Session 2: A New Year

Teacher Note

The second session has a little more on the three lists, mainly on the effect of taking out a loan and on accounting for unpaid bills.

At the end of this piece, the book-keeping has reached quite a sophisticated level without being too challenging.

Now here's an interesting thing: while you were having your break, we've moved into Year 2 and our landlord has offered to sell us the land we've been renting. Great news. No more rent to pay.

The only problem is that the price is $1,000 – which we don't have. Even though there's some cash in the bank, there isn't enough. But it's worth finding that cash somewhere.

There are a few choices that we'll come to later when I talk about Financing, but for the moment, let's keep it simple: let's go to the bank and borrow the money.

The bank almost certainly won't let us borrow the whole $1,000. They'll want us to put in at least some of the money ourselves. We can expect something like $200 of our own savings. Which we can do because we had cash left over at the end of our first year.

So let's say that the bank is comfortable with what they see and agree to lend us the money, the $800 we need. We can now buy the land, but we'll also have to pay the money back - and we'll also have to pay interest. I won't go into the calculation now but let's say the bank wants $150 each year for 10 years.

This means that our financial lists will have to change yet again –the Profit list, the Assets list and the Cash list.

The Profit list will now show that we're paying interest – but we can now drop the cost of rent. Not a great improvement on the bottom line right now, but it will get better as the years go by. Because we're paying off the loan, we'll be paying less interest because we only pay interest on what's left of the loan… the reducing balance.

Workbook page: Profit List (5)

So let's start off by changing our Profit list. We'll drop the Rent figure and add the payments to the bank: the Interest and the Payback

? $150

Workbook page: Asset List (4)

The Assets list will change too, because we now own the land. We can add the full price of the land, the $1,000, to the Asset side of the Assets list.

But we also have to show the $800 that we borrowed from the Bank and now owe. So now we have something on the Liability side.

? $800

Workbook page: Cash List (2)

Let's redo our Asset calculation. Calculate our Assets minus Liabilities; calculate our Total Equity.

? $750

That final Cash figure is a little disappointing, because we now have less money at the end of the year than we had at the beginning.

It might be disappointing, but the truth is that just about every business is like this at the beginning. Business people often talk about a '***Payback'*** period when all those startup expenses are being paid back – and that can often be two or three years.

Things will look better as the years go by though, as we pay off the loan to the bank – and the cost of the land will only show in this one year.

And also as the years go by, the value of the business will rise as we pay off our debt and build up our stock of breeding chickens.

The great thing is that we've seen the way we can look into our business through these lists and understand what's going on. We've also seen how all these lists fit together and how everything balances out.

In a little while, I'll talk some more about how we can use these lists to check out the business. How healthy and what could be improved.

Before I do that though, I'll go back and talk a little about getting more money to make the business bigger. I'll talk about borrowing money from the bank.

I'll also talk about another way, which is taking on a business partner – who will pay us for the honour of sharing our business!

Financing

Teacher Note

The Financing part isn't complicated. The 'Borrowing' part focuses on how a borrower needs to treat the bank – and a few ideas on what a banker should ask about the risks posed by a borrower.

Not too technical, more about proper behaviour and expectations.

Borrowing

Financing is the word we use for getting money from somebody else to do something we need to do now but don't have enough money of our own.

One way is to go to the bank and take out a loan, borrowing some money that we agree to pay back – and to pay interest for until we've finished paying it back.

The way it usually happens is that when we take out a loan, the deal will probably be that we pay a certain amount of money every so often. It will normally be more than just the interest cost, so that every time we make one of those payments, we also pay off a little of the money we owe.

The nice thing about that is that every time we reduce the amount we owe, we have less interest to pay – so every time we make a payment, less has to go into interest and more goes into reducing what we owe … which reduces the interest and reduces what we owe… Which reduces the interest and reduces what we owe. Until it's all paid off… Hooray!!

That's fine, but there something we must always remember. We can't just walk into the bank and expect them to give us money. The bank gets its money from the people who put their cash there for safekeeping – and to earn some interest of their own. And just like the rest of us, the bank has to have actual cash. It must have money to lend. And if it's lent money, it wants to be sure that it will get it back as agreed – and that the interest will be paid.

Just like we want to be paid when we sell our chickens or our eggs.

Remember… It's not the bank's money. It your neighbours' money – and you're not the only person who might be competing to borrow that money.

So quite rightly, the bank will take great care to get that money back… And they might even decide not to lend the money in the first place. Which is always the best way to not lose it. Or they might even decide to ask for more interest than usual, just because they're worried that we might not pay back the loan.

Remember, its other people's money that we're asking for, not just the banker's.

So we have to show the bank that we're worth lending too. The first thing the bank will need, especially if we haven't borrowed money before, is a plan like I'm describing. You'll also need a way of showing the bank that you're sticking with the plan – that you're getting your bookkeeping right – and if not why not.

And you'll need to be able to show that our plan is realistic … which isn't hard if you know what to look for – and that's what our business diagnostics are designed to help with.

And there's one more thing. Whether it's your first loan or a new one for a new purpose, the bank needs to believe in you. Needs to believe your promise that you'll pay them back like you said you would. And they don't have to believe what you say.

If you've borrowed money before, they'll check to see whether you've paid it back and whether you made your payments on time. If you didn't do it last time, you can be sure that the bank won't be very helpful this time.

If it is your first time, the bank will probably ask other people how trustworthy you are. Remember, they're just looking for evidence that you can be relied on to use their money wisely.

So rule number one is to make your payments on time. Banks notice this kind of thing, and they have long memories.

And then you need to have a good, realistic plan – and make sure you're known as a trustworthy person.

If you do that well, you'll have a good chance of getting the money you need – and the bank will be doing the right thing with other people's money.

All of which means that you get your money, you pay the interest and you pay back the loan and everything is clear. No more debt.

The great advantage of taking out a loan is that when it's paid back, you have no obligation to anyone and you still own all of the business.

Taking a Business Partner

Teacher Note

Like the piece about Borrowing, this is an explanation of the relationship between a business owner and a new partner or shareholder.

It also compares borrowing with taking on a shareholder and what both partners should expect.

Borrowing is all very well. Except for one thing. The interest.

Sometimes the money you pay for interest can be very high – even if the interest rate itself is reasonable. The actual money you'd have to pay would take a lot of your income. Even worse, if something terrible happens to the business and you have to close it down, you still have to pay off the loan and the interest.

But there is another way.

You could take a business partner who will provide the money the business needs in return for a share of the business's profits. It's not without its problems, but partners like this are often prepared to wait until those profits start coming in - which could well be some years.

And on top of that, if the terrible thing happens and the business collapses, they know they can't expect to get their money back.

It all sounds good, but as usual, there is a cost. As a business partner they are also a part owner. They own – and will always own, a share of the business. So to get your money you've given away a share in the company forever. Mind you, Bill Gates, who invented Microsoft, is the richest man in the world and he has given away 99% of the company so it's not necessarily bad. Somebody once said it's better to have 1% of something big that 100% of nothing…

Of course you have to find someone willing to provide the money, somebody prepared to take the risk they could lose it all, somebody prepared to wait before they get any return. They're taking a big risk and they'll want to be paid for that risk.

The big question will be how much of the business they want for the money they're putting in and the risk they're taking. They might say they want half of the company because there are two owners … while you might think they deserve much less because of the effort you've put into getting the business up and running.

It's never an easy negotiation, but the better your plan, the stronger your position.

Business Diagnostic (2)

Teacher Note

Finally, the participants get to do the Diagnostic calculations for themselves.

These take the figures from the three lists and calculate various financial ratios.

As well as calculating those ratios, they get to interpret those ratios, developing opinions about what they mean and whether anything needs to be done. It shows how these Diagnostic tools are useful for both business managers and bankers.

So there we have it. A set of reports that show us how our business is running.

But even before we look at what the business is worth, let's go back to how we know how good a plan is.

For a start, it's useful to have something to compare yourself with. Luckily yours isn't the only business in the world. Over the years our accountant friends have analysed lots of businesses have come up with some tricks for checking out and comparing the numbers they can pull out of those plans. Their word is **Benchmarks**: numbers from successful businesses that can be compared with yours.

That's fine, but it's hard to compare your business with another if you're just using raw numbers. It's much better to simply use percentages. That way you can compare your business with similar businesses – meaning other chicken businesses of about the same size. Always remember though, that different industries and different sizes always make a difference.

This means that we can look at lots of different things. For our business doctors, this is called Ratios Analysis. Ratio analysis of financial statements is a big deal because it's so useful – and you can be sure that your banker will have looked at ratios for your business long before they agreed to lend you any money.

So let's look at what we mean by Ratios, let's take another look at our Profit list.

Workbook page: Diagnose your Business (2)

Benchmarks

Benchmarks are figures that we could say come from all the best businesses in the rest of the world.

They're a good start, but only a start, because they're different for different businesses, different industries, different sized businesses ... and often different countries. But they're a very good start.

If you calculate a benchmark and get an answer that's different from the worldwide one, it doesn't mean you're wrong – but it does mean that you should look carefully to see that you haven't forgotten anything.

And do it often. Certainly year after year. In the end it's your own figures that count – but the rest of the world is a good start!

If your answers are different, there are two places you can look. The formula will have a top line: if it's your Gross Profit, are your Variable costs correct? What about the underneath line: are there any Sales you've forgotten?

Liquidity

Profit is a good place to start when you're analysing your business, but there are other things to take care of. One is called Liquidity.

Liquidity is a measure of how much cash you can call on in an emergency. It's all very well having exactly enough cash to deal with all the things you know about, but business is harder than that. There'll always be something unexpected. The trick is to have some extra cash – but not too much. The benchmark is called Working Capital and the calculation is:

$$\text{Working Capital} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The usual benchmark for working capital is around 1.5 to 2. Less than that and you might have difficulty in an emergency; more than that and you've got money that you could be using to pay for more machinery or more staff or more marketing … things that could make the business run better.

But here's an interesting thing: we've already been talking about Assets and Liabilities, but now we're calling them Current Assets and Current Liabilities.

So what does 'Current' mean?

Our accountant friends see a difference between things that last for a long time – like a fencing (sometimes called Non-current assets), and things that can vary a lot in the short-term - like Cash. Short term Assets are called Current … money we can get our hands on quickly in case of an emergency. Current Liabilities are the opposite: they are things that have to be paid for in the near future.

Non-current Assets are valuable for a business, but they don't pay the bills …

Leverage

We don't want to borrow money if we earn less than we would pay in interest, but there are times when borrowing money is like using a lever to extend the use of the cash we have. The accountants call this kind of thing Financial Leverage.

So here's one more thing we can use as a Benchmark: Leverage, how well we're using borrowed money.

There are a few ways of doing it. We can compare our Debt to our Assets, to the Owner's Equity, to the amount of Sales (again) – and we can see how well our earnings cover our interest payments.

So here we have four more formulae:

$$\text{Debt Assets ratio} = \frac{\text{Borrowings}}{\text{Total Assets}}$$

A good average number is 0.7.

$$\text{Debt Equity ratio} = \frac{\text{Borrowings}}{\text{Total Equity}}$$

A good average number is 0.6.

$$\text{Debt Income ratio} = \frac{\text{Borrowings x 100}}{\text{Total Income}}$$

A good average number is 30%

$$\text{Interest Cover ratio} = \frac{\text{Total Income}}{\text{Interest Payments}}$$

A good average number is 4.5

Profitability

We've already had a look at Profit Ratios – but our business has become a bit more complicated since we bought the land. So let's look at it again

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

In our case it comes to **84**%.

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

In our case it comes to **39**%.

We can now check Ratios for industry as a whole and see how we compare.

Firstly, we find that 80% is a good average for Gross Profit and 10% is a good average for Net Profit. So already we can ask a question about our business. We have a 51% Net Profit rather than 10%, so perhaps we should check whether we've forgotten something in our Operating Costs.

That's why Benchmarks like this are so useful and why we'll keep coming back to them.

We've covered an awful lot of things already – and honestly, it seems like an awful lot of effort. So why should we do all this? What's the point of it all?

You could say that it's much easier to just look at the money you hold. If you have money, you're OK. If you're running out of money, you're not OK. So let's have a look. See if our Profit list and our Assets list tell us anything useful.

Let's start at the top of our Profit list, our Sales. If we could increase our sales, everything would look much better. It all depends on how many eggs our chickens produce. Is there a way of helping them lay more? Is 100 eggs per chicken per year anything like other chicken growers are getting?

We're selling both chickens and eggs. What would happen if we hatched more chickens and sold fewer eggs – or the other way round? But if we have more chickens, we need more chickenfeed so is the end result any better? Questions like that come up and we've only looked at the Sales line.

And then we can move on to the direct costs, the COGS. Are we paying too much – or could we pay more and get more eggs. How do we compare with other chicken growers?

And so to our Operating Costs. Can the business afford to pay us more? Are we paying too much rent? Is there any way we can improve our operating costs – or has something appeared that we didn't expect.

Then the Wearing Out allowance, where we made our allowance for the money we've spent on investments like fencing. Would the business benefit from spending a bit more money on improvements to improve production?

With the figures in the Profit list we can think about all these things, try some different figures, see how our Net Profit, our Bottom Line, comes out.

And then you can move on to your Assets list. Already you can see what your business is worth. If anybody comes along and wants to buy you out, you already have an idea of what you should ask. Or if you have a conversation with your bank manager, you can talk about how well you're doing, how valuable your business is.

We've already done a quick look at the Profit list, getting a feel for what the Gross Profit and the Net Profit means – and how we can use them to do some fine tuning. But with an Assets list, we can take a wider look at what those profit figures mean.

So far we've compared Profit with Sales. That tells us how well we are controlling the expense of running the business.

But now that we have our Assets list, we can see how much profit we're making on the amount of money we've put into the business. We can calculate the Return on Total Assets and the Return on Total Equity

$$\text{Return on Total Assets} = \frac{\text{Net Profit x 100}}{\text{Total Assets}}$$

$$\text{Return on Total Equity} = \frac{\text{Net Profit x 100}}{\text{Total Equity}}$$

Again, we can look at the Benchmarks: a general average for ROTA is 20% – and in simple cases, it's the same for ROTE.

We can see there's a difference. What might that mean? What could we do?

Management Ratios

Still with money management: how well we collect our money and pay our bills?

I've already mentioned Payables and Receivables … money we have to pay, and money owing to us. As a principle, we should collect our money as quickly as we can – and perhaps be a little less anxious at paying our bills (but don't tell anybody I said that … you don't want to get a bad reputation for being a slow payer, or people will lose interest in doing business with you).

How do we know whether we are collecting quickly enough or paying in a reasonable time?

Again we have some Benchmarks and some new words: ***Debtor Days*** and ***Creditor Days***.

A Debtor is someone who owes your money and Creditor is someone you owe money too. Debtor Days is the average number of days it's taking to collect your money; Creditor Days is the average number of days you're taking to pay your bills.

You can calculate both from our Asset list and our Profit list.

The formulae are:

$$\text{Debtor Days} = \frac{365 \times \text{Receivables}}{\text{Total Sales}}$$

$$\text{Creditor Days} = \frac{365 \times \text{Payables}}{\text{Total Sales}}$$

The general averages for these two benchmarks are 45 for Debtor Days and 60 Creditor Days.

I personally would like to use lower figures for both of these, although the reality is that it's not easy to do better.

It's worth saying that in the end, the most reliable Benchmarks are your own business after you've been operating for a few years and you've thought long and hard about how you been running the show.

So there we are. We've only just begun with our book-keeping and we already know the things that will make our businesses run better.

So it wasn't all a waste of time!

Wrap

Teacher Note

And then, finally, through to the conclusion ...

This is all good. We've covered a great deal.

When we started, I don't think too many of you thought you'd be behaving like real accountants, real business managers – or real bankers… But that's what you've done.

We started off with simple book-keeping: lists of what you'd bought and what you'd sold. Keeping records is always a brilliant start.

And then you moved on to something that's a pretty big deal: you took those lists and changed them into the much more useful lists that accountants call ***Financial Statements***. Statements you can look at to see what you're worth – and where you might make improvements that can make life easier and more comfortable – (and probably more profitable).

And then you moved on from being Accountants to being ***Business Doctors***, using tried and tested tools to look at how well a business is being run.

And it's not just valuable for a company's health. These are the tools a bank can use when they're being asked for a loan – or when they're comparing different applicants. Money is a valuable thing and there's never enough to go around, so it has to be used wisely – and there must always be competition between borrowers. And not everybody qualifies to get that money because bankers should always be convinced that borrowers will pay back the money they've been lent.

And then we went back to look at how a business can be financed – because there's always a time when a bit more money to invest can pay real dividends. So we looked at whether that money could be raised by taking out a loan or taking on a business partner – and all that that entails.

Best of all, you've done it all in exactly the same way that experienced business managers would do the job, using exactly the same financial documents that the professionals use – and you'll keep on using them as your business gets better and better.