ASSETS $\quad 1,275$

LIABILITIES
Current liabilities
Accounts payable 210

| Bank loan | 260 |
| :--- | ---: |
| Total Liabilities | 470 |

EQUITY
Equity accounts (Note 1) 805

Total Equity $\quad 805$
TOTAL LIABILITIES + EQUITY $\quad 1,275$

Note 1: Equity accounts

|  | Mrs Fridi | Mr Fridi | Total |
| :--- | :---: | :---: | :---: |
|  Beginning <br> balances  | 400 | 400 | 800 |
| Share of <br> profits | 7.5 | 7.5 | 15 |
| Less: <br> drawings | $(5)$ | $(5)$ | $(10)$ |
| Ending <br> balances | 402.5 | 402.5 | 805 |


| Suggested solution to Exercise 3.2 |  |  | (Page 1 of 2 pages) |  |
| :---: | :---: | :---: | :---: | :---: |
| JOURNAL |  |  |  |  |
| January 20X5 |  | Calculation: | DEBIT | CREDIT |
|  |  |  | CU | CU |
|  | Land (B) ( $\mathrm{B}=$ balance sheet) |  | 90,000 |  |
|  | Building (B) |  | 120,000 |  |
|  | Equipment (B) |  | 50,000 |  |
|  | Cash (B) |  | 160,000 |  |
|  | Paid-In capital (B) |  |  | 420,000 |
|  | Advance payment (B) |  | 2,400 |  |
|  | Cash (B) |  |  | 2,400 |
|  | Furniture (B) |  | 25,000 |  |
|  | Cash (B) |  |  | 25,000 |
|  | Inventories (B) |  | 25,000 |  |
|  | Cash (B) |  |  | 25,000 |
|  | Inventories (B) | (10,000USD $\times 3.20)$ | 32,000 |  |
|  | Suppliers (B) |  |  | 32,000 |
|  | Cash (B) |  | 15,000 |  |
|  | Cost of goods sold (I) |  |  |  |
|  | ( l income statement) | (500/2200 $\times(25,000+32,000)$ | 12,955 |  |
|  | Sales (1) | (500 units $\times 30 \mathrm{CU}$ ) |  | 15,000 |
|  | Inventories (B) |  |  | 12,955 |
|  | Administrative expenses (1) | (200 elect + 500 telephone) | 700 |  |
|  | Cash (B) |  |  | 700 |
|  | Administrative expenses (1) | $(2,400 / 12$ months $=200)$ | 200 |  |
|  | Advance payment (B) |  |  | 200 |
|  | Administrative expenses (1) |  | 1,750 |  |
|  | Acc. Dep. building (B) | $(5 \% \times 120,000 \times 1 / 12)$ |  | 500 |
|  | Acc. Dep. equipment (B) | $(25 \% \times 50,000 \times 1 / 12)$ |  | 1,041.66 |
|  | Acc. Dep. furniture (I) | $(10 \% \times 25,000 \times 1 / 12)$ |  | 208.33 |
|  | Cash (B) |  | 52,500 |  |
|  | Cost of goods sold (I) | (1500/1700 $\times 44,045$ ) | 38,864 |  |
|  | Sales (1) | (1500 units $\times 35 \mathrm{CU}$ ) |  | 52,500 |
|  | Inventories (B) |  |  | 38,864 |

LAU SA - Trial balance - 31 January 20X5

|  | Debit | Credit |
| :--- | ---: | ---: |
| Cash | CU |  |

## Requirement 3

These two ratios are known as liquidity ratios.
Although the current ratio is showing little variation over the 3 years (although it may be considered fairly low), the acid-test ratio shows that the liquidity position of the enterprise deteriorated in 20X2 before recovering in 20X3. However, the balance sheet shows that the enterprise has allowed its debtors (accounts receivable) to grow rapidly. This may mean that the debtors may be slow in settling what they owe to Senegal Limited and the company should be following up for payment. If only cash is compared to current liabilities, it can be seen that the company does not have enough cash to settle all its current liabilities should much of the accounts receivable prove to be uncollectible.

## Requirement 4

These ratios (Profit to revenue or profit margin, Return on total assets and Return on equity) are known as profitability ratios.
From a healthy position in 20X1, the results from these ratios show a rapid deteriorating position for the company. Reasons for this need to be investigated. One reason may be that the tourism sector was hit particularly hard during the COVID-19 pandemic and the tourism industry came to a standstill in Africa. However, the company should not blame its bad results entirely on the pandemic as the intermediate year (20X2) also shows a deteriorating position. The company should question its operating model: Is the mark-up on its products too low? Is it allowing its debtors too much time to pay? What other costs are contributing to the increase in expenses and can any of them be reduced?

## Requirement 5

The debt ratio has been steadily increasing. This means that the company is using more debt to finance its assets. As the debt is increasing, this places the company in a risky position as loans may need to be repaid and interest payments need to be made.
This is reflected in the leverage ratio (total liabilities to equity) which has more than doubled over the three years. This again indicates that the company is in a risky position.

## Requirement 6

The ratios show the company in a deteriorating position for three years. It is unlikely that the company will be successful in its request for additional finance.
The owner could take the following steps:

1. Contact all debtors (accounts receivable) and request them to make immediate payment.
2. Consider whether it is holding too much inventory and whether by lowering prices on certain slow-moving items, these items would sell, and this would improve its cash position.
3. Are any of the fixed assets in excess of what is needed? These assets could be sold.
4. The company does have $50,000 \mathrm{CU}$ in the bank. The company should produce a forecasted cash flow and a business plan to show how it intends to improve its operations in the future.
5. In this plan, its pricing model should be questioned, as it could be that the company's markup on some of its products may be too low.
6. The company could consider leasing any assets required rather than outright purchase.

Note: This is not a definitive answer and many other valid points could be discussed.

## Requirement 1.

The cash flow position is deteriorating in the future. The owner needs to investigate reasons for this.

- Cash sales are not showing any growth, and the amounts from credit customers seems to be increasing. The owner may be giving credit to customers too freely.
- If purchases of inventory are compared to the sales figures, the profit margin may be set too low. For example, in January inventory costing $28,000 \mathrm{CU}$ was purchased, yet cash receipts are only $33,000 \mathrm{CU}$ in February.
- Wages has increased rapidly.
- Although April shows some improvement, the forecast is too short to be able to make any predictions about the months after April.


## Requirement 2.

The advice I would give the owner is based on the above observations.

- Try to get customers to pay immediately using electronic funds transfers (EFTs) or similar.
- Consider increasing the gross margin on your sales. What is the current mark-up? Compared to competitors, is the current mark-up too low?
- Why have wages increased so rapidly? The business does not seem to have shown the growth one would expect with additional staff members being appointed.
- Extend the forecast to at least 12 months.


## Requirement 3.

Based on the forecasted cash flow, I would not extend additional finance to Takalani Enterprises. However, the owner could act on the following reasons for my decision, and it is possible I would extend additional finance in the future.

- The forecasted cash flow shows a decreasing cash balance over the four months. If the family member required the loan to be paid back, there would not be enough cash in the business to buy more inventory.
- Are customers paying within a $25-30$ day period (which is the usual credit terms), or are they exceeding this period?
- Is the business paying immediately for its purchases of inventory, or has it negotiated credit terms with its suppliers? If it can negotiate credit terms with its suppliers, it may not need additional finance.
- However, the main issue seems to be linked to cash and credit sales, and the possibility that the inventory mark-up is too low, or the owner has invested too much in slow-moving inventory items. The owner should produce a business plan showing how sales are to be increased and expenses are to be reduced.
- A forecast of longer than 4 months is necessary together with some comparison of the forecast with actual cash flow so as to get some idea as to its accuracy.

Note: The answer above is not meant to be definitive and many other valid points could be made.

## Appendix. Instruction for trainers

## 1. Introduction

Micro-, Small and Medium-sized Enterprises (MSMEs) are the backbone of the economy across the globe and one of the major drivers for innovation and development. MSMEs make up 90 percent of the economic engine of developing countries and are a major source of employment and self-employment, including for vulnerable groups, such as women, senior citizens and youth. The outbreak of the Covid-19 pandemic has dramatically affected global economic and severely disturbed the financial stability, operations, supply chains, and other aspects of business, among which the MSME sector are hit the hardest. Based on the Guidance on SMEs (SMEGA Level 3) ${ }^{5}$, United Nations Conference on Trade and Development has developed an Accounting Training Manual for MSMEs. This initiative aims at improving financial literacy in the MSMEs, to facilitate their access to finance, including to financial aid in the post COVID-19 resurgence.

The manual consists of four modules which are designed to be delivered over 4 days at about 6 hours per day. (If the exercises are assigned as homework, the delivery time is reduced to 4 hours per day.) The 4 days need not to be consecutive. The modules can be delivered online or in-person according to each unique setting. A combination of delivery methods could be used. For example, the first two modules could be delivered in-person and the last two modules could be delivered online. The manual has been written in a neutral manner, using CU to represent currency units. The manual does not focus on the complexities of taxation which varies according to different jurisdictions. However, where possible, trainers should use terminology that reflects the local context.

If the modules are being delivered online, modules should be emailed to the participants prior to the training. If the modules are being delivered in-person, the participant should have access to the material either electronically or in hardcopy.

## 2. Module coverage

The modules build on each other and should be delivered consecutively. A brief synopsis of each module is as follows:

Module 1 serves as an introduction to accounting. The approach taken in Module 1 is to first guide the participants to measure the performance of an entity by preparing an income statement, and then shows the participants how to prepare a balance sheet and a cash flow statement. As the participants work through the example, accounting terminology and definitions are introduced. After preparing the income statement, balance sheet and the cash flow statement, participants are then shown how the transactions can be recorded using an accounting worksheet and the accounting equation. Although a number of the definitions used in the manual are given in section 1.5, the definitions are there to be referred to as the examples are worked through. For example, after working through the first income statement, definitions which could then be emphasized or explained are income statement, revenue, cost of sales, profit and expense. The accrual basis of accounting and the reporting entity are other relevant definitions which could also be introduced at that stage.

[^5]Module 2 uses the same examples as shown in Module 1 and introduces the accounting cycle and the recording of the transactions using debits and credits, and introduces the journal, ledger and trial balance. The focus is on double entry.

Module 3 expands on the accounting concepts and introduces different types of assets and liabilities and focuses on the two main accounting operations of an enterprise, recognizing revenue and managing inventory.

Module 4 introduces financial statement analysis and illustrates information a financial institution may require before advancing finance, and some possible financing options for enterprises.

Each module starts with learning objectives and ends with exercises based on its contents.

## 3. Worked examples and exercises

There are illustrative worked examples within each module and in addition, each module is followed by two to three exercises. The worked examples should be discussed with the participants and the trainer should ensure that the participants understand the concepts and calculations before moving onto the next section in the module. The solutions at the end of each module are mostly partial solutions and the participants should be given time to come up with their answers before the solution is discussed. The remainder of the solution, where only a partial solution has been provided, is at the end of the manual.

An alternative form of delivery could assign the exercises at the end of each module as homework. In this case, before the subsequent module is delivered, the homework would be discussed. The difference in timing between the two approaches is shown in Section 5 .

## 4. PowerPoint Slides (PPTS)

PPTS have been prepared for each module ${ }^{6}$. The notes section of the PPTS contain further information as to how the material could be delivered and what could be covered. In most cases, the contents of the PPTS have been copied and pasted directly from the manual. Trainers can customize the PPTS to suit their unique circumstances.

The numbering of the headings in the PPTS corresponds to the headings in the manual.

[^6]
## 5. Suggested timing for the delivery of each module

The timing is flexible and should be tailored to the participants' needs and understanding. Modules can be delivered according to what best suits the participants and the trainers. As indicated previously, the exercises could be discussed as part of the module or they could be assigned as homework. The suggested timing of the delivery of the module according to which approach is chosen is shown in the following two tables.

| Suggested timing if the exercises are discussed as part of the module |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Module | Review of <br> previous <br> module | Presentation <br> of module <br> contents | In-class <br> illustrative <br> examples | Group <br> discussions, <br> QQs and Q\&A | Exercises <br> completed <br> in class | Total <br> time (24 <br> hours) |
| 1 | 0 | 30 | 160 | 50 | 120 | 360 |
| 2 | 30 | 65 | 90 | 55 | 120 | 360 |
| 3 | 30 | 115 | -1 | 95 | 120 | 360 |
| 4 | 30 | 55 | 115 | 40 | 120 | 360 |

${ }^{1}$ The examples are included as part of module contents

Suggested timing if the exercises are assigned as homework

| Module | Homework <br> review | Presentation <br> of module <br> contents | In-class <br> illustrative <br> examples | Group <br> discussions, <br> QQs and Q\&A | Exercises <br> assigned as <br> homework | Total time <br> $(16$ hours) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0 | 30 | 160 | 50 | - | 240 |
| 2 | 30 | 65 | 90 | 55 | - | 240 |
| 3 | 30 | 115 | -1 | 95 | - | 240 |
| 4 | 30 | 55 | 115 | 40 | - | 240 |

[^7]Detailed suggested timing of the delivery of the contents of the modules is shown below.

## Module 1

The objective of Module 1 is to introduce the participants to the three financial statements (balance sheet, income statement and cash flow statement). This is first done by using the example of Joe Ngibe who decides to make face masks. He needs to know whether or not his business is successful. After preparing the three financial statements (FS) by only using the information given and without focusing on the accounting entries and terminology, participants are introduced to the accounting equation and enter the same information using an accounting worksheet. At the same time, various definitions are introduced. The definitions have been placed together in section 1.5 and can be referred to at appropriate times when delivering the module.
The method of delivery is different for online or in-person delivery. If the content is being delivered inperson, a more interactive approach can be used, such as by using a blackboard or a flipchart as well as the PPTS.
The method of delivery has been indicated as 'informal' or 'informal discussion', as the intention of the training is not to 'lecture' the topics but to engage the participants as far as possible in the material. Participants should be given enough time to read the information in the modules or exercises where discussion is indicated. Where possible, the discussion should be interactive, asking the participants for their answers or points of view. This is especially for the quick quizzes.

| Section | Activity | Focus on | Method of delivery | Mins |
| :--- | :--- | :--- | :--- | :---: |
|  | Introductions | Introduce yourself. Ask the <br> participants to introduce <br> themselves stating: <br> 1. their name, <br> 2. the type of enterprise they <br> have, | Informal. | 15 |
| 1.1 | What is accounting? | reason(s) why they are <br> taking the training, and <br> 4. their expectations for the <br> workshop. | Accounting provides financial <br> information about the entity. <br> It uses the financial statements <br> (FS) to communicate effects of <br> financial transactions. | Informal discussion <br> emphasizing <br> "communication". |
| 1.2 | Objectives and <br> qualitative <br> characteristics (QC) | FS communicate information. <br> What are the characteristics <br> the information should have to <br> be useful? | Informal discussion. | 10 |
| 1.3 | Users and their needs | Ask the participants who do <br> they think are users of the | Informal discussion - <br> generate a list of users <br> and the uses of the FS. | 10 |
| 1.4 | information. <br> Generate a list with 2 aspects: <br> Separating your <br> personal affairs from <br> youreconomic <br> transactions | Explain how in law, there is a <br> (ifference between a natural <br> person and a juridical (legal) <br> person. Briefly explain the | Informal discussion. | 10 |


|  |  | different entity forms according to your jurisdiction. |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Quick quiz in PPTS |  |  |  |
|  | 1. What are the 3 FS? Define them. <br> 2. Name one user and what they would use the FS for? <br> 3. Name one qualitative characteristic? Why is it important? |  | Verbal and interactive. | 10 |
| 1.5 | Definitions and explanations used in this module | Refer to these definitions as the examples in the module are discussed. |  |  |
| 1.6 | Illustrative example 1.1 | The example allows financial statements to be prepared without resorting to debits/credits etc. Work through the example allowing the answers to come from an understanding that for there to be an increase in a person's financial position, there needs to be some economic activity. How do we measure that economic activity? With an income statement. <br> How do we measure that financial position? With a balance sheet. <br> How do we measure how the enterprise generates and uses cash? With a cash flow statement. <br> Explain the various definitions in the manual. <br> Explain how the various FS articulate with each other. | Participants have the answer in their manual. Work through each transaction, discussing its effect on the income statement, the balance sheet and the cash flow statement. Refer back to the definitions in Section 1.5 . | 60 |
|  | Illustrative example 1.2 | The example is now extended to a second month and shows the application of the accrual concept and also introduces the concept of 'drawings'. Work though each entry in the income statement, balance | Participants have the answer in their manual. Work through each transaction, discussing its effect on the income statement, the balance sheet and the cash flow statement. Refer back | 60 |


|  |  | sheet and cash flow statement, on a line-by-line basis. | to the definitions in Section 1.5. |  |
| :---: | :---: | :---: | :---: | :---: |
| 1.7 | Illustrative example 1.3 Recording the transactions using an accounting worksheet | This introduces the accounting equation $A=L+E$. <br> The transactions for both March and April are now entered using an accounting worksheet. | Participants have the answer in their manual. <br> First work through March and then through April. Work through each transaction, discussing its effect on the worksheet and how the final balances correspond to the balance sheet and the entries in the equity column correspond to the income statement. | 40 |
|  | Exercises |  |  |  |
| 1.1 | Sipho Shange | Balance Sheet. <br> The answer is at the end of the manual. | Participants to fill in the items into the Balance sheet. Explain that Equity = balancing figure. | 25 |
| 1.2 | Ms Carmen Diaz | Accounting worksheet, income statement, balance sheet and cash flow statement (CFS). Draw attention to the articulation between the CFS and the income statement. | Participants to enter the transactions into the worksheet. Complete with participation from participants. The amounts in the worksheet can then be used to prepare the FS. | 60 |
| 1.3 | Patrick Ngwenya | Cash Flow Statement (CFS) | Complete CFS - verbal, informal discussion. | 35 |
| End the module by asking the participants to reflect on what has been learnt. Identify any areas which may need to be revised in the next session. |  |  |  | 15 |
| Total time (6 hours $\times 60 \mathrm{mins}$ ) |  |  |  | 360 |

## Module 2

The objective of Module 2 is to further expand participants' knowledge of accounting by re-enforcing important definitions and introduce the recording of transactions using debits, credits, journals and ledgers. It also introduces the trial balance and touches on other various aspects, such as multiple entries and EFTs.
The method of delivery is different for online or in-person delivery. If the content is being delivered inperson, a more interactive approach can be used, such as using a blackboard or a flip chart.

| Section | Activity | Focus on | Method of delivery | Mins |
| :---: | :---: | :---: | :---: | :---: |
| - | Revise answers to the exercises from Module 1. | Exercises 1.1, 1.2 and 1.3. | Informal - emphasize the main points, making sure that the participants have an understanding of how to enter the transactions on the worksheet. | 30 |
| 2.1 | Underlying concepts <br> 1. Going concern <br> 2. accrual | Use examples to give meaning to these concepts. | Informal. | 5 |
| 2.2 | Elements, recognition and measurement | Ensure that the meanings of the words are understood. Recognition = record | Informal. (Note that some of this activity is revision of Module 1.) | 5 |
| 2.3 | Assets | Difference between current and non-current assets. <br> Examples of different assets. | Informal. | 5 |
| 2.4 | Liabilities | Difference between current and non-current liabilities. Examples of different liabilities. | Informal. | 5 |
| 2.5 | Equity | $A=L+E$ | The focus is on the accounting equation. Informal. | 5 |
|  | Quick quiz in PPTS |  |  |  |
|  | 1. What is meant by the going concern concept? <br> 2. What does accrual mean? <br> 3. What is the definition of an asset? - can you give an example? <br> 4. What is the definition of a liability? - can you give an example? |  | Verbal and interactive. | 10 |
| 2.6 | Accounting equation and accounting cycle | Discuss the pictorial depiction of the accounting equation. | Informal. | 5 |


| 2.6.1 | Recording the transactions using an accounting worksheet | Revision from Module 1. Briefly go through the main points again - as the same example is used to explain debits, credits etc. | Informal. | 10 |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline 2.6 .2 \\ & 2.6 .3 \end{aligned}$ | Recording transactions using debits and credits <br> Illustrative example 2.1 | Focus on the terminology: an account, a ledger, double entry. <br> Show that the "rules" used in the worksheet are the same as those used for double entry. Extract the trial balance (TB) (end of March) and explain its usefulness. | Link the terminology back to worksheet. <br> Link T accounts back to worksheet. | 10 10 |
|  | Illustrative example 2.2 | Work through the entries for April. <br> Extract the TB (end of April). Show how the ledger accounts link to the TB. | Emphasize that the income statement is now for 2 months, but that the balance sheet does not change. | 30 |
|  | Illustrative example 2.3 | This example reinforces the notion of double entry. The participants have already entered the transactions into the ledger, but now a journal is being used for the 'instructions' for the ledger entries. <br> Closing journal entry. <br> Emphasize the end of the cycle and the beginning of the new cycle. Emphasize the steps that are necessary to prepare FS by referring back to the accounting cycle. | Discuss each entry. Ask which accounts must be debited or credited. <br> Link back to ledger. | 30 |
| 2.7 | Other matters | This section covers a number of other matters which further explain how accounting transactions can be ordered or summarized. <br> The requirements of SMEGAlevel 3 are also covered. | Informal discussion. Bring in the practices for paying for services or items in your jurisdiction. | 25 |
|  | Illustrative example 2.4 | Illustrative example 2.4 has been included in here as depreciation is accounted for in the Module 2 exercises. | Explain the concept of depreciation and amortization. Work through the journal entries. | 20 |
| 2.8 | Concluding the accounting cycle | Refer to the diagram on the PPTS. | Informal. | 5 |


|  | Quick quiz in PPTS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1. What is a Trial <br> Balance (TB)? <br> Why is a TB useful? <br> What are the <br> "rules" for the <br> double entry <br> system? <br> What is a journal? <br> What is a ledger? |  | Verbal and interactive. | 10 |
|  | Exercises |  |  |  |
| 2.1 | Ms Li-Nau | Participants need to complete the ledger accounts and extract the trial balance. | Work through each entry with the participants giving them time to complete the ledger accounts. Discuss the journal entries which need to be entered into the ledger. Thereafter allow the participants time to extract the TB. | 60 |
| 2.2 | Mr JL Ritsono Computer lessons | Participants can see that a spreadsheet could be used to record their transactions such as Microsoft's Excel and thereafter complete the double entry with ledger entries | Complete ledger accounts and the TB. | 60 |
| End the module by asking the participants to reflect on what has been learnt. Identify any areas which may need to be revised in the next session. |  |  |  | 10 |
| Total time (6 hours x 60 mins) |  |  |  | 360 |

## Module 3

The objective of Module 3 is to expand the participants' knowledge on the other types of assets, liabilities and equity plus the different types of transactions which enterprises may come across in practice. Use your discretion as to which illustrative examples to focus on, for example no 3.7 (FIFO and the weighted average method) may be relevant to participants buying and selling items, while the production cost of inventories may not be relevant. The focus of this module is on the exercises which are used to embed the principles of double entry and how to extract a trial balance.
The method of delivery is different for online or in-person delivery. If the content is being delivered inperson, a more interactive approach can be used, such as using a blackboard.

| Section | Activity | Focus on | Method of delivery | Mins |
| :---: | :---: | :---: | :---: | :---: |
| - | Reflection on the previous module and exercises | Discuss what was difficult/ easy. Do the participants see any benefit to being able to prepare the FS? What are the benefits? Relate to access to finance. | Informal discussion. | 30 |
| 3.1 | More advanced accounting matters | Explain that this module expands and builds on previous concepts and knowledge. | Informal discussion. | 10 |
| 3.2 | Assets <br> Illustrative examples 3.1 - $3.11$ | Focus on the examples that are relevant to the participants. It's not necessary to spend a great deal of time on examples if you think they are not relevant. <br> Trainers to use their discretion. | Informal discussion. | 60 |
| 3.3 | Liabilities | Focus on the examples that are relevant to the participants. It's not necessary to spend a great deal of time on examples if you think they are not relevant. <br> Trainers to use their discretion. | Informal discussion. | 25 |
| 3.4 | Equity <br> Illustrative example 3.12 3.15 | Show how the equity account changes depending on the entity form, but that the accounting equation always holds true, i.e. A $=\mathrm{L}+\mathrm{E}$. | Informal discussion. | 20 |
|  | Quick quiz in PPTS |  |  |  |
|  | What is the difference between non-current assets and current assets? <br> Can you name an example of each? What is the difference between non-current liabilities and current liabilities? |  | Verbal and interactive. | 20 |


|  | Can you name an example of each? Why is it necessary to impair inventory at year-end? |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 3.5 | Main accounting operations <br> Illustrative examples 3.16 3.21 | For many businesses, revenue recognition and inventory management are its most important transactions. <br> The section on inventory management is quite detailed. Accounting for the production cost of inventories may not be relevant for many MSMEs and may be too complicated for someone who is being introduced to accounting for the first time. Trainers' discretion is required as to what to emphasize. | Informal discussion. | 60 |
|  | Exercises |  |  |  |
| 3.1 | Mr and Mrs SA Fridi | Participants to fill in the ledger accounts. Discuss each transaction giving each participant an opportunity to come up with the answer. <br> Allow the participants to extract the TB and then link the TB to the IS and BS (given). | Show how ledger accounts are used to extract the TB. Discuss the $B S$ and the $I S$. | 60 |
| 3.2 | Mrs Lau | Participants to complete the journal entries. Draw their attention to the page of the solution where the working for cost of sales is given. | Discuss each transaction giving each participant an opportunity to come up with the answer. <br> Allow the participants to extract the TB and then link the TB to the IS and BS (given). | 60 |
| End the module by asking the participants to reflect on what has been learnt. Identify any areas which may need to be revised in the next session. |  |  |  | 15 |
| Total time (6 hours x 60 mins) |  |  |  | 360 |

## Module 4

The objective of Module 4 is for the participants to understand how they can analyze their financial statements using various techniques, how they can interpret their calculations and how their financial statements and other projections can help them access finance. Bring in the situation in your jurisdiction. Draw the participants' attention to any financing opportunities in their specific jurisdiction, where they can go to apply for funding and what information they would need to provide to access funding.
The method of delivery is different for online or in-person delivery. If the content is being delivered inperson, a more interactive approach can be used, such as using a blackboard and a flipchart.

| Section | Activity | Focus on | Method of <br> delivery | Mins |
| :--- | :--- | :--- | :--- | :---: |
| - | Reflection on the previous <br> module and exercises | Discuss what was difficult/ <br> easy. Reinforce the importance <br> of being able to use the FS to <br> access to finance. | Informal <br> discussion. | 30 |
| 4.1 | Financial analysis | The use and usefulness of <br> financial analysis | Verbal <br> introduction. | - |
| Illustrative example 4.1 | Horizontal method | Explain how to perform <br> horizontal analysis. <br> Focus on the analysis. | Informal. <br> Ask the <br> participants to <br> check if the \%s <br> are correct and <br> then focus on the <br> analysis. <br> Ask the <br> participants to <br> check if the \%s <br> are correct and <br> then focus on the <br> analysis. | 5 |


|  | 2. What do the above <br> techniques NOT tell the <br> user about the enterprise? |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 4.2 | Access to finance | Emphasize that in order to <br> obtain finance certain <br> documentation will be <br> required. Refer to your <br> jurisdiction as to where they <br> could possibly find funding. <br> Focus on that various <br> assumptions have been made. <br> These need to be realistic. <br> Discuss the various documents <br> which a provider of finance <br> may require. A number of <br> points have been listed and <br> can be discussed in as much <br> detail as considered necessary. | Informal <br> discussion. <br> discussion. <br> Show how these could <br> represent funding <br> opportunities. <br> Contacts can provide a source <br> of finance | Informal |


|  |  | is always a cost associated <br> with borrowing. Consider only <br> discussing the easier examples. |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 4.1 | Exercises: | Financial statement analysis: <br> Requirements 3-6: Ask <br> participants to provide the <br> points. | informal <br> discussion. | 60 |
| 4.2 | Forecasted cash flow: <br> Discuss broad observations <br> from the cash flow. <br> Participants to provide the <br> points for requirements 1, 2 <br> and 3. | Informal <br> discussion. | 60 |  |
| End the module by asking participants to reflect on what has been learnt. |  |  |  |  |
| Identify any areas which may need to be revised in the next session. |  |  |  |  |

## 6. Tips for trainers

1) The delivery of the modules should be interactive with quick quizzes or other techniques used to break up the time and keep the attention of the participants. It is important for the participants to engage with the material, write down answers, make lists, draw diagrams etc. If the material is being delivered in-person, participants could work in pairs or in teams. Role-playing and brain-storming can be used. Be guided by your own experiences.
2) Accounting is a language with many words which are not part of every-day language and therefore may be new to the participants. It will be important to ensure that these new words do not get in the way of understanding and learning basic accounting. Often the context of how these words is used in every-day language can also cause confusion. For example, stating that your bank balance is in credit at the bank, means that the opposite is true in your own accounting records.
3) It's important to make sure that the words used do not confuse the participants. Different words are used with the same meaning. For example, profit, income or earnings are often used interchangeably. "Cash book" or the "cash ledger account" is often used to describe the money in the bank. Other examples are the income statement, the profit or loss statement and the statement of comprehensive income. As the training progresses, trainers could compile a list of words which is added to as new words are raised with similar meanings.
4) If the training is being delivered online or in-person and if there is access to the internet, there are YouTube videos which could be played (check that they are appropriate first). You could even download a set of financial statements from a listed company to show what the financial statements of a listed company looks like.
5) If the training is being delivered in-person, participants could work in pairs or in teams.
6) Regardless of how the training is being delivered (online or in-person), participants should have pens or pencils on hand as well as a calculator so that they have the means to work out answers if and when required.
7) Trainers could add in their own exercises should they want to demonstrate a local issue.
8) End each module with some reflection on what has been learnt. Focus on the steps that are needed to get to the answers. How have participants have found the pace of the discussion? The times given are a guide only and can be adjusted according to the participants. It is usually necessary to make sure they are all working at the same pace and no one is left behind, so a "hands-on" approach is recommended.
9) If the delivery of the material is online, trainers should familiarize themselves with the various features of the online platform being used. Participants can be unmuted to allow them to participate in the discussion and the chat feature could also be used.

[^0]:    ${ }^{1}$ Also known as a Statement of Comprehensive Income

[^1]:    2 'Profit' is not a defined element as it is the difference between two elements.

[^2]:    ${ }^{3}$ United Nations (2009) Accounting and Financial Reporting Guidelines for Small and Medium-sized Enterprises (SMEGA) Level 3 Guidance.

[^3]:    ${ }^{4}$ This is a payment medium recognised by a legal system and used to meet financial obligations.

[^4]:    Analysis of the results:
    It can be seen that the gross profit percentage is the same as in the previous period. In percentage terms, the costs were $40 \%$ in March compared to $42 \%$ in April, although in absolute terms the costs have halved. The profit after tax decreased and the percentage for April is very low. This number should be interpreted with caution. First of all, profit varies by sector and activity, i.e. some are more profitable than others. Second, these are the first months of operations of the company. It is therefore surprising that already during the first month, the company has made

[^5]:    ${ }^{5} \mathrm{https}: / /$ unctad.org/system/files/official-document/iteteb20036_en.pdf

[^6]:    ${ }^{6}$ The PPTS for each module can be downloaded at: https://isar.unctad.org/accounting-for-msmes/. Please send an enquiry to isar@unctad.org to request the passcode.

[^7]:    ${ }^{1}$ The examples are included as part of module contents

