

HOW NOT TO GO BROKE!

*A practical guide for home builders, renovators
and trade contractors on how to
stay in business and prosper*



Canadian Home Builders' Association



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DEPARTMENT OF FAIR TRADING
New South Wales, Australia



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Published 1998

ISBN 0-86506-060-6

This booklet was originally produced by Marketplace Development, Department of Fair Trading, Government of New South Wales, Australia © 1995.

Canadian adaption produced, with permission, by the Canadian Home Builders' Association, Suite 500, 150 Laurier Avenue West, Ottawa, Ontario K1P 5I4

The Canadian Home Builders' Association wishes to thank the Department of Fair Trading, Government of New South Wales, for kindly permitting adaptation of this publication for use by Canadian home builders and renovators.

How To Use HOW NOT TO GO BROKE!

The **How Not To Go Broke!** booklet is an easy, practical guide containing information on the golden rules for keeping your business out of financial trouble and in the black.

The booklet is arranged so that the first part explains the 12 Golden Rules that are the foundation of a successful business. Each rule is detailed and its importance to business practices noted. It is important to get a firm understanding of this section before moving on to the following sections. You should make notes or underline what is interesting or important.

Parts Two and Three form a case study to illustrate practically how the 12 Golden Rules can be applied to an operating business. The case study is a fictional account of a typical small building business.

The purpose of the case study is to show you, the manager of the business, how you can apply what you have learnt in the first section to your own business. This way you can use the new knowledge as a tool for informed decision making.

It is important that you contact an accountant when planning your business finances and structures. This booklet should not be used as a substitute for professional advice.

PART 1

THE 12 GOLDEN RULES

Why is it that some businesses succeed and some go broke? There's no easy answer, but there are some golden rules that should help every builder and contractor keep out of financial trouble:

1. Make sure you have enough money when you start your business.
2. As your business grows, make sure you have enough money to keep growing.
3. Keep on top of your work in progress and invoice it as soon as possible. Once you've invoiced, collect all debts quickly.
4. Negotiate credit and trading terms with your suppliers and subcontractors and stick to them.
5. Prepare a realistic budget and cashflow projection at the start of every year without fail. Throughout the year, keep referring back to them to see how well you have forecasted.
6. If you can see a cash shortage coming up, don't ignore it. Talk to your bank manager, suppliers and debtors to see if you can solve the problem. You may also have to put more of your own money into the business.
7. Use a proven system for estimating costs on each job. Ensure a margin is added to the cost of each job which covers your overheads and gives you a profit on the job.
8. During the course of each job, regularly check actual costs to ensure they are within the estimated costs. If not, find out why.
9. Keep up with industry changes and developments. If they affect your costs, make sure to build the changes into your costings.
10. Don't try to solve a short-term cashflow problem by lowering your price on jobs to the point where you might lose money.
11. At the end of each job, compare the estimated costs to the actual costs including overheads. If you were out, improve your estimating technique for the next job.
12. Make sure you maintain an accounting system that suits the size of your business. Discuss it with your accountant and review it as your business grows.

You can get help. Take the time to talk to your accountant and bank manager. Don't be afraid to ask them questions. It all helps you understand your business better, which should help you not to go broke.

Make sure you have enough money when you start your business.

A business in the home-building field usually starts with the contractor investing his or her own money in the enterprise.

How much of the owner's money (equity) and how much borrowed money (debt) is required depends on the cost of the fixed assets needed for the business, such as motor vehicles and tools, and the number of jobs expected to be done — that is, the level of trading operations.

While the need to buy fixed assets is obvious, the idea of needing money for day-to-day operations is not so clear.

A business needs working capital to fund its operations. Suppliers and subcontractors with whom you do business (accounts payable) will want to be paid on time. Expenses such as insurance and tax must also be paid by the due date. But there will be a time lag in collecting from people who owe you money (accounts receivable) for work in progress.

You will therefore need money so that you can pay your creditors while you're waiting for your debtors to pay you. This is working capital.



As your business grows, make sure you have enough money to keep growing.

Usually, as a business grows, the level of accounts receivable and the amount of work in progress rise. As this happens, the need to have more money to keep going increases. You need to plan ahead to make sure you have enough money to buy further assets and have some money in reserve to help the business grow. Two questions which are often asked by the owners of a growing business are:

1. How much money should I borrow and how much do I have to put in myself?

There are many theories about the right mix of borrowed money and owner's money. The most appropriate is:

- Small growing businesses should borrow as little as possible.
- Never borrow money unless you can comfortably repay interest and principal.
- Borrowings should only be used where the profits you are earning comfortably exceed the cost of the interest.

In deciding how much to borrow, a business should assess how risky its future is. The "Risky Business" chart (opposite page) looks at the different types of risks and the things you should consider in assessing risk.

2. If I borrow money, what kind of loan should I use?

The type of loan you take out should depend on the type of asset you're buying. It is a good practice to match the term of the loan to the likely life of the asset.

So, for example, if you are borrowing money to buy a vehicle with an expected life of five years, a five-year loan may be most appropriate.

Work in progress and accounts receivables, which are assets that go up and down

constantly, are usually funded with a fluctuating account such as an overdraft or line of credit.

When using an overdraft, there are two important things to remember:

- When a business has an overdraft, it is common for it to build up a "core debt." You can tell if you have a core debt by seeing if your overdraft is reduced to a zero balance at some point during the year. If it is not, then a core debt usually exists. If this is the case, you should consider changing to some form of longer-term debt. You should also look at your working capital management (see rules 3 and 4).
- Well-run businesses will try to keep an undrawn balance in their overdraft accounts. This is usually a cheap source of 'contingency funds' which a business may need to draw on to cover temporary cashflow problems, e.g., caused by poor weather or Christmas shutdowns. The availability of contingency funds is particularly important in the building industry due to the existence of relatively high 'business risks'.

When interest rates and inflation are low, you may not be greatly concerned about your level of debt and interest. However, interest rates can increase, and as your business grows, its demand for funds will increase. If loans are taken out, there is an increased requirement to meet interest payments. Without continued profits, you may not be able to meet these payments. A business must therefore balance the mix of loans and retained earnings in financing growth.



RISKY BUSINESS!

There are two types of risk in every business:

(a) Business Risks - Business risks vary depending on the industry. They are sometimes internal to a business, such as risks of defective work, but are usually external.

Some of the business risks faced by builders are:

- The possibility of competitors starting up.
- Bad weather often has an impact on the cashflow of the business.
- The cyclical nature of the industry, with regular booms and busts, means that builders are often either overworked or desperately trying to find work. It also has an impact on the cost of subcontractors.
- Downturns in the property market can also have a severe impact on 'spec' builders.

(b) Financial Risks - When you invest your own money in a business, it is always at risk. However, real financial risk occurs when a business borrows money. A business with debt has fixed interest commitments to meet, irrespective of the level of profits. If a business fails to meet these interest commitments, it runs the risk of insolvency due to its inability to pay the interest.

A business in an industry with high business risks (giving rise to potential threats to cashflow and profits) should aim to reduce the level of its financial risks by lower levels of borrowing. Therefore, builders should maintain a reasonable level of owner's funds in the business.

3

Keep on top of work in progress and invoice as soon as possible. Once you've invoiced, collect all debts quickly.

As a business grows, the need for working capital increases. The faster you collect money owing to you, the less need you will have to use your overdraft or line of credit.

Although it is normal for the dollar value of working capital to increase as a business grows, the importance of good working capital management cannot be over-stressed. The "Test your Strengths" chart (opposite) sets out details of the key indicators of good working capital management.

It is very easy to forget about chasing accounts receivable and just go on the next job—but remember, a profit is not earned until the money is in the bank.



4

Negotiate credit and payment terms with suppliers and subcontractor and stick to them.

It may be tempting to delay payment to creditors. However, there are some important things to remember when doing this:

- You may miss out on lucrative early-payment discounts.
- You may lose some of the goodwill established with your supplier or subcontractor.
- The benefit is usually only one-time and suppliers will soon be watching to see you don't extend payments any further.

The best approach is to negotiate good terms with your suppliers. Good terms may include extended payment terms or short lead times for filling orders. In these days of greater competition for your purchasing dollar, don't be afraid to ask for more.



TEST YOUR STRENGTHS!

Working capital management key indicators of performance

Use these indicators to see how well you manage your working capital. Measure your performance the way your bank manager and accountant would.

Indicator	How it's calculated	What it means
Current Ratio	$\frac{\text{Accounts Receivable} + \text{Work in Progress} + \text{Inventory}}{\text{Accounts Payable}}$ <p>For example:</p> $\frac{\$60,000 + \$80,000 + \$5,000}{\$115,000} = 1.3$	Shows the amount by which your current assets (accounts receivable, work in progress, inventory) exceed your current accounts payable, e.g., a ratio of 1.5 means current assets is one and a half times as large as current liabilities. For a profitable business, maintaining a current ratio of around 1.0 <i>is extremely good</i> . It means that money is not tied up unnecessarily in working capital. Conversely, having too much working capital (when the current rating exceeds 1.5) means that despite generating profit, the cash is all in accounts receivable and work in progress. Too low working capital (when the current ratio is less than 0.75) may result in instability due to an inability to meet short-term commitments from cash.
Accounts Receivable Turnover	$\frac{\text{Accounts Receivable} \times 365}{\text{Annual Sales}}$ <p>For example:</p> $\frac{\$60,000 \times 365}{\$1,000,000} = 22 \text{ days}$	This ratio shows how many days on average it takes to collect an account receivable. There is no definitive good or bad number of days. <i>The lower this number the better.</i>
Accounts Payable Turnover	$\frac{\text{Accounts payable} \times 365}{\text{Annual Cost of Sales}}$ <p>For example:</p> $\frac{\$115,000 \times 365}{\$850,000} = 49 \text{ days}$	This ratio shows the average number of days it takes you to pay your accounts payable. There is no definitive good or bad number. It is good to have your accounts payable turnover longer than your accounts receivable turnover. In some cases, however, discounts may be more advantageous to take.
Days Work in Progress or Inventory	$\frac{\text{Work in Progress or Inventory} \times 365}{\text{Annual Cost of Sales}}$ <p>For example:</p> $\frac{\$80,000 \times 365}{\$850,000} = 34 \text{ days}$	This shows how long it takes on average for work in progress or inventory to be used. <i>The lower this number the better.</i>

Prepare a realistic budget and cashflow at the start of every year without fail. Throughout the year, keep referring back to them to see how well you have forecasted.

If your forecast was out, identify why. If it's a problem, fix it and adjust the forecast for the remainder of the year. Keep the changes in mind for next year's budget and cashflow.

Budgets and cashflows are not just for accountants. You should use them to plan the way your business will go.

You wouldn't give a quote without estimating the costs. The same kind of planning is necessary for your business.

No business is too small to prepare budgets and cashflow forecasts. If you have a small business, it should be easier.

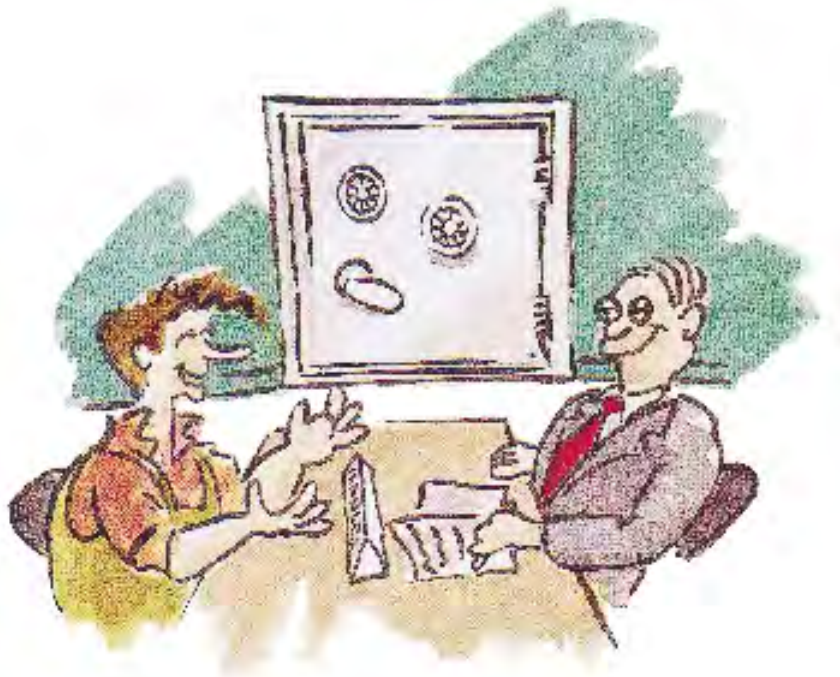
Preparing budgets and cashflows every year is important to start you thinking about the year ahead. Naturally that doesn't mean preparing them on June 30 and putting them away until the next year. Forecasts are only useful if they reflect your current circumstances. You may need to improve income by getting more jobs, or by raising prices to improve your margin, or you may need to cut costs by reducing some of your overheads.



Each month you should compare your actual results to the forecasts. If there are any differences, investigate the reasons. If your profit isn't as high as you forecast, see if there's something you can do to improve the results.

If you find your forecasts are out, you should also adjust the forecasts for the remainder of the year.

Cashflow forecasts will show you each month whether you will have cash on hand or a cash shortage. If you don't know how to prepare budgets and cashflow statements, ask your accountant or financial advisor.



If you can see a cash shortage coming up, don't ignore it. Talk to your bank manager, suppliers and debtors to see if you can solve the problem. You may also have to put more of your own money into the business.

6

It is very common for businesses, particularly growing businesses, to find themselves short of cash. It is important to address the problem sooner rather than later. Cashflow forecasts will help pinpoint the problem early.

When you see a cash shortage coming, you should:

1. Understand why you need the money. If you are making profits on your contracts, it is likely you need the funds because of increasing working capital. Be very wary if the problem is due to losses on past jobs.
2. Before borrowing money from the bank, make sure you can easily cover the additional interest from your cashflow.
3. If you decide to borrow from the bank, discuss with your bank manager why you need the money. Show him or her your budgets and cashflows to support what you're saying.

4. If you are uncomfortable with borrowing more money, talk to your suppliers (they may be happy to give you extended credit for a big one-time order), your customers (see if you can get them to pay a bit sooner), or you may have to put the money in yourself.

DON'T ignore the problem or stop listening to your bank manager, your suppliers and your customers, and **DON'T** rush out to sign up as many contracts as you can to keep the cash coming in. All that does is build a bigger bubble to burst sometime in the future.

RULES

Use a proven system for estimating costs on each job. Ensure a margin is added to the cost of each job which covers your overheads and gives you a profit on the job.



The road to ruin is littered with examples of building companies which have tried to reinvent the wheel by developing their own costing system. Those who adopt this strategy always seem to underestimate the amount of time and cost it takes to develop the system and to iron out any bugs or errors.

Many different systems exist for estimating costs. Some are readily available computer programs, others are manual systems which rely on 'rules of thumb' or 'experience'.

Correctly estimating costs for each job is the first critical step on the road to ensuring you can make a profit on each contract. It is essential to use an estimating system which has proven itself.

Talk to other building companies, industry bodies and computer software suppliers, as well as your accountant and your bank manager, to find a system which others have proved by experience to work successfully and which is suitable for your business.

The estimating system should cover both quantities and unit costs for both labour and materials for each step in the construction process.

The estimating system should tell you what it will cost to carry out the work required by the contract. To ensure all your real costs are

included in your price, you will need to cover your overhead costs.

These are all the costs associated with running your business which cannot be charged to a particular job. Examples of overhead costs are office rent, wages of office staff, office telephone charges, motor vehicle operating costs and advertising.

The total costs for overhead expenses for each year must be estimated so that they can be added to the cost of each job to ensure that, over the course of the year, all of these overheads will be covered. Only after all these costs have been paid will you be able to earn a profit.

To provide for a profit on the job you will need to add your desired profit to all costs allowed when pricing each job. Therefore for each project there will be three components to the price you quote for the work:

- the costs to carry out the work
- the overhead costs
- the profit you require

The allowance for overheads and profit is your 'margin' which is added to the costs allowed for the construction work. The margin is usually expressed as a percentage of the cost of the work. While overheads are generally fixed, they can be adjusted to a certain extent (see *Budget Plan* under *Case Study, Rule 5*). In some cases your allowance for profit may need to be adjusted either upwards to cover other losses or downwards to ensure you remain competitive.

To enable such adjustment, you should calculate overheads and profits each as a percentage of the cost of the work so that when each item is added together the result is the total percentage margin, to be added to the estimated construction cost.

Example:

• Cost of the Work		\$40,000	} This is the "margin" added to the cost of the work. }
• Overhead	15%	\$ 6,000	
• Profit	5%	\$ 2,000	
TOTAL PRICE QUOTED		\$ 48,000	

During the course of each job, regularly check actual costs to ensure they are within the estimated costs.
If not, find out why.

Even the best estimating system is only as good as the information put into the system. At the beginning of the job, your costs are based on estimates (which usually are based on the latest known material and labour rates). It is necessary during the course of each job to check regularly to ensure actual costs (e.g., dollars per cubic metre for concrete or rate per thousand for bricklaying) are in line with your estimates.

It is also important to remember that cost depends on both quantity and unit price. Therefore, even if your actual cost per unit is the same as your estimate, you may have a cost overrun if a larger-than-estimated quantity of material or labour is required to complete the job.

Only by regularly checking both unit costs (rates) and total quantities can you see if you are staying within budget. The sooner any problem is identified, the sooner it can be fixed and the

lower the cost of any corrective action which may be required.

If you regularly check your actual costs against your estimates, and promptly take any corrective action needed, you will be able to avoid ending up with a financial disaster at the end of a job. This is especially important on fixed-price contracts. It may well be that your suppliers and/or subcontractors have charged higher prices than quoted.

Comparing costs against estimates allows you to identify inefficiencies and possible time delays which may need to be fixed to achieve targets. It will also prevent the temptation to cut corners toward the end of a job to bring it in on target.

Monitoring costs through a job will prevent a cost overrun that may tarnish a builder's reputation or, worse still, result in a dispute with your client.



9

Keep up with industry changes and developments.
They will affect your costs.
Make sure you build the changes into your costings.

All builders must recognise that their budgets are flexible and are meant to be changed as circumstances change. The only thing with any degree of certainty is the money you will get (sales revenue) after you enter into a fixed price contract. Everything else (especially costs) is subject to market conditions and may rise (or fall) during each year.

Building techniques, regulations and materials, and general technology are constantly changing and improving. For example, there wouldn't be a builder around today without a mobile phone

or a nail gun. If you don't have such tools, you aren't in the race! But also remember that technology has a price and all the 'tools' and materials that enable builders to operate more effectively and efficiently must be factored into your costing estimates.

It is a good idea to keep up with all the industry changes. For example, you might consider joining an industry association, subscribing to industry magazines and making sure you are on the mailing lists of key suppliers (the market leaders!).



10

Don't try to solve a short-term cashflow problem by lowering your price on further jobs to the point where you might lose money.

You might aim to achieve a gross profit on each and every job which will cover your overheads at the end of the year and leave you with a profit. Any contract which only covers the 'direct' costs of labour and material is a loser as it will not cover the overhead costs necessary for administering the contract.

Every contract should achieve at least a break-even result. As noted in Rule 7, a contract is only a break-even contract if it covers both its direct costs and an adequate share of overheads. For example, if you do ten contracts each year which are of the same size, you will lose money on any

contract which doesn't cover both its direct costs and one-tenth of the year's overhead costs.

Don't be tempted to solve short-term cashflow problems by taking on jobs which you know will not at least break even.

Short-term cash problems can be solved in other ways — by talking to your bank manager, your suppliers and customers or by getting advice from your accountant.

If you can't do a job for a price that gives you a profit, or at least breaks even, the odds are that your competitors can't either — let them go broke!

At the end of each job, compare the estimated costs to the actual costs including overheads. If you were out, improve your estimating technique for the next job.

The job doesn't finish when the keys are handed over. It is an important discipline at the end of each job to compare your actual costs to your original (and any revised) estimates. You need to know, for better or for worse, why a job didn't finish on budget.

You may find out the job didn't finish on budget because of the weather and associated delays, there may have been excess wastage, your materials price may have gone up, you may be using outdated price lists or you may have been overcharged. Your employees or subcontractors may be working inefficiently or they may not have enough supervision, or your subcontractors may have charged higher prices than quoted.

Most of these things can be fixed and prevented from happening again if you are able to identify the problems. The best estimating system is one which is updated for changes in prices and quantities after each job is completed so the next job can be estimated based on the most up-to-date information.

It is also essential to check that your gross profit at the end of the job is enough to enable you to cover your estimated overheads for the year. Allocate your overhead costs to each job and determine whether the overhead percentage is right. You may find that due to the unusual nature of a particular job (e.g., the position, slope, size, access to site, etc.) extra machinery had to be hired. You may need to revise your overhead budget for the remainder of the year (e.g., reduce costs or increase the allocation to each future contract) if you lose a lot of money on one job.

Think of your budgeted profit at the end of the year as a pie — with the profit on each individual job representing a piece of the pie. On every job when you don't meet your budget your pie is eaten away. If you don't monitor what's happening during and after each job, at the end of the year there will be no pie.





12 Make sure you maintain an accounting system that suits the size of your business. Discuss it with your accountant and review it as your business grows.

Every business needs a system which records the details of the financial activities of the business in a way which gives relevant, understandable and timely information to the owner of the business to enable him or her to manage the business properly.

Consequently, not every builder needs the latest computer system to handle their accounts. In some cases a manual system will do the job required.

When deciding what is the most appropriate accounting system for your business, you must consider the number of jobs you run at any one time, the total number of jobs through the year, the difficulty in preparing cost/job estimates, the number of employees, the frequency of billings, whether an accountant prepares the financial statements or whether you do, and whether you or your employees can operate a computer properly. A computer will only provide a worthwhile function if it is used properly.

Whatever system is selected, it must at least be able to do the following:

- Tell you how much profit or loss you are making on each contract and what your overhead costs are each period.
- Give you regular reports (preferably at least monthly) on how the business as a whole is performing (profit and loss) and what the overall financial position of the company is (balance sheet).
- Allow you to prepare budgets and compare these to your actual results to identify problem areas.

It is important to do the administration work in the most efficient manner and make sure it doesn't over take the 'profit work' of building itself.

PART 2

CASE STUDY

In the first part of this guide, we outlined the 12 Golden Rules on how not to go broke — Rules which should help every builder and contractor keep out of financial trouble.

In Part 2, we look at a case study of Acme Homes Limited, a building company established by Rusty Saw. We look at how Rusty's business measures up against the 12 Golden Rules and discuss some of the things he has done right and wrong. We also look at budgets and cashflows, and how they can help you to manage your business better.

Acme Homes Limited – The first two years

Rusty Saw started Acme Homes Limited on July 1, 1994 and, as we see on the next page, he had mixed results in his first two years.



In his first year (July 1, 1994 to June 30, 1995), Rusty seems to have done most things right and had a good profit of \$20,000 before tax to show for it. However, in the second year (July 1, 1995 to June 30, 1996), while Rusty's business seemed to have grown, he had a loss of \$10,000 before tax.

To understand why this has happened, Rusty decides to check his performance by looking at the changes in his balance sheet and profit and loss statement, and applying the first six Golden Rules.

Acme Homes Limited – The first two years

JUNE 30, 1994

Setting Up

Rusty Saw was employed in a number of medium-sized building companies for about ten years, working his way up to being employed as a building supervisor before starting his new company, Acme Homes, which will specialise in low-priced homes, alterations and additions.

He has accumulated \$30,000 in cash which he will invest in the new business as equity. This money will be used to buy equipment, a computer and to pay for some basic designs to be drafted. He also wants to buy a pickup truck for the business. The bank suggests he borrow \$20,000 on a term loan with payment of principal due in five years.

Rusty finds that suppliers are keen to do business with him and give him 30 days credit for supplies. Business is good. Rusty takes deposits on a number of new jobs. The forecast gross margin is around 20%.

JUNE 30, 1995

End of First Year

During the year, he has trouble keeping inside his trade suppliers' terms. He approaches his bank which gives him a \$10,000 overdraft. This allows him to keep within his 30-day terms from suppliers. At the end of his first year, Rusty is quite satisfied. He has paid himself wages of \$35,000, which he has treated as part of his overhead costs, and the business has made a net profit after tax of \$13,400.

Rusty has purchased \$50,000 of fixed assets, using all of his initial \$30,000 cash contribution and the term loan of \$20,000. As a result, although he has billed \$30,000 in accounts receivable and has \$40,000 in work in progress and inventory, Rusty has no immediate cash to

fund his \$46,600 accounts payable balance or the repayment of his \$10,000 bank overdraft.

Rusty confidently forecasts sales of \$1 million for 1996.

JUNE 30, 1996

End of Second Year

It seems to be a good year for Rusty. Sales have doubled, although his gross profit has slipped to about 15%. Rusty is finding it increasingly difficult to stay within suppliers' terms. Rusty's cashflow problems were not helped as a result of spending an additional \$25,000 to expand his range of plans.

Rusty was not too pleased to find he had a loss at the end of the year of \$10,000. The increased interest cost together with the lower margin meant he had a poor year, even though he has again paid himself wages of \$35,000.

At the end of the year, Rusty's accounts receivable, work in progress and inventory have increased to \$140,000.



BALANCE SHEET OF ACME HOMES LIMITED

	30/6/94	30/6/95	30/6/96
CURRENT ASSETS (short term)	\$	\$	\$
Cash	30,000		
Accounts Receivable		30,000	60,000
Work in Progress		35,000	80,000
Inventory		5,000	5,000
FIXED ASSETS (long term)			
Designs		20,000	45,000
Equipment		10,000	12,000
Motor Vehicle		20,000	{Depreciated} 18,000
TOTAL ASSETS	30,000	120,000	220,000

CURRENT LIABILITIES			
Bank Overdraft		10,000	31,600
Accounts Payable		40,000	115,000
Income Tax Payable		6,600	
NON-CURRENT LIABILITIES			
Bank Loan		20,000	20,000
TOTAL LIABILITIES	0	76,600	166,600

EQUITY			
Paid-up Capital	30,000	30,000	50,000
Retained Earnings		13,400	3,400
TOTAL EQUITY	30,000	43,400	53,400

PROFIT & LOSS ACME HOMES LIMITED

SALES		500,000	1,000,000
COST OF SALES		(400,000)	(850,000)
GROSS PROFIT		100,000	150,000
OVERHEADS		(80,000)	(160,000)
PROFIT / (LOSS)		20,000	(10,000)
TAX		(6,600)	
NET PROFIT / (LOSS) AFTER TAX		13,400	(10,000)

KEY RATIOS FOR ACME HOMES LIMITED

Working Capital	23,400	30,000
Current Ratio	1.50	1.30
Accounts Receivable Turnover	22	22
Accounts Payable Turnover	37	49
Days Work in Progress	32	34

1

Make sure you have enough money when you start your business.

Most businesses start with the owner investing in the business (equity) and borrowing any extra money needed, for example, to buy assets (debt).

When Rusty started his building company, Acme Homes Limited, he had \$30,000 of his own money and \$20,000 he had borrowed from the bank. This was not enough to cover the total cost of \$54,000 spent on house designs (\$20,000), equipment (\$12,000) and the pickup truck (\$22,000)—see ‘Depreciation’ for an explanation of Rusty’s fixed assets costs.

Rusty also didn’t leave himself any money to be able to pay his operating costs and suppliers before his first progress claims were received. Acme Homes then had to borrow more money by way of an overdraft of \$10,000. Rusty has used his own money and the money he initially borrowed from the bank to buy long-term assets.

Rusty could have borrowed more to buy these long-term assets and used money he had

invested as equity to pay the initial operating creditors. This would have meant Acme Homes had \$30,000 of its owner’s money and \$20,000 of long-term borrowed money.

Remember:

- It is important not to spend all your starting money on assets, as money will be needed to pay creditors in the short term.
- Overdrafts can be an expensive method of financing trading operations. They should only be used to cover temporary cashflow problems.
- It is good practice to match the life of any finance to the likely life of the assets.
- Try to keep the amount of borrowed money in a business of this size less than (and no worse than equal to) the amount of owner’s money.

2

As your business grows, make sure you have enough money to keep growing.

A growing business needs money to finance its expansion. Good planning and having some money in reserve are key ingredients for success.

Rusty had a good first year and made a profit of \$20,000 before tax. In his second year of trading, Rusty’s business expanded rapidly. His accounts receivables, accounts payables, overhead costs and work in progress all increased by 100% or more. Rusty also spent a further \$25,000 on house designs and another \$5,000 on plant and equipment.

Rusty needed cash to cover these asset purchases and the increase in operating expenses. He did this by an increase in owner’s money (from \$30,000 to \$50,000) and also by an increase in borrowed money (his overdraft increased from \$10,000 to \$31,600).

Rusty had put another \$20,000 of his own money into the business in its second year of operation while extending his overdraft by \$21,600.

At the end of the second year Rusty therefore had \$53,400 of owner’s money (\$50,000 of cash contribution and \$3,400 of retained profit) and \$51,600 of borrowed money (\$20,000 in term loans and \$31,600 in overdraft).

The balance between owner’s money and borrowed money is about right, however, Rusty has seen that the total value of his long-term (fixed) assets of \$75,000 is more than the total value of his long-term debt and owner’s money of \$73,400. It seems Rusty’s investment is tied up in paying for assets rather than in funding the day-to-day operations.

Rusty may have been better off to have increased his bank loan by say \$20,000 instead of his overdraft. By increasing the overdraft now, Rusty may have reduced his chances of getting a further increase when he really needs it.



Remember:

- Try to pay for your short-term liabilities from your short-term assets and pay for your long-term assets with long-term finance.

DEPRECIATION

Most fixed assets decline in value over their anticipated useful life. At the end, they usually have a residual value and are either sold or traded in.

It is important to understand this concept when bringing the cost of an asset into the profit and loss statement. While your cashflow will show the cost of the asset being met at the time it was bought, your profit and loss statement will spread this cost over the asset’s anticipated useful life. This is depreciation.

In this way, the cost of using up part of the asset’s useful life in any year is brought to account in that year. This is different to the day-to-day operating costs which are paid and treated as an expense in the year in which they are incurred. (Note: tax regulations set out the rate of depreciation you are allowed for various types of assets, as well as the accounting procedures that must be used. This simplified example is for illustration only — check with your accountant for specific depreciation rates.)

Rusty bought plant and equipment for \$12,000 in his first year, which he calculated would have a useful life of five years and which he could then sell for \$2,000. Rusty, therefore, had to depreciate this plant and equipment by \$2,000 each year.

$$\begin{aligned}
 \$12,000 - \$2,000 &= \$10,000 \\
 \frac{\$10,000}{5 \text{ years}} &= \$2,000 \text{ a year}
 \end{aligned}$$

Rusty also paid \$22,000 for the pickup truck, which he expected to use for five years and then trade in for \$12,000. Depreciation on the pickup truck was therefore \$2,000 a year.

$$\begin{aligned}
 \$22,000 - \$12,000 &= \$10,000 \\
 \frac{\$10,000}{5 \text{ years}} &= \$2,000 \text{ a year}
 \end{aligned}$$

In the second year Rusty bought a further \$5,000 of plant and equipment which, again, he thought would last five years but would have no resale value at that time. Depreciation on this equipment was \$1,000 a year.

$$\begin{aligned}
 \frac{\$5,000}{5 \text{ years}} &= \$1,000 \text{ a year}
 \end{aligned}$$

3

Keep on top of work in progress and invoice it as soon as possible. Once you've invoiced, collect all debts quickly.

As with any business you must be aware of what money is owed to you and collect it as soon as possible.

In Rusty's first year his accounts receivable turnover was 22 and his 'Days Work In Progress' was 32. That means, on average, it was 54 days (22 +32) from the time he started a job or stage or work until the time he collected his money. His accounts payable turnover was 37 — that is, the average number of days it took to pay his creditors from supply of materials or labour was 37. Therefore, he was behind by around 17 days. In the second year this gap reduced to 7 days.

However, while in the first year 17 days accounts payable equalled about \$18,000 (\$40,000 divided by 37 and multiplied by 17), in the second year, 7 days accounts payable equalled about \$16,400 (\$115,000 divided by 49 and multiplied by 7). This meant the amount of owner's money or borrowed money did not have to increase to cover a gap.

The total value of work in progress and accounts receivable has increased from \$65,000 at the end of Rusty's first year to \$140,000 at the end of the second year. Because of the increase in sales (from \$500,000 to \$1,000,000), accounts receivable turnover has remained at 22 and 'days work in progress' has only increased from 32 to 34.

Rusty needs to check his work in progress to make sure all that could have been billed has been and, once billed, has been collected quickly. The faster you collect money owing to you, the less you will need to use your overdraft facility to pay creditors and suppliers on time.

Rusty's 'current ratio' (the amount of short-term assets compared to the amount of short-term liabilities) has fallen from 1.5 to 1.3. This is an improvement and lessens the amount of money tied up in working capital.

Rusty is collecting his accounts receivable in an average of 22 days which is good — generally less than 30 is good but this depends on the payment terms agreed with customers.



Remember:

- Your creditors will more than likely want payment before you are paid for a job. Unless the business has been operating profitably for a sufficient period, the lag between collecting your debts and paying your suppliers will always cause short-term cash problems if the owner's money invested in the business is not enough.

Negotiate credit and trading terms with suppliers and subcontractors and stick to them.

It is important to keep on good terms with your suppliers and creditors. No one likes getting paid late and if you pay on time, your suppliers will value your business. This, in turn, could lead to opportunities of obtaining better discounts and trading terms.

As you can see, Rusty's trade creditors have increased substantially (\$40,000 to \$115,000) in year two although his sales have only increased by 100% (from \$500,000 to \$1,000,000). Further, the number of days on average it takes Rusty to pay his creditors has increased from 37 to 49. Rusty may be losing lucrative early payment discounts and may be coming under the eye of

some of his creditors and suppliers. This may also explain why Rusty's 'Cost of Sales' has increased.

Remember:

- You must try to meet your creditors' payment terms with your own payment terms! In Rusty's case this may mean finishing construction more quickly (i.e., converting work in progress to customers more quickly) and then billing and collecting from customers more quickly. Alternatively, it means more owner's funds are required.



Prepare a realistic budget and cashflow at the start of every year without fail. Then, throughout the year, keep referring back to them to see how well you have forecast.

It is very important to prepare budgets and cashflows each year, and to compare actual results against forecasts each month.

A budget predicts the various sales, cost of sales and overheads of a business while a cashflow refers to the movement of cash within that business (see *Cashflows*, opposite page, for a more detailed explanation).

Rusty predicted an increase in sales of 100% in the second year of trading. However, it appears he has not monitored his cost of sales. His gross profit margin dropped from 20% to 15% (see *Gross Profit Margin Percentage*, page 26, for an explanation of how to calculate the gross profit margin).

Increased sales may have occurred because Rusty was under-quoting on his jobs, or the cost of materials increased and these increases were not passed on to his customers. Also, Rusty's overhead costs doubled.

These factors resulted in Rusty suffering a loss of \$10,000. When considered with an increase in short-term overdraft borrowings, this is not a good situation for Rusty's business.

If Rusty had, in his second year, achieved a gross profit margin percentage the same as his first year (20%), he would have made a profit before tax of \$40,000. As it was, he only achieved a gross profit margin of 15%.

Rusty needed to achieve a 16% gross profit margin on sales to break-even. Therefore, any job that didn't return at least a 16% gross profit margin wasn't worth doing.

To prepare a realistic budget for the following year, it is worthwhile looking at what Rusty needs to achieve to break-even (see *Break-Even or Go Broke?*, page 26).

Basically, Rusty need to:

- make more sales and contain overheads, or
- try to reduce his overhead costs while maintaining sales, or
- improve his gross profit margin while maintaining his sales level.

Reducing costs or trying to improve gross profit margins are matters over which the business has some control. Strategies to address these matters are more preferable and more successful than simply trying to increase sales.



Remember:

- Try to set a gross profit percentage target to achieve on each job. If you can't achieve a gross profit on each job that will give you an overall profit at the end of the year, the job probably isn't worth doing.
- Make sure you contain your overheads when sales increase or all your hard work will be for no extra profit. Your overhead shouldn't increase in line with sales, as you will still expect to pay about the same rent on your work premises and you will pay around the same amount for electricity, phone, etc.

CASHFLOWS

Profit and loss budgets and cashflow forecasts are essential tools for the management of any business.

By using these plans and comparing actual results to budgets and forecasts you can:

- quickly see if actual results are in line with the plans and identify reasons for any differences; and
- take appropriate action well in advance to avoid cash shortages.

There can be significant differences between 'Profit' and 'Cashflows'. The profits earned in any one financial period may be the result of work done and money spent over a number of periods, whereas cashflow refers to cash received or cash paid during that period. Do not make the mistake of assuming that cash received, less cash paid in any one period is your profit. Remember, cash in the bank is not necessarily profit!

For example, a motor vehicle bought for cash may be used in the business over a number of years. The initial expense of buying the vehicle will be treated as a cash payment in the cashflow statement, in the month it was bought.

In Rusty's case, he paid \$22,000 cash for the pickup truck and the money was paid out of his business. It would be shown as a cash payment of \$22,000 in July 1994, the month in which he bought the vehicle.

However, the cost of buying the vehicle, which is expected to have a useful life of several years, will be treated differently in the profit and loss statement.

In Rusty's case, the pickup truck is expected to have a life of five years. The purchase cost of \$22,000 (less the expected resale value of \$12,000 at the end of the five years) will be spread over the five years. As a result, Rusty's profit and loss statements for the first five years of his business will include an amount of \$2,000 in each year as the cost of using up the useful life of the vehicle. See 'Depreciation' for a further explanation of this (page 21).

Further, most building contracts specify the progress payments which must be made by clients. Most builders and contractors would be aware that the actual amount of work, and the costs relating to that work, does not coincide exactly with the progress payments received. Consequently, for each stage of construction, cashflow will be different to profit.

The real difference between profit and cashflow is the time frame in which payments are received and made. Depreciation is a good example of this timing difference.

GROSS PROFIT MARGIN PERCENTAGE

Gross profit is the difference between sales revenue and the cost of the materials and labour used directly in producing the product which is sold. It is calculated as:

$$\text{Gross Profit} = \text{Sales} - \text{Cost of Sales}$$

The gross profit margin percentage is calculated as:

$$\frac{\text{Gross Profit}}{\text{Sales}} \times 100 = \text{Gross Profit Margin Percentage}$$

For Year One, Rusty calculated his gross profit margin percentage as:

$$\frac{\$100,000}{\$500,000} \times 100 = 20\%$$

For Year Two, the gross profit margin percentage was:

$$\frac{\$150,000}{\$1,000,000} \times 100 = 15\%$$

BREAK-EVEN OR GO BROKE?

Every business must know the value of sales it must achieve to cover all of its costs. This is called the break-even point. The required level of sales depends on the average gross profit margin percentage achieved and the level of overhead costs in the business.

If you calculate your anticipated costs for the year and determine your required gross profit margin percentage, then you can work out the value of sales you will need to break-even.

$$\text{Break-even} = \frac{\text{Overheads}}{\text{Gross profit margin\%}}$$

In the case of Acme Homes Limited:

Year One

$$\begin{aligned} \text{Overheads} &= \$80,000 \\ \text{Gross profit margin \%} &= 20\% (0.20) \\ \text{Break-even} &= \frac{\text{Overheads}}{\text{Gross profit margin \%}} \\ \text{Break-even} &= \frac{\$80,000}{0.20} \\ \text{Break-even} &= \$400,000 \end{aligned}$$

As sales (\$500,000) were more than break-even (\$400,000), Acme Homes made a profit.

Year Two

$$\begin{aligned} \text{Overheads} &= \$160,000 \\ \text{Gross profit margin \%} &= 15\% (0.15) \\ \text{Break-even} &= \frac{\text{Overheads}}{\text{Gross profit margin \%}} \\ \text{Break-even} &= \frac{\$160,000}{0.15} \\ \text{Break-even} &= \$1,066,666 \end{aligned}$$

As sales (\$1,000,000) were less than break-even (\$1,066,666), Acme Homes had a loss.

If overheads or the gross profit percentage changes, the break-even point will change. For example, if Rusty had been able to keep overheads to \$150,000 in the second year, then break-even would have been \$1,000,000. Alternatively, if Rusty had been able to achieve a gross profit margin of 20% but overheads had remained at \$160,000, break-even would have been \$800,000 and Acme Homes would have made a profit.

If you can see a cash shortage coming up, don't ignore it. Talk to your bank manager, supplier and debtors to see if you can solve the problem. You may also have to put more of your own money into the business.

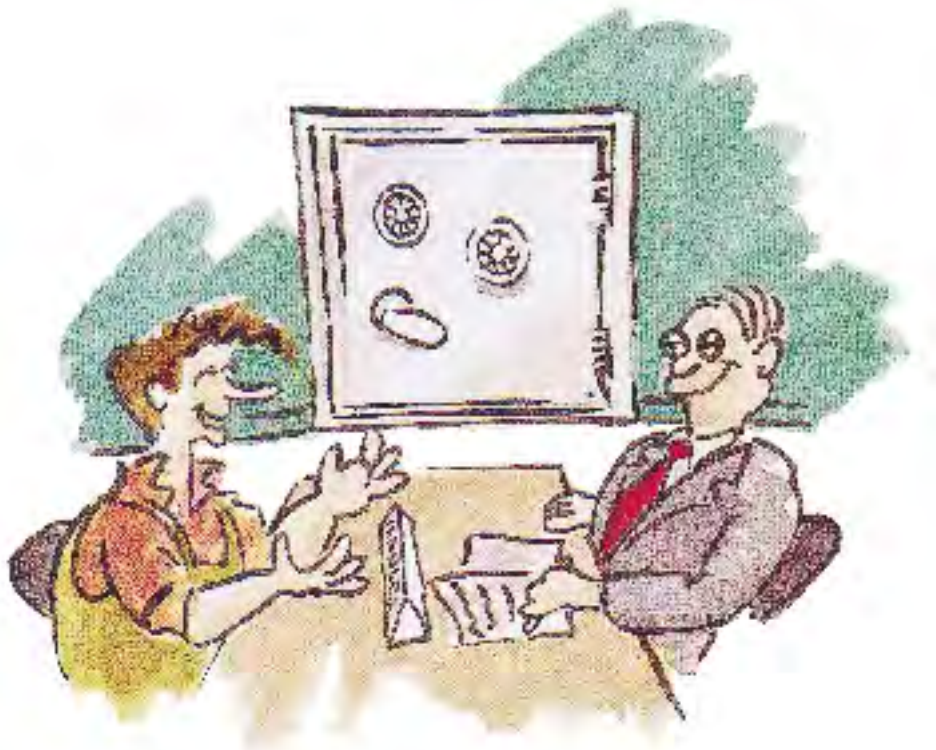
At the end of Rusty's first year of trading, he should have reassessed his cash requirements for the following year. It was apparent he needed to buy more designs and he did this by increasing his overdraft. This is not effective business management.

Rusty should have talked to his bank manager about his short-term cash needs and possibly converted some of the short-term debt (overdraft) to a long-term bank loan in order to buy his new designs which he will use over a long period of time.

All of Rusty's hard work seems to have reduced his ultimate profit. Even though his sales increased from \$5000,000 to \$1 million and he put \$20,000 more owner's money into the business, he suffered a loss. As you can see, 'bigger is not always better.'

REMEMBER :

- Reassess and monitor your business on a timely basis. Discuss short-term problems with your bank manager and/or suppliers and negotiate alternate arrangements. You are their valued customer. Recognise the potential problem before it overtakes your business!



PART 3

THE WAY FORWARD

Rusty is prepared to review his own performance critically and learn from his mistakes. He should do well. He understands that he could have done better in arranging finance during his first two years. Heavy reliance on overdraft needs urgent attention.

Rusty plans to review his overheads critically. The cost of these has doubled, in line with sales, and this has severely affected profits in the second year.

He will work hard to improve his gross profit margin by taking a long hard look at his costs and by making sure that he quotes a price which will give him a profit margin better than break-even.

Rusty now understands what makes his business tick and how a bit of planning, and keeping an eye on progress, can help make his business profitable. Rusty enlisted the help of his accountant to help him review his costs and plan for the year ahead.

OVERHEAD BUDGET			
	Costs for year ended 30/6/95	Costs for year ended 30/6/96	Budget for year ended 30/6/97
Rusty's Wages	35,000	38,000	40,000
Job Supervisor	—	33,000	—
Office Manager	20,000	24,000	26,000
Office Assistant/Account Clerk	—	19,000	20,000
Part-time Receptionist	—	—	10,000
Motor Vehicle Expenses	6,000	14,000	8,500
Rent	6,000	6,500	7,000
Depreciation	4,000	5,000	5,000
Telephone & Electricity	2,400	5,500	3,500
Advertising	2,400	7,500	4,000
Bank Interest and Charges	3,600	6,500	5,000
Stationery and Postage	600	1,000	1,000
Total Overhead Expenses	80,000	160,000	130,000

Reviewing Rusty's Overheads

In Rule 5, we saw that Rusty's overheads had doubled in line with sales—this shouldn't happen. Rusty's accountant broke down his overhead costs over the last two years and tried to identify ways to improve his overhead mix.

During the year ended June 30, 1996, Rusty's business expanded rapidly and he found himself spending most of his time either in the office or out quoting for jobs. Therefore, he had to employ a job supervisor to control and monitor his work sites.

Office workload had increased enough for Rusty to employ an office assistant/clerk to help out with the phones and accounts.

Further, Rusty's motor vehicle expenses more than doubled because he paid all of the costs for the job supervisor's car. He provided the supervisor with a mobile phone and this, together with increased office work, led to the telephone account more than doubling.

Rusty advertised with everyone who knocked on the door and his advertising expense more than tripled.



Reducing Rusty's costs

The accountant identified the following ways to reduce costs:

1. Rusty resolved that he wouldn't get bogged down in the office. He would take on the role of mobile site supervisor and do the preliminary work on job quotes. This would remove the need for a full-time job supervisor.
2. Rusty would employ a part-time typist/receptionist. This would free up the office manager to assist Rusty pricing new jobs and monitoring the progress of current jobs. This would also mean the office assistant/clerk would be freed up to share more of the administrative workload.
3. Removing the need for a job supervisor would also reduce motor vehicle and telephone expenses.
4. Rusty had a good hard look at his advertising policy. He resolved to identify his target market and only advertise with papers/magazines that would reach his target market. He set himself a budget of \$4,000 for the next year.

These changes would result in a reduction in overheads of \$30,000 (or nearly 20%).

RUSTY'S ACTION PLAN

Rusty and his accountant decided to prepare a budget for profit and loss and a cash flow projection for the next 12 months based on the overhead budget (see page 28) and the assumption listed below:

1. Rusty decided he would not do any job that didn't give him a gross profit margin of at least 20% (gross margins were discussed under Rule 5 of this Case Study). This would leave him with an anticipated net profit of \$70,000 at the end of the financial year.
2. Sales would be the value of the work billed to clients each month. Rusty expected sales to be:

July	\$60,000	January	\$50,000
August	\$70,000	February	\$70,000
September	\$70,000	March	\$100,000
October	\$80,000	April	\$110,000
November	\$80,000	May	\$120,000
December	\$70,000	June	\$120,000

Total sales were expected to be \$1,000,000 (i.e., same as year ended June 30, 1996).

3. Cost of sales would be 80% of sales (i.e., achieving a gross profit margin of $100 - 80 = 20\%$).
4. Sales revenue would be collected as follows:
 - 50% in the month invoiced;
 - 40% in the month after invoice;
 - 10% in the second month after invoice.
5. Cost of sales would be paid as follows:
 - 5% in the month prior to the sale being recorded;
 - 40% in the month of sale;
 - 40% in the month after sale;
 - 15% in the second month after sale.
6. Overheads would be paid in the month in which they were incurred.
7. Rusty's outstanding creditors had agreed to extend his payment terms temporarily to assist him through his problems. They agreed to accept \$50,000 in July, \$30,000 in August and \$10,000 in September and October (total \$100,000).
8. Rusty's bank manager agreed to extend his overdraft limit to \$60,000 temporarily on the basis of Rusty's forecasts and on the proviso the amount owed was reduced to \$12,000 by the end of the 1996 - 97 year.



Using these assumptions, Rusty then prepared his profit and loss budget and cashflow forecast as shown on the opposite page. In the last part of this guide we'll see how well Rusty did against his plan by applying the last six Golden Rules. We will also look at a couple of his jobs through the year and break them down through the costing and monitoring processes. We will see what sort of profit Rusty made for the year.

PROFIT AND LOSS BUDGET													
	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL
SALES	60,000	70,000	70,000	80,000	80,000	70,000	50,000	70,000	100,000	110,000	120,000	120,000	1,000,000
COST OF SALES	(48,000)	(56,000)	(56,000)	(64,000)	(64,000)	(56,000)	(40,000)	(56,000)	(80,000)	(88,000)	(96,000)	(96,000)	(800,000)
GROSS PROFIT	12,000	14,000	14,000	16,000	16,000	14,000	10,000	14,000	20,000	22,000	24,000	24,000	200,000
OVERHEADS	(10,000)	(10,000)	(11,000)	(11,000)	(11,000)	(11,000)	(11,000)	(11,000)	(11,000)	(11,000)	(11,000)	(11,000)	(130,000)
NET PROFIT (before tax)	2,000	4,000	3,000	5,000	5,000	3,000	(1,000)	3,000	9,000	11,000	13,000	13,000	70,000

COLLECTIONS															
MO.	SALES	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL	POST JUNE
MAY	(prior yr)	20,000												20,000	
JUN	(prior yr)	35,000	5,000											40,000	
JUL	60,000	30,000	24,000	6,000										60,000	0
AUG	70,000		35,000	28,000	7,000									70,000	0
SEPT	70,000			35,000	28,000	7,000								70,000	0
OCT	80,000				40,000	32,000	8,000							80,000	0
NOV	80,000					40,000	32,000	8,000						80,000	0
DEC	70,000						35,000	28,000	7,000					70,000	0
JAN	50,000							25,000	20,000	5,000				50,000	0
FEB	70,000								35,000	28,000	7,000			70,000	0
MAR	100,000									50,000	40,000	10,000		100,000	0
APR	110,000										55,000	44,000	11,000	110,000	0
MAY	120,000											60,000	48,000	108,000	12,000
JUN	120,000												52,000	52,000	68,000
TOTAL	1,000,000	85,000	64,000	69,000	75,000	79,000	75,000	61,000	62,000	83,000	102,000	114,000	111,000	980,000	80,000

PAYMENTS															
MO.	COST OF SALES	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL	POST JUNE
JUN	(prior yr)	50,000	30,000	10,000	10,000									100,000	0
JUL	48,000	19,200	19,200	7,200										45,600	0
AUG	56,000	2,800	22,400	22,400	8,400									56,000	0
SEPT	56,000		2,800	22,400	22,400	8,400								56,000	0
OCT	64,000			3,200	25,600	25,600	9,600							64,000	0
NOV	64,000				3,200	25,600	25,600	9,600						64,000	0
DEC	56,000					2,800	22,400	22,400	8,400					56,000	0
JAN	40,000						2,000	16,000	16,000	6,000				40,000	0
FEB	56,000							2,800	22,400	22,400	8,400			56,000	0
MAR	80,000								4,000	32,000	32,000	12,000		80,000	0
APR	88,000									4,400	35,200	35,200	13,200	88,000	0
MAY	96,000										4,800	38,400	38,400	81,600	14,400
JUN	96,000											4,800	38,400	43,200	52,800
JUL	(next yr)												5,000	5,000	0
TOTAL	800,000	72,000	74,400	65,200	69,600	62,400	59,600	50,800	50,800	64,800	80,400	90,400	95,000	835,400	67,200

CASH FLOW													
	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL
OPENING CASH (1)	(31,600)	(28,183)	(48,167)	(54,950)	(60,133)	(54,117)	(49,300)	(49,683)	(49,067)	(41,450)	(30,433)	(17,417)	(31,600)
+ ACCOUNTS RECEIVABLE (2)	85,000	64,000	69,000	75,000	79,000	75,000	61,000	62,000	83,000	102,000	114,000	111,000	980,000
— ACCOUNTS PAYABLE PAYMENTS (3)	(72,000)	(74,400)	(65,200)	(69,600)	(62,400)	(59,600)	(50,800)	(50,800)	(64,800)	(80,400)	(90,400)	(95,000)	(835,400)
— OVERHEADS (4)	(9,583)	(9,583)	(10,583)	(10,583)	(10,583)	(10,583)	(10,583)	(10,583)	(10,583)	(10,583)	(10,583)	(10,583)	(125,000)
= CLOSING CASH / OVERDRAFT	(28,183)	(48,167)	(54,950)	(60,133)	(54,117)	(49,300)	(49,683)	(49,067)	(41,450)	(30,433)	(17,417)	(12,000)	(12,000)

NOTES

- Opening Cash consists of Rusty's overdraft of \$31,600 at 30/06/96
- Collections patterns are based on the assumptions noted on page 30
- Payment patterns are based on the assumptions noted on page 30
- Payments for overheads are for cash items only (i.e. "depreciation" is excluded)

7

Use a proven system for estimating costs on each job. Ensure a margin is added to the cost of each job which covers your overheads and gives you a profit on the job.

You will recall that in Rusty's Action Plan, Rusty made his mind up that he wouldn't do any jobs that didn't give him at least a 20% gross profit margin. He decided that if he couldn't do the job at a margin that would give himself a profit after paying his overheads, it wasn't worth doing.

Because Rusty experienced such large fluctuations in his profit margin in his first two years of operations, he decided he would check his basic costing system with his accountant and industry association to determine whether his system was all right. He determined his system, basic as it was, was sufficient for his level of operations.

An example of the costing system he used to help him keep on track is as follows:

Job: Three-bedroom house on a level site with easy access.



Rusty received a copy of the plans from the owner of the land. On the basis of the plans, Rusty was required to give an all inclusive fixed price to build the house, employing all necessary subcontractors to get the job done.

Rusty's calculations were as follows:

	Materials	Labour	Total
Foundation work and framing	\$16,000	\$7,000	\$23,000
Bricklaying	\$8,000	\$7,000	\$15,000
Electrical work	\$2,500	\$1,500	\$4,000
Plumbing	\$3,000	\$2,000	\$5,000
Roofing	\$4,000	\$3,500	\$7,500
Fit out (plastering, carpentry, cabinetry, stove, carpets, etc.)	\$15,000	\$8,500	\$23,500
Landscaping	\$1,000	\$1,000	\$2,000
Totals	\$49,500	\$30,500	\$80,000

Therefore, Rusty estimates his direct costs (materials and labour) for this job to be \$80,000. He wants to know what his contract price should be to ensure a 20% gross profit margin on the cost of the work (i.e. before he pays for any overheads). This should give Rusty a good profit

at the end of the year, after paying any overheads. He worked out that the contract price would need to be \$96,000 to make a gross margin of 20% on the cost of the work.

During the course of each job, regularly check actual costs to ensure they are within the estimated costs.
If not, find out why.

Rusty got the job outlined on the previous page. Half way through the job, he decided to see how it was going. What he found is shown in the table below.

	Estimates		% Complete		Actual Costs To Date		Variance
	Materials	Labour	Materials	Labour	Materials	Labour	
Foundation & framing	\$16,000	\$7,000	100%	100%	\$17,300	\$7,600	(\$1,900)
Bricklaying	\$8,000	\$7,000	100%	50%	\$8,500	\$3,500	(\$500)
Electrical work	\$2,500	\$1,500	10%	10%	\$250	\$150	—
Plumbing	\$3,000	\$2,000	50%	30%	\$1,500	\$600	—
Roofing	\$4,000	\$3,500	—	—	—	—	—
Fit out	\$15,000	\$8,500	—	—	—	—	—
Landscaping	\$1,000	\$1,000	—	—	—	—	—
Total	\$49,500	\$30,500			\$27,550	\$11,850	(\$2,400)

As you can see from the above analysis the cost of Rusty's foundation work and framework was more than his estimates. On closer investigation he discovered the price of timber increased shortly after he submitted his quote and a subcontractor had charged him for two days labour when there was no work due to rain.

He also discovered the price of the bricks he was using had increased. After negotiations with the brick company, Rusty was able to get them to stick by their original quote and he received a refund. All other costs were on budget.



9

Keep up with industry changes and developments. Make sure you build the changes into your costings.

Rusty attended two 'new product' seminars during the year and a training seminar on framing houses with steel rather than timber. Rusty realises he has to keep up with industry changes and developments if he wants to survive. Although he found it hard to find the time to go to the seminars, he used them to his advantage. He was able to build his new knowledge into his discussions with potential customers and it helped him 'sell' new work.

He also found that the supply of steel framing was more consistent and reliable, and it only took him 10 days instead of 12 days to put up the framing while the cost was comparable to timber framing. This meant Rusty could save on his labour costs and he could complete work more quickly, which would mean a bigger profit

for Rusty at the end of the year. Also remember that if you are using outdated price lists, you as the builder are the person who will normally pay the extra costs.



10

Don't try to solve a short-term cashflow problem by lowering your price on further jobs to the point where you might lose money.

As discussed in Rule 7, Rusty based his plans on a gross profit margin of 20%.

On that basis, he could see he would be able to gradually reduce his overdraft to the point where he would have a cash surplus at the end of the year.

Rusty proved in his first year he was able to make a gross profit of 20% on every contract. In his second year, because he was so busy fielding inquiries (due to heavy advertising), he found he was unable to properly monitor his jobs and control costs. Therefore, his gross profit margin fell to 15% and he ended up suffering a loss.

After Rusty presented his forecasts and plans to his bank, his bank manager agreed to extend his overdraft facilities in the short term on the basis there would be a steady reduction over the year.

The bank manager was more comfortable with Rusty's forecasts and could see they would be achievable based on his work in the previous two years.

Because Rusty had planned in advance and had arranged a higher overdraft limit with his bank and extended repayment terms with his suppliers, he was able to trade satisfactorily through what would otherwise have been a problem period for his cashflow.

Further, as Rusty had his cashflow under control and could see he was on track and steadily reducing his overdraft, he was able to offer delayed payment terms to win a couple of jobs. Rusty obtained bank guarantees to cover most of the delayed payments and was sure of getting paid.

At the end of each job, compare the estimated costs to the actual costs including overheads. If you were out, improve your estimating technique for the next job.

Rusty performed the same exercise as outlined in Rule 8 at the end of the job.

This is how Rusty found that the job had come in when it was completed:

	Estimates		% Complete		Actual Costs To Date		Variance
	Materials	Labour	Materials	Labour	Materials	Labour	
Foundation & framing	\$16,000	\$7,000	100%	100%	\$17,300	\$7,100	(\$1,400)
Bricklaying	\$8,000	\$7,000	100%	100%	\$8,000	\$7,000	—
Electrical work	\$2,500	\$1,500	100%	100%	\$2,400	\$1,500	\$100
Plumbing	\$3,000	\$2,000	100%	100%	\$3,100	\$2,500	(\$600)
Roofing	\$4,000	\$3,500	100%	100%	\$4,000	\$3,300	\$200
Fit out	\$15,000	\$8,500	100%	100%	\$14,600	\$8,600	\$300
Landscaping	\$1,000	\$1,000	100%	100%	\$1,000	\$1,000	—
Total	\$49,500	\$30,500	100%	100%	\$50,400	\$31,000	(\$1,400)



At the end of the job, Rusty discovered the plumbing works were well above budget. Rusty had problems with the same plumber in the past. Not only had this plumber tried to overcharge Rusty, he was unreliable and seemed to work inefficiently. This had led to delays on other aspects of Rusty’s jobs and cost over-runs. After

analysing this job, Rusty decided he would no longer use that particular plumber because these problems were taking money straight out of Rusty’s pocket.



12

Make sure you maintain an accounting system that suits the size of your business. Discuss it with your accountant and review it as your business grows.

Rusty's business was relatively small. He estimated he would build, on average, nine or 10 homes in a year. On that basis, he decided a computer system was not necessary. However, he wanted his office manager to get more involved with the accounting and monitoring of the jobs.

Rusty sat down with his accountant and was able to prepare preprinted forms that his office manager would easily be able to fill in to provide him with the information he needed.

The forms were based on his proven costing system and would provide summaries to enable

him to manage his business effectively. Use of the forms would also free Rusty to monitor his trade subcontractors more closely and get on with the profit work of building itself.

Rusty decided that if his business was at the stage where he was building more than 20 homes a year, he would implement a computer system to account for his business dealings. Rusty would get relevant advice and training for himself and his staff when he was ready.

RUSTY'S RESULTS

Rusty's third year of operations (year ended June 30, 1997) was his best ever, with the following results:

Balance Sheet of Acme Homes Limited

	30/6/96	30/6/97
<u>Current Assets</u>		
Cash	—	\$28,148
Accounts Receivable	\$60,000	\$68,000
Work in Progress	\$80,000	\$70,000
Inventory	\$5,000	\$7,082
<u>Fixed Assets</u>		
Designs	\$45,000	\$45,000
Plant and Equipment	\$12,000	\$9,000
Motor Vehicle	\$18,000	\$16,000
Total Assets	\$220,000	\$243,230
<u>Current Liabilities</u>		
Bank Overdraft	\$31,600	—
Accounts Payable	\$115,000	\$79,830
Income Tax Payable	—	\$30,000
<u>Non Current Liabilities</u>		
Bank Loan	\$20,000	\$20,000
Total Liabilities	\$166,600	\$129,830
<u>Equity</u>		
Paid-up Capital	\$50,000	\$50,000
Retained Earnings	\$3,400	\$63,400
Total Equity	\$53,400	\$113,400

Profit and Loss of Acme Homes Limited

	30/6/96	30/6/97
Sales	\$1,000,000	1,060,000
Cost of Sales	(\$850,000)	(\$825,000)
Gross Profit	\$150,000	\$235,000
Overheads	(\$160,000)	(\$135,000)
Profit	(\$10,000)	\$100,000
Tax	—	(\$30,000)
Net Profit after Tax	(\$10,000)	\$70,000

Rusty has had an excellent year. Although his business only grew slightly, he was able to contain his costs and make a good profit (as well as paying his own wages). He also turned his overdraft around with the support of his bank manager to a positive cash position of \$28,148.

RUSTY REAPS THE REWARDS

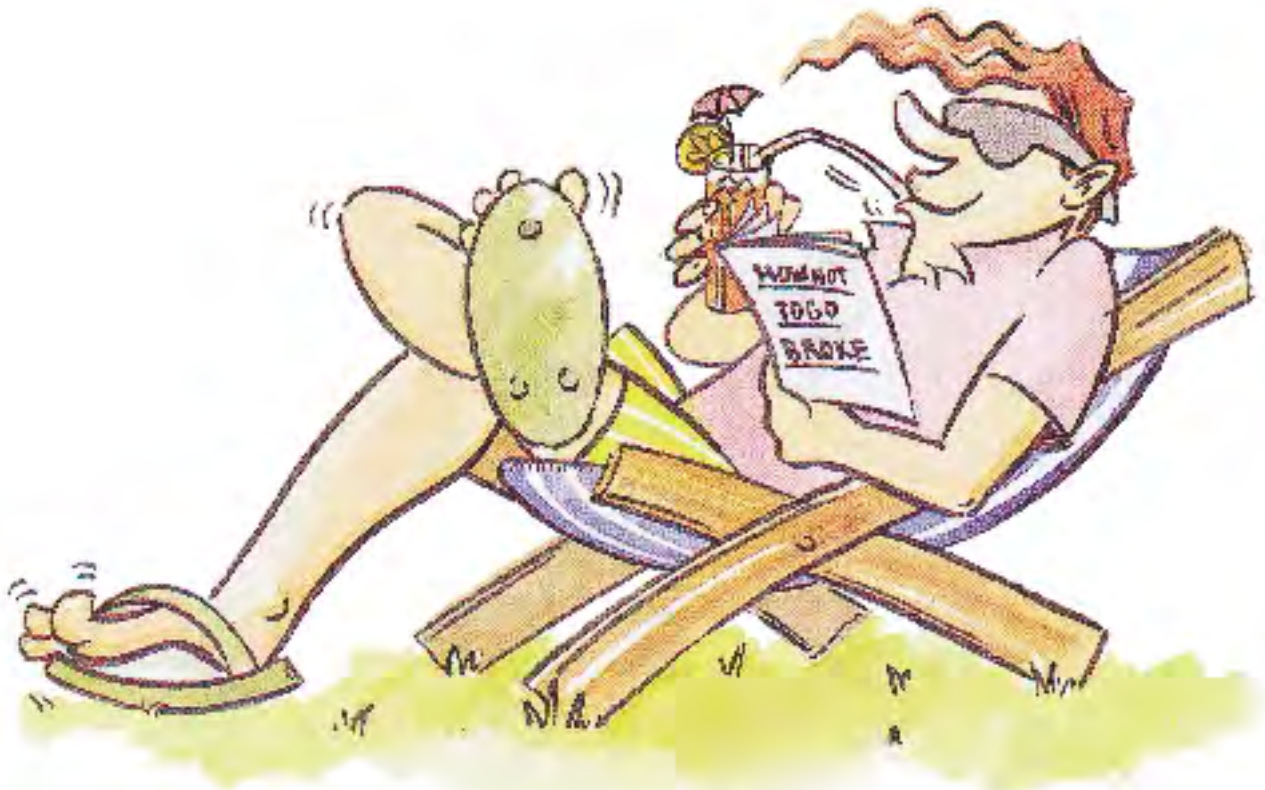
In this guide, we have outlined 12 Golden Rules on 'How Not to Go Broke!' Rusty was starting his business from scratch and, by following the Golden Rules, he had a good first year.

In his second year, he experienced a rapid expansion and started to run off the rails. Rusty suffered a loss but by refocusing on the 12 Golden Rules he was able to get back on track.

In his third year of operations, by planning, monitoring and seeking appropriate advice where necessary, Rusty had turned his business around to be profitable and now knows the right ways to keep it profitable. Rusty has a solid business.

The challenge now for Rusty will be to ensure any further expansion in his business is smooth and profitable.

Rusty has the tools (the 12 Golden Rules) to make sure this happens. He will treat any expansion in his business as if he is starting out again and make the same sorts of decisions as when he first started. Rusty must look at the effects any expansion will have on his underlying business and how the structure and operations need to change to incorporate any increase (e.g., how the business is funded, whether he needs more staff, computer system, training, etc.). In some cases, it is better to be small and profitable rather than large, busy and unprofitable.



ACCOUNTING TERMS

Here is an explanation of the accounting terms used in this booklet.

Budget	An estimate of the sales, cost and overheads for a business for the next financial year.
Working Capital	The amount of debt and equity in a business.
Cashflow	A schedule which shows (usually for a 12-month period) the amount of money coming into a business (from debtors) and the amount of money going out (to suppliers and to pay for overhead costs).
Core debt	That component of an overdraft which does not get repaid at least once a year. Core debt should generally not exist in an overdraft account.
Debt	Money borrowed by a business. It includes loans from a bank or finance company and shareholder loans.
Equity	Money put into the business by the owners. Also includes profits not paid out of the business.
Fixed Assets	This consists of plant, equipment, office furniture, motor vehicles etc. Assets that have an expected life of more than one year.
Paid-up capital	The amount of money used to buy shares in a company.
Working capital	The amount of money tied up in the operations of a business. It includes debtors, work in progress and inventory, less trade creditors, sub-contractors and unpaid expenses.
Work in progress	Work done which is not yet at a stage where it can be billed to a customer.

