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International Edition

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INTERNATIONAL LABOUR OFFICE
GENEVA

First published 1999

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Improve Your Business: Basics
Geneva, International Labour Office, 1999
/Management development/,/Entrepreneur/,/Small-scale industry/,
/Small enterprise/,/Management/.
12.04.1
ISBN 92-2-110853-8

ILO Cataloguing in Publication Data

Home"" """"> ar.cn.de.en.es.fr.id.it.ph.po.ru.sw

Improve Your Business: Basics (ILO, 1999, 188 p.)

COSTING

IN THIS CHAPTER YOU WILL LEARN

- **Determine what it costs to run your business**
- **Use costing to improve your business**
- **Differentiate between direct and indirect costs**
- **Differentiate between material and labour costs**
- **Differentiate between costs for a manufacturer or service operator and those for a retailer or wholesaler**

NOTE Since this book is intended for use in many different countries, we have used the term "NU" in the examples to represent an imaginary "National Unit of currency"

Know your costs

WHAT ARE COSTS?

Every business has costs. Costs are all the money your business spends to make and sell your products or services. Here are some examples of costs:

- **Salaries and wages to the employees are costs to the business.**
- **Electricity for the lights, machines and other equipment is a cost to the business.**
- **Raw materials bought to make into products are a cost to the business.**

If you are a service operator, a retailer or a wholesaler, you may not have exactly the same costs as a manufacturer. But most businesses have costs for materials, labour, electricity, rent, transport, and so on.

WHAT IS COSTING?

Costing is the way you calculate the total costs of making and selling a product or providing a service. Many businesses do not know all their costs and therefore cannot do their costing properly.

THINK ABOUT THESE TWO BUSINESSES:

- ***A pottery:***

Clayworks Pottery make tea cups. They do not know their costs but they do not worry too much about costs, they only want to be cheaper than their competitors so they sell more. Most other potteries charge 4.50 Nil for a tea cup so Clayworks decide to set their price at 3.90 NU.

- ***A metalworks business:***

A customer asks for a quotation for 5 door frames. The material for one door frame costs 65.00 NU. The Metalworks Company decide to charge 70.00 NU for each frame. It is a low price but it is more than the cost of the materials so they think that they will still make a profit.

1. Is there a problem with the way Clayworks Pottery do the costing of their tea cups? Please explain why or why not?

_____
_____
_____

2. Is there a problem with the way The Metalworks Company do the costing of their door frames? Please explain why or why not?

_____
_____
_____

1. Yes, there is a problem with the way Clayworks Pottery do the costing of tea cups. They set a price which is lower than the other potteries' prices. They do not know if their total costs for a tea cup are higher than their price of 3.90 NU. Clayworks Pottery do not know if the tea cups give their business a profit or a loss.

2. Yes, there is a problem with the way The Metalworks Company do the costing of their door frames. They know the direct material costs for a door frame. But they think that the 5.00 NU they add to the cost of materials is profit. They forget about other costs that their business has, for example:

- *labour costs for their employees making the door frames*
- *other costs to run their business, such as rent and transport.*

The Metalworks Company do not know if the price of 70.00 NU gives the business a profit or a loss.

HOW CAN COSTING IMPROVE YOUR BUSINESS?

Costing helps you to set prices

When you know your total costs, you can set prices which will give your business a profit.

Costing helps you to reduce and control your costs

When you know all your costs, you can work out better and cheaper ways to make and sell

your products or services.

Costing helps you to make better decisions about your business

When you know the total costs for each type of product or service, you can make better decisions about which products or services to sell so that your business makes the highest profit.

Costing helps you to plan for the future

When you know all your costs, you can make plans for your business. For example, you need to know all your costs before you can make a Sales and Costs Plan or a Cash Flow Plan.

DIFFERENT TYPES OF COSTS

Before you can do costing, it is necessary to understand the different types of costs a business has. All businesses have two types of costs:

- **direct costs, and**
- **indirect costs.**

Direct **+** Indirect **= TOTAL COSTS**
Costs Costs

You must understand the different types of costs to be able to calculate the total costs and do the costing for each product or service your business makes or sells.

Direct costs

For a manufacturer or service operator, direct costs are all costs that can be directly

related to:

- **the products or services you make or sell, or**
- **the production of those products or services.**

For a retailer or wholesaler, direct costs are the costs for buying goods to resell.

To be counted as direct costs, the costs must also be:

- **easy to calculate**
- **big enough to add a considerable amount to the total direct costs.**

For example, *Reliable Tailors* make protective coats. Fabric and buttons are direct costs for making a protective coat because:

- **they become part of the coat**
- **the amounts of fabric and buttons for each coat are easy to calculate**
- **the costs of fabric and buttons are big enough to add a considerable amount to the total direct costs of a coat.**

Reliable Tailors have employees working full time sewing protective coats. Those employees' wages are direct costs because:

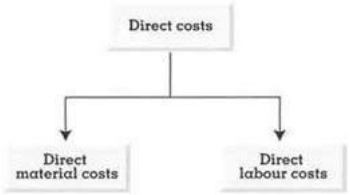
- **their work is directly related to the production of coats**
- **the time they spend making coats is easy to calculate**
- **their wages are big enough to add a considerable amount to the total direct costs of a coat.**

Reliable Tailors have to pay for two things that are directly related to the production of protective coats:

- **materials**
- **labour.**

So you can see there are two different types of direct costs:

- **direct material costs**
- **direct labour costs.**



Figure

Direct material costs

Direct material costs are what your business spends on materials that become part of, or are directly related to, the products or services you make or sell.

To be counted as a direct material cost:

- **the amount of material must be easy to calculate**
- **the cost of the material must be big enough to add a considerable amount to the total direct material costs.**

Here are examples of direct material costs for different businesses:

- **At *The Metalworks Company,* the sheets of metal, hinges and bolts become part of**

the door frames. The amount of each material for one door frame is easy to calculate. The cost of each material is big enough to add a considerable amount to the total direct material costs of the business. So the costs of sheet metal, hinges and bolts are direct material costs for the business.

- ***Reader's Bookshop*** **does not make products. They buy stationery, books and other goods to resell. For a retailer or wholesaler, the costs of buying goods to resell are direct material costs.**

Direct labour costs

Direct labour costs are all the money your business spends on wages, salaries and benefits for the employees who work in the production of your products or services. Retailers and wholesalers, who do not make products or provide services, do not have direct labour costs.

To be counted as a direct labour cost:

- **the time spent on making the product must be easy to calculate**
- **the cost of the direct labour must be big enough to add a considerable amount to the total direct labour costs.**

Here are examples of direct labour costs for different businesses:

- **At The Metalworks Company, the employees' work is production of metal products. The time spent making each product is easy to calculate. The wages paid for the work are big enough to add a considerable amount to the total direct labour costs. So the wages the business pays to the employees are direct labour costs for the business.**

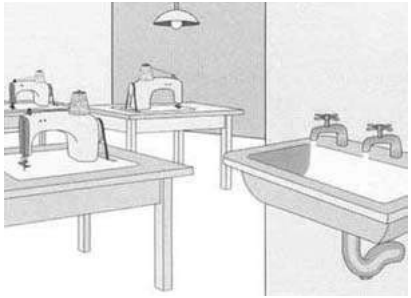
- **Reader's Bookshop does not have any employees working directly in making products. So they do not have any direct labour costs.**

Indirect costs

Businesses do not only have direct costs. All businesses also have costs for running the business, for example rent, electricity, transport, licences, repairs and maintenance. These types of costs are called indirect costs.

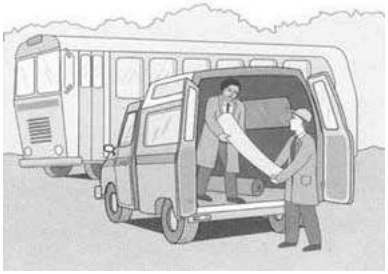
Indirect costs are all other costs, except direct costs, that you have for running your business. Indirect costs are normally not directly related to one particular product or service. They are costs for the whole business.

Here are some examples of indirect costs:



Figure

Costs for buildings and equipment, for example rent, electricity and water, maintenance, repairs, service and insurance are indirect costs.



Figure

Costs for transport for buying materials or goods, visiting suppliers or customers, and for delivering goods to customers are indirect costs.

Costs for wages of employees or owners who do not work directly in the production of

goods or services are indirect costs. For example, wages of sales staff, messengers, cleaners and security guards are indirect costs. For retailers and wholesalers, all salaries and wages are indirect costs. These costs are called indirect labour costs.

Some costs that would normally be calculated as direct costs can become indirect costs. Here is an example:

To make coats, Reliable Tailors use thread. But they have decided that thread is an indirect cost and not a direct cost because:

- **the amount of thread they use to make one protective coat is very small and difficult to calculate**
- **the cost of the small amount of thread they use to make one coat is not big enough to add a considerable amount to the total direct material costs.**

You can see that there are different types of costs that make up the total costs of a product or service.

Direct material costs	**+**	Direct labour costs	**+**	Indirect costs	**=**	**TOTAL COSTS**

Costing for a manufacturer or service operator

If you are a retailer or wholesaler, go to ***Costing for a retailer or wholesaler****.*

To explain how a manufacturer or service operator does costing we use Reliable Tailors as an example. Reliable Tailors make different types of garments such as protective coats and overalls. To help them calculate all the costs for one product they use a Product Costing Form. The Product Costing Form follows 4 steps:

Step 1 *Calculate*		*Step 2* *Calculate*		*Step 3* *Calculate*	*Step 4* *Add up*
Direct material costs	**+**	Direct labour costs	**+**	Indirect costs	**= TOTAL COSTS**

The next page shows a Product Costing Form. Reliable Tailors also use a Labour Costs Form to help them with their calculations.

They use the Labour Costs Form in Step 2.

COSTING FOR
A MANUFACTURER
OR SERVICE OPERATOR

STEP 1. Calculate direct material costs

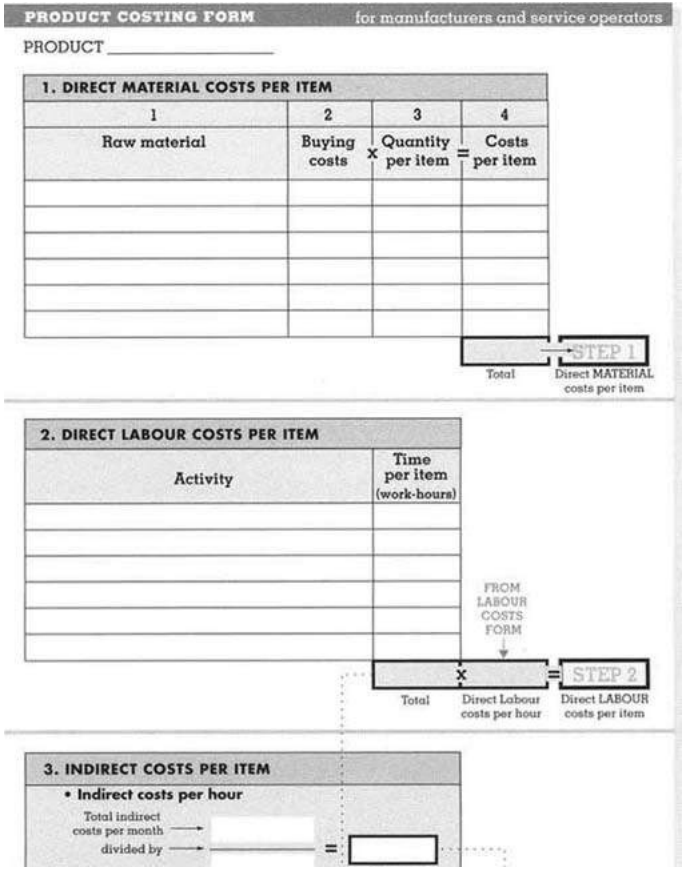
STEP 2. Calculate direct labour costs

STEP 3. Calculate indirect costs

STEP 4. Add up total costs

Reliable Tailors is a manufacturer. If you are a service operator, use the Product Costing Form

and the same 4 steps for the costing of each of your services. You can do an exercise for a service operator.



PRODUCT COSTING FORM for manufacturers and service operators

PRODUCT _____

1. DIRECT MATERIAL COSTS PER ITEM

1	2		3		4
Raw material	Buying costs	x	Quantity per item	=	Costs per item
			Total		STEP 1 Direct MATERIAL costs per item

2. DIRECT LABOUR COSTS PER ITEM

Activity	Time per item (work-hours)

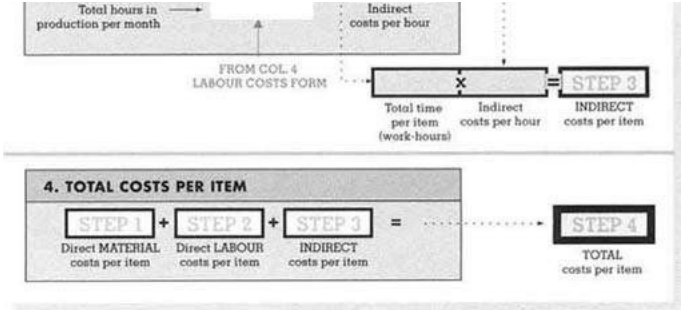
FROM LABOUR COSTS FORM

Total x Direct Labour costs per hour = STEP 2 Direct LABOUR costs per item

3. INDIRECT COSTS PER ITEM

• **Indirect costs per hour**

Total indirect costs per month → divided by → =



Figure

STEP 1. CALCULATE DIRECT MATERIAL COSTS

COSTING FOR
A MANUFACTURER
OR SERVICE OPERATOR

STEP 1. Calculate direct material costs

STEP 2. Calculate direct labour costs

STEP 3. Calculate indirect costs

STEP 4. Add up

total costs

Calculate the costs of all materials:

- **that become part of, or are directly related to, the product or service**
- **that are easy to calculate and have a big enough cost to be counted.**

You can see how Reliable Tailors use the Product Costing Form to calculate the direct material costs for one protective coat to be 30.40 NU.

Here are some notes to help you complete Step 1 of the Product Costing Form to work out the direct material costs per item:

Column 1. Raw material

In column 1 on the Product Costing Form, write down the different raw materials that become part of the product or service. Only include materials that are easy to calculate and have a big enough cost to be counted.

Reliable Tailors write down fabric and buttons. They also use thread but:

- **it is difficult to calculate how much thread they need for one coat**
- **the thread needed for one coat costs very little.**

So Reliable Tailors have decided that thread is not a direct material cost for making protective coats. At Reliable Tailors, thread for making coats is counted as an indirect cost. You can see how Reliable Tailors include thread in their indirect costs.

Column 2. Buying costs

In column 2 on the Product Costing Form, write down the cost of buying one unit of each

raw material.

Column 3. Quantity per item

In column 3 on the Product Costing Form, write down how much you need of each raw material to make one item. Remember to include wastage.

Most businesses have some wastage. For example:

- **Reliable Tailors have small pieces of fabric left over.**
- **A carpenter has off-cuts of wood wasted.**
- **A tinsmith gets bits of metal that are too small to use.**

Wastage is a cost to your business because you have paid for the raw materials that are wasted. Work out how much waste you normally have for one item. Add this amount to the quantity of material you need to make the item.

Column 4. Costs per item

In column 4 on the Product Costing Form, write down the cost of each material needed to make one item. To calculate this cost, multiply the buying costs (column 2) by the quantity needed for one item (column 3).

Total

When you have worked out the cost of each raw material needed to make one item, add up the amounts in column 4. This total gives you the total direct material costs for the item.

STEP 2. CALCULATE DIRECT LABOUR COSTS

COSTING FOR

A MANUFACTURER OR SERVICE OPERATOR

STEP 1. Calculate direct material costs

STEP 2. Calculate direct labour costs

STEP 3. Calculate indirect costs

STEP 4. Add up total costs

Work out the costs of wages, salaries and benefits for the employees who work directly in the production of the product or service.

Every business needs information on all their labour costs. To help you calculate labour costs for your business, you can use a Labour Costs Form.

On the Labour Costs Form, you write information about each person working in your business, for example, working hours per month, wage per month and time in production per month.

You need this information to:

- **calculate the direct labour costs per hour (on the Labour Costs Form)**
- **calculate the direct labour costs per item (on the Product Costing Form).**

You only need one Labour Costs Form for the whole business. You use the information in that form to calculate the cost of all your products or services.

Reliable Tailors have nine employees. Most of them work in production, but some of them are not directly involved in the production. That is important to know when you calculate the direct labour costs.

First, Reliable Tailors fill in the Labour Costs Form. Then they use the information to work out the direct labour costs for one protective coat on the Product Costing Form.

Here is the Labour Costs Form for Reliable Tailors:

RELIABLE TAILORS

LABOUR COSTS FORM for manufacturers and service operators

			Direct labour costs		Indirect labour costs	
1	2	3	4	5	6	7
Employee	Total working hours per month	Total monthly pay NU	Hours in production per month	Pay for time in production NU	Hours NOT in production per month	Pay for time NOT in production NU
K Wilson, cutting & design	160	800	160	800	-	-
N Hunter, sewing	180	540	180	540	-	-
F Jones, sewing	160	440	160	440	-	-
D Preston, overlocking	160	440	160	440	-	-
G Turner, pressing, folding, etc.	160	250	160	250	-	-
M Anderson, owner: supervision, sewing	160	1000	80	500	80	500
R Hall, owner: sales, admin.	160	1000	-	-	160	1000
T Smith, messenger, cleaner	160	250	-	-	160	250
P Peters, record-keeping	40	80	-	-	40	80
Total			900 hrs	2970	440 hrs	1830

DIRECT LABOUR COSTS PER HOUR

Total pay for time in production → from column 5 → 2970 NU

divided by

Total hours in production per month → from column 4 → 900 hrs.

= 2970 NU / 900 hrs. = 3.30 NU

3.30 NU — DIRECT labour costs per hour

Figure

Column 1. Employee

In column 1 on the Labour Costs Form, write down the name of each person working in the business. You can also write down the type of work they do.

If you are the owner, you must remember to include yourself. For example, at Reliable Tailors, Mr Anderson and Mrs Hall are the owners:

- **Mr Anderson does supervision and sewing.**

- **Mrs Hall does sales and administration.**

Column 2. Total working hours per month

In column 2 on the Labour Costs Form, write down the number of hours each person works in the business per month.

At Reliable Tailors, most employees work 160 hours per month.

But two employees do not work 160 hours per month:

- **Miss Peters assists with record-keeping. She only works 40 hours per month.**
- **Mr Hunter is very skilled at sewing. He works extra hours when there is a lot of work. With overtime, Mr Hunter usually works 180 hours per month.**

Column 3. Total monthly pay

In column 3 on the Labour Costs Form, write down how much each person gets paid per month.

Owner's salary is also part of the labour costs for a business. It is important that the owner writes down how much the business pays him or her per month. For example, Mr Anderson and Mrs Hall pay themselves 1000 NU each per month.

The Labour Costs Form is divided into two parts:

- **Direct labour costs (columns 4 and 5)**
- **Indirect labour costs (columns 6 and 7)**

Direct labour costs

Columns 4 and 5 on the Labour Costs Form give you information about the costs for employees who work directly in the production of your products or services. Their wages, salaries and benefits are direct labour costs.

Column 4. Hours in production per month

In column 4 on the Labour Costs Form, write down how many hours each person works in production per month.

At Reliable Tailors, Mr Wilson, Mr Hunter, Mrs Jones, Mrs Preston and Miss Turner spend all their time working in production. So, for each of them, the number of hours in column 4 is the same as the total working hours per month in column 2.

Mrs Hall, Mr Smith and Miss Peters do not work in production. They do other kinds of work. Their salaries and wages are indirect labour costs (see column 6).

Some people work in production and also do other jobs that are not directly related to the production of a particular product or service. For example, look at the information on the Labour Costs Form for Mr Anderson:

- **Half of his time, 80 hours per month, Mr Anderson does sewing. He works directly in production. His salary for this work is a direct labour cost.**
- **The other half of his time, 80 hours per month, Mr Anderson supervises the production of all the garments that Reliable Tailors make. His salary for this work is an indirect labour cost (see column 6).**

Column 5. Pay for time in production

In column 5 on the Labour Costs Form, write down how much of each person's monthly

pay is for time spent working in production. If a person works full-time in production, the whole wage is a direct labour cost. If a person works part-time in production, divide the wage into direct labour costs and indirect costs.

For example at Reliable Tailors:

- **Mr Anderson's total salary is 1000 NU.**
- **He spends half his time in production and half his time supervising.**
- **Half his salary, 500 NU, is for time spent in production and is a direct labour cost.**

So 500 NU is written down as pay for time in production in column 5 on the Labour Costs Form.

Indirect labour costs

Columns 6 and 7 on the Labour Costs Form give you information about the costs for employees who do not work directly in production. Their wages, salaries and benefits are indirect labour costs.

Column 6. Hours not in production per month

In column 6 on the Labour Costs Form, write down how many hours each employee in the business does work that is not directly in the production of a particular product or service.

At Reliable Tailors:

- **Mr Anderson works 80 hours supervising.**
- **Mrs Hall works full-time in sales and administration.**
- **Mr Smith works full-time as messenger and cleaner.**
- **Miss Peters works 40 hours assisting with record-keeping.**

Column 7. Pay for time not in production

In column 7 on the Labour Costs Form, write down how much of each person's monthly pay is for time spent doing work that is not directly related to the production of a particular product or service.

For example, at Reliable Tailors:

- **Half of Mr Anderson's salary, 500 NU, is for supervision which is not directly related to the production of only one particular product.**
- **The full wage for Mr Smith, the messenger, is for work that is not in production.**

Direct labour costs per hour

Use the bottom part of the Labour Costs Form to calculate the direct labour costs per hour for your business.

To calculate the direct labour costs per hour:

- **divide the total pay for time in production per month (the total of column 5) by the total number of hours worked in production per month (the total of column 4).**

At Reliable Tailors, the direct labour costs per hour are 3.30 NU. Look to see how Reliable Tailors do their calculation.

The direct labour costs per hour tell you how much your employees who work directly in production cost your business each hour. You need this information to calculate the direct labour costs for each product your business makes, or each service your business provides.

Calculate direct labour costs per item

To do costing you must know the time it takes to make each item and the direct labour costs per hour. Then you can use the Product Costing Form to work out the direct labour costs per item.

Reliable Tailors have calculated that their direct labour costs per hour are 3.30 NU. Now they need to work out how long it takes to make one protective coat. Then they can calculate the direct labour costs for one protective coat.

In Step 2 of the Product Costing Form write down:

- **the different activities or types of work your employees do to make the item**
- **how long each activity takes.**

You can see how Reliable Tailors have estimated how long it takes to make one protective coat.

Reliable Tailors estimate that it takes one and a half work-hours to make one protective coat. A work-hour is not always the same as an hour on the clock. It is important to know the difference when you do costing.

The number of work-hours is the total amount of time you need to make one item or provide one service. The time each person works on the item or service is added up to give the total time.

It takes 1.5 hours to complete one coat from cutting to packing. But at Reliable Tailors, each employee only does one activity on each coat. So they can make many coats in 1.5 hours. But it still takes 1.5 work-hours to do all the activities on one coat.

When you know how many work-hours it takes to make one item, you can work out the direct labour costs per item. Do the calculation on the Product Costing Form. To calculate

the direct labour costs per item:

- **multiply the total work-hours it takes to make one item by the direct labour costs per hour for your business.**

Reliable Tailors know that:

- **it takes 1.5 total work-hours to make one coat**
- **the direct labour costs for one hour are 3.30 NU.**

So, by multiplying, they calculate that the direct labour costs for one protective coat are 4.95 NU. You can see how Reliable Tailors calculate the direct labour costs for one coat.

STEP 3. CALCULATE INDIRECT COSTS

COSTING FOR A MANUFACTURER OR SERVICE OPERATOR

STEP 1. Calculate direct material costs

STEP 2. Calculate direct labour costs

STEP 3. Calculate indirect costs

STEP 4. Add up total costs

Reliable Tailors have completed Steps 1 and 2 of their costing. They have filled in part of their Product Costing Form. Now Reliable Tailors know that the direct material costs for one coat are 30.40 NU, and that the direct labour costs for one coat are 4.95 NU.

Indirect costs are all other costs, except direct costs, that you have for running your business, for example, rent and electricity.

Here is how Reliable Tailors calculate their indirect costs:

INDIRECT COSTS PER MONTH		
		NU
	Rent	500
	Electricity and water	150
	Maintenance of equipment	400
	Insurance (equipment, stock, building)	200
A	Transport	250
	Interest on loan	500
	Stationery	20
	Telephone and postage	90
	Advertising and other promotion	150
B	Indirect labour (from Labour Costs Form, total of column 7)	1830
C	Thread, pins, etc.	100
D	Scissors, needles, etc.	130

E	Depreciation	350
	Miscellaneous, e.g. teas, cleaning materials	100
	Total indirect costs per month	**4770 NU**

*Different businesses have different indirect costs. Work out how much money your business **normally** spends for each indirect cost every month.*

Costs that you do not pay every month

You need to calculate indirect costs per month. Your business may have some indirect costs that you do not pay every month, for example, insurance, licences, tools and stationery. For those costs, divide the cost by the number of months the item is used. For example, Reliable Tailors buy stationery such as receipt books every 3 months. They pay about 60 NU each time. So they calculate that their cost per month for stationery is 20 NU:

$$\frac{60\,\text{NU}}{3\,\text{months}} = 20\,\text{NU per month}$$

Explanations of some of the indirect costs for Reliable Tailors

A. *Transport*

In the amount for transport, Reliable Tailors include all transport that their business has to pay for. For example, when they:

- **collect materials**
- **deliver finished garments to customers.**

Transport is usually an indirect cost because it is difficult to calculate how much the transport costs are for one item. For example, transport costs for one protective coat are difficult to work out because:

- **when Reliable Tailors get a delivery of fabric for coats they often get fabrics for other garments in the same delivery**
- **when Mrs Hall uses transport to meet customers, she may sell overalls and other garments, not only protective coats.**

B. *Indirect labour*

Reliable Tailors use information from their Labour Costs Form to get the amount they spend on indirect labour per month. They copy the total amount from column 7 on their Labour Costs Form.

C. *Thread, pins, etc.*

At Reliable Tailors, thread is an indirect cost because:

- **the small amount of thread needed for each garment is difficult to calculate**
- **the cost of thread for each garment is very small.**

D. *Scissors, needles, etc.*

In this amount, Reliable Tailors include the cost of scissors, measuring tapes and other less expensive equipment or tools which are needed for the business. All costs for less expensive tools and other equipment must be included in the indirect costs.

E. *Depreciation*

If equipment has a high value and lasts for a long time, you do not write down the cost of buying it. Instead you calculate how much value the equipment will lose every month you use it. This is called depreciation.

Sometimes Reliable Tailors buy expensive equipment like sewing machines. The following section explains depreciation and shows you how Reliable Tailors calculate depreciation in their business.

Depreciation

Depreciation is the loss in value of equipment and is a cost to your business. The total cost of buying the equipment is divided into the number of years you expect to use it.

For some businesses, in particular manufacturers like Reliable Tailors, costs for depreciation are high. So, it is important to include depreciation in the indirect costs for your business.

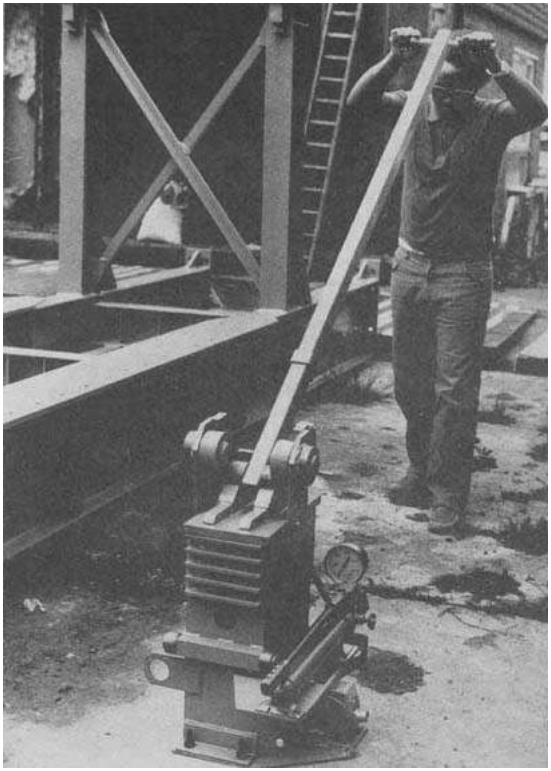
Equipment is all the machinery, tools, workshop fittings, office furniture, etc., that your business needs. Learn more about buying equipment in the BUYING chapter.

Find out if your business has equipment for which you should calculate depreciation

In general, only calculate depreciation for equipment which:

- **has a high value, and**
- **lasts for a long time.**

Reliable Tailors calculate depreciation for their sewing machines. They do not calculate depreciation for scissors and other less expensive equipment.



Figure

What equipment do you have in your business? Do you calculate depreciation for your equipment?

Estimate for how long you can use the equipment

To estimate how long you expect to use your equipment, you can:

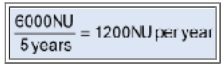
- **use your own experience**
- **ask suppliers**
- **ask other businesses using the same or similar equipment.**

Reliable Tailors have 4 sewing machines. They estimate that they can use 3 sewing machines for 5 years. They bought the fourth sewing machine second-hand and they estimate that they will use it for only 3 years.

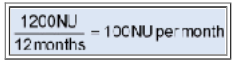
Calculate the depreciation

For example, Reliable Tailors paid 6000 NU for sewing machine 1 when they bought it in 1995. They expect to use it for 5 years.

First, they calculate the depreciation per year:



Then, they divide the amount per year into months:

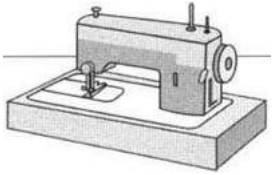


Reliable Tailors calculate the depreciation for the other 3 machines in the same way.

If you have more than one machine, or other equipment, add up the depreciation per month for each piece of equipment to get the total amount you need to include in your monthly indirect costs.

Reliable Tailors add up the amounts for depreciation per month for all 4 sewing machines:

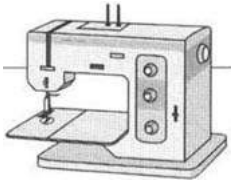
Reliable Tailors include the total amount for depreciation per month in their indirect costs.



figure

Sewing machine 1
100 NU

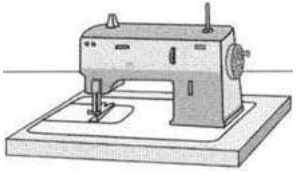
+



figure

Sewing machine 2
100 NU

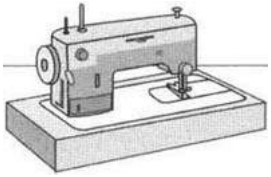
+



figure

Sewing machine 3
100 NU

+



figure

Sewing machine 4
50 NU

= Total
350 NU

Depreciation is a cost to your business. Learn in the RECORD-KEEPING chapter how to enter depreciation as a cost in your records.

A carpentry business have just bought a circular saw. Help them to calculate the depreciation per month for the circular saw. Here is the information you need:

- *They paid 4500 Nil for the saw.*
- *They expect to use the saw for 5 years.*

What is the depreciation per month for the circular saw?

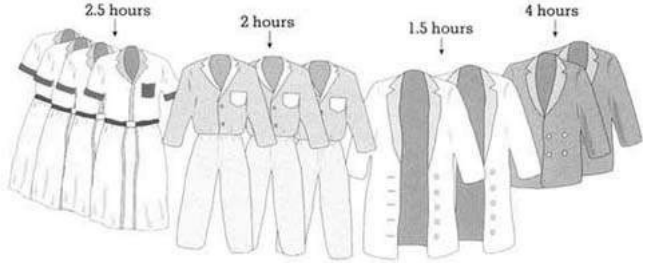
The depreciation per month for the circular saw is 75 NU.

Calculate indirect costs per item

The total indirect costs for a business must be divided and shared by each product or service the business makes or sells. The indirect costs for one item depend on how long it takes to make that item. The longer it takes to make, the higher the indirect costs for that item.

Normally, the total indirect costs for Reliable Tailors are 4770 NU per month. Reliable Tailors must add a part of the 4770 NU to the costs of each item the business makes.

Reliable Tailors' monthly indirect costs of 4770 NU are shared among their products



Figure

Reliable Tailors make protective coats, overalls and other garments.
Different garments take different amounts of time to make.
It takes Reliable Tailors 1.5 hours (90 minutes) to make one coat.
It takes 2 hours to make one overall. Protective coats take less time than overalls.
So the indirect costs for a protective coat are lower than the indirect costs for an overall.

To calculate the indirect costs for one item use Step 3 of the Product Costing Form. First calculate the indirect costs per hour for all items your business makes.

To work out the indirect costs per hour for your business:

- **divide the total indirect costs per month by the total hours in production per month (from the Labour Costs Form).**

Then:

- **multiply the total time per item (from Step 2 of the Product Costing Form) by the indirect costs per hour.**

You can see how Reliable Tailors do their calculations of the indirect costs for one protective coat on the Product Costing Form. The indirect costs for a coat are 7.95 NU.

STEP 4. ADD UP TOTAL COSTS

COSTING FOR A MANUFACTURER OR SERVICE OPERATOR

STEP 1. Calculate direct material costs

STEP 2. Calculate direct labour costs

STEP 3. Calculate

indirect costs

STEP 4. Add up total costs

Reliable Tailors have completed Steps 1, 2 and 3 of costing a protective coat. They now have all the amounts they need to work out the total costs of a coat. To do Step 4, they add up the amounts on the Product Costing Form:

Step 1		*Step 2*		*Step 3*		*Step 4*
Direct material costs	**+**	Direct labour costs	**+**	Indirect costs	**=**	**TOTAL COSTS**
30.40 NU		*4.95 NU*		*7.95 NU*		*4330 NU*

Now Reliable Tailors know the total costs of a coat. See the completed Product Costing Form.

They follow the same 4 steps for costing all other products they make. They use a separate Product Costing Form for each product. If the costs are not the same, Reliable Tailors use a separate Product Costing Form for each quality or design.

Remember, you only need one Labour Costs Form for the whole business. Reliable Tailors can use the information from their Labour Costs Form for costing all their products.

The total costs of a product or service are not the price you charge your customers. The total costs are only a starting point to decide what price to charge your customers. Learn how to set your prices in the MARKETING chapter.

RELIABLE TAILORS
PRODUCT COSTING FORM for manufacturers and service operators

PRODUCT Protective coat, white

1. DIRECT MATERIAL COSTS PER ITEM

1	2	3	4
Raw material	Buying costs	x Quantity per item	= Costs per item
Fabric, white cotton drill	15.00 NU /metre	2m	30.00 NU
Buttons, jar of 100 buttons	10.00 NU/jar (0.10 NU/button)	4 buttons	0.40 NU

30.40 NU (Total) → 30.40 NU (Direct MATERIAL costs per item)

2. DIRECT LABOUR COSTS PER ITEM

Activity	Time per item (work-hours)
Cutting	15 mins
Overlocking	10 mins
Sewing	30 mins
Button holes, buttons	20 mins
Quality control, ironing, folding & packing	15 mins

FROM LABOUR COSTS FORM

1.5 hrs (Total (90 mins)) x 3.30 NU (Direct labour costs per hour) = 4.95 NU (Direct LABOUR costs per item)

3. INDIRECT COSTS PER ITEM

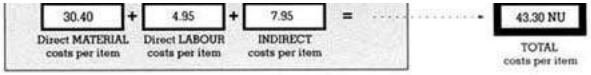
• **Indirect costs per hour**

Total indirect costs per month → 4770 NU
divided by →
Total hours in production per month → 900 hours
= 5.30 NU (Indirect costs per hour)

FROM COL. 4 LABOUR COSTS FORM

1.5 hrs (Total time per item (work-hours)) x 5.30 NU (Indirect costs per hour) = 7.95 NU (INDIRECT costs per item)

4. TOTAL COSTS PER ITEM

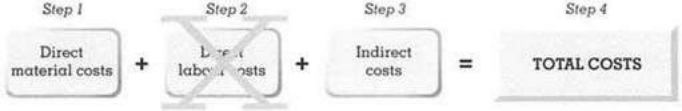


Figure

Costing for a retailer or wholesaler

If you are a manufacturer or service operator, go to ***Costing for a manufacturer or service operator****.*

Retailers and wholesalers have the same types of costs and can normally do costing in the same way. Some costs for retailers and wholesalers are different from the costs manufacturers and service operators have:



Figure

COSTING FOR A RETAILER OR WHOLESALER

STEP 1. Calculate direct material costs

STEP 2. Calculate indirect costs

STEP 3. Add up total costs

Retailers and wholesalers:

- **have direct material costs. Retailers do not make products but they need goods to sell. The costs of buying goods to resell are the direct material costs for a retailer or wholesaler.**

- **do not have direct labour costs. They buy and sell goods made by other businesses. They often have employees assisting in the store but they do not have any employees making products. So, for a retailer or wholesaler, all wages and salaries are indirect costs.**

- **have indirect costs such as rent and electricity. For a retailer or wholesaler, indirect costs are all the costs the business has except for the costs of buying goods to resell.**

Retailers and wholesalers follow 3 steps to calculate the total costs for each product. They can use the Product Costing Form for the calculations.

Step 1		*Step 2*		*Step 3*
Calculate		*Calculate*		*Add up*
Direct material costs	**+**	Indirect costs	**=**	**TOTAL COSTS**

To explain how a retailer or wholesaler does costing we use *The General Store* as an example.

STEP 1. CALCULATE DIRECT MATERIAL COSTS

COSTING FOR A RETAILER OR WHOLESALER

STEP 1. Calculate direct material costs

STEP 2. Calculate indirect costs

STEP 3. Add up total costs

Direct material costs for a retailer or wholesaler are the costs of buying goods to resell.

The General Store calculate the direct material costs per item for the different products their store sells. This is how they calculate the direct material costs for baked beans:

- **The General Store pay 36.00 NU for a box of baked beans.**
- **There are 12 cans in a box.**
- **The direct material cost of one can of baked beans is 3.00 NU.**

$$\frac{36.00\text{NU}}{12\text{cans}} = 3.00\text{NU per can}$$

The General Store does not include any cost for transport. They count transport as an indirect cost for the whole business. In the Product Costing Form, The General Store write the name of the product. In column 1, they write how much they pay for one item.

STEP 2. CALCULATE INDIRECT COSTS

**COSTING
FOR A RETAILER OR
WHOLESALER**

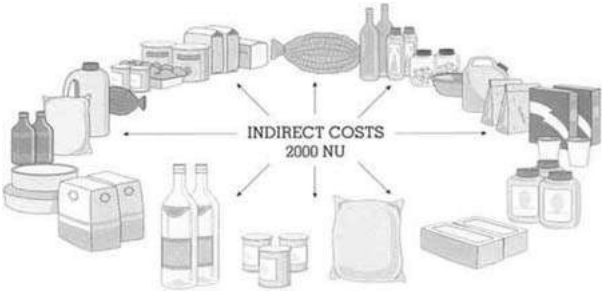
STEP 1. Calculate direct material costs

STEP 2. Calculate indirect costs

STEP 3. Add up total costs

Indirect costs are all other costs that you have for running your business, for example, rent and electricity. For a retailer or wholesaler, indirect costs are all other costs, except costs for buying goods to resell.

The total indirect costs for a business must be divided and shared by each item the business sells. Normally, the total indirect costs for The General Store are 2000 NU per month. The General Store must add a part of the 2000 NU to the costs of each item their business sells.



Figure

The General Store wants to calculate the indirect costs for one can of baked beans. To do this, they must work out the indirect costs charge (%) for their business. Then they can calculate how much to add to the direct material costs for each can of baked beans to cover the total indirect costs.

The indirect costs charge is a percentage that you add to each item you sell to cover the total indirect costs.

3.00 NU ? ?

Figure

Direct material costs per item	X	Indirect costs charge %	=	Indirect costs per item

By calculating the indirect costs charge, and adding it to each and every item your business

sells, you make sure that you cover your total indirect costs.

The General Store do the calculations for the indirect costs charge on the top part of their Product Costing Form.

To calculate the indirect costs charge and the indirect costs per item for every product you sell, follow these steps:

1. **Calculate total direct material costs per month**
2. **Calculate total indirect costs per month**
3. **Calculate the indirect costs charge**
4. **Calculate the indirect costs per item.**

1. Calculate total direct material costs per month

First, calculate how much money your business normally spends each month to buy goods to resell.

The General Store have many regular suppliers. They buy some goods:

- **many times a week, for example, bread**
- **once a week, for example, dry foods and groceries such as sugar, salt and margarine**
- **once a month, for example, clothes.**

They add up the receipts for all the goods their business normally buys during a month.

Some months The General Store buy a lot and some months they only buy a little but normally they buy goods to resell for 10,000 NU per month.

The General Store write the amount for total direct material costs per month at the top of their Product Costing Form.

The General Store does not include any transport costs in the total direct material costs for buying goods. It is difficult to calculate the transport costs for each item. They cannot just divide the cost and add the same amount to each item in the delivery because:

- **there can be hundreds of items in one delivery, sometimes more, sometimes less, but the cost for transport is often the same for each delivery**
- **in each delivery, some goods cost a lot and some cost less**
- **some items are big and some are small.**

So, retailers and wholesalers should calculate their transport costs as indirect costs. Below, you can see how The General Store include transport costs as an indirect cost for their business.

How much money does your business normally spend each month on total direct material costs?

2. **Calculate total indirect costs per month**

The General Store work out the total indirect costs for their business per month. Remember, for a retailer or wholesaler, indirect costs are all costs, except direct material costs, that you have for running your business.

The General Store list the indirect costs for the whole business. The list must include all the indirect costs per month for your business.

Here are the indirect costs for The General Store:

	INDIRECT COSTS PER MONTH		
			NU
	Rent		300
	Electricity		75
	Repairs and maintenance		50
	Insurance		125
A	Transport		250
	Interest on loan		150
	Advertising and other promotion		25
B	Indirect labour:	1 shop assistant	300
		Owner's salary	550
C	Depreciation		20
	Wrapping paper		75
	Stationery		10
	Licence		5
	Miscellaneous, e.g. teas, cleaning materials		65
	Total indirect costs per month		**2000 NU**

Different businesses have different indirect costs. Work out how much money your business normally spends for each indirect cost every month. Make sure that your list of indirect costs is complete.

Costs that you do not pay every month

Your business may have some indirect costs that you do not pay each month, for example, insurance, licence and stationery. For those costs, divide the cost by the number of months the item is used. For example, The General Store pay 60 NU per year for a licence to operate the business. The cost per month is 5 NU:

$$\frac{60\ \text{NU}}{12\ \text{months}} = 5\ \text{NU per month}$$

Explanations of some of the indirect costs for The General Store

A. *Transport*

The General Store add up all the transport costs that their business has per month. This includes transport costs for:

- **visiting suppliers, for example, bus fares and taxis**
- **buying goods for the business**
- **delivering goods to customers**
- **delivery by suppliers.**

B. *Indirect labour*

Retailers and wholesalers buy and sell goods. They do not make any products. They do not have any employees directly involved in the production of goods. So, retailers and wholesalers do not have any direct labour costs. All salaries, wages and benefits for employees and owners are indirect labour costs.

C. *Depreciation*

Your business should calculate depreciation on equipment that:

- **has a high value, and**
- **lasts for a long time.**

For example, The General Store buy a delivery bicycle for their business. The bicycle has a high value of 1200 NU. The General Store estimate that they will use it for 5 years. But the bicycle will lose value during the 5 years. The loss in value is called depreciation and is a cost to the business.

Figure

To work out how much the depreciation of the bicycle costs their business each year, The General Store divide the total cost of buying the bicycle by the number of years they expect to use it:

$$\frac{1200\text{NU}}{5\text{ years}} = 240\text{NU per year}$$

Then they divide 240 NU to work out the depreciation per month:

$$\frac{240\text{NU}}{12\text{ months}} = 20\text{NU per month}$$

The General Store write the amount per month in their list of indirect costs.

The General Store write down all indirect costs per month on their list of indirect costs. They add them up to get the total indirect costs per month. They write the amount at the top of their Product Costing Form.

Make sure that you include all different indirect costs your business has when you do your costing

3. Calculate the indirect costs charge

To calculate the indirect costs charge, divide the total indirect costs per month by the total direct material costs per month and multiply by 100. See The General Store's calculation.

The General Store work out that the indirect costs charge for their business is 20%. The 20% indirect costs charge means that The General Store must add 20% to the direct material costs of each can of baked beans.

All retailers and wholesalers have different direct material costs and different indirect costs. So, the indirect costs charge will be different for every business. Work out the indirect costs charge for your business.

4. Calculate indirect costs per item

The indirect costs charge tells you what percentage to add to the direct material costs of all the goods you sell so you can cover your total indirect costs. Now you have to calculate the amount to add to each item.

The indirect costs charge for The General Store is 20%. So The General Store must add 20% to the direct material costs of all the goods they sell.

Here is how they calculate the amount to add to each can of baked beans:

Figure

3.00 NU $\frac{20}{100}$ 0.60 NU

Direct material costs per item	**X**	Indirect costs charge %	**=**	Indirect costs per item

The indirect costs for a can of baked beans are 0.60 NU. Now The General Store know that they must add 0.60 NU to each can of baked beans to cover their total indirect costs.

The General Store use column 2 of the Product Costing Form to work out the amount to be added to each product. They use the same indirect costs charge, 20%, to calculate the amount for all the products their business sells.

STEP 3: ADD UP TOTAL COSTS

COSTING FOR A RETAILER OR WHOLESALER

STEP 1. Calculate direct material costs

STEP 2. Calculate indirect

costs

STEP 3. Add up total costs

To get the total costs per item, you add up the amounts for direct material costs and indirect costs.

The General Store now has all the information they need to work out the total costs for a can of baked beans.

Figure

Step 1 *Step 2* *Step 3*

Direct material costs	+ Indirect costs	= **TOTAL COSTS**
3.00 NU	*0.60 NU*	*3.60 NU*

This is how The General Store add up the total costs for baked beans, and for all their other products, on the Product Costing Form:

PRODUCT COSTING FORM for retailers and wholesalers

INDIRECT COSTS CHARGE (%)

Total indirect costs per month → 2000 NU
divided by →
Total direct material costs per month → 10000 NU
x 100 = 20 % (Indirect costs charge)

Product	1 Direct material costs per item	+	2 Indirect costs per item (column 1 x indirect costs charge)	=	3 Total costs per item
Groceries & dry foods					
Farmers baked beans, 450g	3.00 NU		(3.00 NU x 20/100 =) 0.60 NU		3.60 NU
Pride flour, 1kg	3.20 NU		(3.20 NU x 20/100 =) 0.64 NU		3.84 NU
Best Foods cooking oil, 750 g	4.55 NU		(4.55 NU x 20/100 =) 0.91 NU		5.46 NU
Star sugar, 2kg	4.71 NU		(4.71 NU x 20/100 =) 0.94 NU		5.65 NU
Eastern Blend tea, 250g	1.40 NU		(1.40 NU x 20/100 =) 0.28 NU		1.68 NU

Figure

The total costs of a product are the starting point to decide what price to charge your customers. To make a profit, your price must be higher than the total costs of the product. Learn how to set your prices in the MARKETING chapter.

Review

Summary

Every business has costs. Costs are all the money your business spends to make and sell your products or services. Costing is the way you calculate the total costs of making or selling a product, or providing a service.

Costing helps your business to:

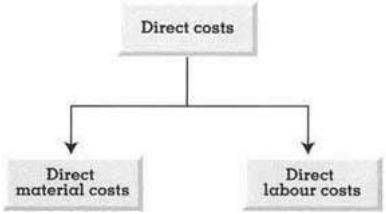
- **set your prices**
- **reduce and control your costs**
- **make better decisions about your business**
- **plan for the future.**

All businesses have two types of costs:

- **direct costs**
- **indirect costs.**

Direct costs are all costs that are directly related to the products or services your business makes or sells. There are two types of direct costs:

- **direct material costs**
- **direct labour costs.**



Figure

Indirect costs are all other costs, except direct costs, that you have for running your business, for example, rent and electricity. Indirect costs are normally not directly related to one particular product or service. Indirect costs are sometimes called overheads or expenses.

You must understand the different types of costs to be able to calculate the total costs for any product or service your business makes or sells:

Direct material costs	**+**	Direct labour costs	**+**	Indirect costs	**=**	**TOTAL COSTS**

If you are a manufacturer or service operator, use a Product Costing Form and follow 4 steps to calculate the total costs of making and selling any product or service in your business:

Step 1: Calculate direct material costs
Step 2: Calculate direct labour costs
Step 3: Calculate indirect costs
Step 4: Add up total costs.

Use a separate Product Costing Form for costing each product or service.

If you are a retailer or wholesaler, use a Product Costing Form and follow 3 steps to calculate the total costs of each product you sell:

Step 1: Calculate direct material costs
Step 2: Calculate indirect costs
Step 3: Add up total costs.

Retailers and wholesalers do not make products so they do not have any direct labour costs.

Use the total costs of a product as the starting point to decide what price to charge your customers.

What did you learn in this chapter?

Now that you have worked through this chapter, try these practical exercises. The exercises will remind you of what you have learned and help you to improve the costing in your business.

Compare your answers with the Answers. If you find it difficult to work out an answer, read the relevant part of the manual again. The best way to learn is to finish an exercise before you look at the answers. Check the list of Useful Business Words.

*You have learned more about costing in this chapter. But what you have learned does not help you until you use the new knowledge in the day-to-day running of your business. Remember to do the **Action Plan** to improve the costing in your business.*

COSTING AT BEAUTY HAIR SALON

This exercise is for manufacturers and service operators. *If you are a retailer or wholesaler, do the exercise **COSTING AT READER'S BOOKSHOP**.*

Beauty Hair Salon is a service operator. Help Beauty Hair Salon do the costing of a perm.

1. Use the information below to fill in part 1 of the Product Costing Form and to calculate the direct material costs for one perm.

To make a perm, Beauty Hair Salon use perm lotion and neutralizer:

Perm lotion:

- *a 5 litre container makes 50 perms*
- *each 5 litre container costs 87.50 Nil.*

Neutralizer:

- *a 2.5 litre container makes 40 perms*
- *each 2.5 litre container costs 30.00 Nil.*

2. Use the information below to complete the Labour Costs Form for Beauty Hair Salon. Then use the information from the Labour Costs Form to fill in part 2 of the Product Costing Form and to calculate the direct labour costs for one perm.

There are 4 people working at Beauty Hair Salon:

- *Miss Mrisho who is the owner of Beauty Hair Salon. She works full-time (160 hours per month) doing hairdressing. Her salary is 1500 Nil per month.*

- *Mrs Kiduko who works full-time (160 hours per month) also doing hairdressing. Her wage is 730 NU per month.*

- *Miss Missano who does hairdressing only on Saturday mornings (20 hours per month). Her wage is 150 NU per month.*

- *Mrs Emesu who serves tea, does cleaning, laundry, messenger jobs etc. She works part-time (120 hours per month). Her wage is 300 NU per month.*

The total time needed to make a perm for one customer is one and a half hours. This includes all activities such as shampooing, applying perm lotion, rollers and neutralizer, conditioning, drying and all the rinsing in between.

LABOUR COSTS FORM for manufacturers and service operators

			Direct labour costs		Indirect labour costs	
1	2	3	4	5	6	7
Employee	Total working hours per month	Total monthly pay	Hours in production per month	Pay for time In production	Hours NOT in production per month	Pay for time NOT in production
M Mrisho, owner, hairdressing	160	1500 NU	160	1500 NU	—	—
S Kiduko, hairdressing						
T Missano, hairdressing						
O Emesu, cleaning, laundry, etc.						
Total						

DIRECT LABOUR COSTS PER HOUR

Total pay for time in production → from column 5
divided by →
Total hours in production per month → from column 4

= ____ = [ ]

DIRECT labour costs per hour

Figure

3. Use the information below to fill in the indirect costs for Beauty Hair Salon. Then do the calculation for indirect costs per item in part 3 of the Product Costing Form for perms.

At Beauty Hair Salon:

- *Rent costs 428 NU per month*

- *Transport costs 70 NU per month*
- *Electricity and water cost 200 NU per month*
- *Advertising and other promotion cost 75 NU per month*
- *Licence costs 120 NU per year*
- *Shampoo, conditioner, etc, cost 100 NU per month*
- *Scissors, combs, brushes, towels, shower caps, perm rods, rubber gloves, etc, cost 300 NU per 6 months*
- *Beauty Hair Salon bought a hair dryer in 2000 and paid 720 NU for it. They estimate that they will use it for 3 years.*
- *Miscellaneous: cleaning materials, soap, teas, etc. cost 80 NU per 2 months.*

Figure

INDIRECT COSTS PER MONTH
Rent
Electricity and water

Electricity and water
Transport
Advertising and promotion
Indirect labour (from Labour Costs Form, total oi column 7)
Depreciation (hair dryer)
Licence
Shampoo, conditioner, etc.
Scissors, combs, brushes, towels, shower caps, perm rods, etc.
Miscellaneous: cleaning materials, teas, etc.
Total indirect costs per month

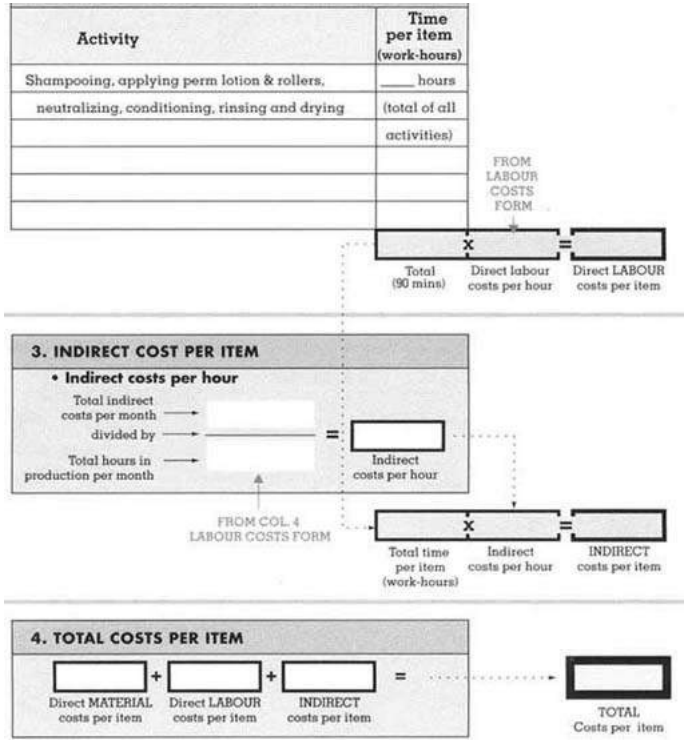
PRODUCT COSTING FORM for manufacturers and service operators

PRODUCT Perms

1. DIRECT MATERIAL COSTS PER ITEM

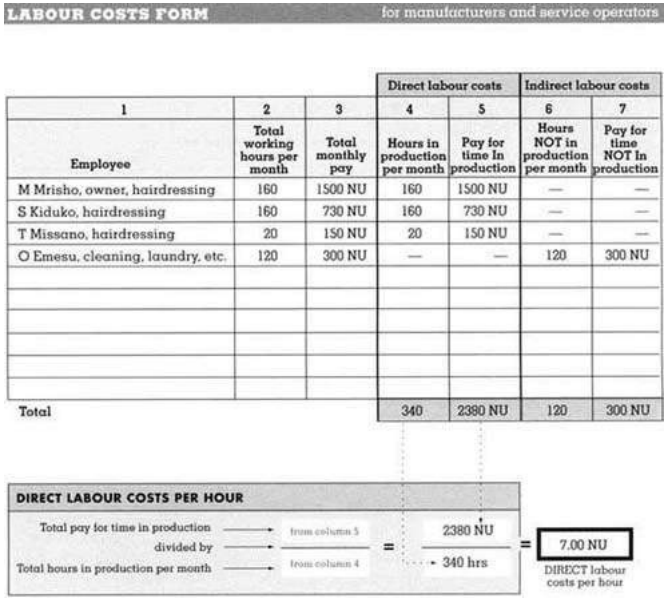
1	2	3	4
Raw Material	Buying costs	x Quantity per item	= Costs per item
Perm lotion, 5 litres	87.50 NU per	100ml	1.75 NU
	container	(1/50 of a	
		container)	
Neutralizer, 2.5 litres			
		Total	Direct MATERIAL costs per item

2. DIRECT LABOUR COSTS PER ITEM



Figure

1. Here is the completed Labour Costs Form, list of indirect costs and Product Costing Form for perms:



LABOUR COSTS FORM for manufacturers and service operators

			Direct labour costs		Indirect labour costs	
1	2	3	4	5	6	7
Employee	Total working hours per month	Total monthly pay	Hours in production per month	Pay for time in production	Hours NOT in production per month	Pay for time NOT in production
M Mrisho, owner, hairdressing	160	1500 NU	160	1500 NU	—	—
S Kiduko, hairdressing	160	730 NU	160	730 NU	—	—
T Missano, hairdressing	20	150 NU	20	150 NU	—	—
O Emesu, cleaning, laundry, etc.	120	300 NU	—	—	120	300 NU
Total			340	2380 NU	120	300 NU

DIRECT LABOUR COSTS PER HOUR

Total pay for time in production (from column 5) divided by Total hours in production per month (from column 4) = 2380 NU / 340 hrs = 7.00 NU DIRECT labour costs per hour

Figure

INDIRECT COSTS PER MONTH

	NU
Rent	428
Electricity and water	200
Transport	70
Advertising and promotion	75
Indirect labour (from Labour Costs Form, total of column 7)	300
Depreciation (hair dryer)	20
Licence	10

Shampoo, conditioner, etc.	100
Scissors, combs, brushes, towels, shower caps, perm rods, etc.	50
Miscellaneous: cleaning materials, teas, etc.	40

Total indirect costs per month **1293 NU**

- To calculate the depreciation per month for the hair dryer, divide the depreciation per year into months:

$$\frac{240\text{NU}}{12\text{months}} = 20\text{NU per month}$$

- To calculate the costs per month for scissors, combs, brushes, etc. divide the total cost by the number of months they normally use these materials before they buy again, 6 months:

$$\frac{300\text{NU}}{6\text{months}} = 50\text{NU per month}$$

- To calculate the costs per month for miscellaneous items, divide the total cost by the number of months they use the items before they buy again, 2 months:

$$\frac{80\text{NU}}{2\text{months}} = 40\text{NU per month}$$

PRODUCT COSTING FORM for manufacturers and service operators

PRODUCT Perms

1. DIRECT MATERIAL COSTS PER ITEM

1	2		3		4
Raw material	Buying costs	x	Quantity per item	=	Costs per item

Perm lotion, 5 litres	87.50 NU per	100ml	1.75 NU
	container	(1/50 of a	
		container)	
Neutralizer, 2.5 litres	30.00 NU per	63ml	0.75 NU
	container	(1/40 of a	
		container)	

2.50 NU → 2.50 NU

Total — Direct MATERIAL costs per item

2. DIRECT LABOUR COSTS PER ITEM

Activity	Time per item (work-hours)
Shampooing, applying perm lotion & rollers,	1.5 hours
neutralizing, conditioning, rinsing and drying	(total of all
	activities)

FROM LABOUR COSTS FORM

1.5 hrs X 7.00 NU = 10.50 NU

Total — Direct labour costs per hour — Direct LABOUR costs per item

3. INDIRECT COSTS PER ITEM

• **Indirect costs per hour**

Total indirect costs per month → 1293 NU

divided by →

Total hours in production per month → 340 hours

= 3.80 NU

Indirect costs per hour

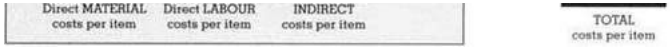
FROM COL. 4 LABOUR COSTS FORM

1.5 hrs X 3.80 NU = 5.70 NU

Total time per Item (workihours) — Indirect costs per hour — INDIRECT costs per item

4. TOTAL COSTS PER ITEM

2.50 NU + 10.50 NU + 5.70 NU = 18.70 NU



Figure

COSTING AT READER'S BOOKSHOP

This exercise is for retailers and wholesalers. *If you are a manufacturer or service operator, do the exercise* ***COSTING AT BEAUTY HAIR SALON****.*

Reader's Bookshop is a retail business mainly selling books and stationery. Help Reader's Bookshop to calculate the indirect costs per item and the total costs per item for each product they have listed on their Product Costing Form below. For your calculations you also need this information:

- *Reader's Bookshop normally buy goods to sell for 6000 NU per month.*
- *Rent, electricity, wages and all other indirect costs are normally 1500 NU per month.*

PRODUCT COSTING FORM for retailers and wholesalers

INDIRECT COSTS CHARGE (%)

Total indirect costs per month → ☐
divided by → ═══ x 100 = ☐ Indirect costs charge
Total hours in production per month → ☐

	1	2	3
Product	Direct material costs per item +	Indirect costs per item (column 1 x indirect costs charge)	= Total costs per item
Pencils, HB	0.52 NU		
Ballpoint pens, blue	1.00 NU		
Markers, assorted colours	6.00 NU		
Exercise books, large	1.60 NU		
Envelopes, large brown	0.60 NU		
Envelopes, small brown	0.32 NU		
Adhesive tape	4.52 NU		

Figure

The completed Product Costing Form for Reader's Bookshop should have the amounts shown in the form below:

PRODUCT COSTING FORM for retailers and wholesalers

INDIRECT COSTS CHARGE (%)

Total indirect costs per month → 1500 NU
divided by →
Total direct material costs per month → 6000 NU

x 100 = 25 % (Indirect costs charge)

Product	1 Direct material costs per item	+	2 Indirect costs per item (column 1 x indirect costs charge)	=	3 Total costs per item
Pencils, HB	0.52 NU		(0.52 NU x 25/100 =) 0.13 NU		0.65 NU
Ballpoint pens, blue	1.00 NU		(1.00 NU x 25/100 =) 0.25 NU		1.25 NU
Markers, assorted colours	6.00 NU		(6.00 NU x 25/100 =) 1.50 NU		7.50 NU
Exercise books, large	1.60 NU		(1.60 NU x 25/100 =) 0.40 NU		2.00 NU
Envelopes, large brown	0.60 NU		(0.60 NU x 25/100 =) 0.15 NU		0.75 NU
Envelopes, small brown	0.32 NU		(0.32 NU x 25/100 =) 0.08 NU		0.40 NU
Adhesive tape	4.52 NU		(4.52 NU x 25/100 =) 1.13 NU		5.65 NU

Figure

- To calculate the indirect costs charge, divide the total indirect costs per month by the total direct material costs for buying goods per month and multiply by 100:

$$\frac{1500NU}{6000NU} - X\,100 - 25\%$$

- To calculate the indirect costs per item (column 2), multiply the direct material costs per item by the indirect costs charge: Pencils:

$$0.52NU \times \frac{25}{100} - 0.13NU$$

- To work out the total cost per item (column 3), add the direct material costs per item and the indirect costs per item: Pencils:

0.52NU-0.13NU-0.65NU

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Improve Your Business: Basics (ILO, 1999, 188 p.)

RECORD-KEEPING

IN THIS CHAPTER YOU WILL LEARN HOW TO

- **Keep records that improve your business**
- **Analyse your sales**
- **Analyse your costs**
- **Make a profit and loss statement**

- **Analyse both your profit and your net profit**

NOTE Since this book is intended for use in many different countries, we have used the term "NU" in the examples to represent an imaginary "National Unit of currency"

Keeping and using business records

WHAT IS RECORD-KEEPING?

To keep business records means to write down:

- **how much money your business receives, and**
- **how much money your business pays out.**

A transaction is any exchange of money for goods or services. Money comes in and goes out of the business through transactions. Here are two examples of transactions:

- **A customer gets goods from your business - your business gets money from the customer.**

- **You keep your business money in a savings account - the bank pays interest.**

In the transactions above, money comes in to a business. A business gets money mainly by selling goods or services.

A business spends money to pay for goods, raw materials, labour, rent, electricity and all other costs. In the transactions below, money goes out of a business:

- **Your business gets goods and raw materials - the supplier gets money from your business.**

- **You are the owner and you work at the business - the business pays you a salary.**

For good record-keeping you need to write down all your business transactions in an organized way in the order the transactions happened.

Do you keep business records? Do you record every transaction?

HOW CAN RECORDS IMPROVE YOUR BUSINESS?

Neat, accurate records can help you to find out how your business is doing. They can help you solve problems in your business.

- **If your business is doing well, use your records to find out why. Then find and plan ways to do even better.**

- **If your business is not doing well, use your records to find out what is wrong. Plan ways to solve the problems.**

Records can help you run your business in the following ways:

Records help you control your cash
Your records show you how much money your business should have at any point in time. Use your records to make sure that money does not disappear.

Records show you how your business is doing
Your records help you find problems before it is too late. Use your records to find out if something is going wrong, if costs are too high, if sales are falling, and so on.

Records show others how your business is doing
You need proper records when you apply for a loan, pay your taxes, and so on. Use

your records to show that everything is in order and that you are in control of your business.

Records help you plan for the future

Records show how well your business did in the past and how well it is doing now. When you know your business's strengths and weaknesses, you can plan properly for the future.

Figure

If you keep records, how do you use them to improve your business?

The record-keeping system

Your record-keeping system should be as simple as possible. You must be able to get all the information you need from your record-keeping, but the record-keeping system should not contain more information than that. A record-keeping system that has too much information is complicated and takes a lot of time to keep.

Your record-keeping system can have these parts:

- **Customers' Accounts Record**
- **Record Book**
- **Profit and Loss Statement.**

Customers' Accounts Record

If you sell on credit, write down how much each customer owes your business in a Customers' Accounts Record. When a customer pays, write the amount received both in the Customers' Accounts Record and in the Record Book.

Keep invoices and delivery notes for everything you buy on credit. It is a good idea to keep them in a file. You can call the file ***Unpaid Suppliers' Invoices****. When you pay for what you bought on credit, write the amount in the Record Book.*

The Record Book

The Record Book is the centre of your record-keeping. In the Record Book you write down:

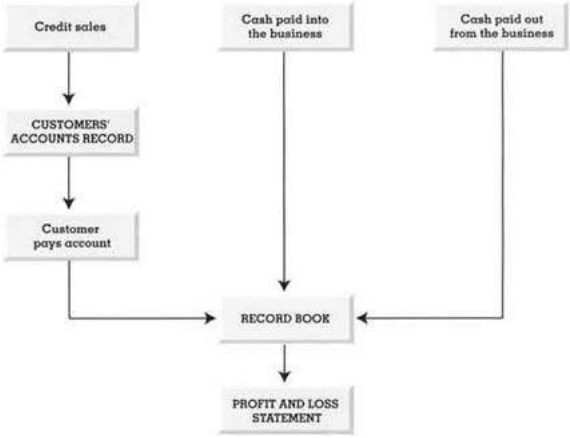
- **all money that comes into your business and where it came from - mostly from sales.**
- **all money that goes out of your business and what it was used for - mostly for costs.**

Learn more about different types of costs in the COSTING chapter.

Profit and Loss Statement

To see how your business is doing, use information from the Record Book to make a Profit and Loss Statement.

This is how the record-keeping system works:



Figure

CUSTOMERS' ACCOUNTS RECORD

When you sell goods or services on credit, money will be paid later for the goods or services your customers receive. You need written records of everything your business sells on credit. Use a Customers' Accounts Record.

In general it is risky to sell on credit. Some customers do not pay on time. Some customers do not pay at all. But credit can increase your sales, because good customers stay with your business. So it can be a good idea to give credit to reliable customers.

If you sell on credit, keep a record of all your credit sales. A written record of customers' credit helps you to know:

- **which customers owe money to your business**
- **how much money each customer owes**

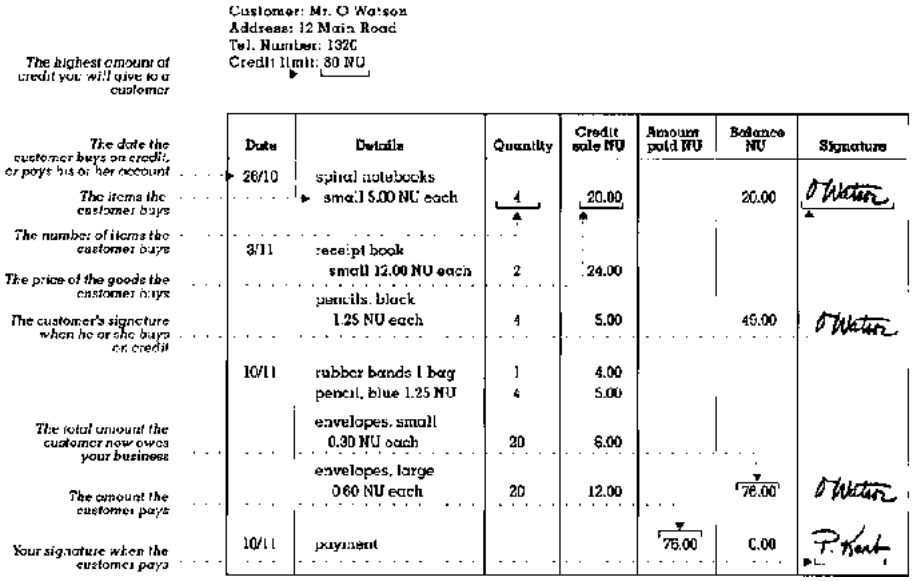
- **which customers pay their accounts on time.**

With written records, you avoid arguments with customers and you can follow up customers who do not pay their accounts on time.

Make your own Customers' Accounts Record, with one page or section for each customer. You can use:

- **a book with a page for each customer**
- **separate pages in a file**
- **a separate book for each customer, if you have very few customers who each buy a lot.**

This is the Customers' Accounts Record for one customer at *Reader's Bookshop:*



Figure

When the customer pays the account, write down the payment in the Customers' Accounts Record. The payment also means that cash comes into the business. So the transaction must be recorded in the Record Book.

The Record Book

The Record Book is where you write down all the transactions in your business. Make a habit of entering the day's transactions in your Record Book at the end of each day.

VOUCHERS

For your record-keeping you need proof to show that you received or paid out money. You need written proof of every transaction, even for small amounts such as stamps or small cash sales. Some examples of written proof are:

- **copies of receipts you give to customers when they buy from you**
- **receipts or invoices you get when you buy goods or raw materials, or receipts when you pay rent and electricity.**

If there is no written proof, you must write down the details about the transaction yourself. You can use a sheet of paper to write down the information you need. It is important to write:

- **when the transaction happened**
- **who was involved in the transaction**
- **what happened in the transaction**
- **how much money was involved in the transaction.**

In record-keeping, receipts and any other written proof of transactions are called vouchers. File and keep all the vouchers. They are the only proof that your records are correct. If there are mistakes in your record-keeping, the vouchers help you find out where the mistakes are.

The information you need to fill in your Record Book comes from the vouchers from all transactions in your business.

Give each voucher a number

Write a new number on each voucher. Start with number 1 for the first entry of the year. Then continue in number order with 2, 3, 4 and so on, until the end of the year. By numbering your vouchers this way, it is easy and quick to find the voucher you need. Give

the voucher its number when you record the transaction in the Record Book.

After you have recorded the vouchers in your Record Book, file all vouchers in number order. This way, your vouchers are in the same order in the file as they are recorded in your Record Book.

HOW TO FILL IN THE RECORD BOOK

All business transactions are recorded in columns in the Record Book. The different columns are for details about each transaction in your business. In different columns, you record transactions of different types. The amount of money for each transaction is recorded in two different columns.

Why must you record a transaction in two columns?

You need to control the money in your business. So you must enter each amount in the Cash or Bank columns. The Balance column shows you how much money your business has at any time.

You need to find out how your business is doing and plan for the future. So you must enter each amount in one more column that tells you how your business either earns or spends money.

money in

money out

Date	Details	Voucher No.	Cash			Bank			Sales	Direct material costs	Direct labour costs	Indirect costs
			In	Out	Balance	In	Out	Balance				

Figure

In what order should you record a transaction?

To avoid making mistakes, record every transaction in this order:

Step 1. Fill in the date, details and voucher number in the Record Book.

Step 2. Write the voucher number on the voucher.

Step 3. Record the amount of the transaction in two different columns. Enter the amount in the Cash or Bank column first. Then enter the same amount in one of the other columns.

Step 4. File the voucher.

Use an analysis book, an exercise book or any other suitable book for your Record Book. Draw the same columns as in *Modern Furniture's* Record Book on the next page.

Figure

Modern Furniture's Record Book

Modern Furniture is a manufacturing business, making furniture to order. People in town come to Modern Furniture and order the furniture they want. This is Modern Furniture's

Record Book for November.

	Date	Details	Voucher No.	Cash In	Cash Out	Cash Balance	Bank In	Bank Out	Bank Balance	Sales	Direct material costs	Direct labour costs	Indirect costs
A	1/11	B/f				380 –			2570 –				
B	10/11	Bought timber	340		280 –	100 –					280 –		
C	10/11	Sales	341	38 –		138 –				38 –			
C	10/11	Sales	342	340 –		538 –				340 –			
	11/11	Bought varnish, etc	343		210 –	328 –					210 –		
	18/11	Sales	344				2400 –		4970 –	2400 –			
D	23/11	Bank to cash box	345	2000 –		2328 –		2000 –	2970 –				
	23/11	Bought timber	346		1030 –	1298 –					1030 –		
E	23/11	Wage	347		310	988						310	
E	23/11	Wage	348		310 –	678 –						310 –	
F	23/11	Own salary	349		600 –	78 –						600 –	
	24/11	Sales	350	890 –		968				890			
	24/11	Electricity	351		90 –	878 –							90 –
	27/11	Rent	352		250 –	628 –							250 –
										3728	1520	1220	340

These balances show the amounts of money in the cash box and the bank at the end of the month. The balances are brought forward to the first day of the following month.

These amounts are totals for the month.

Figure

Date: Write the date of the transaction.

Details: Describe the transaction.

Voucher No.: Write a voucher number for each transaction. Write the same number on the voucher.

Cash: Write all the cash that came into or went out of your business. At any time, the Balance column shows the amount of money you should have in the cash box.

Bank: Write all the money that came into or went out of your bank account. At any time, the Balance column shows you the amount of money you have in the bank.

Sales: Write all your money in from sales in this column.

Direct material costs: Write the cost of all raw materials or goods for resale in this column.

Direct labour costs: If you are a manufacturer or service operator, write all wages for people who make your products or provide your services in this column. Retailers and wholesalers do not need this column.

Indirect costs: Write all other costs for running your business in this column. Here are explanations for some of the transactions:

A. On the first day of the month, Modern Furniture wrote down the balances brought forward for Cash and Bank on a new page in the Record Book. The balances brought forward show how much money Modern Furniture have in the cash box and in the bank account at the start of the month. Modern Furniture got the amounts from the balances on the last day of the month before.

B. Modern Furniture paid cash for timber. The receipt from the supplier is the voucher. Modern Furniture write down the amount in two columns, under Cash out and under Direct Material Costs.

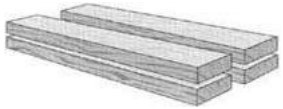
C. Two customers bought goods for cash, so Modern Furniture have copies of two receipts. They give each receipt a voucher number. They write each voucher on a separate line in

the Record Book. For each transaction they write the amount under Cash in and under Sales.

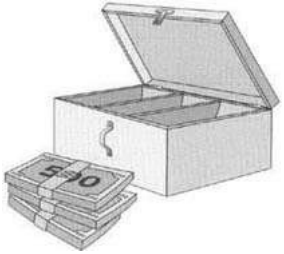
D. Modern Furniture took money out of the business's bank account and put it in the cash box. They wrote their own voucher for the transaction and wrote the amount under Cash in and Bank out.

E. Modern Furniture paid monthly wages in cash to the two carpenters working at the business. Each employee signed a receipt. The two receipts are the vouchers. Modern Furniture write the amounts under Cash out and under Direct labour costs.

F. The owner of Modern Furniture paid himself his monthly salary. The owner's salary is a direct labour cost because he works directly in the production. The owner's salary is written under Cash out and Direct labour costs.



Figure



Figure

QUESTIONS AND ANSWERS ABOUT THE RECORD BOOK

What should you do if a page is full?

When a page of Modern Furniture's Record Book is full before the end of the month they add up the columns and carry the totals and balances to the next page.

To carry the totals and balances to the next page is called balances brought forward. You can write B/f in the details column.

21/3	Bought timber	83		332 -	360 -						332 -			
22/3	Sales	84	70 -		430 -					70 -				
23/3	Sales	85	203 -		633 -					203 -				
										1510 -	670 -	430 -	505 -	

Date	Details	Voucher No	Cash			Bank			Sales	Direct material costs	Direct labour costs	Indirect costs
			In	Out	Balance	In	Out	Balance				
23/3	B/f				633 -			2101 -	1510 -	670 -	430 -	505 -

Figure

How should you record loans, grants, tax and equipment?

The general rule in the Record Book is to make two entries for each transaction. But you make only one entry for some transactions. The most important of those transactions are:

- **loans**
- **grants or donations**

- **tax**
- **equipment or machines**
- **depreciation.**

A. Loans

A loan is money coming into the business, but not from sales. To keep control of your money the loan must be recorded. Write the amount in the column for Cash in or Bank in, depending on where you put the money. But make no other entry.

When you pay back the loan, enter the payment in the column for Cash out or Bank out, and no other entry.

B. Grants or donations

A grant or donation is also money coming into the business, but not from sales. Write down the amount under Cash in or Bank in, and make no other entry.

C Tax

You pay tax on the profit you make. It is neither a direct cost nor an indirect cost so you only record it as Cash out or Bank out.

D. Equipment or machines

When you buy machines or any other expensive equipment, money goes out of your business. Enter those amounts under Cash out or Bank out, and make no other entry.

Here are examples of these transactions:

	Date	Details	Voucher	Cash		Bank		Sales	Direct	Direct	Indi

			No.								material costs	labour costs	co
				In	Out	Balance	In	Out	Balance				
	2/1	B/f				360 -			1230 -				
A	3/1	Received loan	78				5000 -		6230 -				
	3/1	Sales	79	125 -		485 -				125 -			
B	4/1	Received donation	80	2000 -		2485 -							
	4/1	Bought stationery	81		67 -	2418 -							6
C	5/1	Paid tax	82		1200 -	1218 -							
D	5/1	Bought machine	83					4500 -	1730 -				

E. Depreciation

Machines and equipment get older every year they are used. They lose value. The loss in value of machines and equipment is called depreciation. Depreciation is an indirect cost to your business and must be recorded. But depreciation does not mean that money goes out of the business. The money was paid out when the machine or equipment was bought.

To calculate the depreciation, divide the total cost of buying the machine or equipment by the number of years you expect to use it. Only calculate depreciation for machines or equipment which have a high value and last for several years.

In your Record Book, record the depreciation for all your machines and equipment as one amount every year. Make it the very last entry of the year. Enter the amount under Indirect costs, and make no other entry.

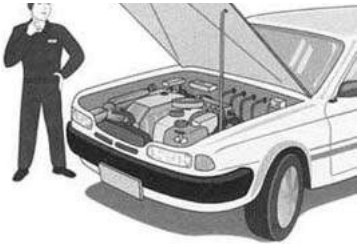
For example. Modern Furniture's total cost for depreciation is 3200 NU per year. They record it as the last entry of the year like this:

Date	Details	Voucher No.	Cash						Bank						Sales		Direct material costs		Direct labour costs		Indirect costs	
			In		Out		Balance		In		Out		Balance									
29/12	Sales	471	350	-											350	-						
30/12	Glue and varnish	472			78	-											78	-				
31/12	Depreciation	473																			3200	-

Learn more about depreciation in the COSTING chapter.

Use records to improve your business

Your records cannot solve problems by themselves. You are the one who must solve the problems. But your records will help you.



Figure

Think of a broken-down car. The mechanic cannot find the problem by looking at the whole car.

Figure

The mechanic must study each part carefully to find the problem.

Your business is like a car. To repair it and make it run well, you must understand all the different parts that make it work. That is called analysing your business.

You can use your records to analyse your business. Your records help you to:

- **analyse your sales**
- **analyse your costs**
- **analyse your profit.**

When you analyse your sales, costs or profit, you will be able to find out if your business is doing well or not. If something is wrong, you will be able to find out what is wrong so you can solve your problems. Even if your business is doing well, analysing your records can help you to find ways to do even better.

At the end of every month, make sure you have:

- **written the balance for cash and bank**
- **added up all the sales**

- **added up each of the costs: direct material costs, direct labour costs and indirect costs.**

These totals for sales and costs are the starting point for analysing your records.


Do you know the total sales and costs for your business?

ANALYSE YOUR SALES

High sales do not always mean that your profit is high. But your sales are important for the success of your business. Analyse your sales to find out if sales are going up or down.

Compare the total sales from this month with the total sales from last month and for the same month last year. These are the amounts for sales at Modern Furniture:

SALES COMPARISON			
	THIS MONTH December 2001	**LAST MONTH** November 2001	**THIS MONTH LAST YEAR** December 2000
Sales	5763 NU	3728 NU	3850 NU

Modern Furniture asked themselves:

- **Are sales going up or down? Why?**

Modern Furniture know why sales were higher in December than in November. In December they had a special order for beds from the new hotel in town. In December 2000 they had no special order so sales were about the same as in November 2001.


In some business the sales are higher in some seasons and lower in others. You know your

business best.

- *In which months or seasons do you expect to sell more? Why?*

- *In which months or seasons do you expect to sell less? Why?*

When you understand the reasons for changes in your sales, you can plan ways to increase them. If your sales are falling, study your records and think of every possible reason for the problem. Here are some examples:

- **Is it a marketing problem? For example, do you not sell what your customers want?**

- **Is it a buying problem? For example, do you buy from a supplier who cannot offer what the customers want?**

- **Is it a stock control problem? For example, do you keep too little stock, damaged stock or stock in bad condition?**

- **Is it a costing problem? For example, do you not calculate your direct labour costs correctly?**

- **Is it a record-keeping problem? For example, do you not write down and follow up credit sales?**

- **Is it a financial planning problem? For example, are the costs in your business higher than planned?**

*There is a **chapter** on each of these topics. Use these chapters to help you analyse your*

business. Think about these same topics when your sales go up, too. When you know why your sales increase, you can plan ways to do even better.

Follow these steps to analyse your sales. You can use the same steps to analyse any other part of your records.

ANALYSE YOUR SALES

STEP 1.	Compare	→ *Compare your monthly or yearly sales to find out if there is a change. Are your sales rising or falling?*
STEP 2.	Find reasons for changes	→ *Find reasons for rising or falling sales.*
STEP 3.	Plan improvements	→ *Plan ways to increase your sales and improve your business.*

ANALYSE YOUR COSTS

These are the different costs in Modern Furniture. They get the figures from their Record Book.

COSTS COMPARISON			
	THIS MONTH December 2001	**LAST MONTH** November 2001	**THIS MONTH LAST YEAR** December 2000
Direct material costs	**2490 NU**	**1520 NU**	**1345 NU**

Direct labour costs	**1495 NU**	**1220 NU**	**1250 NU**
Indirect costs	**485 NU**	**340 NU**	**310 NU**

Modern Furniture compare the different costs from this month with the costs from last month and the same month last year. They use the same steps as they did for sales.

ANALYSE YOUR COSTS

STEP 1. Compare → *Compare your monthly or yearly costs to find out if there is a change. Are your costs rising or falling?*

STEP 2. Find reasons for changes → *Find reasons for rising or falling costs.*

STEP 3. Plan improvements → *Plan ways to lower your costs and improve your business.*

Modern Furniture analysed their costs to find out:

- **which costs had gone up, and why**
- **which costs had gone down, and why.**

Here are some examples of what they found:

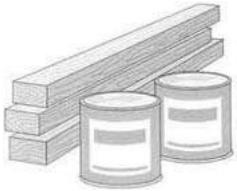
- **Direct material costs were much higher in December 2001 than in November. This seems bad. But Modern Furniture know that sales were much higher in December**

than in November. The more you sell, the more raw materials you need. So there is a good reason for the increase in direct material costs.

Sales in December 2000 were slightly higher than in November 2001. But the direct material costs were lower. Modern Furniture should look closely in their Record Book to find out how they managed to keep the direct material costs so low.

- **Direct labour costs have increased from November. One employee was paid overtime to make the beds for the new hotel. This does not worry Modern Furniture as long as the sales increased at the same time as the direct labour costs.**

- **Indirect costs for December 2001 were higher than in both November 2001 and December 2000. The cost for electricity increased. Modern Furniture must find out why.**



Figure

Are costs in your business rising or falling? Do you know which costs are rising or falling, and why? What can you do to lower costs in your business?

MAKE A PROFIT AND LOSS STATEMENT

To find out if your business is making a profit or a loss, you subtract all costs from your sales. When sales are higher than costs, your business makes a profit. When sales are

lower than costs, your business makes a loss.

A Profit and Loss Statement helps you to calculate if your business is making a profit or a loss. Every business should do a Profit and Loss Statement at the end of every year. You can also calculate your profit and loss more often, for example:

- **after each month**
- **after three months**
- **after six months.**

The more often you calculate your profit and loss, the sooner you will know if your business has problems. Then you can do something about the problems before it is too late.

Modern Furniture get all the amounts in the Profit and Loss Statement from their Record Book. This is their Profit and Loss Statement for 2001:

PROFIT AND LOSS STATEMENT

1/1/2001 - 31/12/2001

A	Sales		36213	
B	Direct material costs	-	11600	
C	**Value added**	**=**	**24613** →	**24613**
D	Direct labour costs		15800	
E	Indirect costs	+	4713	
	All other costs	=	20513 →	- 20513
F	**Net profit**			**= 4100**

A. Sales

Modern Furniture add up all the 12 monthly sales totals for 2001 from their Record Book. The sales from January to December were:

1460 NU + 2315 NU + 2330 NU + 3070 NU + 2635 NU + 3050 NU + 2870 NU + 2812 NU + 3200 NU + 2980 NU + 3728 NU + 5763 NU = 36213 NU.

B. Direct material costs

Modern Furniture add the totals of direct material costs for each month to get the total direct material costs for 2001: 11600 NU. They get the figures from the Record Book.

C. Value added

Deduct direct material costs from sales to get value added. The value added shows you how much your business has increased the value of the direct materials that you bought. Read more about value added.

D. Direct labour costs

Modern Furniture add up all the monthly totals for the employees making furniture: 15800 NU. That is the total direct labour costs for the year. They get the figures from the Record Book.

E. Indirect costs

The total indirect costs for 2001 are 4713 NU. Modern Furniture worked out the figure by adding up all monthly totals from the Record Book.

F Net profit

Deduct all other costs from the value added to get the net profit. The net profit shows the total result of your business. Read more about net profit.

Manufacturers and service operators have direct labour costs. Retailers and wholesalers do not. If your business does not have direct labour costs, do not enter any amounts under direct labour costs. Instead, include all your costs for labour under indirect costs.

ANALYSE YOUR PROFIT

Analyse your profit to find ways to improve your business. To analyse your profit, follow the same steps as for analysing sales and costs.

ANALYSE YOUR PROFIT

STEP 1.	Compare	→ *Compare your monthly or yearly profits to find out if there is a change. Are your profits rising or falling?*
STEP 2.	Find reasons for changes	→ *Find reasons for rising or falling profits.*
STEP 3.	Plan improvements	→ *Plan ways to lower your profits and improve your business.*

Analyse your value added

The value added is very important for your business. Value added is the amount of money

left after you have subtracted your direct material costs from the money earned from sales. The value added must be high enough to pay for all other costs in your business and to give you a profit.

Sales	-	Direct material costs	= **VALUE ADDED**

A retailer or wholesaler buys goods for resale and a manufacturer buys raw materials to make products. These are direct material costs to the business. The price when the business sells its products is higher than the direct material costs. The difference between the direct material costs and sales is the value added. It shows you how much your business has increased the value of the direct materials that your business bought.

When you try to increase your value added, your direct labour costs and indirect costs will often increase as well. But the costs will often not increase as much as the value added and your net profit will be higher.

Modern Furniture, for example, make a simple dining room table which they sell to customers who cannot pay much for furniture and want a cheap table. The table is sold for 300 NU. Modern Furniture have done the costing of the table and know how much one table costs to make. This is the profit they make from one table:

PROFIT FOR SIMPLE DINING TABLE		
Sales		300 NU
Direct material costs	-	110 NU
Value added	**=**	**190 NU**
Direct labour costs	-	40 NU

Indirect costs	-	20 NU
Net profit	**=**	**130 NU**

To increase the value added in the production of the tables, Modern Furniture are planning to:

- **change the design of the table**
- **use better quality wood.**

Modern Furniture will sell the new type of tables to customers who want more exclusive furniture in their homes and can afford to pay higher prices.

The direct material costs for the new table will be higher. The design will be more complicated and each table will take longer to make, so the direct labour costs will also be higher. The indirect costs allocated to one table will be higher, because one table takes a longer time to make.

The price will increase more than the increase in costs. This is the profit they will make from the new exclusive dining table:

PROFIT FOR EXCLUSIVE DINING TABLE		
Sales		600 NU
Direct material costs	-	190 NU
Value added	**=**	**410 NU**
Direct labour costs	-	90 NU
Indirect costs	-	40 NU
Net profit	**=**	**260 NU**

Net profit = 200 NU

If the value added in your business is falling, there can be a number of reasons. Make sure that you analyse the value added and find out the true reason.

Examples of reasons for falling value added are:

Your total sales have fallen

For example, *Network Computers* import and sell computers. During 2001, competition from low price importers was tough. Network Computers maintained the same value added on each machine but the number of machines sold decreased from 2000 to 2001 and the total value added fell:

Network Computers	**2000**
Sales	86400 NU
Direct material costs -	59300 NU
Value added	**= 27100 NU**

Network Computers	**2001**
Sales	76000 NU
Direct material costs -	52400 NU
Value added	**= 23600 NU**

You have sold more products or services than before with a low value added

For example, *Builders Wholesalers* sell both complete kitchen units and construction materials like cement, timber and bricks. The value added is highest on the kitchen units. In 2001 they sold fewer kitchen units but more building materials than in 2000. The value

added fell:

Builders Wholesalers	**2000**
Sales	336000 NU
Direct material costs	- 258900 NU
Value added	**= 77100 NU**

Builders Wholesalers	**2001**
Sales	341500 NU
Direct material costs	- 301000 NU
Value added	**= 40500 NU**

Your direct material costs have increased but you have not increased your prices

For example, *Fashion Enterprises* make trousers. The price of the raw materials they use went up in 2001. Because of tough competition, Fashion Enterprises did not increase their prices. Their value added fell:

Fashion Enterprises	**2000**
Sales	27620 NU
Direct material costs	- 21100 NU
Value added	**= 6520 NU**

Fashion Enterprises	**2001**
Sales	28190 NU
Direct material costs	- 23680 NU
Value added	**= 4510 NU**

The higher your value added is, the more money there is to cover other costs and to give your business a profit. Try to find ways to increase your value added.

Examples of ways to increase value added are:

- **Increase the number of items sold**
  If you sell more of your product, the total value added will increase even if the value added for one item of the product is the same.

- **Sell more products with a high value added**
  If your business sells several different products, each one probably has a different value added per item. Try to concentrate on the products with the highest value added. Sometimes the price can be raised and the value added increased by improving your product, like Modern Furniture did.

- **Raise the price**
  Try to raise your prices at least as much as the direct material costs increase.

This is how Modern Furniture analyse their value added for 2001. They compared the value added for 2001 with the two previous years:

VALUE ADDED COMPARISON			
	THIS YEAR 2001	**LAST YEAR** 2000	**THE YEAR BEFORE LAST** **1999**
Value added	24613 NU	22900 NU	16580 NU

Modern Furniture can see that their value added in 2001 was higher than in 2000 and 1999. They know that the reason for the increase is higher sales. The value added on each

piece of furniture has been the same.

Modern Furniture want to increase the value added even more and will now try to find ways to increase the value added on each piece of furniture.

Has the value added in your business gone up or down? What is the reason for the increase or decrease in value added?

Analyse your net profit

The net profit is the amount of money left after you have subtracted all other costs from the value added. The net profit shows you the total result of your business. It tells you how well or how badly your business is doing.

Value **-** All other **= NET PROFIT**
added costs

You may have very high sales and a high value added. But if your direct labour costs and indirect costs are also very high, you can end up with a very low net profit, or even a loss.

Find out if the net profit is higher or lower than before, and why. If the value added is not lower, the reason for lower net profit is higher direct labour costs or higher indirect costs, or both.

This is how Modern Furniture analyse their net profit for 2001. They compare the net profit for 2001 with the two previous years:

NET PROFIT COMPARISON			
	THIS YEAR	**LAST YEAR**	**THE YEAH BEFORE LAST**

	2000	2000	1999
Value added	24613 NU	22900 NU	16580 NU
Net profit	4100 NU	8550 NU	5750 NU

Modern Furniture can see that net profit has gone down in 2001 compared to both 2000 and 1999. Value added had gone up but net profit was much lower than the years before. This means that either direct labour costs or indirect costs have increased. To find out why, Modern Furniture must study their costs.

Modern Furniture found out that their direct labour costs were much higher in 2001 than in 2000. Now they must plan ways:

- **to lower the direct labour costs, or**
- **to increase their value added.**

Has the net profit in your business gone up or down? What is the reason for the increase or decrease in net profit?

If your value added or net profit is lower than before, do not just wait to see if business will improve. Always find out the reason and take action to improve your value added or your net profit

Review

Summary

A transaction is any exchange of money for goods or services. Record-keeping is a way of writing down all transactions involving:

- **money coming into your business**
- **money going out of your business.**

Record-keeping is necessary for every business. Neat, accurate records will help you find and solve business problems. Use records to:

- **control your cash**
- **show you how your business is doing**
- **show others, such as the bank, how your business is doing**
- **plan for the future.**

Your record-keeping system can have these parts:

- **Customers' Accounts Record**
- **Record Book**
- **Profit and Loss Statement.**

If you sell on credit, write down all credit transactions in a Customers' Accounts Record. Keep a separate Customers' Accounts Record for each customer.

The Record Book is where you write down all transactions in your business. The Record Book consists of columns and you write down each transaction in two different columns.

You need a written document for all transactions. For record-keeping, receipts and other documents are called vouchers. Vouchers are the proof of all transactions entered in the Record Book.

Use your records to:

- **analyse your sales**

- **analyse your costs**
- **analyse your profit.**

A Profit and Loss Statement shows you if your business is making a profit or a loss. Use your Record Book to get the information you need to make a Profit and Loss Statement.

Sales	**-** Direct material costs	**= VALUE ADDED**	**-** All other costs	**=**	**NET PROFIT**

The value added is the amount of money left after you have subtracted your direct material costs from the money earned from sales. The value added must be high enough to pay for all other costs in your business and give you a profit.

The net profit is the amount of money left after you have subtracted all other costs from the value added. It shows the total result for your business.

What did you learn in this chapter?

Now that you have worked through this chapter, try these practical exercises. The exercises will remind you of what you have learned and help you to improve the record-keeping in your business.

Compare your answers with the Answers. If you find it difficult to work out an answer, read that part of the manual again. The best way to learn is to finish an exercise before you look at the answers. Check the list of Useful Business Words.

*You have learned more about record-keeping in this chapter. But what you have learned does not help you until you use the new knowledge in the day-to-day running of your business. Remember to do the **Action Plan** to improve the record-keeping in your business.*

CREDIT SALES AT RELIABLE TAILORS

Reliable Tailors make dust coats and overalls. One of their main customers is Nighthawk Security. Nighthawk Security buy on credit. These are the transactions between Reliable Tailors and Nighthawk Security for the month of April. Use this information to fill in the Customers' Accounts Record below.

3 April *Reliable Tailors deliver 20 overalls for 60 Nil each. Nighthawk Security pay half of the total amount immediately. (This transaction is already filled in.)*

15 April *Reliable Tailors deliver an order of 10 overalls for 60 Nil each on credit. No payment is received.*

30 April *Nighthawk Security pay Reliable Tailors 1200 NU.*

CUSTOMERS' ACCOUNTS RECORD

Customer: Nighthawk Security
Address: 12 Main Road
Tel. Number: 13898
Credit limit: 1500.00 NU

Date	Details	Quantity	Credit sale NU	Amount paid NU	Balance	Signature
3/4	Overalls 60.00 NU	20	1200.00	600.00	600.00	

Reliable Tailors filled in Customers' Accounts Record should look like this:

CUSTOMERS' ACCOUNTS RECORD

Customer: Nighthawk Security
Address: 12 Main Road
Tel. Number: 13898
Credit limit: 1500.00 NU

Date	Details	Quantity	Credit Sale NU	Amount Paid NU	Balance	Signature
3/4	Overalls 60.00 NU	20	1200.00	600.00	600.00	
15/4	Overalls 60.00 NU	10	600.00		1200.00	
30/4	Payment			1200.00	0	

STAR GENERAL STORE AND THE RECORD BOOK

1. Help Star General Store to complete their Record Book below. Write the transactions on the empty lines.

a On 20/2, Star General Store pay 340 NU cash for goods,

b. On 22/2, Star General Store:

- *take out 500 NU from the business's bank account and put the money in the cash box*
- *pay the monthly wage of 320 NU in cash to the full-time employee*

- *pay the monthly wage of 160 NU in cash to the part-time employee*
- *pay the owner his monthly salary of 650 NU in cash,*

c. On 25/2, Star General Store receive, in total, 370 NU from sales,

d. On 26/2, Star General Store pay 590 NU for various goods. They pay by cheque,

e. On 27/2, they receive, in total, 520 NU from sales.

f. On 28/2, Star General Store receive a loan of 2000 NU. The loan is deposited into the bank account.

Date	Details	Voucher No.	Cash			Bank			Sales	Direct material costs	Direct labour costs	Indirect costs
			In	Out	Balance	In	Out	Balance				
1/2	B/i				130			2100				
4/2	Sales	23	410		540				410			
7/2	Sales	24	445		985				445			
11/2	Bought goods	25		640	345					640		
13/2	Sales	26	390		735				390			
15/2	Bus fare	27		15	720							15
18/2	Sales	28	480		1200				480			

2. Enter the total sales for February for Star General Store in the empty box below:

	THIS MONTH February 2001	**LAST MONTH** January 2001
Sales	_____ NU	2250 NU

Compare the total sales in February with the total sales in January. Were sales in February higher or lower in the month before? How much higher or lower?

3. Use the Record Book for February to make a Profit and Loss Statement for Star General Store.

Do not include any amount for direct labour costs in the Profit and Loss Statement. Like other retailers, Star General Store have no direct labour costs because they do not make any products. Instead, they record all labour costs under indirect costs.

PROFIT AND LOSS STATEMENT

1/2/2001 - 28/2/2001

Sales

Direct material costs -

Value added = →

Direct labour costs		
Indirect costs	+	
All other costs	= →	-
Net profit		**=**

4. Here is Star General Store's Profit and Loss Statement for January. Compare the Profit and Loss Statements for the two months. Answer the questions:

PROFIT AND LOSS STATEMENT

	1/2/2001 - 28/2/2001	
Sales	2250	
Direct material costs	- 1250	
Value added	**= 1000** →	**1000**
Direct labour costs	___	
Indirect costs	+ 950	
All other costs	= 950 →	- 950
Net profit		**= 50**

a. Is the value added for February higher or lower than the month before? How much higher or lower?

_____

b. Is the net profit higher or lower than before? How much higher or lower?

_____

c. Look at the amounts and try to explain why the net profit is higher or lower than before.

_____
_____
_____

1. Star General Store's Record Book for February should look like this:

Date	Details	Voucher No.	Cash			Bank			Sales	Direct material costs	Direct labour costs	Indirect costs
			In	Out	Balance	In	Out	Balance				
1/2	B/f				130 -			2100 -				
4/2	Sales	23	410 -		540 -				410 -			
7/2	Sales	24	445 -		985 -				445 -			
11/2	Bought goods	25		640 -	345 -					640 -		
13/2	Sales	26	390 -		735 -				390 -			
15/2	Bus fare	27		15 -	720 -							15 -
18/2	Sales	28	480 -		1200 -				480 -			
20/2	Bought goods	29		340 -	860 -					340 -		
22/2	Bank to	30	500 -		1360 -		500 -	1600 -				

	cash box																			
22/2	Wage	31			320	-	1040	-											320	-
22/2	Wage	32			160	-	880	-											160	-
22/2	Own salary	33			650	-	230	-											650	-
25/2	Sales	34	370	-			600	-						370	-					
26/2	Bought goods	35								590	-	1010	-			590	-			
27/2	Sales	36	520	-			1120	-						520	-					
28/2	Loan from bank	37							2000	-		3010	-							
														2615	-	1570	-	1145	-	

2. Sales comparison:

Star General Store's sales were 365 NU higher in February. 2615 NU - 2250 NU = 365 NU

	THIS MONTH	**LAST MONTH**
	February 2001	January 2001
Sales	2615 NU	2250 NU

3. Star General Store's Profit and Loss Statement for February should look like the table below:

4.

a. Star General Store's value added for February is 45 NU higher.

b. There is no net profit. Instead there is a 100 NU loss compared with 50 NU profit in January. Star General Store must find out why.

c. From the Profit and Loss Statements you can see that the indirect costs increased from 950 NU to 1145 NU. The value added was not high enough to cover the increase in indirect costs. Star General Store must try to increase the sales or lower the indirect costs.

PROFIT AND LOSS STATEMENT

1/2/2001 - 28/2/2001

Sales		2615	
Direct material costs	-	1570	
Value added	**=**	**1045** →	**1045**
Direct labour costs	-		
Indirect costs	+	1145	
All other costs	=	1145 →	- 1145
Net profit			**= -100**

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Improve Your Business: Basics (ILO, 1999, 188 p.)

FINANCIAL PLANNING

IN THIS CHAPTER YOU WILL LEARN

- **Get information about your past costs and sales**
- **Analyse your past costs and sales**
- **Analyse your cash flow**
- **Forecast your sales and costs for the future**
- **Forecast your cash flow for the future**

NOTE Since this book is intended for use in many different countries, we have used the term "NU" in the examples to represent an imaginary "National Unit of currency"

Planning for the future

WHAT IS PLANNING?

Planning means working out what to do about something before it happens. For your business, planning means thinking about and working out what to do in the future to improve your business.

You already plan in your business. For example, before you buy goods or raw materials you think about and work out:

- **what goods or materials you need**
- **how much you need**
- **where to buy the goods or materials**
- **when you need the goods or materials.**

What is a forecast?

When you plan you make a forecast. A forecast tells you what is likely to happen in the future. A weather forecast on the radio or television tells you what the weather is likely to be on the next day. When you know what the weather forecast is you can plan ahead. You can, for example, plan to take your umbrella.

When you make a forecast for your business you work out:

- **how much the business can expect to sell**
- **how much materials are likely to cost**
- **how much cash the business can expect to have.**

Figure

IS FINANCIAL PLANNING NECESSARY?

Some business people do not make financial plans. They do not think ahead to prevent problems. They do not know how their business will do in the future.

THINK ABOUT WHAT HAPPENED TO THESE BUSINESSES:

• ***Super Cycle Shop*** *sell and repair bicycles. They did not make a profit last year because their costs were too high.*

• *The bank did not give* ***The Hardware Store*** *a loan when they applied for it. The bank wanted to know their expected sales, costs, profit and cash flow for next year but The Hardware Store could not provide those estimates.*

• ***Modern Furniture*** *make furniture to order. They recently bought a typewriter for the office. Now they have no cash to buy raw materials.*

1. What went wrong at Super Cycle Shop?

_____
_____
_____

2. How could financial plans have helped Super Cycle Shop?

_____
_____
_____

3. Did The Hardware Store get a loan from the bank?

_____

4. How could financial plans have helped The Hardware Store

_____
_____
_____

5. What has gone wrong at Modern Furniture?

_____
_____
_____

6. How could financial plans have helped Modern Furniture?

_____
_____
_____

1. Super Cycle Shop did not make a profit because their costs were too high.

2. If Super Cycle Shop had made financial plans they would have thought about the future and known that their costs would be high. They could have done something about it before their business started to lose money.

3. No, The Hardware Store did not get a loan from the bank.

4. Financial plans would have helped The Hardware Store to show the bank manager what sales, costs and profit the business expects next year. The bank must know what profit a business is likely to have in the future before it can think about giving a loan.

5. Modern Furniture did not have enough cash to buy raw materials.

6. Financial plans would have helped Modern Furniture to know when they had enough cash to buy a typewriter.

HOW PLANNING CAN IMPROVE YOUR BUSINESS

Here are four important reasons why you should make plans for your business:

- **A plan shows you if your business can expect to make a profit in the future**
  Make a plan to ensure that the sales and costs your business is likely to have in the future will give you a profit.

- **A plan shows the bank how well your business can expect to do in the future**
  Make a plan to show to the bank when you apply for a loan.

- **A plan shows you what money you can expect to come in and go out of your**

business
Make a plan so that your business does not run out of cash.

- **A plan shows you which part of your business you can improve**

Make a plan to force yourself to think about every part of your business. To work out a plan you have to think carefully about everything that affects your business.

USEFUL FINANCIAL PLANS

If your business is doing well, planning can help you to do even better in the future.

If your business is not doing well and has some problems, planning can help you to solve problems. A plan can help you to see problems before they happen. Then you can work out what to do to prevent the problems.

This chapter shows you how to make two kinds of plans that are useful for your business:

- **A Sales and Costs Plan**

This plan helps your business to make a profit. In a Sales and Costs Plan you make a forecast of your sales and costs for each month for the next year. A Sales and Costs Plan shows you how much profit you can expect to make next year.

- **A Cash Flow Plan**

This plan helps you to make sure your business does not run out of cash at any time. Use a Cash Flow Plan to work out in advance how much cash will come in and go out of your business each month.

What plans do you make in your business? What plans do you need?

Making financial plans

When you make plans for your business, remember:

- **Keep them simple**
  Make your plans as simple as possible. Then they are easy to make and easy to use.

- **Make them suit your needs**
  Choose the most suitable period for your plans. You can make your plans for three months, one year or whatever period is best for your business.

- **Make them clear**
  Divide your plans into months. In your Record Book you divide your records into months. When you divide your plans into months, you can compare your records with your plans each month. Then you can see if your business is going as you worked out in your forecasts.

- **Make them in advance**
  Make your plans before you need to use them. Do not wait until one plan is finished before you begin the next plan.

- **Find facts**
  Look for information and use it to make your plans. For example, when you forecast the cost of materials or goods, ask your supplier about next year's prices. Do not guess!

A Sales and Costs Plan

A Sales and Costs Plan shows you the sales, costs and profit your business is likely to have next year.

When to make a Sales and Costs Plan

Make a Sales and Costs Plan to meet the needs of your business. Many businesses make a Sales and Costs Plan every year. It is often a good idea to plan one year ahead for your business. If costs and prices for your products change, you may need to make a Sales and Costs Plan every six months.

Make your Sales and Costs Plan before you need to use it. Do not wait until the old plan is finished before you make your next plan.

HOW TO MAKE A SALES AND COSTS PLAN

To make a Sales and Costs Plan for your business:

A. 1. Forecast indirect costs for each month of the next year
2. Forecast direct material costs per item
3. Forecast direct labour costs per item
B. 4. Forecast sales for each month of next year
C. 5. Calculate total direct material costs for each month of next year
D. 6. Calculate total direct labour costs for each month of next year
7. Complete your Sales and Costs Plan.

SALES AND COSTS PLAN													**Year ____**	
	DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**TOTAL**
B	Sales													
C	Direct material costs													
	Value added													
D	Direct labour costs													

A	Indirect costs													
	Net profit													

To make the forecasts for your Sales and Costs Plan, follow four steps:

Step 1. Get information about last year
To make a plan you need information about what happened in the past. You can get this information from your business records. For example, there is information about last year in your Record Book, invoices and receipts.

Step 2. Analyse the past
Think carefully about what happened in your business last year. Were there ways you could have improved your sales or reduced your costs? Look at each part of your business and try to learn from the past. Work out ways to improve.

Step 3. Get information about next year
Think of anything that will affect your sales or costs in the future. Get information about any changes in your sales or costs next year.

Step 4. Make the forecast for next year
Use the information that you get from Steps 1, 2 and 3 to make your forecast for next year.

1. FORECAST INDIRECT COSTS

Businesses have many different kinds of indirect costs. Here are some examples:

- **rent**
- **stationery**
- **indirect labour**

- **insurance**
- **depreciation**
- **transport**
- **electricity and water**
- **licences**
- **maintenance of equipment.**

Read more about indirect costs in the COSTING chapter.

Make a list of the different kinds of indirect costs you have in your business. For your Sales and Costs Plan, make a forecast for each different indirect cost.

Make sure that you include all the indirect costs for your business in the forecast of indirect costs. It takes some time to work it out but it is necessary.

Use the four steps to forecast all the different kinds of indirect costs for your business next year. For example, look at indirect labour costs.

Indirect labour costs

Indirect labour costs are the wages or salaries your business pays to employees who are not working in production. For example, office clerks, messengers and typists.

Use the four steps to make a forecast of the indirect labour costs for your business next year.

Step 1. Get information about last year
Use your records to find the amount you spent each month on wages and benefits for people you employ who are not working in production.

Step 2. Analyse the past
Think about how much your business spent on indirect labour last year. Can you reduce this amount? Here are some questions to ask yourself:

- **How many employees did I have last year who were not working in production?**
- **Do I need them all?**

Step 3. Get information about next year
What will happen to your indirect labour costs next year? Here are some questions to ask yourself:

- **Will I need as many employees who do not work in production next year?**
- **Will I need more employees?**
- **Should I increase wages? When and by how much?**

Step 4. Make the forecast for next year
Use all information about indirect labour costs from Steps 1, 2 and 3. Make a forecast of the amount you will spend on indirect labour each month next year.

If you have done costing, use information from the Labour Costs Form to plan your indirect labour costs.

This is how the shoemaking business, Top *Footwear,* make their forecast for indirect labour costs next year:

Step 1. Get information about last year
Last year Top Footwear paid their one office clerk 480 NU per month.

Step 2. Analyse the past
Their business needed one employee to do office work and answer the phone.

Step 3. Get information about next year
Top Footwear will still need one clerk next year. They will increase the wage to 530 NU in May.

Step 4. Make the forecast for next year
Top Footwear's forecast for indirect labour costs next year looks like this:

Figure

1. FORECAST OF INDIRECT COSTS												Year: 2002	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Indirect labour	480	480	480	480	530	530	530	530	530	530	530	530	6160

Analyse each type of indirect cost your business has. Make a forecast of how much each indirect cost is likely to be each month next year.

Use your records to see how much you spent on each indirect cost last year. Then think of ways to reduce those costs next year.

When Top Footwear has analysed all the different kinds of indirect costs the business has, their forecast for indirect costs looks like this:

Figure

1. FORECAST OF INDIRECT COSTS												Year: 2002	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Indirect labour	480	480	480	480	530	530	530	530	530	530	530	530	6160
Rent	360	360	360	400	400	400	400	400	400	400	400	400	4680
Electricity	150	150	150	150	150	165	165	165	165	165	165	165	1905
Water	60	60	60	60	60	60	60	60	60	60	60	60	720
Stationery	35	35	35	35	35	35	35	35	35	35	35	35	420
Transport	130	130	130	130	130	130	160	160	160	160	160	160	1740
TOTAL	1215	1215	1215	1255	1305	1320	1350	1350	1350	1350	1350	1350	15625

Top Footwear add up all the monthly forecasts to get a total forecast of indirect costs for next year. Top Footwear's forecast of total indirect costs for next year is 15625 NU.

Do you know the amount of indirect costs in your business?

1. Here is information for Beauty Hair Salon. Make a forecast of their indirect costs for next year on the blank form below.

- *Rent last year was 300 Nil per month.*

- *Electricity last year was 100 NU per month.*
- *Stationery last year was 20 NU per month.*
- *Water last year was 18 NU per month.*

- *Electricity charges will go up by 20 NU in May next year.*
- *Rent will go up by 75 NU in April next year.*
- *Stationery costs will be the same next year.*

- *In January Beauty Hair Salon will put in another basin. It will increase water use by 5 NU per month next year.*

1. FORECAST OF INDIRECT COSTS												Year: 2002	
DETAILS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL

2. What is the forecast of total indirect costs for Beauty Hair Salon next year?

1. *Here is the forecast of indirect costs for Beauty Hair Salon next year:*

1. FORECAST OF INDIRECT COSTS													
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Rent	300	300	300	315	315	315	315	315	315	315	315	315	3735
Electricity	100	100	100	100	120	120	120	120	120	120	120	120	1360
Water	23	23	23	23	23	23	23	23	23	23	23	23	276
Stationery	20	20	20	20	20	20	20	20	20	20	20	20	240
TOTAL	443	443	443	458	478	478	478	478	478	478	478	478	5611

2. The forecast of total indirect costs for Beauty Hair Salon next year is 5617 NU.

To get the forecast of total indirect costs add up all the monthly totals.

2. FORECAST DIRECT MATERIAL COSTS PER ITEM

- **If you are a manufacturer or a service operator, direct material costs are what your business pays for the raw materials to make the products or services you sell. A manufacturer or service operator forecasts the direct material costs per item for each product made by the business.**

- **If you are a retailer or wholesaler, direct material costs are what your business pays for the products you buy to resell. A retailer forecasts the direct material costs per item for each product the business sells.**


Read more about direct material costs in the COSTING chapter.

To make a forecast of direct material costs for your business, use the four steps. It takes some time to work out a forecast of direct material costs for each product you sell but it is

necessary.

Step 1. Get information about last year

Use your records to get the amount your business spent on direct material costs last year. Top Footwear make different shoe models. They work out the direct material costs for every model they made last year. This is how they work out the direct material costs for men's leather shoes:

- **The cost of leather for one pair is 15.00 NU.**
- **Top Footwear buy the rubber soles ready-made for 7.00 NU per pair.**
- **The shoe laces cost 0.50 NU.**

Figure

Direct material costs for one pair of men's leather shoes last year	
Leather	15.00
Rubber soles	7.00
Shoe laces	0.50
Total	*22.50*

Step 2. Analyse the past

Think about direct material costs for your business. Here are some questions to ask yourself:

- **Did I waste materials?**

- **Did I get the lowest possible price for the appropriate quality of materials?**
- **Did I get discounts?**
- **Did I find the best supplier?**

Step 3. Get information about next year

Find out what will happen to your direct material costs next year. Ask your suppliers about price increases and discounts. Check with other suppliers to see if they offer better terms. What can you do to reduce direct material costs per item next year? Here are some questions to ask yourself:

- **Can I buy in bulk to reduce costs?**
- **Can I use cheaper materials?**
- **Can I get discounts for materials?**

Step 4. Make the forecast for next year

Use the information in Steps 1, 2 and 3. Make a forecast of the direct material costs for next year for one item of each product. You must forecast the direct material costs per item for every product you sell in your business.

This is how Top Footwear make their forecast of direct material costs for men's leather shoes:

- **The cost of leather was 15.00 NU per pair last year. It will go up to 17.00 NU per pair next year.**
- **The cost of rubber soles will go up from 7.00 NU to 7.50 NU.**
- **Shoe laces will still cost 0.50 NU next year.**

FORECAST

Direct material costs for one pair of men's leather shoes	
Leather	17.00
Rubber soles	7.50
Shoe laces	0.50
Total	*25.00*

Retailers and wholesalers sell many products. Their forecast of direct material costs per item may be very long. But a business must know their direct costs for all their goods to find out how well they can expect to do in the future.

3. FORECAST DIRECT LABOUR COSTS PER ITEM

- **If you are a manufacturer or service operator, direct labour costs are what your business pays to employees who work to make the products or services you sell. A manufacturer or service operator forecasts the direct labour costs per item for each product or service.**

- **If you are a retailer or wholesaler, you do not have direct labour costs. You write all your labour costs under indirect costs.**

Read more about direct labour costs in the COSTING chapter.

To make a forecast of direct labour costs for your business use the four steps.

Figure

Step 1. Get information about last year

Use your records to work out the amount of direct labour costs for each product last year. This is how Top Footwear work out the direct labour costs for one pair of men's leather shoes last year:

- **It takes two hours to make one pair of leather shoes at Top Footwear.**
- **Last year they paid their employees 24.00 NU a day which is 3.00 NU an hour.**
- **Last year the direct labour costs for one pair of leather shoes were 6.00 NU:**

2 hours **X** 3.00 NU **= 6.00 NU**

Step 2. Analyse the past

Think about the direct labour costs for your business last year. Can you reduce them? Here are some questions to ask yourself:

- **Did my employees take too long to make one item?**
- **Were the employees working in production fully occupied?**

Step 3. Get information about next year

Find out if wages will increase next year. What can you do to reduce labour costs per item next year? Here are some questions to ask yourself:

- **Can I reduce the time it takes to make one item?**

- **Will I increase wages next year?**
- **Will I give a bonus next year?**

Step 4. Make the forecast for next year

Use the information in Steps 1, 2 and 3. Make a forecast of the direct labour costs per item for next year for each product.

This is how Top Footwear make the forecast of direct labour costs for next year:

- **Wages will go up to 28.00 NU a day next year which is 3.50 NU per hour.**
- **The direct labour cost for one pair of men's leather shoes will increase to 7.00 NU next year:**

2 hours **X** 3.50 NU **= 7.00 NU**

4. FORECAST SALES

Forecasting your sales is the most important part of making a Sales and Costs Plan. Your sales bring in the money. Without good sales there can be no profit. Make a sales forecast of how many of each product or service you are likely to sell for each month.

To make your sales forecast follow the four steps.

Step 1. Get information about last year

Use your records to find out how many items of each product you sold each month last year.

Take the number of each product or service sold each month and multiply it by its selling

price. Get the total sales amount for each month by adding up the totals for all your products.

Step 2. Analyse the past

Think carefully about your marketing last year. Remember the four Ps of marketing: Product, Price, Place and Promotion.

Look at each P one by one and try to think of ways to improve your sales. Here are some questions to ask yourself when you analyse your amounts:

- **Product** Did you sell the products or services your customers wanted? Which products sold well? Why? Which products did not sell? Why?

- **Price** How did you set your prices last year? Were your customers willing to pay the prices you set? Were your prices high enough to give your business a profit?

- **Place** Is your business in a good place? Did you sell your products or services direct to your customers? Did you sell to retailers or wholesalers? Did this increase your sales?

- **Promotion** How did you promote your products or services last year? Did you use advertising and sales promotion? Did you get any publicity? Did you improve your skills as a salesperson? Which type of promotion gave the highest sales and best profit for your business?

The MARKETING chapter tells you more about how to understand and satisfy your customers and how to increase your sales.

Step 3. Get information about next year

Think about your marketing. How can you increase your sales next year? Good marketing improves your sales. Here are some questions to ask yourself:

- **Product** What products or services do your customers want? Can you sell some new services or products? How can you improve the quality, the designs and customer service?

- **Price** Do you need to increase your prices? How can you change your prices to increase sales next year? Can you give discounts or special offers to make your prices more attractive?

- **Place** Is there another way to sell your goods or services? Can you find a better place to sell your goods or services? What is the best kind of distribution for your business?

- **Promotion** Which is the best way to promote your products or services next year? Is it advertising, sales promotion or something else? What can you do to make people talk well about your business? Can you improve your skills as a salesperson?

Step 4. Make the forecast for the next year

Use the information from Steps 1, 2 and 3. Make a forecast of sales for each month of next year.

This is how Top Footwear makes a forecast of the total sales for men's leather shoes in January:

- **They will sell each pair for 40.00 NU next year.**
- **They expect sales to go up to 75 pairs in January.**

- **Their forecast of total sales for men's leather shoes in January next year is 3000.00 NU:**

Figure

40.00 NU **X** 75 pairs **= 3000.00 NU**

Here is Top Footwear's forecast of total sales for next year:

4. FORECAST OF TOTAL SALES												**Year: 2002**	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Men's leather shoes	3000	3000	3000	3000	3000	3200	3200	3500	3500	3500	3500	3500	38900
Women's leather shoes	2500	2500	2500	2500	2500	2800	2800	3000	3000	3000	3500	3500	34100
Canvas shoes	2000	2000	2000	2500	2500	2500	2500	2000	2000	2000	2000	2000	26000
TOTAL	7500	7500	7500	8000	8000	8500	8500	8500	8500	8500	9000	9000	99000

5. CALCULATE TOTAL DIRECT MATERIAL COSTS

Now work out the total direct material costs for each month next year for all the products, goods or services your business sells.

- **Get the amounts you have worked out in your forecast of direct material costs per item.**

- **Multiply these amounts by the number of each product you forecast your business**

is likely to sell each month next year. Get the numbers from your forecast of sales.

Here is Top Footwear's forecast of direct material costs for men's leather shoes in January:

Forecast direct material costs per item	**x**	Forecast sales quantity of each product per month	**= Forecast total direct material costs per product per month**
25.00 NU		*75 pairs*	*1875 NU*

- **Add up the forecasts for direct material costs per month for each product to get the total direct material costs per month.**

Here is the forecast of total direct material costs for Top Footwear next year:

5. FORECAST OF TOTAL DIRECT MATERIAL COSTS												**Year: 2002**	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Men's leather shoes	1875	1875	1875	1875	1875	2000	2000	2200	2200	2200	2200	2200	24375
Women's leather shoes	1600	1600	1600	1600	1600	1700	1700	1900	1900	1900	1900	2200	21200
Canvas shoes	1200	1200	1400	1600	1600	1600	1600	1200	1200	1200	1200	1200	16200
TOTAL	4675	4675	4875	5075	5075	5300	5300	5300	5300	5300	5300	5600	61775

6. CALCULATE TOTAL DIRECT LABOUR COSTS

Retailers and wholesalers do not have direct labour costs so they do not have to do this calculation. They write all their labour costs under indirect costs.

If you are a manufacturer or service operator, work out the total direct labour costs for each month of the year.

- **Get the amounts you have worked out in your forecast of direct labour costs per item.**
- **Multiply these amounts by the number of each product you forecast your business is likely to sell each month next year. Get the numbers from your forecast of sales.**

Figure

Here is Top Footwear's forecast of direct labour costs for men's leather shoes in January:

Forecast direct labour costs per item	**x**	Forecast sales quantity of each product per month	**= Forecast total direct labour costs per product per month**
7.00 NU		*75 pairs*	*525 NU*

- **Add up the forecasts for direct labour costs per month for each product to get the total direct labour costs per month.**

Here is the forecast of total direct labour costs for Top Footwear next year:

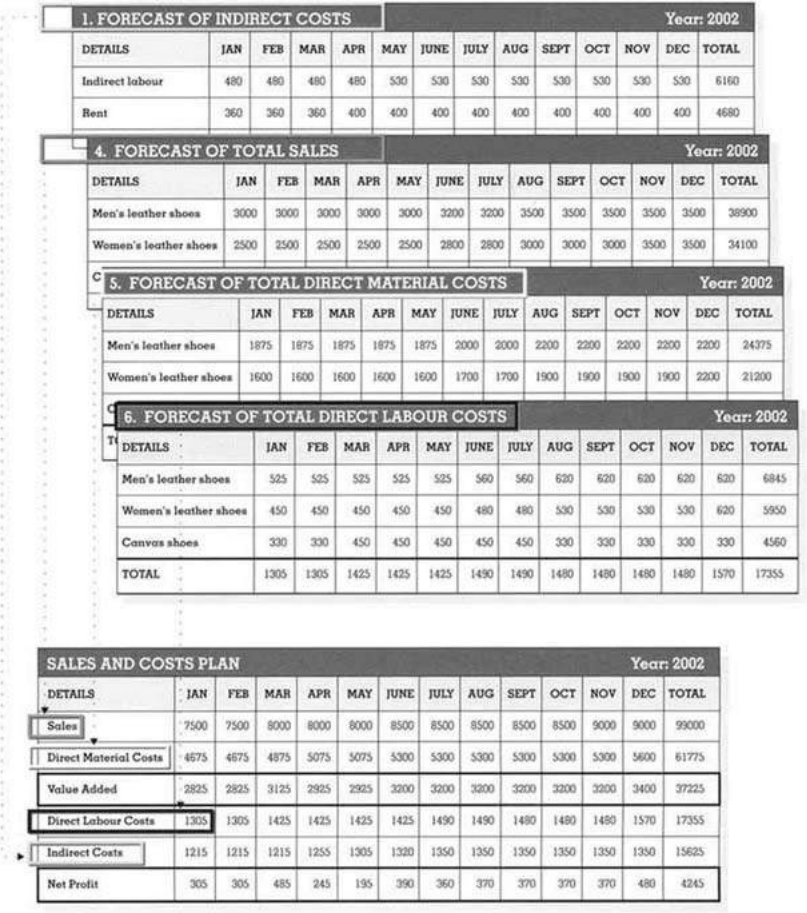
6. FORECAST OF TOTAL DIRECT LABOUR COSTS												**Year: 2002**	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Men's leather shoes	525	525	525	525	525	560	560	620	620	620	620	620	6845
Women's leather	450	450	450	450	450	480	480	530	530	530	530	620	5950

shoes													
Canvas shoes	330	330	450	450	450	450	450	330	330	330	330	330	4560
TOTAL	1305	1305	1425	1425	1425	1490	1490	1480	1480	1480	1480	1570	17355

7. COMPLETE YOUR SALES AND COSTS PLAN

Now that you have made the forecasts you can fill in your Sales and Costs Plan. Use these forecasts to calculate what the value added and net profit are likely to be for your business next year.

This is Top Footwear's Sales and Costs Plan:



1. FORECAST OF INDIRECT COSTS — Year: 2002

DETAILS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Indirect labour	480	480	480	480	530	530	530	530	530	530	530	530	6160
Rent	360	360	360	400	400	400	400	400	400	400	400	400	4680

4. FORECAST OF TOTAL SALES — Year: 2002

DETAILS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Men's leather shoes	3000	3000	3000	3000	3000	3200	3200	3500	3500	3500	3500	3500	38900
Women's leather shoes	2500	2500	2500	2500	2500	2800	2800	3000	3000	3000	3500	3500	34100

5. FORECAST OF TOTAL DIRECT MATERIAL COSTS — Year: 2002

DETAILS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Men's leather shoes	1875	1875	1875	1875	1875	2000	2000	2200	2200	2200	2200	2200	24375
Women's leather shoes	1600	1600	1600	1600	1600	1700	1700	1900	1900	1900	1900	2200	21200

6. FORECAST OF TOTAL DIRECT LABOUR COSTS — Year: 2002

DETAILS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Men's leather shoes	525	525	525	525	525	560	560	620	620	620	620	620	6845
Women's leather shoes	450	450	450	450	450	480	480	530	530	530	530	620	5950
Canvas shoes	330	330	450	450	450	450	450	330	330	330	330	330	4560
TOTAL	1305	1305	1425	1425	1425	1490	1490	1480	1480	1480	1480	1570	17355

SALES AND COSTS PLAN — Year: 2002

DETAILS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Sales	7500	7500	8000	8000	8000	8500	8500	8500	8500	8500	9000	9000	99000
Direct Material Costs	4675	4675	4875	5075	5075	5300	5300	5300	5300	5300	5300	5600	61775
Value Added	2825	2825	3125	2925	2925	3200	3200	3200	3200	3200	3200	3400	37225
Direct Labour Costs	1305	1305	1425	1425	1425	1425	1490	1490	1480	1480	1480	1570	17355
Indirect Costs	1215	1215	1215	1255	1305	1320	1350	1350	1350	1350	1350	1350	15625
Net Profit	305	305	485	245	195	390	360	370	370	370	370	480	4245

Figure

Top Footwear's Sales and Costs Plan shows them that their business can expect to make a net profit each month next year.

Remember, if you are a retailer or wholesaler you do not have any direct labour costs. Include all your labour costs under indirect costs. Do not write anything on the line for Direct Labour Costs in your Sales and Costs Plan.

When you have worked out the forecast net profit or loss you have completed your Sales and Costs Plan for next year. The plan must show that your business can expect to make a profit. The forecast profit must be high enough to allow for something to go wrong or for problems to happen. Your business must have enough money to cope with problems you do not expect. For example:

- **your sales might be lower than expected**
- **a machine might break down**
- **you might run out of materials.**

USE YOUR SALES AND COSTS PLAN TO IMPROVE YOUR BUSINESS

At the end of each month, compare the amounts you forecast in your Sales and Costs Plan with the amounts you have in your Record Book. Use your Sales and Costs Plan to check if your business is doing as well as you expected:

- **Are your sales for the month as high as the sales you forecast? If not, find out why your sales are lower that you expected.**

- **Are your costs for the month higher than the costs you forecast? If your costs are higher find out why.**

- **Is your profit for the month lower than the profit you forecast? Look for reasons**

why your profit is not as high as you expected.

Figure

Look at how Top Footwear use their Sales and Costs Plan:

1. Compare each month and look for differences
In February, Top Footwear did not make as much profit as they forecast.

2. Find out why there are differences
They see from the Record Book that one machine broke down. They could not make enough products to meet their orders. The repair of the machine was an extra cost.

3. Work out what to do
They must maintain the machine better so it does not break down. Then they can meet all their orders.

A Cash Flow Plan

A Cash Flow Plan is a forecast which shows how much cash you expect to come in and to go out of your business each month. A Cash Flow Plan helps you make sure that your business does not run out of cash at any time.

Does your business run out of cash?

Use your Cash Flow Plan to make sure that your business always has enough cash to pay for your costs. There are many reasons why your business may run out of cash. For example:

- **You have to buy goods or raw materials before you sell anything. This means that cash goes out before cash comes in.**

- **If you give credit to your customers you do not get paid immediately. You often have to buy more goods or materials before these credit customers pay you.**

- **You need cash to buy equipment. The equipment will help the business to make a profit in the future. But you usually have to pay cash for the equipment now, before you have earned that profit.**

When you plan your cash flow:

- **you get a warning in advance about future cash shortages**
- **you have more control over the flow of cash**
- **you can solve problems before they happen**
- **you can have cash ready when you need it.**

Does your business ever run out of cash? Do you know why?

HOW TO MAKE A CASH FLOW PLAN

To make a Cash Flow Plan you forecast:

- **how much cash will come in to your business each month**
- **how much cash will go out of your business each month.**

Top Footwear plan their cash flow. On the following page is their Cash Flow Plan for the next three months.

CASH FLOW PLAN	Jan	Feb	Mar

CASH IN			
1 Cash at the start of the month	2000	2835	3670
2 Cash in from sales	7680	7680	7780
3 Any other cash in	-	-	-
4 *TOTAL CASH IN*	*9680*	*10515*	*11450*
CASH OUT			
5 Cash out for direct material costs	4730	4730	4800
6 Cash out for direct labour costs	900	900	900
7 Cash out for indirect costs	1215	1215	1215
8 Cash out for planned investment in equipment	-	-	-
9 Any other cash out	-	-	-
10 *TOTAL CASH OUT*	*6845*	*6845*	*6915*
11 *CASH AT THE END OF THE MONTH*	*2835*	*3670*	*4535*

To make your Cash Flow Plan, follow the 11 steps in the plan. Steps 1 - 4 are for cash in. Steps 5 - 10 are for cash out. Look at each step for the first month, January.

Step 1. Cash at the start of the month

This is the amount of cash you expect to have in the cash box plus the amount of cash in your bank account at the beginning of January. Write this total amount on line number 1 on your Cash Flow Plan.

Step Cash in from sales

2. Look at your Sales and Costs Plan. Find the forecast you made for cash sales for January. Remember that cash in from previous credit sales is part of this amount. Write this amount on line number 2 on your Cash Flow Plan.

Step 3. Any other cash in

This is the amount of cash you forecast your business will get during January from any other source such as a loan from a bank or interest from your bank account. Write the total amount on line number 3 on your Cash Flow Plan.

Step 4. TOTAL CASH IN

Add up all the cash in amounts from Steps 1, 2 and 3. This is the total cash amount you expect to come in to your business in January. Write the amount on line number 4.

Step 5. Cash out for direct material costs

This is the amount of cash you forecast your business will pay out in January to buy goods and materials. Use your Sales and Costs Plan. Write the amount you forecast for direct material costs for January on line number 5.

Step 6. Cash out for direct labour costs

This is the amount of cash you forecast your business can expect to pay out in January to pay wages and benefits for employees working in production. Use your Sales and Costs Plan. Find the amount you forecast for direct labour costs for January and write it on line number 6 on

your Cash Flow Plan. Remember that retailers and wholesalers do not have direct labour costs. They leave line number 6 blank.

Step 7. Cash out for indirect costs

This is the amount of cash you forecast your business will pay out in January for indirect costs such as rent, insurance, electricity, transport, indirect labour and stationery. Look at your Sales and Costs Plan. Find the amount you forecast for indirect costs for January. Write this amount on line number 7 on your Cash Flow Plan.

Step 8. Cash out for planned investment in equipment

Will you buy any equipment during January? Write the amount you will pay for the equipment on line number 8.

Step 9. Any other cash out

This is any other amount of cash you forecast your business will pay out during January, such as a loan repayment. Write this amount on line number 9 on your Cash Flow Plan.

Step 10. TOTAL CASH OUT

Add up all the cash out amounts from Steps 5, 6, 7, 8 and 9. This is the cash amount that you expect to go out of your business during January. Write the amount on line number 10.

Step 11. CASH AT THE END OF THE MONTH

Subtract the total cash out from the total cash in to get the amount left in your cash box and

Subtract the total cash out from the total cash in to get the amount left in your cash box and bank account at the end of January. Cash at the end of the month is cash at the start of the next month. Write the amount on line number 11.

Total cash in	-	Total cash out	=	**Cash left**
9680 NU		*6845 NU*		*2835 NU*

Top Footwear's Cash Flow Plan shows that at the end of January next year they expect to have:

When you have filled in the amounts for cash in and out for each month, your Cash Flow Plan shows how much cash your business expects to have at the end of each month.

USE YOUR CASH FLOW PLAN TO IMPROVE YOUR BUSINESS

Use your Cash Flow Plan to make sure that your business has enough cash all the time. If the plan shows that there is no cash in your business at the end of a month, you are likely to run out of cash that month. Look at the amounts you expect to get in and pay out during that month and think about how you can solve the problem.

If your Cash Flow Plan shows that your business is likely to run out of cash during one month, think about these questions:

- **Can you increase cash in from sales during that month?**
- **Are you giving too much credit?**
- **If you sell on credit, do your credit customers pay on time?**
- **Can you give less credit or give credit for a shorter period?**
- **Do you have to give credit at all?**
- **Can you reduce your direct material costs for the month?**
- **Can you buy less expensive goods or materials?**

- **Can you reduce waste of materials?**
- **If you buy on credit, can your supplier give you more time to pay?**
- **Can you reduce any of your indirect costs, for example, costs for telephone or electricity?**
- **Can the bank extend your loan period or reduce the amount you have to pay each month?**
- **Is it necessary to buy the new equipment immediately?**
- **Can you buy equipment on credit or get a loan?**

How often should you make a Cash Flow Plan?

You can make your Cash Flow Plan for three months or for a longer or shorter period if it suits your business.

Make a new Cash Flow Plan before the old one runs out. Then your business can always see how much cash is likely to come in and go out, and you can make decisions about cash.

Sunshine Restaurant made a Cash Flow Plan for their business. The plan showed that they will run out of cash in May.

CASH FLOW PLAN	**April**	**May**	**June**
CASH IN			
1 Cash at the start of the month	2000	1300	-500
2 Cash in from sales	4000	4000	
3 Any other cash in	-	-	

4 *TOTAL CASH IN*	*6000*	*5300*	
CASH OUT			
5 Cash out for direct material costs	3200	3200	
6 Cash out for direct labour costs	800	800	
7 Cash out for indirect costs	700	800	
8 Cash out for planned investment in equipment	-	1000	
9 Any other cash out	-	-	
10 *TOTAL CASH OUT*	*4700*	*5800*	
11 *CASH AT THE END OF THE MONTH*	*1300*	*-500*	

1. Which three amounts of cash out are larger in May than April for Sunshine Restaurant?

_____
_____

2. Why do you think the amount for Step 8 is larger for May?

_____
_____

3. What advice can you give Sunshine Restaurant to help them improve their cash flow in May?

_____
_____
_____
_____

4. How does the Cash Flow Plan help Sunshine Restaurant?

_____

_____
_____
_____

1. Cash out for indirect costs, planned investment in equipment and the amount for total cash out are larger for Sunshine Restaurant in May.

2. The amount for Step 8 is larger for May because Sunshine Restaurant plan to buy some new equipment.

3. Sunshine Restaurant should not plan to buy the new equipment in May. They should try to buy the equipment when the business will have enough cash.

4. The Cash Flow Plan helps Sunshine Restaurant by showing them before they reach May that they will have no cash left at the end of the month if they buy the equipment. They can plan when it will be better to buy the new equipment.

Review

Summary

Planning means thinking and working out what to do about something before it happens. For your business, planning means thinking about and working out what to do in the future to improve your business.

Four important reasons to make a plan for your business are:

- **A plan shows you if your business can expect to make a profit in the future.**

- **A plan shows the bank how well your business can expect to do in the future.**
- **A plan shows you what money you can expect to come in and go out of your business.**
- **A plan shows you which part of your business you can improve.**

A forecast tells you what is likely to happen in the future.

To make a forecast, follow four steps:

Step 1. Get information about the past
Step 2. Analyse the past
Step 3. Get information about next year
Step 4. Make the forecast for next year.

A Sales and Costs Plan helps your business to make a profit. It shows you the costs, sales and profit your business is likely to have next year.

To make a Sales and Costs Plan for your business:

1. **Forecast indirect costs for each month of next year**
2. **Forecast direct material costs per item**
3. **Forecast direct labour costs per item**
4. **Forecast sales for each month of next year**
5. **Calculate total direct material costs for each month of next year**
6. **Calculate total direct labour costs for each month of next year**
7. **Complete your Sales and Costs Plan.**

Use your Sales and Costs Plan to improve your business. At the end of each month:

1. **Compare your Sales and Costs Plan with your records and look for differences**

2. Find out why there are differences
3. Work out what to do.

A Cash Flow Plan is a forecast which shows you how much cash you expect to come in and go out of your business each month. The Cash Flow Plan helps you make sure that your business does not run out of cash at any time.

To make a Cash Flow Plan, forecast cash in and cash out of your business each month. Use your Sales and Costs Plan to forecast the amounts.

To make a Cash Flow Plan follow these steps:

Step 1. Cash at the start of the month
Step 2. Cash in from sales
Step 3. Any other cash in
Step 4. Total cash in
Step 5. Cash out for direct materials costs
Step 6. Cash out for direct labour costs
Step 7. Cash out for indirect costs
Step 8. Cash out for planned investment in equipment
Step 9. Any other cash out
Step 10. Total cash out
Step 11. Cash at the end of the month.

Use your Cash Flow Plan to see if your business is likely to have cash at the end of every month. Check every month to see if the amount of cash you have in your business is the same as the amount you forecast in your plan.

What did you learn in this chapter?

Now that you have worked through this chapter, try these practical exercises. The exercises will remind you of what you have learned and help you to improve the financial planning in your business.

Compare your answers with the Answers. If you find it difficult to work out an answer, read the relevant part of the manual again. The best way to learn is to finish an exercise before you look at the answers. Check the list of Useful Business Words.

*You have learned more about financial planning in this chapter. But what you have learned does not help you until you use the new knowledge in the day-to-day running of your business. Remember to do the **Action Plan** to improve the financial planning in your business.*

PLANNING AT BOLTON CARPENTRY

Mr Bolton works alone at his carpentry shop where he makes tables and chairs. He is now planning for next year. He now has all the information he needs. Use the information below to help Mr Bolton complete a Sales and Costs Plan for January 2002.

- *Last year Bolton Carpentry paid 140 Nil per month for rent. The landlord says that the rent will go up by TO NU per month at the beginning of next year.*

- *Bolton Carpentry paid 50 NU per month for electricity last year. There will be no increase in costs next year. Mr Bolton thinks he will use the same amount of electricity next year.*

- *Transport cost 40 NU per month last year. Mr Bolton thinks he can reduce this cost through better planning to 32 NU per month next year.*

- *Bolton Carpentry spent 25 NU per month to maintain the machines last year. Some machines are old and will need more maintenance next year. Mr Bolton thinks that the cost of maintaining his machines next year will be 40 NU per month.*

- *The cost of materials to make one chair was 9 NU last year. The supplier told Mr Bolton that next year the cost will go up to 10 NU.*

- *The cost of materials to make one table was 20 NU last year. The supplier said the cost will go up by 2 NU next year. Mr Bolton thinks he can save 1 NU per table by reducing waste.*

- *Mr Bolton takes 4 hours to make one chair.*

- *It takes 8 hours for Mr Bolton to make one table.*

- *Mr Bolton will pay himself 5 NU per worked hour next year.*

- *Bolton Carpentry normally sell 20 chairs and 10 tables per month.*

- *A chair sold for 40 NU last year. After checking his competitors' prices, Mr Bolton has decided to keep this price next year.*

- *Mr Bolton sold each table for 60 NU last year. But from doing market research he found out that customers are willing to pay 80 NU next year.*

1. FORECAST OF INDIRECT COSTS												**Year: _____**	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Rent													
Electricity													
Transport													

Machine maintenance													
TOTAL													

2. FORECAST OF DIRECT MATERIAL COSTS PER ITEM	
DETAILS	**AMOUNT**
Chair	
Table	

3. FORECAST OF DIRECT LABOUR COSTS PER ITEM	
DETAILS	**AMOUNT**
Chair	
Table	

4. FORECAST OF TOTAL SALES												**Year: _____**	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Chairs													
Tables													
TOTAL													

Use your forecasts to make forecasts of total direct material costs and total direct labour costs.

5. FORECAST OF TOTAL DIRECT MATERIAL COSTS												**Year: _____**	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Chairs													

Tables													
TOTAL													

6. FORECAST OF TOTAL DIRECT LABOUR COSTS												**Year: _____**	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Chairs													
Tables													
TOTAL													

Here is the blank Sales and Costs Plan for Bolton Carpentry. Help Mr Bolton to work out the value added and net profit he is likely to get in January 2002.

SALES AND COSTS PLAN												**Year: _____**	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Sales													
Direct material costs													
Value added													
Direct labour costs													
Indirect costs													
Net Profit													

In January 2002 Bolton Carpentry's

- *value added is likely to be _____ NU*

- *net profit is likely to be _____ NU*

Here are the forecasts for Bolton Carpentry for January 2002:

1. FORECAST OF INDIRECT COSTS												Year: 2002	
DETAILS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Rent	150												
Electricity	50												
Transport	32												
Machine maintenance	40												
TOTAL	272												

2. FORECAST OF DIRECT MATERIAL COSTS PER ITEM	
DETAILS	AMOUNT
Chair	10
Table	21

3. FORECAST OF DIRECT LABOUR COSTS PER ITEM	
DETAILS	AMOUNT
Chair	20
Table	40

4. FORECAST OF TOTAL SALES	Year: 2002

DETAILS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Chairs	800												
Tables	800												
TOTAL	1600												

5. FORECAST OF TOTAL DIRECT MATERIAL COSTS												Year: 2002	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Chairs	200												
Tables	210												
TOTAL	410												

6. FORECAST OF TOTAL DIRECT LABOUR COSTS												Year: 2002	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Chairs	400												
Tables	400												
TOTAL	800												

Here is Bolton Carpentry's completed Sales and Costs Plan for January 2002:

SALES AND COSTS PLAN												Year: 2002	
DETAILS	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUNE**	**JULY**	**AUG**	**SEPT**	**OCT**	**NOV**	**DEC**	**TOTAL**
Sales	1600												
Direct material costs	410												
Value added	1190												

Direct labour costs	800												
Indirect costs	272												
Net Profit	118												

In January next year, Bolton Carpentry's

- value added is likely to be 1190 NU
- net profit is likely to be 118 NU.

CASH FLOW PROBLEMS AT RELIABLE TAILORS

Reliable Tailors have decided to make a Cash Flow Plan to help control the cash in their business. Here is their Sales and Costs Plan for next year which shows how much cash in they forecast from sales, and how much cash out they forecast for costs each month:

Reliable Tailors have also forecast that:

- *They will get a loan of 500 NU from the bank on 1st January to buy a new cutting machine. Repayments will be 50 NU per month starting on 75 January.*
- *Cash in the cash box at the beginning of January will be 600 NU.*
- *Their bank account will have 2000 NU at the beginning of January.*

- *They will buy the new cutting machine for 500 NU in January.*

SALES AND COSTS PLAN			
DETAILS	**JAN**	**FEB**	**MAR**
Sales	5000	6000	7000
Direct material costs	2000	2500	3000
Value added	3000	3500	4000
Direct labour costs	1000	1500	1750
Indirect costs	1100	1200	1200
Net profit	900	800	1050

Here is a blank form for you to fill in to make a Cash Flow Plan for Reliable Tailors for January, February and March next year.:

CASH FLOW PLAN	**Jan**	**Feb**	**Mar**
CASH IN			
1 Cash at the start of the month			
2 Cash in from sales			
3 Any other cash in			
4 *TOTAL CASH IN*			
CASH OUT			
5 Cash out for direct material costs			
6 Cash out for direct labour costs			

7 Cash out for indirect costs			
8 Cash out for planned investment in equipment			
9 Any other cash out			
10 *TOTAL CASH OUT*			
11 *CASH AT THE END OF THE MONTH*			

Here is the completed Cash Flow Plan for Reliable Tailors:

CASH FLOW PLAN	**Jan**	**Feb**	**Mar**
CASH IN			
1 Cash at the start of the month	2600	3450	4200
2 Cash in from sales	5000	6000	7000
3 Any other cash in	500	-	-
4 *TOTAL CASH IN*	*8100*	*9450*	*11200*
CASH OUT			
5 Cash out for direct material costs	2000	2500	3000
6 Cash out for direct labour costs	1000	1500	1750
7 Cash out for indirect costs	1100	1200	1200
8 Cash out for planned investment in equipment	500	-	-
9 Any other cash out	50	50	50
10 *TOTAL CASH OUT*	*4650*	*5250*	*6000*
11 *CASH AT THE END OF THE MONTH*	*3450*	*4200*	*5200*