

Outback Accounting

www.iniPax.com

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The early days of a new business is often no more than a life or death watch on the **Cash Box**: a rattle in the cash box means life; death means an uncomfortable silence.

But there'll come a time when a business manager needs more:

- whether there are more payments coming in than going out,
- whether the cash from everyday operations, investors and asset trades is more than the cash that goes out as payments,
- what the business would be worth if all the debts (**liabilities**) are paid off and everything sellable (**assets**) is sold.

So...

The cash box is a good start, but long-term success means "**Keeping the Books**". That means having a **Profit & Loss Statement**, a **Cash Flow Statement** and a **Balance Sheet**.

This book tracks through all the steps that make that happen, explaining all the way.

Book-keeping

The health and profitability of a business depends absolutely on thorough and up-to-date financial reports.

Getting those reports starts off with writing down all the company's payments and receipts. This is no small task – unless it's done regularly, ideally using some kind of automated system.

A regular work plan is up to the business manager; an automated book-keeping system is described in the next few pages.

It's a website called **iniPax**. The web address is www.iniPax.com.

It is a (free) online system that has been designed specifically for small businesses. It has been designed to make the book-keeping work simple and easy, with proper financial statements (**Profit & Loss**, **Balance Sheet**, **Cash Flow** and business benchmarks) calculated with the click of a button.

It might be simple and easy, but it still provides the management information that helps the business run smoothly.

And there you'll find the **Cash Book** ...

iniPax Book-keeping

The iniPax website has been designed help young businesses. It's simple, but proven to be very effective.

It can guide business and financial planning, business health – and even help with preparations for raising money.

To get started, type in:

www.iniPax.com

Feel free to check it out ...

The Home Page shows a host of links, but for this exercise, the focus is on the **Cash Book** function under **Business Design**.

This is where the book-keeping gets done.

Click on **Cash Book**.

The screenshot shows the iniPax website header with the text 'iniPax ...' and 'iniPax Business Services'. Below this is a navigation menu with the following items:

- Business Design
 - the Story
 - the Financials
 - Cash Book** (highlighted with a red box)
 - User Guide
- Business Analysis
 - CooperRatings
- Business Services
 - theSMEboard
 - Share
- Schools
 - theStudies
 - Fin Lit
 - theOutback

Each item in the navigation menu has a corresponding description to its right, such as 'theStory is something you can't' for 'the Story' and 'theOutback is a low tech offline' for 'theOutback'.

iniPax Book-keeping

Register

To get started, **Register** with your name, location and eMail (twice, just to be sure). Your eMail will not be shared with anyone.

Give yourself an ID ... up to 8 characters. Any more than that gets a bit tedious to enter every time you log in.

A Password will be automatically generated and sent to your eMail address.

Or Log in

If you already have login details, click **Login** and you're away ...



Register

Salutation	- ▾
First Name	<input type="text"/>
Last Name	<input type="text"/>
QuickID	<input type="text"/>
Country	<input type="text"/>
<hr/>	
eMail	<input type="text"/>
Confirm eMail	<input type="text"/>

or Login

User Name	<input type="text"/>
Password	<input type="password"/>
<input type="button" value="Login ..."/>	

Your Home Page

Your personal Home Page shows all the companies registered to your name. There's no limit to the number of companies you can add – so you might even choose to go into the book-keeping business!

Because **iniPax** is designed as a planning service as well as a book-keeper, registering a new business automatically creates a template for building a financial plan (**Financials**) and another for describing the business (**Stories**) - in the terms expected by managers ... and investors.

It also sets up a '**Journal**' for book-keeping.

On the **iniPax** site the Journal is described simply as the **Cash Book**.

Adding a new company is easy: Give yourself a code of up to 4 characters.

There's a drop-down list of industry sectors to select from. In time, that will build a database of business benchmarks.

Add a New Company

Company Code	<input type="text"/>	up to 4 characters
Industry Sector	<div>Agriculture ▼</div>	
<div>Submit</div>		

Your Home Page

Logging in takes you to your private **Home Page**. You'll see the company(s) you may have already registered. With links to the **Financial** template, the business **Story** template – and the **Cash Book**.

Select your Cash Book

Click on **Select** for the Cash Book of the company you want to work with ...

Financials		
AAA	select	delete
ACME	select	delete
Stories		
AAA	select	delete
ACME	select	delete
Cash Book		
AAA	select	delete
ACME	select	delete

Process Transactions

In the Cash Book, click on **New Entry** to bring up the pop-up entry window.

There's nothing much to the Entry screen. It's meant to be easy.

Description: whatever helps remind you what the transaction was about.

Counterparty: a record of who the deal was with.

Classification: a drop-down box of preset categories. Important when the financial statements are calculated (more on the next page).

Amount: what it says!

Date: this is important because the system classifies financial statements into the proper time frame.

Invoice or Cash: this is important too because it helps keep track of the way Cash is coming into and out of the business.

The window stays open as long as new entries are being made. Click **close** when done ...

Enter

Journal: Enter	
Description	<input type="text"/>
CounterParty	<input type="text"/>
Classification	Income <input type="button" value="v"/>
Amount	<input type="text"/>
Date	YY [2016] MM [01] DD [01]
Invoice or Cash	Cash <input type="button" value="v"/>
close	<input type="button" value="Submit"/>

Edit

Journal: Edit Entry	
Description	Income Yr 2016
CounterParty	cvbnrt
Classification	Income <input type="button" value="v"/>
Amount	1033
Date	YY [2016] MM [01] DD [01]
Invoice or Cash	Invoice <input type="button" value="v"/>
close	<input type="button" value="Submit"/>

Delete

Journal: Delete Entry	
Description	Income Yr 2016
CounterParty	cvbnrt
Classification	Income
Amount	1033
Date	1/1/2016
Invoice or Cash	Invoice
close	<input type="button" value="Submit"/>

Open Invoices

Income Yr 2016	ABC Company	1033	01/01/2016	Income	paid	edit	delete
COGS Yr 2016		200	01/01/2016	COGS	paid	edit	delete
Income Yr 1		1,500	01/01/2016	Income	paid	edit	delete
Product Sales Yr1		1,000	01/01/2017	Income	paid	edit	delete
COGS Year 1		25	01/01/2017	COGS	paid	edit	delete
Income 2018		3,000	01/01/2018	Income	paid	edit	delete
Sales Yr 2		87	01/01/2018	Income	paid	edit	delete

Transactions Completed

Income Yr 2016	ABC Company	9,000	01/01/2016	Income		edit	delete
COGS 2016		1,800	01/01/2016	COGS		edit	delete
Opex Yr 2016		1,500	01/01/2016	Opex		edit	delete
Tax Yr 2016		143	01/01/2016	Tax		edit	delete
Interest Yr 2016		366	01/01/2016	Interest		edit	delete
Inventory Yr 2016		500	01/01/2016	Inventory		edit	delete
Plant & Equip 2016		4,200	01/01/2016	Capex		edit	delete

Classification

There are three parts to the cost of doing business, and to an accountant they each have a different name:

1. **Cost of Goods Sold (COGS).**
The things that go into the goods that the business sells (like components and raw materials).
2. **Operating Expenses (OpEx).**
The things that go into operating the business (like wages, rent, telephone bills).
3. **Capital Expenditure (CapEx).**
The cost of things that last (like tools, machines, buildings).

These are things that a manager must watch because they have an effect on Profit and Value.

Drop-down List

There's more in the drop-down list ...

- Income
- COGS
- OpEx
- Interest Paid
- Tax Paid
- Stock in hand
- Plant & Equipment (CapEx)
- Other Asset Purchases
- Equity Capital In
- Dividends (profits to shareholders)
- Debt In (money borrowed)
- Debt repayments

It's not a long list, but every entry **must** have one or other of these categories. They are there because they give a really good picture of the health of the business.

Cash Received

The Cash Book will show all your previous entries.

Those entries are divided into **Open Invoices** (Bills to be paid) and **Transactions Completed**.

An invoice is only a promise to pay; it's not cash that can be used to pay bills – and that's something that's extremely important for a business manager. That's why it's tracked by **iniPax**.

And that's why there's a popup box to register when an Invoice changes to cash.

When that happens, the change is registered on the Payments/Receipts Journal page.

Invoice Paid

Journal: Invoice Paid	
Description	Income Yr 2016
CounterParty	cvbnff
Classification	Income
Amount	1033
Date	1/1/2016
Invoice or Cash	Convert 'Invoice' to 'Cash'
close	<input type="button" value="Submit"/>

Open Invoices

COGS Yr 2016	200	01/01/2016	COGS	paid	edit	delete
Income Yr 1	1,500	01/01/2016	Income	paid	edit	delete
Product Sales Yr1	1,000	01/01/2017	Income	paid	edit	delete
COGS Year 1	25	01/01/2017	COGS	paid	edit	delete
Income 2018	3,000	01/01/2018	Income	paid	edit	delete
Sales Yr 2	87	01/01/2018	Income	paid	edit	delete

Transactions Completed

Income Yr 2016	cvbnff	9,000	01/01/2016	Income	edit	delete
Income Yr 2016	cvbnff	1033	01/01/2016	Income	edit	delete
COGS 2016		1,800	01/01/2016	COGS	edit	delete
Opex Yr 2016		1,500	01/01/2016	Opex	edit	delete
Tax Yr 2016		143	01/01/2016	Tax	edit	delete
Interest Yr 2016		366	01/01/2016	Interest	edit	delete
Inventory Yr 2016		500	01/01/2016	Inventory	edit	delete
Plant & Equip 2016		4,200	01/01/2016	Capex	edit	delete

Financial Statements

With all this in place, the stage is now set to look at the financial statements that accountants use and bankers expect.

Those statements lead to the performance ratios that professionals use to check on the health of a business.

The usual way with these things is to prepare them once a year – mainly because preparing them is quite time-consuming – and because a full year of figures will average out any short-term effects.

But because **iniPax** makes it as easy as the click of a button, it can be done regularly to watch the figures unfold.

And talking of unfolding, the tables are set out to show a five-year span, to show how the business is evolving and (hopefully) growing as the years go by.

Financial Statements

As soon as the latest round of entries are made, you can check out the financial statements at that instant in time.

Click **Statements** ...

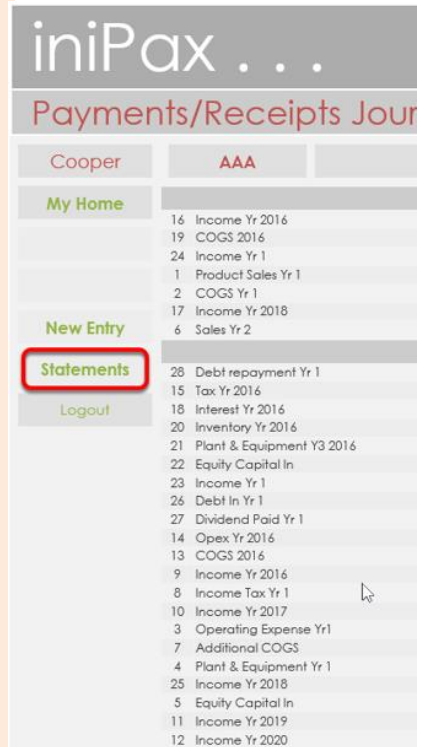
... and up will come:

- **Profit & Loss** (Profit List)
- **Cash Flow Statement** (Cash List)
- **Balance Sheet** (Assets List)

Just like the Bank Manager uses.

Just like a Business Manager uses.

They are described in detail in the **Financial Statements** section.



Financial Statements

	2015	2016	2017	2018	2019
PROFIT & LOSS					
Sales	20,033	21,000	20,000	40,087	50,000
COGS	2,000	101	0	0	0
Gross Profit	18,033	20,899	20,000	40,087	50,000
Operating Expense	5,000	33	0	0	0
Operating Profit	13,033	20,866	20,000	40,087	50,000
Interest Expense	366	0	0	0	0
Tax Expense	293	0	0	0	0
Depreciation Expense	1,050	804	603	452	339
NET PROFIT	11,324	804	603	452	339
CASH FLOW					
OPERATING ACTIVITIES					
Revenue	17,500	20,000	17,000	40,000	50,000
Payments	6,800	109			
Inventory	500				
Interest	366				
Tax Expense	293				
Total Operations	9,541	19,891	17,000	40,000	50,000
INVESTING ACTIVITIES					
Plant & Equipment	4,200	65			
Other Investment					
Total Investment	4,200	65			
FINANCING ACTIVITIES					
Sale of Shares	5,000			100	
Dividends Paid	133				
Borrowings	2,000				
Debt Repayments	235				
Total Financing	6,632				
Net Increase/Decrease	11,973	19,826	17,000	40,100	50,000
Cash @ Start	0	11,973	31,799	48,799	88,899
Cash @ End of Year	11,973	31,799	48,799	88,899	138,899
BALANCE SHEET					
ASSETS					
Cash	11,973	31,799	48,799	88,899	138,899
Receivables	2,533	3,533	6,533	6,620	6,620
Inventory	500				
Plant & Equipment	4,200	4,265	4,265	4,265	4,265
Accum Dep	1,050	1,854	2,457	2,909	3,248
Other					
Total Assets	18,156	37,743	57,140	96,875	146,536
LIABILITIES					
Borrowings	1,765	1,765	1,765	1,765	1,765
Payables	200	225	255	255	255
Other					
Total Liabilities	1,965	1,990	1,991	1,990	1,990
NET ASSETS	16,191	35,753	55,150	94,885	144,546
EQUITY					
Equity Invested	5,000	15,691	35,753	55,250	94,885
Retained Earnings	11,191	20,062	19,397	39,635	49,661
NET EQUITY	16,191	35,753	55,150	94,885	144,546

Business Analysis

Select the Test

The menu on the Financial Statements Page, has a link to Ratios and Valuation. Both are simple calculations, but again, quite enough to begin with.

The **Data Entry** link returns to the Journal page – and **Download** sends a .pdf copy of the Statements to your eMail address.

What am I Worth?

The **NPV** Valuation button brings up a textbook version of what your company is worth.

The Risk-Free Rate and the Risk Premium figures can be changed, but the automatic figures are quite OK for a start. The Cash Flow figures are copied automatically from the Financial Statements.

Business Performance: Financial Ratios

The **Ratios** link brings up Financial Ratios based on your financial statements.

The Benchmarks are a guide only. You'll need to go to your past history or the Internet to get more precise figures for your industry and a company of your size.

[DataEntry](#)
[Download](#)
[NPV Valuation](#)
[Ratios](#)

	Discount Factor
Risk Free Rate	<input type="text" value="6.00"/>
Risk Premium	<input type="text" value="6.00"/>
	Operating Cash Flows
Year 1	9,541
Year 2	19,891
Year 3	17,000
Year 4	40,000
Year 5	50,000
close	<input type="button" value="Submit"/>
Indicative Valuation	
\$175,382	

FINANCIAL RATIOS						Benchmark
Liquidity						(generic)
Working Capital	-0.17	-2.44	-	-	-	1.5
Quick Ratio	-0.90	-3.13	-	-	-	1.2
Leverage						
Debt/Assets Ratio	0.00	0.00	0.00	0.00	0.00	0.7
Debt/Equity Ratio	0.00	0.00	0.00	0.00	0.00	0.6
Debt to Income	0.00	0.00	-	-	-	30%
Interest Cover Ratio	-	-	-	-	-	4.5
Profit Performance						
Gross Profit Margin	57.06	50.00	0	0	0	80%
Net Profit Margin	-193.53	-184.38	-	-	-	10%
Return on Total Equity	100.00	47.28	21.29	13.77	9.36	20%
Return on Total Assets	-21.99	-17.83	-9.52	-6.67	-4.77	20%
Management Ratios						
Stock Turnover Ratio	4.00	45.71	0.00	0.00	0.00	30
Debtor Days	30	30	-	-	-	30
Creditor Days	51.43	45.77	0.00	-	-	45

The Book-keeping habit is a good habit

Not only because it's important to record the figures – and monitor the health of the business – but also because the traditional financial reports are so tightly integrated with book-keeping. In **iniPax**, they are available at the click of a button.

It doesn't take long to become familiar with what the reports mean and how the professionals work.

You too can get to “*Walk the walk and talk the talk*”.

The next part of this book explores the business planning process. It then goes into how the reports all fit together and what the numbers mean for the health of the business.

Business Planning

Why Plan?

Running a business, earning money, paying the bills – and maybe having some take-home pay - is all very well, but it's nice to think that all this is going to keep on growing, continuing well into the future so there's something to pass on to the kids – or the shareholders.

Making that happen means having a good plan ... a clear (and simple!) idea of what the business is going to do and how it's going to be done.

And a plan for the money: where it's to come from, where it's to go, how efficiently it's being used – and how management is setting itself to maintain continuing health checks.

We all like a good story, and that's what this next part is all about ...

What does a Plan contain?

A Plan needs to be written down, and it needs to be clear about what is important. Time, effort – and money – should not be wasted on things that don't add value.

A Plan can be thought of as a book with a number of chapters. The lessons of business history tell us what those chapters should be:

- Short Sharp Summary
- Broad Description
- The Market
- Customers
- Business Strategies
- Management Skills
- Money Management
- Risk Management
- Dreams ...

The next few pages describe the things to think about – and illustrates it all with a nice simple example ... a **Chicken Farm**.

Business Planning

Plan	<i>What is the business going to do?</i>
Record	<i>Where is the money coming from / going to?</i>
Health	<i>How does the business compare?</i>

Our Chicken Farm ...

To make it real, this story will be illustrated by a chicken farm – like I found in Cambodia ...

What can you do with chicken?

- Sell eggs?
- Sell to egg producers?
- Sell for food?
- Breed more chickens?

Maybe you can think of other things ...

That's a start... having something to sell.

Let's imagine our Chicken Farm story.

Be careful though: when you're telling a business story, it's really easy to talk about all sorts of things. Things that might sound interesting but are irrelevant to the health of the business. Sadly, lots of businesses go bad because they don't concentrate on what's important.

So keep it simple.

One thing at a time. You'll have plenty of opportunity to go into more detail later on.



Model Business

Chicken Farm

- *What can it sell?*
- *What does it need?*
- *How big?*

First Principles ...

A business is always an investment, even when the founder is the only investor - although the investor could also be a banker or a shareholder.

These outsiders are not so interested in the product that makes the founder so excited. They're interested in something that makes good use of their money. The prospect of a reward.

So the deal needs to be special. Getting outsiders interested is a competitive business, just as a successful business means out-competing competitors.

Start off by asking the sort of questions an investor might ask. It's always easier for the Story to have the right answers if you ask the right questions.

Business Summary

- *What's so special about the business?*
- *What's the product, how much is it likely to sell for and what's the likely profit margin?*
- *How many potential customers can be identified?*
- *Who are they?*

Our Chicken Farm

Our chicken farm produces chickens and eggs, basic foods with an ongoing demand.

It's a business with lots of competition, of course, but it's easy to find out how it can be operated efficiently – and opportunities for competitive improvements.

Prices and costs are easy to find, so pricing is easily established.

These are the things that can be said in the brief summary that comes up at the front of the Story.

Things to think about later ...

- *Buy eggs ready to hatch*
- *Buy hens to hatch the eggs*
- *Buy a rooster*
- *Buy fencing*
- *Buy best-price chickenfeed*
- *Negotiate sales outlets.*



What does the Story say?

We are going to chickens and raise them to laying age. Some of the eggs will be sold and some will be retained and hatched to expand the stock of laying hens.

First Principles ...

Now it's time to look a bit more into about how the business works.

There's more to the business story than the things it sells. They're necessary, of course - but there's also:

- Growth strategies to be executed,
- Sales and marketing programs,
- Milestones and targets to be met,
- R&D and Continuous Improvement programs,
- Cost-effective production management.

Money to be made work.

Business Description

- *Products and services*
- *Sales and Marketing*
- *Growth Strategies*
- *Milestones and targets*
- *Continuous Improvement*

Our Chicken Farm

This neighborhood offers something special. It is a close-knit community in which there is a real prospect that the women can build a co-operative that can out-compete others along the highway.

Chicken feed suppliers, for instance, could sell to local producers rather than down the highway: better price for the producers; better profit for the sellers.

If the business ever needs to borrow to expand, the local lender, the village-based community bank, could run less risk because the members of the co-operative are known personally.

There is an established street market that runs every evening. Members of the trading community are well known – and hard bargainers. Deals with those traders could be very profitable.

The government's agriculture department is very active in promoting new techniques. Support and advice is readily available – especially from the field officers who benefit directly from any business's success.



What does the Story say?

The chicken farm will start with 24 chickens, expanding to 500 in 5 years.

It will sell door to door and into street markets and will seek to create a competitive co-operative of suppliers, producers and sellers.

It will trade some of its produce for the supplies it needs, although in time it will expand its land holdings to grow its own chicken feed.

It will implement a breeding program that retains only the best chickens as stock and sells the rest.

First Principles ...

Business is all about serving customers.

- Who are they?
- how many of them are there?
- what do they want?
- what are they prepared to pay for?

Don't expect customers to come running to you just because you like what you're doing. Get to see things their way. It's a competitive world. And as we know, business is all about ***Selling***.

Mind you, it's always important to be realistic and look at what you've got and what you can actually do. The trick is to step away and look for something else if you find that nobody wants to buy.

- How would you describe your customers – and how many might there be?
- How can you out-compete the Competitors?
- Sales: if possible, include some past history – and some (defensible) prediction.

The Market

- the Customers,
- the Competition,
- How many potential customers?
- How much could they buy?
- How much might they pay?

Our Chicken Farm

In a way this has started from the wrong place ... started with what we want to do rather than with what the customers will buy.

Sometimes it works that way though, so maybe we're OK.

So let's look at what we can say about the market ...

There is unmet demand in the local community; the egg sellers run out of stock very quickly – even though their prices are quite high.

Chicken meat does not sell so well, probably because of strong vegetarian beliefs. What does sell are chicken pieces (stir fry) rather than whole chickens (oven roast).

While there is some local competition, production is not sufficient to meet demand. The only competitive opposition may come from a fear that a new entrant may reduce prices.

Common knowledge around the district is a high level of diabetes because of limited range of foods.



What does the Story say?

We have already established a reputation in the local weekly market, with many loyal customers who are known personally

We also do home deliveries throughout the week when the market is closed.

Demand is good and we have always sold out before the market closes.

We could easily expand to the next village and are making plans to do so.

First Principles ...

For a new business there is a choice: become a Monopolist (no competition/ set its own price) by inventing something that people want but nobody has done before. It can be done, but it needs very clever thinking.

The other end of the scale is to look around and see what people are already buying, something that they have no choice but to buy. Like food. Like clothes. Like houses.

The ideal is a business with no competitors. It can sell as much as it likes – and set its own price. It's called a Monopoly. Good for the business but not so good for the customers, so government regulators aren't so happy with that sort of thing and try to break it up.

The best of all worlds is to have a Monopoly while the business is getting established but accept that others will want a piece of the action and develop a competitive (improved and cheaper) version of their own. So the monopolist will have to keep improving.

That's why the textbooks are in favour of competition ... for the customers' sake. Customer protection.



Competition

Competition

First Principles ...

In reality it's best to expect competition and deal with it.

Plan to out-compete the competitors by offering something that's the same but different! Different enough for buyers to see it as different - different enough to grab enough of a share of buyers to make the business worthwhile.

Which means working towards a Monopoly in a known market. A mini-Monopoly. So now the Monopoly rules apply all over again! Can it be made at a price that makes a profit? Can monopoly power be used to push the price up.

At least this time a new market has to be created where there was none before.

This way it isn't necessary to invent a new product or create a new market: maybe all it needs is just better advertising!

So those are the choices: a Monopoly with no competitors or a mass market with lots of competition to show the way.



Competition

First Principles ...

The story so far is good, but it's a passive kind of thing, a bit of a snapshot, as though everything is fixed in place and nothing changes.

Now it's time to look ahead and talk about the strategies that will make the business prosper and grow.

Predicting the future is never easy but working to milestones is a good start. Milestones give a sense of achievement, something to report to investors.

- Set down some well thought out and realistic milestones: moments to celebrate as the business unfolds.
- Include some highlights from a defensible marketing and sales plan.
- Staying ahead of competitors means having a solid research and development plan.

Being a success means having a ToDo list, the things that have to be done to make the plan come alive.

So the Business Description is the Photo Album and the Business Strategy is the Movie.

Business Strategies

- *A Plan that Adds Value*
- *Growth Plan and Milestones*
- *Marketing and Sales Plan*
- *Research & Development Plan*
- *Continuous Improvement Plan*

Our Chicken Farm

The key to ongoing success is a quality relationship with customers and suppliers

The purchase of quality chicken feed from a quality supplier, although it may prove costly, pays dividends in the quality and quantity of eggs produced. Identifying reliable suppliers and maintaining a co-operative relationship is critical.

Consistent sales volumes and prices means identifying and appropriate market venue: on that is central to the customer catchment, and one in which there are customers that need – and can afford – the business's produce

The business must plan to grow its revenue, either by growing larger, by becoming more efficient or by developing a better (ie higher priced) product.

To stand still is to fail.



What does the Story say?

A firm operating foundation has already been established in the form of agreed commercial relationships with known suppliers and distributors around the district. Initial sales confirm the market analysis.

On this basis, the next phase of the development is to acquire further sales until known market and distributor relationships are at full capacity. At this point sales reach will be extended beyond the local district by starting to talk with specialty city outlets.

First Principles ...

It might be a cliché, but investors invest in people, not products and plans. These people aren't called Executives for nothing. These are the people that get things done.

Let the world know ...

- Show that you've got the team: describe your directors, advisors and key executives – and why they're the best ...
- Boast about management's achievements ... about their previous commercial successes.
- How will you keep the team together? What retention arrangements are in place?

Management

The Story should cover:

- the Boss,
- the Specialists,
- Success stories,
- Training programs,
- What will make them loyal?

Our Chicken Farm

The founder/manager has a clear idea what needs to be done and who is to do it – but is well over the temptation to tell people how to do their jobs – knowing that nothing destroys workers' motivation more than "Micro-management".

Management knows that it needs to insist that the job is done properly and to the best quality, but everybody has been encouraged to feel that they're each the manager of what they're doing.

Thinking forward, the founder understands that even though she's the boss at the beginning, there will come a time when she can't do everything. That's when she will need experts to support her. A sales and marketing expert, and production expert, of course, a finance expert. No longer will she be managing the business... She will be managing the experts and is already planning that succession.



What does the Story say?

The founder / manager has the skills to guide the business through its early stages of growth. She has brought together these suppliers and vendors for this enterprise and can report a profitable first six months.

She knows that as the business grows, she will need to recruit people with specialist skills: sales, suppliers, financial and staff management. She has already started watching the performance of younger members of nearby businesses.

First Principles ...

Getting started needs money ... the everyday money it takes to run a business – and at the beginning, money for tools and equipment

Within reason, it's always useful to have outside money, especially if it can earn a better return than the interest or dividend that has to be paid ... the Cost of Capital.

But what's the best kind of cash? A loan (Debt) or a cashed-up business partner (Equity)?

A loan means that interest has to be paid – but when it's paid off the lender goes away.

A business partner will always be there and will always take some of the profits – but gets nothing if there are no profits to share.

So the business questions are:

- How much does the business need – and when?
- Does the cash come from a bank or from shareholders? Debt or Equity?
- How can investors get their money back?

Money

The Story should cover:

- Taking out a loan, or
- Issuing shares,
- What return can you offer?
- Potential ...

Our Chicken Farm

Things to remember:

- *the bank gets its money from people who put their cash there for safekeeping – and to earn some interest of their own.*
- *it will only lend if it's sure that the loan and the interest will be paid - and if it can't be sure, it doesn't have to lend at all. The bank has to trust you.*
- *you're not the only person who is competing to borrow that money ...*



What does the Story say?

We have considered our options and believe that a loan is best for our expansion plans.

For the amount of money required, we can provide solid security, and we have sufficient income to meet current interest rates and repayment costs.

First Principles ... Borrowing Money

Borrowing means taking out a loan and then making regular payments, with interest, until it's all paid off.

The payments will normally be more than just the interest, so that every time a payment is made, a little of the borrowed money is also paid – so less of the next payment goes into interest and more into reducing what's owed ... until it's all paid off ...

There's more to borrowing money than just asking for it. There's no shortage of people asking for money and never enough to go around, so you must expect to be competitive.

So what's going to attract lenders?

Return and **Risk**.

Return: interest, capital gain or dividend?

Risk: potential risks and how they're managed?

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.

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



Borrowing

First Principles ... Borrowing Money

A lender has to be reassured that the borrower is worth lending to. The first thing a lender will ask for is a plan, a book-keeping system that shows that the business is staying on track.

If this is the borrower's first time, the lender will probably ask other people how trustworthy they are, evidence that the borrower can be relied on to use their money wisely.

For those who have borrowed money before, there'll be a check to see whether it's been paid back and whether the payments were made on time. If they weren't, the lenders won't be very helpful next time. They notice this kind of thing, and they have long memories.

And even after all that, they might even ask for more interest than usual, just because they're worried that there's a more than average risk that the loan might not get paid back.

If all this is done well, there's a good chance of getting the money – and if it's a Bank, it will be doing the right thing with other people's money.

So it's all up to you.



Borrowing

First Principles ... Business Partner

Next: taking on a business partner, a shareholder

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

The money paid for interest can all add up, even if the interest rate itself is reasonable. The actual money can take a lot of the business's income. Even worse, if something terrible happens to the business and it has to close down, the loan and the interest still has to be paid off.

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.

On top of that, if the terrible thing happens and the business does collapse, they know they won't get their money back. They share the risk.

It all sounds good, but there is a cost. As a risk and profit-sharing partner, they are also a part owner. So to get that money, a share in the company has been given away forever.



Business Partner

First Principles ... Business Partner

Mind you, Bill Gates, who invented Microsoft, is the richest man in the world and he has handed over more than 99% of the company so it's not necessarily bad. Somebody once said it's better to have 1% of something big than 100% of nothing...

Of course, someone has to be 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 the Founder might think they deserve much less because of the effort they've put into getting the business up and running.

Sharing ownership is never an easy negotiation, but the better the Founder's plan, the stronger the Founder's position.



**Business
Partner**

First Principles ...

It's no secret that things can go wrong, often through no fault of our own.

Have a think about what that might be – especially the really bad things, things that can have a really bad effect on the business. Then think about what could be done if they did happen. Things that it would be wise to have in place, just in case. A kind of private insurance.

A business plan is more than the excitement of possible profits. It is also about surviving the bad times. And having a plan for the bad times is especially important for lenders and shareholders.

So bring those worries out into the open – and describe what could be done about them. Nobody trusts “no worries”.

Show that the bad things have already been thought about and that there is a plan in place.

Risks

Our Chicken Farm

The company depends on a steady, preferably increasing, demand for its product. It will need its retailers to remain loyal, its own staff to remain productive and that its offering remains competitive.

Market stability is ensured by strong retailer agreements with enforceable penalties.

The spectre of climate change, drought and flood, is always present.

The business would be adversely affected if any of these did not perform to plan.

Although the product is quite simple, the company will continually explore ideas for adding attractive and distinctive features to its product line.



What does the Story say?

Market share will be maintained by actively monitoring customer satisfaction and sales figures, retailer by retailer.

Backup suppliers have been identified. Suppliers have been selected after considering their past performance.

Suppliers must provide evidence that water management arrangements are in place e.g. storage dams and flood basins.

First Principles ...

While there's always a risk that things can go wrong, there are times when they can go very right ...

So it's alright to be a dreamer!

The future is never as reliable as the past - and it's hard to sell a deal on Blue Sky alone but it's worth mentioning the possibilities.

Building a business should be enjoyable – and part of the enjoyment can come from dreaming of a future upside. It's all very well to imagine Risks and how they might be dealt with, but it's also OK to look at the other side of the coin.

It's OK to imagine good things and how they might be captured. Just like the plans to manage risk.

The thing to remember though, is that dreams are all your own – and they're not plans. For planning purposes, concentrate on the everyday – and certainly don't rely on dreams to promote the business to outsiders – like lenders ...

Future Dreams

The Story should cover:

- Innovation,
- Emerging technologies
- Market awareness,
- Customers,
- Competition.

Our Chicken Farm

Although the business intends to rely on steady and reliable growth with a continually improving product, it will no doubt develop special knowledge and skills that may put it in a position to make breakthroughs in production, product or market.

The business's plans do not rely on such breakthroughs, but neither will it ignore the chance that this could happen and so will continually monitor its activity, both internal and external, for opportunities that it might capture.



What does the Story say?

The business has a strict focus on everyday sales and cost saving. It also keeps looking for new markets and new ways of operating. It is widely agreed that the business is in a very competitive position and that there is a real prospect of a significant number of new customers and farming efficiencies.

Financial Reporting

Financial Statements

Often when people talk about a business, they only talk about selling things and paying for whatever they need to buy to run the business.

That's good, but it's only a start.

We have a Story. We know what we want to do, and the logic of it all has to add up.

But there's another part of the Plan that really does have to add up ... all the financial arithmetic. The Financial Reports, the financial health checks that must go on all the time.

Some people say they can't understand the reports – and all the book-keeping is too hard so they leave it to their Accountant to check out at Tax time. Once a year.

Wrong.

Those are the people who get all surprised when they wake up one day and find the business has gone broke. If you can't keep the records up to date – and understand what the figures mean, forget about going into business.

Financial Statements

All of this brings us to the things Accountants talk about. Financial Statements, the reports on how well a business is going.

Accountants use three main reports. They call them:

- the **Profit & Loss Statement**,
- the **Balance Sheet**, and
- the **Cash Flow Statement**.

For this exercise we'll keep it simple and call them the **Profit List**, the **Assets List** and the **Cash List** – because that's what they are.

The important thing is that these lists all fit together: if one changes, the other two have to change as well. If all three match up, the figures can be trusted – and the bank knows it can trust you!

And that leads to the most important thing of all: the figures from those lists can be used them to see how our business compares with all the other businesses in the world - and whether there's anything that can be improved.

And so you feel at home with the business, we'll apply all this to our Chicken Farm ...

Profit List

The **Profit List** uses a business's invoices to show what's left after the money from Sales has been used to pay the bills. That's what's called **Profit** (or maybe Loss!).

What it shows though, is only promises to pay, not actual cash. Invoices are not the same as cash in the bank, because people don't always pay on time.

Real Cash is accounted for in a separate – but closely integrated - **Cash List**.

For management purposes, there are various kinds of Costs: **Variable** and **Fixed**.

Some costs vary according to the number of items sold. Those are the Variable costs (or Cost of Goods Sold – or COGS). Others are those that have to be paid for no matter how much is sold: they are the Fixed costs (or Operating Costs – or OpEx).

What's left over after the bills have been paid is called **Profit**.

Profit List

SALES	
Eggs	
Chickens	
TOTAL SALES	
EXPENSES	
Variable Costs	
Chickenfeed	
GROSS PROFIT	
Fixed Costs	
Rent	
My Pay	
Total Costs	
OPERATING PROFIT	
Wearing Out Expense	
Interest and Repayments	
NET PROFIT	

Assets List

The Accountants' name for the Assets list is **Balance Sheet**.

A business is worth more than the cash in the cash box. The things that it **owns**, for instance, like tools and equipment – or chickens(!) – are called **Assets**.

Against those Assets, must be balanced anything the business **owes** ... loans that must be paid back, for instance. They are called **Liabilities**.

The difference between **Assets** and **Liabilities** is a measure of what the business is worth. Its **Net Assets**.

Alongside that is a calculation of what the owner has put into the business: the **Owner's Equity**.

Interestingly, the calculation of Net Assets is quite different from the way Total Equity is counted – but they both come to the same number.

A very useful cross-check.

Assets List

ASSETS	(We Own)	LIABILITIES	(We Owe)
Current Assets		Current Liabilities	
Cash			
Receivables		Payables	
Non-Current Assets		Non-Current Liabilities	
Land		Borrowings	
Fencing			
Chickens			
New Chickens			
Wearing Out			
TOTAL ASSETS		TOTAL LIABILITIES	
NET ASSETS			
OWNERSHIP			
Owner's Equity			
Net Profit			
TOTAL EQUITY			

Cash List

Accountants call the Cash list the **Cash Flow Statement**. It's different from the **Profit & Loss Statement** because it's actual cash, not just promises to pay.

Cash information is grouped under three headings:

- **Operating** Activities (everyday operations),
- **Investing** Activities (money paid for things like land and equipment), and
- **Financing** Activities (like money borrowed or dividends paid).

The list must always show that the business holds real cash, otherwise payments won't go through - and if you can't pay your bills, you can go to gaol ... !

So watch the **Cash At End** calculation like a hawk - every day of the year ...

Cash List

OPERATING ACTIVITIES	
Cash from Customers	
Cash to Suppliers and Employees	
Interest	
NET OPERATING	
INVESTING ACTIVITIES	
Land	
Chickens	
New Chickens	
NET INVESTING	
FINANCING ACTIVITIES	
Loans	
Repayments	
NET FINANCING	
INCREASE / DECREASE	
CASH AT BEGINNING	
CASH AT END	

Book-keeping

Our Chicken Farm example starts with simple book-keeping, a list of what's spent and what's sold.

A list like this is the simplest way of keeping track, and it's enormously useful. At the very least, you'll know whether there's cash to carry on.

It's then very easy to shift these figures into the three Lists: the **Profit**, **Assets** and **Cash** lists.

So to get started ...

Let's say we have saved \$500 to get started ... our **Start Cash**.

Let's buy 50 **chickens**, for \$3 each. That comes to \$150.

The chickens will need to be fed, so let's buy \$100 of **chicken feed**.

We'll need somewhere to put them, so let's **rent** somewhere for \$50 – and put a **fence** around it for another \$50.

And then finally, our **wages** ... \$100.

The column on the right shows how the stock of money goes up and down, but in the end, there's still \$50 left.

Our Chicken Farm story has begun ...

Transaction List		Remainder
Start Cash	500	500
Buy Chickens	-150	350
Buy Chickenfeed	-100	250
Pay Rent	-50	200
Buy Fencing	-50	150
My Pay	-100	100
Remainder		50

Profit List (1)

This is a first look at what the Profit list looks like. It shows the business's everyday **Expenses** as they appeared on the book-keeping list.

Some costs vary (**Variable** Costs) and some don't change (**Fixed** Costs).

The important thing is that this is a list of promises rather than actual cash (remember **Credit**), but it's a useful start.

At this stage, the list just shows **Expenses** – but it separates them out as those that change as Sales change (**Variable** costs) and those that stay the same whether lots of chickens are sold or very few (**Fixed** costs).

This **Expenses** list only shows Chickenfeed (**Variable**), Rent and My Pay (**Fixed**). In reality there are usually many more.

SALES	
Eggs	
Chickens	
TOTAL SALES	
EXPENSES	
Variable Costs	
Chickenfeed	100
GROSS PROFIT	
Fixed Costs	
Rent	50
My Pay	100
Total Costs	
OPERATING PROFIT	
Wearing Out Expense	
Interest and Repayments	
NET PROFIT	

Profit List (2)

Profit is what's left of Sales income after all the Expenses have been paid, so let's add some **Sales** to our Profit List.

Our Chicken Farm sells **Eggs** and **Chickens**. Let's look at some numbers:

We've bought 100 hens. Let's say each one lays 100 eggs in a year – so that's 5,000 altogether. As a price example, 10 eggs for a dollar would come to \$500.

But what if we hold back 100 of those eggs and hatch them into new chickens. Our egg sales would go down to \$490 but we would now have 100 new chickens.

So what could we do with those 100 new chickens?

We could sell 50 chickens for \$3 each (which adds up to \$150) and we could keep the other 50 to add to our flock.

So our sales now add up to \$490 for the eggs and \$150 for the chickens ... \$640 altogether.

And that leads to the first performance calculation: after the **Fixed** Costs have been paid we're left with what's called **Gross Profit**.

SALES	
Eggs	490
Chickens	150
TOTAL SALES	640
EXPENSES	
Variable Costs	
Chickenfeed	100
GROSS PROFIT	540
Fixed Costs	
Rent	50
My Pay	100
Total Costs	250
OPERATING PROFIT	
Wearing Out Expense	
Interest and Repayments	
NET PROFIT	

Profit List (3)

From **Gross Profit** we can move on to another kind of Profit ...

Gross Profit is a good start because it shows the cost of everything that goes into whatever is being sold. The more things you make, the more these costs increase – in direct proportion to what you sell. Accountants call it the Cost of Goods Sold.

Fixed costs add to the picture. Subtracting Fixed costs from Gross Profit leaves something closer to the Profit from everyday activities.

This second kind of Profit is called **Operating Profit**. It still doesn't include all of the business's costs, but it covers the costs that the business has to pay every day.

SALES	
Eggs	490
Chickens	150
TOTAL SALES	640
EXPENSES	
Variable Costs	
Chickenfeed	100
GROSS PROFIT	540
Fixed Costs	
Rent	50
My Pay	100
Total Costs	250
OPERATING PROFIT	390
Wearing Out Expense	
Interest and Repayments	
NET PROFIT	

Asset List (1)

The **Profit** list is useful for showing how the money comes and goes, but there are things on our book-keeping list that don't show up as everyday expenses. Things that last – like fences and chickens – and unused cash.

So there's more to a business than the everyday Sales and Expenses on the Profit list.

Things that last are called **Assets**, the things a business **owns**. It's useful to track them separately from those everyday expenses.

Also, some Assets last longer than others. Those that are used up within a year or so are called **Current Assets** and others that last longer are known as **Non-Current Assets** - like fences.

The business must also account for what it owes, like a loan from the bank. They are called **Liabilities** and they'll be explained later.

The Assets list goes hand in hand with the Profit list – and some Benchmarks take figures from both lists.

ASSETS	(We Own)	LIABILITIES	(We Owe)
Current Assets		Current Liabilities	
Cash	50		
Receivables		Payables	
Non-Current Assets		Non-Current Liabilities	
Land		Borrowings	
Fencing	50		
Chickens	150		
New Chickens			
Wearing Out			
TOTAL ASSETS	250	TOTAL LIABILITIES	
NET ASSETS			

OWNERSHIP			
Owner's Equity			
Net Profit			
TOTAL EQUITY			

Profit List (4)

We're not quite there yet with our measure of Profit.

We've seen that payments have to be made for things like chickens and fences - but these things will eventually wear out (or die!).

They're not going to last forever, so they'll have to be replaced. Money will have to be set aside.

The wise thing to do is to estimate how long these assets will last and set aside some part of the original cost each year. Here we're calling it a ***Wearing Out Expense*** (sometimes called ***Depreciation***).

Because it's an ***allowance*** rather than real cash, like Chickenfeed or Rent, it has to be separate from Operating Profit.

Once all of these things have been taken away, the bottom line on the Profit list is called ***Net Profit***. This is getting closer to the real Profit - although not quite there yet!

SALES	
Eggs	490
Chickens	150
TOTAL SALES	640
EXPENSES	
Variable Costs	
Chickenfeed	100
GROSS PROFIT	540
Fixed Costs	
Rent	50
My Pay	100
Total Costs	
OPERATING PROFIT	390
<i>Wearing Out Expense</i>	-40
Interest and Repayments	
NET PROFIT	350

Asset List (2)

The **Wearing Out** expense is an interesting example of how the three lists work together.

It has a place in the **Profit** list as an Allowance, and it also needs to show up on the **Assets** list to remind us that assets don't last forever. But because it isn't actual cash, it doesn't show on the **Cash** list.

The way it's handled is that on the **Assets** list, this year's **Wearing Out** figure will be added to last year's total.

Eventually the original cost and the **Wearing Out** total will be equal and will balance out.

ASSETS	(We Own)	LIABILITIES	(We Owe)
Current Assets		Current Liabilities	
Cash	50		
Receivables		Payables	
Non-Current Assets		Non-Current Liabilities	
Land		Borrowings	
Fencing	50		
Chickens	150		
New Chickens			
<i>Wearing Out</i>	-40		
TOTAL ASSETS	210	TOTAL LIABILITIES	
NET ASSETS			

OWNERSHIP			
Owner's Equity			
Net Profit			
TOTAL EQUITY			

Cash List (1)

So now our third list ... our **Cash** list.

Cash is really important.

It's useful to divide the Cash list into three:

- Operations
- Investing
- Financing

Operations is the cash to and from everyday business and interest payments,

Investments is the cash to and from Asset investments, and

Financing is the cash to and from borrowing- and paying back any loans.

All this shows how much cash should be in the bank at any time.

That's really important to know, because if it doesn't have any cash, the business won't be able to pay its bills – and that's not good!

And remember that all the lists have to fit together, so there's another thing: this Cash figure may now be different from the one previously used in the **Asset** list – so it will now be necessary to go back and change it.

OPERATING ACTIVITIES	
Cash from Customers	640
Cash to Suppliers and Employees	250
Interest	
NET OPERATING	390
INVESTING ACTIVITIES	
Land	
Fencing	50
Chickens	200
New Chickens	
NET INVESTING	250
FINANCING ACTIVITIES	
Loans	
Repayments	
NET FINANCING	
INCREASE / DECREASE	140
CASH AT BEGINNING	500
CASH AT END	640

Assets List (3)

All these pages of calculations have led to a figure for **Net Assets**, the “book” value of the business. It isn't necessarily the figure you'd offer for sale, but it's the one that can be easily defended.

But there's another way of looking at value: the money the founder put in at the beginning - and the Profit that's stayed in the business should certainly be worth something.

The way it's done is that a figure for the value of ownership is put in a separate section at the bottom of the Assets list where it's called **Total Equity**.

Although the way it's calculated is quite different from the calculation of Net Assets, Total Equity comes out as exactly the same figure as Net Assets.

Just like magic – it shows that all work is correct.

ASSETS	(We Own)	LIABILITIES	(We Owe)
Current Assets		Current Liabilities	
Cash	640		
Receivables		Payables	
Non-Current Assets		Non-Current Liabilities	
Land		Borrowings	
Fencing	50		
Chickens	150		
New Chickens			
Wearing Out	-40		
TOTAL ASSETS	850	TOTAL LIABILITIES	
NET ASSETS			

OWNERSHIP			
Owner's Equity	500		
Net Profit	350		
TOTAL EQUITY	850		

Profit List (5)

Up until now, the business has been running on the Founder's own cash. But things change when it needs more than the cash in the bank.

For example, let's say the landlord has agreed to sell you the land you've been renting. That's great. No more rent to pay.

But you'll now need to find the money to pay for the land – like taking out a loan.

A loan means that the lists will have to show the money it pays for **Interest** and **Repayments**. But Rent will no longer appear.

But like the **Wearing Out** expense, Interest and Repayments on that loan aren't really costs of actually running the business, so they're put down with the Wearing Out Expenses, below the Operating Profit line. The same with **Tax**!

Meanwhile, back on the **Assets** list, there'll be two new entries: a new **Asset** (the Land) and a new **Liability** (the Loan).

And the **Cash** list will show loans and repayments as Financing activities.

SALES	
Eggs	490
Chickens	150
TOTAL SALES	640
EXPENSES	
Variable Costs	
Chickenfeed	100
GROSS PROFIT	540
Fixed Costs	
Rent	
My Pay	100
Total Costs	
OPERATING PROFIT	440
Wearing Out Expense	-40
Interest and Repayments	150
NET PROFIT	250

Cash List (2)

Unpaid Bills

Almost there – although it's time to go full circle to the beginning where the point was made that the Profit list showed '*promises to pay*' rather than actual Cash.

The **Assets** list and the **Cash** list must be adjusted to allow for unpaid bills.

Two of the basic Management Benchmarks are the number of days, on average, it takes for people to pay the money they owe us (**Creditor Days**) and people we need to pay (**Debtor Days**).

Bills that are yet to be paid are called **Payables** and money that is yet to be received is called **Receivables**. Receivables are an **Asset** and Payables show up as a **Liability**.

The figures for Receivables and Payables usually come from normal book-keeping, but for this exercise it's possible to work from **Sales** and **Expenses** and adjust the Operating Activities on the Cash list and the Assets list. The calculation is:

$$\begin{aligned} \text{Receivables} &= \frac{\text{Sales} \times 30}{360} = 80 \\ \text{Payables} &= \frac{\text{Expenses} \times 45}{360} = 33 \end{aligned}$$

OPERATING ACTIVITIES	
Cash from Customers	560
Cash to Suppliers and Employees	-167
Interest	-50
NET OPERATING	
INVESTING ACTIVITIES	
Land	-1000
Chickens	-250
New Chickens	
NET INVESTING	
FINANCING ACTIVITIES	
Loans	800
Repayments	-100
NET FINANCING	700
INCREASE / DECREASE	-207
CASH AT BEGINNING	500
CASH AT END	293

Asset List (4)

So the final step is to bring the Assets list up to date so that it now includes:

Assets

- The Cash figure from the Cash list
- Receivables
- Land

Liabilities

- Payables
- Borrowings.

... and that everything continues to balance out.

And **Net Assets** are still equal to **Net Equity**.

ASSETS	(We Own)	LIABILITIES	(We Owe)
Current Assets		Current Liabilities	
Cash	293		
Receivables	80	Payables	33
Non-Current Assets		Non-Current Liabilities	
Land	1000	Borrowings	800
Fencing	50		
Chickens	150		
New Chickens	50		
Wearing Out	-40		
TOTAL ASSETS	1583	TOTAL LIABILITIES	833
NET ASSETS	750		

OWNERSHIP			
Owner's Equity	500		
Net Profit	250		
TOTAL EQUITY	750		

Financial Planning

A business's success rests on making the best use of its money – and having a plan for that money.

We've already seen how **iniPax** can be used for book-keeping and for producing the business story and financial reports.

Consistent with and complementary to that application, we can work the other way 'round and build the very same financial statements (**Profit & Loss, Cash Flow Statement and Balance Sheet**) as we build the plan.

Building the plan means building a model of the business – seeing how the first idea works and then refining the model to reflect what's possible – or not possible. At this stage it means that it's only pretend money that's at risk!

So ... build the model and refine it until it's both realistic and profitable.

Welcome back to **iniPax** ...

Planning Template

The model isn't limited to a start—up business – although that's how it was first used many years ago. It can also be used to build a forward plan for an existing business. The most realistic forward look is a 5 year plan.

If it's an established business, the first step is to seed the plan with figures from the previous year and enter them in the box headed **PRIOR BALANCE SHEET**.

If it's a startup business, the only entry will be **Cash** on the Assets list.

The other setup items is the list of Multipliers. These Multipliers are used to convert Sales Expenses, Equipment costs and Financial arrangements into a full set of Financial Statements. These multiplying factors are common to a wide range of industries. At the beginning, they can be left as they are, but can be refined as experience develops.

PRIOR BALANCE SHEET

Assets	Prior Year
Cash	0
Receivables	0
Plant & Equipment	0
Inventory	0
Accum Dep	0
Other Assets	0

Liabilities	
Borrowings	0
Payables	0
Other Liabilities	0

Equity	
Start Equity	0

Multipliers

Debtor Days	30
Creditor Days	45
Inventory Weeks	13
GST (%)	10
Depreciation (%)	25

PROJECTIONS

	This Year	Next Year	Year After	Year 4	Year 5
Sales	0	0	0	0	0
COGS	0	0	0	0	0
Operating Expenses	0	0	0	0	0
Plant & Equipment Purchases	0	0	0	0	0
Other Asset Purchases	0	0	0	0	0
Equity Capital In	0	0	0	0	0
Dividend Paid	0	0	0	0	0
Base Rate Interest (%)	5	5	5	5	5
Borrowings	0	0	0	0	0
Term Loan Amount	0	0	0	0	0
Term Loan Duration (Yrs)	1	1	1	1	1

Sales & Expenses

You're a business manager, not an accountant, so Sales is your language and the best place to start.

Decide on a Sales figure for Year 1 and set a Sales target for Year 5 (5 years is good for a forward look).

Work out a figure for the **COGS** (Cost of Goods Sold) ... the components and raw materials that finish up in the products or services sold to customers. That figure can be obtained either by analysing the production plan or, more simply at this stage, by finding a percentage figure that matches your business. A **Benchmark**. As often as not, 20% of Sales is a good start.

The next step is to work out a figure for **Operating Expenses** ... bills that have to be paid to keep the business running - like power, rent, wages. Again, do it by calculating a figure or by searching the Internet for a Benchmark for your kind of business (Size, Industry).

Capital Expenditure is money spent on Assets like tools and equipment, chairs and tables, computers. Known as **Plant & Equipment**.

Then put in a Sales figure for where you'd like to be in 5 years.

PRIOR BALANCE SHEET**Assets** **Prior Year**

Cash	0
Receivables	0
Plant & Equipment	0
Inventory	0
Accum Dep	0
Other Assets	0

Multipliers

Debtor Days	30
Creditor Days	45
Inventory Weeks	13
GST (%)	10
Depreciation (%)	25

Liabilities

Borrowings	0
Payables	0
Other Liabilities	0

Equity

Start Equity	0
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PROJECTIONS

	This Year	Next Year	Year After	Year 4	Year 5
Sales	1450000	0	0	0	20000000
COGS	250000	0	0	0	0
Operating Expenses	1000000	0	0	0	0
Plant & Equipment Purchases	750000	0	0	0	0
Other Asset Purchases	0	0	0	0	0
Equity Capital In	0	0	0	0	0
Dividend Paid	0	0	0	0	0
Base Rate Interest (%)	5	5	5	5	5
Borrowings	0	0	0	0	0
Term Loan Amount	0	0	0	0	0
Term Loan Duration (Yrs)	1	1	1	1	1

Fill in the Gaps

Year 1 figures has been a good place to start. A good way to see how the figures work and what's needed.

But this is a **Plan** – a look to the future, the steps along the way to get to the Year 5 Sales figure that was set in the previous step.

One strategy could be a steady growth, taking equal steps each year. Or it could be a slow start to establish and consolidate, followed by rapid expansion once operations have stabilised. Or it could be a fast start to build up cash and a market presence – and only then to consolidate.

Back on the Entry page, fill in the gaps for **COGS**, **OpEx** and **CapEx** just as for Year 1, press the **Submit** button and **iniPax** will do the accountant's work and calculate the Financial Statements.

iniPax lets options be applied and tested, to see which strategy yields the best numbers.

It might also show that the business needs money ... like just about every early stage business.

PRIOR BALANCE SHEET**Assets** **Prior Year**

Cash	0
Receivables	0
Plant & Equip	0
Inventory	0
Accum Dep	0
Other Assets	0

Liabilities

Borrowings	0
Payables	0
Other Liabilities	0

Equity

Start Equity	0
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Multipliers

Debtor Days	30
Creditor Days	45
Inventory Weeks	13
GST (%)	10
Depreciation (%)	25

PROJECTIONS

	This Year	Next Year	Year After	Year 4	Year 5
Sales	1450000	6087500	10725000	15362500	20000000
COGS	250000	1049569	1849138	2648707	3448276
Operating Expenses	1000000	4198276	7396552	10594828	13793103
Plant & Equipment Purchases	750000	0	0	0	0
Other Asset Purchases	0	0	0	0	0
Equity Capital In	0	0	0	0	0
Dividend Paid	0	0	0	0	0
Base Rate Interest (%)	5	5	5	5	5
Overdraft Drawdown	0	0	0	0	0
Term Loan Amount	0	0	0	0	0
Term Loan Duration (Yrs)	5	1	1	1	1
Financial Expenses	0	0	0	0	0

Financial Statements

There's now enough to take a first look at the business's performance through the eyes of a finance professional. Click **Submit ...**

The **Profit & Loss** statement shows **Gross Profit** and **Operating Profit** – and by using **Multipliers** from the Input page, includes an estimate of Depreciation (Wearing Out) and Tax to give a figure for **Net Profit**.

The **Operating Activities** block on the **Cash Flow Statement** sets out Actual Cash from Operations. Promised cash on the P&L has been adjusted by using the figure for **Debtor** and **Creditor Days** in the Multiplier box. Other Multipliers account for **Taxes** and the **Inventory** locked up in the warehouse: product ready to sell and stock ready to turn into products.

The **Investing Activities** block shows that cash for **Plant & Equipment** is separate from Operational activities.

There's nothing to show in the **Financing Activities** block, but the line in red needs attention. The negative figure for **Cash @ Year End** this version of the plan means that it wouldn't have enough cash to pay the bills.

So back to the **Financing** rows on the Input page ...

	This Year	Next Year	Year After	Year 4	Year 5
PROFIT & LOSS					
Sales	1,450,000	6,087,500	10,725,000	15,362,500	20,000,000
COGS	250,000	1,049,569	1,849,138	2,648,707	3,448,276
Gross Profit	1,200,000	5,037,931	8,875,862	12,713,793	16,551,724
Operating Expenses	1,000,000	4,198,176	7,396,552	10,594,828	13,793,103
Operating Profit	200,000	839,755	1,479,310	2,118,965	2,758,621
Interest Expense	0	0	0	0	0
Tax Expense	16,250	-125,764	-264,221	-400,063	-533,926
Depreciation Expense	187,500	140,625	105,469	79,102	59,326
NET PROFIT	28,750	573,367	1,109,620	1,639,801	2,165,368
CASH FLOW					
OPERATING ACTIVITIES					
Revenue	1,439,931	6,055,295	10,692,795	15,330,295	19,967,795
Payments	1,236,979	5,206,102	9,204,045	13,201,891	17,199,735
Inventory	62,500	199,892	199,892	199,892	199,892
Interest	0	0	0	0	0
Tax Paid	16,250	-125,764	-264,221	-400,063	-533,926
Total Operations	156,701	523,538	1,024,637	1,528,450	2,034,242
INVESTING ACTIVITIES					
Plant & Equipment	750,000	0	0	0	0
Other Investment	0	0	0	0	0
Total Investment	750,000	0	0	0	0
FINANCING ACTIVITIES					
Sale of Shares	0	0	0	0	0
Dividends Paid	0	0	0	0	0
Borrowings	0	0	0	0	0
Loan Repayments	0	-0	-0	-0	-0
Total Financing	0	0	0	0	0
Net Increase / Decrease	-593,299	523,538	1,024,637	1,528,450	2,034,242
Cash @ Start	0	-593,299	-69,761	954,876	2,483,325
Cash @ End Of Year	-593,299	-69,761	954,876	2,483,325	4,517,567
BALANCE SHEET					
ASSETS					
Cash	-593,299	-69,761	954,876	2,483,325	4,517,567
Receivables	10,069	42,274	74,479	106,684	138,889
Inventory	62,500	262,392	462,285	662,177	862,069
Plant & Equip	750,000	750,000	750,000	750,000	750,000
Accum Dep	187,500	328,125	433,594	512,695	572,021
Other	0	0	0	0	0
Total Assets	41,771	656,781	1,808,046	3,489,491	5,696,503
LIABILITIES					
Borrowings	0	0	0	0	0
Payables	13,021	54,664	96,309	137,953	179,598
Other	0	0	0	0	0
Total Liabilities	13,021	54,664	96,309	137,953	179,598
NET ASSETS	28,750	602,116	1,711,736	3,351,537	5,516,906
EQUITY					
Equity Invested	0	28,750	602,117	1,711,736	3,351,537
Retained Earnings	28,750	573,367	1,109,620	1,639,801	2,165,368
NET EQUITY	28,750	602,117	1,711,736	3,351,537	5,516,906

Financing: Debt

The business might seek extra cash as a loan, a debt to be repaid.

That loan might be negotiated as cash that's paid off over a few years. A **Term loan**.

On the Input page, it would be entered as a defined **Amount**, **Duration** and **Base Rate Interest** in the year the loan is taken out. That interest rate persists for the life of that loan. Other loans can be taken out in later years.

An alternative to a **Term Loan** is an arrangement with its lender to go into **Overdraft** ... an ongoing kind of loan. Not as rigid as a **Term Loan**, but usually at a higher interest rate. The lender will set an upper limit on the amount that can be borrowed - and the interest is only paid on the money that's actually used.

Back on the Input page, try a number for a **Term Loan**, click **Submit** and see how the **Cash @ Year End** now looks – noticing that Interest cost have been calculated and show up on the Profit & Loss and Cash Flow Statements.

If the **Cash @ Year End** is still negative, go back to the Input page and try another number ...

PRIOR BALANCE SHEET**Assets** **Prior Year**

Cash	0
Receivables	0
Plant & Equip	0
Inventory	0
Accum Dep	0
Other Assets	0

Liabilities

Borrowings	0
Payables	0
Other Liabilities	0

Equity

Start Equity	0
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Multipliers

Debtor Days	30
Creditor Days	45
Inventory Weeks	13
GST (%)	10
Depreciation (%)	25

PROJECTIONS

	This Year	Next Year	Year After	Year 4	Year 5
Sales	1450000	6087500	10725000	15362500	20000000
COGS	250000	1049569	1849138	2648707	3448276
Operating Expenses	1000000	4198276	7396552	10594828	13793103
Plant & Equipment Purchases	750000	0	0	0	0
Other Asset Purchases	0	0	0	0	0
Equity Capital In	0	0	0	0	0
Dividend Paid	0	0	0	0	0
Base Rate Interest (%)	5	5	5	5	5
Overdraft Drawdown	0	0	0	0	0
Term Loan Amount	1000000	0	0	0	0
Term Loan Duration (Yrs)	5	1	1	1	1
Financial Expenses	0	0	0	0	0

Financing: Debt

The figure entered as the **Term Loan Amount** won't necessarily be the same as the negative number for **Cash @Year End**. Some money will now go into **Interest** and **Debt Repayments** – but Interest will be tax deductible, so **Tax** will change – but Interest payments will cut into **Net Profit**.

On the **Cash Flow Statement**, Interest will now appear under Operating Activities, while Repayments will show up in the **Financing** block.

With all these adjustments, the **Cash @Year End** may still be negative – or it may show that the loan doesn't need to be as large (remembering that it's always wise to have a little extra for emergencies)

If necessary, go back to the **Input** page and adjust. The **Term** of the loan and the **Interest Rate** can also be adjusted, so try some alternatives.

The main thing about a loan, despite the cost of interest, is that when the payments are complete, there's no change to ownership – unlike **Equity capital**, which means that some of the ownership is sold off forever.

The loan will show up as an added Cash Asset on the **Balance Sheet** – and Borrowings as a Liability.

	This Year	Next Year	Year After	Year 4	Year 5
PROFIT & LOSS					
Sales	1,450,000	6,087,500	10,725,000	15,362,500	20,000,000
COGS	250,000	1,049,569	1,849,138	2,648,707	3,448,276
Gross Profit	1,200,000	5,037,931	8,875,862	12,713,793	16,551,724
Operating Expenses	1,000,000	4,198,176	7,396,552	10,594,828	13,793,103
Operating Profit	200,000	839,755	1,479,310	2,118,965	2,758,621
Interest Expense	50,000	40,951	31,450	21,474	10,999
Tax Expense	20,000	-113,478	-254,786	-393,620	-530,627
Depreciation Expense	187,500	140,625	105,469	79,102	59,326
NET PROFIT	-17,500	544,701	1,087,605	1,624,769	2,157,669
CASH FLOW					
OPERATING ACTIVITIES					
Revenue	1,439,931	6,055,295	10,692,795	15,330,295	19,967,795
Payments	1,236,979	5,206,102	9,204,045	13,201,891	17,199,735
Inventory	62,500	199,892	199,892	199,892	199,892
Interest	50,000	40,951	31,450	21,474	10,999
Tax Paid	20,000	-113,478	-254,786	-393,620	-530,627
Total Operations	110,451	494,872	1,002,622	1,513,418	2,026,543
INVESTING ACTIVITIES					
Plant & Equipment	750,000	0	0	0	0
Other Investment	0	0	0	0	0
Total Investment	750,000	0	0	0	0
FINANCING ACTIVITIES					
Sale of Shares	0	0	0	0	0
Dividends Paid	0	0	0	0	0
Borrowings	1,000,000	0	0	0	0
Loan Repayments	-180,975	-190,024	-199,525	-209,501	-219,976
Total Financing	819,025	-190,024	-199,525	-209,501	-219,976
Net Increase / Decrease	179,477	304,848	803,097	1,303,917	1,806,567
Cash @ Start	0	179,477	484,325	1,287,422	2,591,339
Cash @ End Of Year	179,477	484,325	1,287,422	2,591,339	4,397,905
BALANCE SHEET					
ASSETS					
Cash	179,477	484,325	1,287,422	2,591,339	4,397,905
Receivables	10,069	42,274	74,479	106,684	138,889
Inventory	62,500	262,392	462,285	662,177	862,069
Plant & Equip	750,000	750,000	750,000	750,000	750,000
Accum Dep	187,500	328,125	433,594	512,695	572,021
Other	0	0	0	0	0
Total Assets	814,546	1,210,866	2,140,592	3,597,504	5,576,842
LIABILITIES					
Borrowings	819,025	629,002	429,477	219,976	0
Payables	13,021	54,664	96,309	137,953	179,598
Other	0	0	0	0	0
Total Liabilities	832,046	683,666	525,786	357,929	179,598
NET ASSETS	-17,500	527,201	1,614,805	3,239,575	5,397,244
EQUITY					
Equity Invested	0	-17,500	527,201	1,614,805	3,239,575
Retained Earnings	-17,500	544,701	1,087,605	1,624,769	2,157,669
NET EQUITY	-17,500	527,201	1,614,805	3,239,575	5,397,244

Equity-based Financials

It's nice to know that one is back in full ownerships when a debt is paid off.

On the other hand, loans are not easy to get for a new company with no assets and no track record – and lots of risk! And interest payments are always a payment when every cent needs to go into the business.

The alternative is to take on a business partner by selling a share of the business. A shareholder. Such an investor is usually prepared to sacrifice immediate returns and take their returns as a share in the increased value of the business (and dividends when the business is strong enough to pay them).

So ... no interest payments, but no tax deduction for interest payments and no more Liabilities in the form of Borrowings. A cascade of changes to our Financial Statements

This kind of finance is called an Equity Investment and can be entered as such on the Input page.

Very healthy, but can we do with less?.

	This Year	Next Year	Year After	Year 4	Year 5
PROFIT & LOSS					
Sales	1,450,000	6,087,500	10,725,000	15,362,500	20,000,000
COGS	250,000	1,049,569	1,849,138	2,648,707	3,448,276
Gross Profit	1,200,000	5,037,931	8,875,862	12,713,793	16,551,724
Operating Expenses	1,000,000	4,198,176	7,396,552	10,594,828	13,793,103
Operating Profit	200,000	839,755	1,479,310	2,118,965	2,758,621
Interest Expense	0	0	0	0	0
Tax Expense	16,250	-125,764	-264,221	-400,063	-533,926
Depreciation Expense	187,500	140,625	105,469	79,102	59,326
NET PROFIT	28,750	573,367	1,109,620	1,639,801	2,165,368
CASH FLOW					
OPERATING ACTIVITIES					
Revenue	1,439,931	6,055,295	10,692,795	15,330,295	19,967,795
Payments	1,236,979	5,206,102	9,204,045	13,201,891	17,199,735
Inventory	62,500	199,892	199,892	199,892	199,892
Interest	0	0	0	0	0
Tax Paid	16,250	-125,764	-264,221	-400,063	-533,926
Total Operations	156,701	523,538	1,024,637	1,528,450	2,034,242
INVESTING ACTIVITIES					
Plant & Equipment	750,000	0	0	0	0
Other Investment	0	0	0	0	0
Total Investment	750,000	0	0	0	0
FINANCING ACTIVITIES					
Sale of Shares	1,000,000	0	0	0	0
Dividends Paid	0	0	0	0	0
Borrowings	0	0	0	0	0
Loan Repayments	0	-0	-0	-0	-0
Total Financing	1,000,000	0	0	0	0
Net Increase / Decrease	406,701	523,538	1,024,637	1,528,450	2,034,242
Cash @ Start	0	406,701	930,239	1,954,876	3,483,325
Cash @ End Of Year	406,701	930,239	1,954,876	3,483,325	5,517,567
BALANCE SHEET					
ASSETS					
Cash	406,701	930,239	1,954,876	3,483,325	5,517,567
Receivables	10,069	42,274	74,479	106,684	138,889
Inventory	62,500	262,392	462,285	662,177	862,069
Plant & Equip	750,000	750,000	750,000	750,000	750,000
Accum Dep	187,500	328,125	433,594	512,695	572,021
Other	0	0	0	0	0
Total Assets	1,041,771	1,656,781	2,808,046	4,489,491	6,696,503
LIABILITIES					
Borrowings	0	0	0	0	0
Payables	13,021	54,664	96,309	137,953	179,598
Other	0	0	0	0	0
Total Liabilities	13,021	54,664	96,309	137,953	179,598
NET ASSETS	1,028,750	1,602,117	2,711,736	4,351,537	6,516,906
EQUITY					
Equity Invested	1,000,000	1,028,750	1,602,117	2,711,736	4,351,537
Retained Earnings	28,750	573,367	1,109,620	1,639,801	2,165,368
NET EQUITY	1,028,750	1,602,117	2,711,736	4,351,537	6,516,906

Equity-based Financials (2)

A financial plan is always a matter of progressive refinement. And with so many interconnections, a change to any one thing has consequences throughout the whole set of financial statements. A change to Sales in Year 1, for instance, not only changes Net Profit in Year 1 but flows right through to the Net Assets in Year 5.

The most important consequence, however, is the change to Cash @ End of Year, that number that must always be positive – for business reasons – and for legal reasons as well!

For a young business, it can take a few years before Income covers start-up costs – which is why Financing Activities are such an important component of the Cash Flow Statement.

Choosing the right kind and right amount of finance is really important. Too little leaves the company vulnerable in the face of an emergency; too much means financing can cost far too much. If it's financed by borrowing, that means too much interest. If it's via a partnership, the surrender of ownership can be too great a cost for the founder's time and effort.

	This Year	Next Year	Year After	Year 4	Year 5
PROFIT & LOSS					
Sales	1,450,000	6,087,500	10,725,000	15,362,500	20,000,000
COGS	250,000	1,049,569	1,849,138	2,648,707	3,448,276
Gross Profit	1,200,000	5,037,931	8,875,862	12,713,793	16,551,724
Operating Expenses	1,000,000	4,198,176	7,396,552	10,594,828	13,793,103
Operating Profit	200,000	839,755	1,479,310	2,118,965	2,758,621
Interest Expense	0	0	0	0	0
Tax Expense	16,250	-125,764	-264,221	-400,063	-533,926
Depreciation Expense	187,500	140,625	105,469	79,102	59,326
NET PROFIT	28,750	573,367	1,109,620	1,639,801	2,165,368
CASH FLOW					
OPERATING ACTIVITIES					
Revenue	1,439,931	6,055,295	10,692,795	15,330,295	19,967,795
Payments	1,236,979	5,206,102	9,204,045	13,201,891	17,199,735
Inventory	62,500	199,892	199,892	199,892	199,892
Interest	0	0	0	0	0
Tax Paid	16,250	-125,764	-264,221	-400,063	-533,926
Total Operations	156,701	523,538	1,024,637	1,528,450	2,034,242
INVESTING ACTIVITIES					
Plant & Equipment	750,000	0	0	0	0
Other Investment	0	0	0	0	0
Total Investment	750,000	0	0	0	0
FINANCING ACTIVITIES					
Sale of Shares	750,000	0	0	0	0
Dividends Paid	0	0	0	0	0
Borrowings	0	0	0	0	0
Loan Repayments	0	-0	-0	-0	-0
Total Financing	750,000	0	0	0	0
Net Increase / Decrease	156,701	523,538	1,024,637	1,528,450	2,034,242
Cash @ Start	0	156,701	680,239	1,704,876	3,233,325
Cash @ End Of Year	156,701	680,239	1,704,876	3,233,325	5,267,567
BALANCE SHEET					
ASSETS					
Cash	156,701	680,239	1,704,876	3,233,325	5,267,567
Receivables	10,069	42,274	74,479	106,684	138,889
Inventory	62,500	262,392	462,285	662,177	862,069
Plant & Equip	750,000	750,000	750,000	750,000	750,000
Accum Dep	187,500	328,125	433,594	512,695	572,021
Other	0	0	0	0	0
Total Assets	791,771	1,406,781	2,558,046	4,239,491	6,446,503
LIABILITIES					
Borrowings	0	0	0	0	0
Payables	13,021	54,664	96,309	137,953	179,598
Other	0	0	0	0	0
Total Liabilities	13,021	54,664	96,309	137,953	179,598
NET ASSETS	778,750	1,352,117	2,461,736	4,101,537	6,266,906
EQUITY					
Equity Invested	750,000	778,750	1,352,117	2,461,736	4,101,537
Retained Earnings	28,750	573,367	1,109,620	1,639,801	2,165,368
NET EQUITY	778,750	1,352,117	2,461,736	4,101,537	6,266,906

Financial Health

Benchmarks

With a proper set of **Profit / Assets / Cash** lists, all sorts of calculations can be used to test the health of a business. The right figures can turn a manager into a kind of **Business Doctor**, diagnosing the health of the business.

To keep things simple, four sets of calculations are a good start:

1. **Profitability**
2. **Working Capital**
3. **Leverage**
4. **Debtor/Creditor Days**

So what can they do for us?

For a start, the figures they provide can be compared with figures from the rest of the world. Those comparison figures are called **Benchmarks** and are something to aim for.

They are only a start though, because they're different for different industries, different sized businesses - and often different countries ...

As time goes by, it's your own figures that count – but the rest of the world is a good start!

Profitability

The first test is what's left over after the money has come in and the bills have been paid: the **Profit**. Something to take home and spend however you like.

Or the **Loss** ... sometimes there are more Expenses than Sales - so we want to watch very carefully to see that that doesn't happen.

We know we have to have enough money to buy the things needed to run the business - and that means having enough money coming in and not too much going out.

This leads to the need for a way of calculating **Profit** and seeing how it compares with other businesses - and whether the comparison means that you could be doing better.

Working Capital

The money that's worked with every day is called **Working Capital**. Money for everyday payments – as well as Emergency money.

We know what it means if we have too little ... we go out of business! But money lying idle is money that could be used to make the business better: More equipment, more staff ... more marketing and sales.

The big question is '*How much is enough?*' So there needs to be a way of deciding how much is right.

Like many things, we can always learn from other successful businesses.

From all those other businesses, we can set ourselves a target, a **Working Capital Benchmark**.

Leverage

As well as **Profitability**, a thing to watch is the total value of the business.

This is especially important when negotiating for a loan.

A lender will always ask about the value of the business because they're never going to lend more money than the business is worth. The best they'll ever do is some fraction of what its value. If the loan goes bad, they can get their money back by taking that much of the business.

The ratio between what the business is worth and what can be borrowed is called **Leverage**. As usual, there are lots of other businesses that can be used as a comparison. Another **Benchmark**.

Credit

People don't always pay on time. That's either because they just don't or because you've agreed to let them wait. Given them **Credit**. That's business. But we do like to be paid some time and we shouldn't have to wait too long. It's your money and what these people are doing is using your money at zero interest. Money that could be used to improve your own business.

People who owe us money are called **Debtors** and people we owe money to are called **Creditors**. The important Benchmark numbers are **Debtor Days** and **Creditor Days**.

Debtor Days is the average number of days our Debtors are taking to pay us and Creditor Days are the average number of days we are taking to pay our bills.

Yet again, compare the **Benchmarks**.

Financial Ratios

Financial statements can provide all sorts of day-to-day operating information for a manager.

The Internet can provide **Benchmarks** for the way that others in the same line of business are performing.

- What is the quality of the financial safety net (**Working Capital**)
- How well is money being managed (**Leverage**)
- How profitable is the business (**Profitability**)?
- **Management Ratios**: How quickly are bills being paid (and money being collected)?
- How long is stock waiting in the warehouse, waiting to be assembled, waiting to be sold?

By clicking **Ratios** in iniPax, the system will calculate a table of ratios based on the data in the financial statements.

It's good to watch the figures unfold as each year passes. In time, the experienced business manager can set benchmark targets from the company's own performance.

ACME	Year 1	Year 2	Year 3	Year 4	Year 5	Benchmark
Liquidity						(generic)
Working Capital Ratio	3.94	2.79	3.08	3.14	3.98	1.5
Quick Ratio	3.54	2.39	2.68	3.11	3.58	1.2
Leverage						
Debt/Assets Ratio	5.38	2.21	0.90	0.31	0.00	0.7
Debt/Equity Ratio	16.03	6.07	2.14	0.65	0.00	0.6
Debt to Income	0.06	0.01	0.00	0.00	0.00	30%
Interest Cover Ratio	2.25	91.16	221.92	467.45	1,174.85	4.5
Profit Performance						
Gross Profit Margin	82.76	82.76	82.76	82.76	82.76	80%
Net Profit Margin	1.50	9.18	9.92	10.17	10.27	10%
Return on Total Equity	4.31	70.54	67.90	57.75	48.91	20%
Return on Total Assets	1.45	25.68	28.77	27.64	25.55	20%
Management Ratios						
Stock Turnover Ratio	4.00	5.25	9.25	13.25	17.25	30
Debtor Days	30.00	30.00	30.00	30.00	30.00	30
Creditor Days	51.43	49.74	47.57	46.76	46.34	45

Liquidity

Although cash is certainly important, the health of the business is more than just cash in the bank – and health is more than just profitability (although that too is important!).

Business health depends on how well it carries out its operations, and the financial statements can certainly help with that.

The first question must always be whether the business has enough cash for its everyday operations – its **Working Capital**? And then, whether it has enough cash to deal with any emergency that must be dealt with quickly.

Working Capital is cash that's readily available, but it also includes things that can be turned into cash relatively quickly – like sales that haven't yet been paid for.

For emergencies, the **Quick Ratio** is based on money that is immediately available. Cash in the bank.

Having that kind of money available is known as **liquidity**, and the business is helped by checking out **Liquidity** ratios.

The formula for the **Working Capital** ratio combines actual cash, Receivables, and the contents of the warehouse as the top line. That total is then divided by the combination of Payables and debts to be paid. Some of them might take a little time to collect, but they are nevertheless quite readily available.

For a real emergency, the alternative is the **Quick Ratio**. Cash, or near Cash is crucial. The top line of the formula includes only Cash and Receivables; the bottom line is Payables only.

In both cases, the convention is that the result is expressed as a simple ratio rather than a percentage.

LIQUIDITY		Target
Working Capital	$\frac{\text{Cash} + \text{Receivables} + \text{Inventory}}{\text{Borrowings} + \text{Payables}}$	1.5
Quick Ratio	$\frac{\text{Cash} + \text{Receivables}}{\text{Payables}}$	1.2

Leverage

Taking on debt, owing money, is not always bad. Especially if the borrowed money can be invested into something that earns more than the interest paid – the cost of capital. It can also be worthwhile if a profitable opportunity comes along that costs more than the business's ready cash.

Looked at in this way, the debt acts like a kind of lever that makes the business's value go much further. So for a business this is known as **Leverage**.

So...

A bit of debt is good, but there are limits. A business must be able to pay off any debt without damaging its other operations. This is important for the business manager – and it is also something that a lender would want to see before they agree to lend.

Leverage can be tested in various ways:

- debt against equity
- debt against assets
- debt against income
- interest cover.

A company's assets can always be used as security for a loan – but being used as security means that the lender can take those assets if the debt isn't paid. That danger should be protected by not risking too great a percentage of those assets.

The appropriate ratio is **Debt / Assets**. Borrowings divided by Total Assets (and converted to a %).

Debt / Equity is a complementary measure. Lenders will inevitably use this to define a limit on how much they will lend.

The calculation is Borrowings divided by Total Equity.

And then there are direct calculations of the stress that debt repayments and interest payments could impose on cash flows. Two calculations here: Borrowings divided by Sales (**Debt / Income**) and available Profit divided by the Interest being paid (**Interest Cover**).

LEVERAGE		Target
Debt / Assets	$\frac{\text{Borrowings} \times 100}{\text{Total Assets}}$	0.7
Debt / Equity	$\frac{\text{Borrowings} \times 100}{\text{Net Equity}}$	0.6
Debt / Income	$\frac{\text{Borrowings} \times 100}{\text{Sales}}$	30%
Interest Cover	$\frac{\text{Net Profit} + \text{Tax}}{\text{Interest}}$	4.5

Profitability

Of course **Profit** is important, but it's more important for the business owner than the business manager (even though for a start-up they're usually the same person...).

Again, there are various ways of measuring **Profitability**.

Gross Profit shows how efficiently raw materials and components are turned into products; **Net Profit** shows how well all of the business's costs are being covered: Cost of Goods Sold (COGS), Operating Expenses (OpEx) and non-operating costs like Tax, Interest payments and Depreciation.

These figures come from the **Profit & Loss** statement – but remember, that statement is only promises to pay: it doesn't take into account late payments, nor does it consider things like bad debts.

A different set of **Profitability** measures can be based on the **Balance Sheet** – on **Assets** and **Equity**.

Return on Total Equity and **Return on Total** (not net) **Assets**. These last two show how well the company's investments are being worked.

The various measures of Profitability are easy to calculate.

Using Sales as a base, the **Gross Profit** margin is obtained by dividing Gross Profit by Sales. **Net Profit** margin is Net Profit divided by Sales.

And again, Assets and Equity must show that they are being worked for the good of the business.

PROFITABILITY		Target
Gross Profit	$\frac{\text{Gross Profit} \times 100}{\text{Sales}}$	80%
Net Profit	$\frac{\text{Net Profit} \times 100}{\text{Sales}}$	20%
Return on Total Assets (ROTA) %	$\frac{(\text{Net Profit} + \text{Tax}) \times 100}{\text{Total Assets}}$	20%
Return on Total Equity (ROTE) %	$\frac{(\text{Net Profit} + \text{Tax}) \times 100}{\text{Total Equity}}$	20%

Throughput

Time is money. Slow payments cost money that could be used to help the business run better.

Looking at **Payments** means looking at how quickly bills get paid – payments from customers and payments to suppliers. Money needs to come in from customers as soon as possible – but payouts not so quickly – remembering though, that suppliers are our friends and it's not sensible to get them offside because of slow payments.

The same thing with raw materials and components. It's never good for a production line to be halted because components are not available – but it's a waste if they've been paid for but are waiting in the warehouse gathering dust. **Just-In-Time** delivery of components was invented to overcome that problem.

And finished products waiting unsold in the warehouse means that money has been paid to produce them without being paid back.

The **Stock Turnover** ratio takes a look at all this.

Financial statements can help yet again:

Debtor Days (the average time for customer payments to arrive) and **Creditor Days** – the average time for supplies to be paid. **Both** can be expressed in terms of days

Stock that's waiting in the warehouse doesn't pay the bills. It has to be sold as quickly as possible. A useful indicator is **Stock Turnover**.

One component of this indicator is the Cost of Goods Sold (COGS) from the Profit & Loss statement. COGS is the cost of the materials that have gone into making the stock for sale.

The other component is the increase in Inventory ... the difference between last year's stocktake and this year's.

The formula is COGS divided by the Increase in Inventory.

As to debt collection, the convention is that Receivables multiplied by 360 and divided by Sales is a reasonable guide to the average number of days it takes for a company to collect its money.

The same thing, with Payables on the top line, is an indicator of how long the company is taking to pay its bills.

THROUGHPUT		Target
Stock Turnover	$\frac{\text{COGS}}{\text{Inventory Increase}}$	13 weeks
Debtor Days	$\frac{360 \times \text{Receivables}}{\text{Sales}}$	30 days
Creditor Days	$\frac{360 \times \text{Payables}}{\text{Sales}}$	45 days