Financial and Commercial Awareness

a one-day interactive workshop featuring the

Virtual Village Pub©

business simulation

Virtual Village Pub Limited
Suite 2, 4 Blenheim Court, Peppercorn Close, Peterborough, PE1 2DU

virtualvillagepub.co.uk
info@virtualvillagepub.co.uk
0845 838 5141

The Virtual Village Pub
Business Simulation

Introduction

Welcome to the charming village of Little Chadwick.

During this business simulation, you and your colleagues will be behind the bar at one of the village's eight equally colourful public houses:

The Black Horse	*The Red Lion*	*The Bluecoat Arms*	*The Golden Eagle*
The White Hart	*The Green Man*	*The Orange Tree*	*The Silver Bullet*

Your task, quite simply, is to make your pub the most profitable in Little Chadwick.

How can you do this? You do this in exactly the same way that any business tries to increase its profitability: by giving the market the products and services it wants at a fair price and by controlling your costs and your cash flow.

But these are hard times for the village pub. Nowadays people have more options as to where they spend their leisure time and where they buy their drinks. Every week of the year, rural pubs are bringing the shutters down for the final time.

In this respect, Little Chadwick looks particularly over-provided for and it must be considered doubtful that all eight of its pubs will survive in the long term.

Increasingly, publicans will have to focus on how to make their pubs more attractive. There are plenty of ways in which these pubs can differentiate themselves in the market place - perhaps by offering a good range of drinks, high quality food, popular entertainment, regular price promotions or attractive beer gardens.

As the game begins, these pubs are all uniformly dull, dreary, dog-eared and dilapidated. Your pub is a blank canvas just waiting for your management team to apply some colour!

You might like to keep a note below of which of your colleagues are running the village's eight pubs. The four pubs on the right will be run by the computer. These pubs flying on autopilot aren't going to win the game but they can certainly throw a spanner in the works, so look out for what they're doing too...

The Black Horse

The White Hart

The Red Lion

The Green Man

The Bluecoat Arms

The Orange Tree

The Golden Eagle

The Silver Bullet

The Eight Pubs of Little Chadwick




1 **The Black Horse** ② **The White Hart** **3** **The Red Lion** **4** **The Green Man**

5 **The Bluecoat Arms** **6** **The Orange Tree** **7** **The Golden Eagle** **8** **The Silver Bullet**




The Village

Little Chadwick is situated some thirty miles outside a major city and is home to about 10,000 people. The electrification of the railway in the 1970s has dragged the village into the commuter belt and many of the residents travel to the city to work. Indeed, Little Chadwick's station, opened in 1926, now serves about 180,000 passengers every year.

The village is no rural backwater; there is a considerable amount of light industry on the Handside Business Park (still known to older residents as the 'Little Chadwick Industrial Estate'), notably at the headquarters of Fairman UK, which has been making abrasives at this site since 1962 and now employs about 150 people.

Though it traces its history to Roman times, Little Chadwick saw its most significant expansion in the 1950s with the completion of the Pennetts housing estate to the north. This area provides the most affordable housing and is popular with younger families and students.

Indeed, the presence of the Van Guessens Agricultural College brings a sizeable student population to the village, though this obviously declines in the summer months. Opened in 1938, it has around 500 full-time and 500 part-time students, many of whom live in the village. The college is based in the south east, where the campus boasts a bar, gymnasium and 60-room accommodation block.

Tourism is a significant part of the village economy, with Bluecoat Hall attracting many visitors throughout the year, especially during the summer. This stately home with its elegant, manicured grounds was completed in 1664 and has been open to the public since the 1970s.

The Little Chadwick Museum and the water mill are also popular with visitors. The museum houses an interesting collection of artefacts and documents, telling the village story from its Roman origins via the Domesday Book, the building of Bluecoat Hall and the coming of the railway. Next door is a fully restored water mill which dates from the 1680s. There is also a small art gallery and a tea room.

Towards the south of the village, the parish church of St Mark dates from the 12th century, though was extensively built in the 1460s. Next door to the church is the village hall, providing a focal point for many of the community's activities. The Little Chadwick Players have performed at the hall regularly since their inception in 1925.

Over the road from the church, Little Chadwick's village green has long served as the sports field for St Mark's JMI School. It is also the home to the village's cricket club in the summer and is well-used by sporty students and locals on an ad-hoc basis. The summer carnival and funfair take place here every July.

The other notable feature of Little Chadwick is its public houses. The Black Horse has been serving customers since the 1350s; the Golden Eagle since the 1950s. In the intervening 600 years a further six pubs have opened their doors. But as people's leisure choices multiply, it is difficult to see a bright future for all eight of these pubs in what is a very crowded market.

In fact, the village's pubs have compounded their difficulties through neglect and poor management. All eight of the pubs are rather dull, dog-eared and dismal. None has a serviceable car park or a usable garden. The food is unremarkable, the range of drinks quite limited. There are no pool tables or big screen TVs, in fact none of the pubs are offering any entertainment at all. No one is advertising; there are no price promotions. But not everything is bleak - there are all kinds of ways in which these pubs can carve out a distinct identity and build a profitable future. Fortunately, the pubs are under new management...

DECISION GRID

			Spring	Summer	Autumn	Winter	Spring	Summer
			Pre game	Q1	Q2	Q3	Q4	Q5
HOURS								
All day opening	0 or 1	1 = open between 3 and 7pm	0					
PRODUCTS & PRICES								
Drinks margin	60% to 75%	60% = cheapest	65.0%					
Range of beers	1, 2, 3, 4, 5	1 = limited, 5 = extensive	2					
Range of other drinks	1, 2, 3, 4, 5	1 = limited, 5 = extensive	2					
Food margin	60% to 75%	60% = cheapest	65.0%					
Size of menu	1, 2, 3, 4, 5	1 = limited, 5 = extensive	2					
Quality of food	1, 2, 3, 4, 5	1 = awful, 5 = excellent	2					
Evening food?	0 or 1	1 = yes, 0 = no	1					
Guest room rate	£	per room	0					
STAFFING								
Staff numbers	3 to 10	no.s at peak times	5					
Pay per hour	£9.50 to £15		9.50					
GAMES								
Pool tables	0, 1, 2, 3	no. of tables	0					
Dart boards	0, 1, 2	no. of boards	0					
Fruit machines	0, 1, 2, 3, 4	no. of machines	0					
ENTERTAINMENT								
TV Sport	0, 1, 2	0 = none, 1 = some, 2 = lots	0					
Quiz nights	0, 1, 2 }		0					
Loud music	0, 1, 2 }	0 = none	0					
Live bands	0, 1, 2 }		0					
Discos	0, 1, 2 }	1 = occasional	0					
Karaoke	0, 1, 2 }		0					
Comedy	0, 1, 2 }	2 - regular	0					
Adult	0, 1, 2 }		0					
MARKETING								
Price promotions - drink	0, 1, 2, 3	strength of promo	0					
Price promotions - food	0, 1, 2, 3	strength of promo	0					
Print advertising	0, 1, 2, 3	degree of exposure	0					
Online marketing	0, 1, 2, 3	degree of exposure	0					
Market research	£3k/ £4k/£5k		0					
Family friendly	0, 1, 2	0 = no kids allowed	0					
CAPITAL EXPENDITURE								
Garden	£3,000	*maximum of 3 in game*	0					
Playground	£1,000	*maximum of 3 in game*	0					
Car Park	£5,000	*maximum of 3 in game*	0					
External lighting	£1,000	*maximum of 3 in game*	0					
Dining room	£10,000	*maximum of 3 in game*	0					
Function room	£10,000	*maximum of 3 in game*	0					
Guest room	£10,000	*maximum of 10 in game**	0					
Internal refurbishment	£10,000	*maximum of 5 in game**	0					

** limited to 3 per quarter*

Bonus questions:

q1	q4	q7	q10
q2	q5	q8	q11
q3	q6	q9	q12

Your Decisions

Each round in the game represents one quarter (i.e. three months) in the life of the village.

Your management team takes over the pub in time to make its decisions for the summer quarter and the simulation runs over five quarters. Only the profit made in the final four quarters counts towards your pub's overall score.

Before you make any of these decisions, it would be a good idea to arrive at some kind of market positioning for your pub. The simulation does not like conflict. If you are going for the high end of the dining market (fine cuisine, good décor, excellent service) do you really want karaoke? If you are targeting the business market, do you want lots of kids running around? Try to come up with a set of decisions which is both coherent and consistent.

Do bear in mind also that you cannot reinvent yourself overnight. During the game, you will acquire some kind of reputation and it will be based not just on what your pub is but on what it used to be. Once you've taken the loud music out of your pub, it will be quite some time before everybody notices.

And remember that the model will be looking not just at your decisions but the offerings of the other seven pubs too. Your new garden may give you an early advantage but this will disappear as other pubs catch up.

You will need to think ahead. Management resource dictates that only two capital items (see page 11) can be bought in any one quarter, so you may need to prioritise what happens when.

In settling on a market positioning, you may like to consider the particular demographics of your pub. Does its location offer inbuilt advantages with any parts of the market? Are the competitive pressures different for your pub to that faced by others? The distances are small, so don't overestimate the impact of the location – but it is there.

You might like to make your own copy of the decisions you have taken on the grid opposite.

All Day Opening

You may decide to close your pub between 3pm and 7pm. Otherwise, your pub will be open from noon until 11pm.

Products & Prices

Drinks margin

This is the pence of profit from every pound of drinks sales (after knocking off the VAT and before paying for overheads). The allowable range is 60% (dirt cheap) to 75% (very expensive).

As you take over the pub your drinks margin is 65%. This means that the cost of the drinks must be 35% (because together they must equal the 100% selling price. Actually the *real* selling price is going to be 120%, but the other 20% is just VAT which is being collected on behalf of the government – it's not the pub's money to keep).

If you are buying a pint from the brewery for £1.05p:

Cost price	= 35%	= £1.05	
Margin	= 65%	= £1.95	[£1.05 x (65/35)]
Pub gets	= 100%	= £3.00	
Govt gets	= 20%	= 60p	[£3.00 x 0.20]
Customer pays	= 120%	= £3.60	

[you could also do £1.05 x (100/35) to go straight from the cost price to the ex-VAT selling price and then multiply by 1.20 to add on the VAT]

You do not have to worry about what the actual cost prices or selling prices are – you are just indicating what margin you are going to apply to the cost prices of your various different drinks in computing your selling prices.

Note that the accounts show sales and costs **excluding VAT** and that the simulation assumes a VAT rate of 20% throughout.

This margin is what you might call your 'theoretical' margin – it's not actually the margin you will achieve on your drink sales, especially if you start doing price promotions ("buy three glasses and get the bottle for free"). Even if you don't discount your prices, there's the beer in the pipes, the cork in the wine, the bottle in pieces on the floor – and that's before the freebies.

Everyone would rather pay less for their drinks so, all things being equal, a lower price should drive volume. But don't expect every part of the market to be equally price-sensitive; it's just one factor in the mix and it is more important for some groups than for others.

Working with Percentages

COST PRICE	+	GROSS MARGIN	=	EX VAT SELLING PRICE **[always 100%]**	
35%	+	65%	=	100%	[%'s]
0.35	+	0.65	=	1.00	[decimals]

Always 'go via 1%'. If you know your cost price is 35% and is £1.05, find out what 1% is first and then find out what 100% is….

£1.05 ÷ 35 = £0.03 [this is 1%]
£0.03 x 100 = £3.00 [this is 100%]

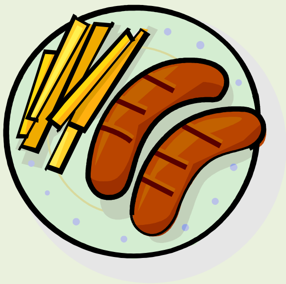
The customer actually pays 120% after adding on the VAT.

£1.05 ÷ 35 = £0.03 [this is still 1%]
£0.03 x 120 = £3.60 [this is 120%]

Range of beers and other drinks

As you take over your pub, the drinks range is 2, where 1 is limited and 5 is extensive. A good range of drinks is a selling point but do be aware of the downside in carrying more stock. A higher stock figure will mean higher stock losses and the cash that is sitting in the form of beers, wines and spirits is cash that could otherwise have reduced your pub's debts. As you are paying interest on your bank loan, that means you are effectively paying interest on your stock.

Food margin



The permissible range is between 60% and 75%. The food market can crudely be split between those after ‘pub grub’ and those looking for a higher quality offering. In the former case, price is important, in the latter case it is less so. A high margin does not make the food of higher quality; it means that the % gap between the cost price and the selling price is greater. Your food can have the highest margin in Little Chadwick and still be rubbish.

Size of menu

At the start of the game your menu size is ‘2’, where ‘5’ represents the most extensive menu and ‘1’ the smallest. Remember, a larger menu is likely to mean a higher stock figure and that is cash that could otherwise be repaying your pub’s bank loan.

Quality of food

When you take over your pub, the quality of its food is measured as a ‘2’ on a scale where 5 is excellent and 1 is frankly awful. Higher quality should mean higher sales but look out for additional costs too. To make your food really attractive, you may have to replace that microwave with a real chef and that is going to add to your staffing costs.

Evening food?

All the pubs must serve food at lunchtime but, in the evenings, it is a matter for the management. Consider whether food is a significant part of the pub’s appeal in the evenings. If it is not, it may be worth sacrificing a low number of sales to reduce the costs of the operation.

Guest Room Rate

At the start of the game, none of Little Chadwick’s pubs is offering overnight accommodation. You do have the option of converting one or more upstairs rooms into a bedroom at a cost of £10,000 per room. If you do this, you need to indicate how much your room or rooms are to be sold for.

Staffing

Staff Numbers

Although you cannot be sure how often your pub will be busy, you need to indicate how many people you will have on duty at peak times (in addition to either the manager or assistant manager). This should be at least 3 and no more than 10. It is important to review your staffing needs as the game develops. For instance, if your pub does more food or enters the hotel market, the staff will be stretched more thinly and customer service levels may suffer. If you lower your prices or hold aggressive price promotions, you should consider whether you need to increase staffing levels.

Pay per hour

This is the average pay rate (excluding the managers and any chef). For the purposes of simplicity, you can ignore any minimum wage set by law but, at the lower rates, your staff will be less experienced and this means they could be less customer-friendly and less efficient.

Overall, the model looks at your staffing levels and pay rates and at the demands being placed on those staff in deciding on the quality of your customer service. For some parts of the market, service levels will be crucial – for others, less so.

Be aware that the supply of labour won't necessarily keep pace with the demand. If there's a labour shortage in the village, it will be the pubs who pay less and who work their staff harder who are likely to face problems in recruiting the staff numbers that they want.

Games

Pool tables

At the start of the game there are no pool tables in the village. Providing one or more tables will provide both a competitive advantage (at least for some of the market) and a new revenue stream. Do bear in mind that tables take up space and cost £300 each per quarter to hire. If you put them in the right kind of environment, they will earn you money but if you put them in the wrong kind of pub, they will cost you money. Either way, they will have a significant impact on the character of your pub.

Dart boards

In a similar way, these take up space and affect your pub's character but the cost is negligible and there is no revenue (at least none which is directly attributable).

Fruit machines

Again, this is another revenue stream – once you have covered the £500 quarterly rental cost for each machine. Do consider whether the gaming machines fit with the character of the establishment and look out for diminishing returns (e.g. three machines will not be played three times more than one machine).

Entertainment

TV Sport
Big match football is passing Little Chadwick by. Your pub can steal a competitive advantage by screening football matches and other big events. The premier package includes every game on every channel but costs your pub a cool £6,000 per quarter. A more modest package costs £3,000.

Quiz nights
One of the cheaper forms of entertainment that you can offer. An occasional quiz night will cost £520 a quarter, with a more regular quiz costing £1,040. Enter 2 for regular, 1 for occasional.

Loud music


If you are going to have music, you will need the appropriate licence. If your music is loud or regular it will cost £780 a quarter. If your music is quieter or occasional it will cost £390. Perhaps of greater significance than the cost is the effect that music will have on the character of the pub. For some it will be a significant draw; for others a serious deterrent. Enter 2 for loud or regular, 1 for quieter or occasional.

Live bands
Regular live bands could cost as much as £4,000 a quarter. An occasional band will cost £2,000. Again, there will be a significant impact on the character of the establishment. Enter 2 for regular, 1 for occasional.

Discos
Dancing will also increase the entertainment costs – by about £4,000 for a regular event or £2,000 for an occasional one. Enter 2 for regular, 1 for occasional.

Karaoke
Provision of a professional karaoke system will cost £80 a night whether it is offered once a week or twice a week. Enter 2 for twice weekly, 1 for once a week.

Comedy
A weekly comedy evening can feature either one or two comedians. Expect to pay £100 per comedian per night. No laughing matter. Enter 1 for a solo, 2 for a double act.

Adult
If you want to take your pub in this direction, expect some significant costs. We don’t exactly know how much or what you’re getting for the money; we’re not that kind of computer. 2 gets you twice as much as whatever 1 gets you.

Marketing

Price promotions

This involves either reducing the price for a particular time (e.g. early evening) or providing more stock at the same price. Both do very little for public order but can be very effective at increasing sales. Do remember that these sales are at a much lower margin than your normal sales. For example, a promotion where the beer normally being sold for £3.60 (see 'drinks margin') is sold instead for £2.40:

Customer pays	=	£2.40	=	120%	
Govt gets	=	40p	=	20%	[£2.40 x (20/120)]
Pub gets	=	£2.00	=	100%	
Cost price	=	£1.05			
Margin	=	95p	=	47.5%	[(£0.95/£2.00) x100]

The greater the proportion of your sales that are sold at these discounted rates, the greater the dilution of your margins. And do remember that a customer who is charged £1 less still needs the same amount of customer service and the same amount of floor space.

You can enter a 1, 2 or 3 if you want to do price promotions on your drinks. The higher the number, the more regular the promotions and the greater the level of discounting. Do be aware that the success of your promotions will depend not just on the attractiveness of your offer but also on what your competitors are doing. If you are going to discount your prices it is important to advertise the fact – otherwise you will be dropping your margins without gaining extra footfall.

Price promotions on food work in the same way as for drink. You can offer early evening discounts and 'kids eat for free' deals. Both methods should improve volume; both are bound to dilute your margin.

Print Advertising

If you wish to advertise, you can enter a 1, 2 or 3, with a 3 representing the highest degree of exposure. Each unit implies a quarterly cost of £400. Apart from communicating any promotions, advertising is particularly useful for attracting tourists, diners and overnight guests.

Online Marketing

Your pub has no online presence at the outset. Creating and maintaining a website and social media profile will help to attract tourists, diners and overnight guests, as well as the younger market groups. Outsourcing this task will cost £300, £600 or £900 per quarter.

Family Friendly

What will your pub's attitude be towards children? A 2 means they are welcomed, a 1 means they are tolerated, zero means they are not allowed in. Apart from attracting families, a high score will attract tourists. For some groups, however, the presence of children may deter.

Market research

The following additional reports are available:

Drinks market (Cost = £5,000)

This gives you

- Relative size of the market segments
- What they like and what they don't like
- How much they spend per visit

Food market (Cost = £4,000)

This gives you

- Differing characteristics and demand stimuli of the 'restaurant' and 'pub grub' sectors
- An indication of additional staffing costs associated with higher quality offerings

Hotel market (Cost = £3,000)

This gives you

- Advantages and disadvantages of entering the hotel market

Capital Expenditure

How It Works

Capital Investment is about buying items of long-term value to the business (e.g. creating a landscaped pub garden). These should all have a positive impact on sales performance, though their effect on different parts of the market will vary and, as always, the activities of your competitors may undermine your efforts.

You need to be very careful in ordering these items, since the figures you enter should be for the items wish to *buy* in the next quarter rather than a running total of the items you have bought so far. Consider this example which contrasts a capital item (a car park) with a non-capital item (a hired pool table):

In the autumn you want one pool table in the bar and you want to build one unit of car park, so you enter a '1' against both items.

In the winter you wish to still have one pool table and not to enlarge the car park, so you enter a '1' for the pool table (you're keeping it) but a '0' for the car park (you're not extending it).

In the spring, you wish to add a second pool table and double the size of your car park, so you enter a '2' for the pool table and enter a '1' for the car park.

The prices relate to each 'unit' bought, so if you put a '1' against 'Internal Refurbishment' in the first quarter that will cost £10,000; if you put a '2' it will cost you £20,000.

The maximum additions during a game are 5 for internal refurbishments, 10 for guest rooms and 3 for all others. Due to management constraints, you may only buy two different items of capital expenditure in any one quarter (thus a '2' on just garden and playground is fine, a '1' on garden, playground and refurbishment is not allowed).

Do remember that cash invested in these 'fixed' assets (as we call capital items) is cash that could otherwise reduce your debt, so you are effectively paying interest on any cash that you tie up in your fixed assets.

Because these assets will stay in the business for several years, it is not fair to put all of their cost on the Profit & Loss Account as soon as they are bought. Instead, we spread the cost out over the estimated life of the asset. For example, any guest rooms we convert will have an estimated life of ten years and so the outlay of £10,000 will be charged at a rate of £1,000 per year (or £250 per quarter). This is known as **depreciation**. The £10,000 cash will still have to be paid upfront – but when we work out the profit for each of the ten years, we will just include £1,000 of depreciation.

The estimated life of the fixed assets is as follows:

10 years - guest rooms, function rooms, dining rooms, car park
5 years - gardens, playgrounds, lighting, internal refurbishment

The pub building itself is not depreciated.

Any capital expenditure comes online half way through the next quarter. For example, if you indicate that you want to convert an upstairs room into a guest room during the spring, it will be available to sell for half of the quarter (i.e. for 45 nights rather than for 90). This means you will need to think ahead – the summer is too late to start planning your beer garden! Note that the depreciation charge will assume that the room arrived at the start of the quarter.

Eight Capital Expenditure Options

Garden

A garden increases the popularity of your pub across all groups, though its impact is particularly strong in the summer and almost non-existent in the winter. Costs £3,000 per unit, with a maximum of £9,000 over the game. A medium-sized garden can cost between £400 and £2,000 a quarter to maintain, depending on the season.

Playground

Popular with families. Most groups are ambivalent, but some are put off by it. Costs £1,000 per unit with a maximum of £3,000 over the game.

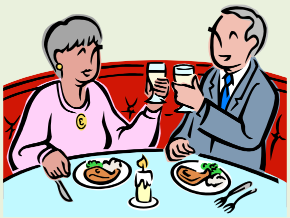
Car Park

Has a positive impact with most parts of the market. Cost is £5,000 per unit and you can buy up to three units during the game. One unit is about eight bays.

External Lighting

When you take over your pub it appears gloomy from the outside (and, frankly, from the inside too). One unit of external lighting will be adequate, two or three will make it stand out from the crowd. Cost is £1,000 a time but look out for the running cost as well – about £300 per unit per quarter.

Dining Room

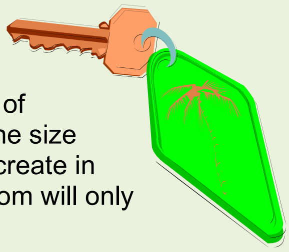


Pubs who wish to enter the serious end of the restaurant market may wish to consider giving over some of their bar space to a proper dining room. This increases the credibility of your food offering but at the cost of reducing your available space for drinkers. The work will require some alterations (as well as a lot of furniture) so the cost is £10,000 for a small dining room, £20,000 for a larger one and £30,000 for the largest of all. It is also possible to gradually increase the size of the dining room, i.e. starting with a small one and then enlarging it.

Function Room

Providing a function room will allow your pub to compete in a new market since there are corporate and social functions in the village and beyond that will only be won by pubs that have provided such rooms. The rooms are not hired out but will attract extra revenue and you will be able to monitor how much they are attracting. Function rooms do not reduce the space available to drinkers; they are hewed from rooms at the back of your pub which are currently not in use. Be realistic about what a £10,000 conversion will buy you – there will be room for a live band if the drummer travels light but not for any audience. A £30,000 conversion will give you a room large enough to allow your pub to split its personality, i.e. the loud music and the diners will have more prospect of harmonious co-existence.

Guest Rooms



When you take over your pub, there is no overnight accommodation available in the village. Each pub has the option of converting upstairs rooms into guest rooms at a cost of £10,000 per room. The occupancy that your pub achieves for its rooms will depend on the size of the market (which is quite seasonal), on your pricing, on the kind of environment you create in your pub and on your advertising. Look out for diminishing returns too – your seventh room will only get sold when the first six are full up.

Internal Refurbishment

It is many years since any money was spent on the interior of your pub. If you wish to improve the quality of the bar area you should consider a programme of internal refurbishment. This is available at £10,000 a unit and you can schedule a total of five units over the course of the simulation.

Quarterly Depreciation Charges per Unit of Capital Expenditure

Option	Cost per unit	Est. life (yrs)	Est. life (qtrs)	Depreciation/qtr
Garden	£3,000	5	20	£150
Playground	£1,000	5	20	£50
Car Park	£5,000	10	40	£125
External Lighting	£1,000	5	20	£50
All Rooms	£10,000	10	40	£250
Internal Refurbishment	£10,000	5	20	£500

Accounts

How to Understand the Profit & Loss Account ("P&L")

This report, also known as the **Income Statement**, shows you how much profit (or loss) your pub made in the latest quarter. Your pub's accounting year runs from Autumn to Summer, with a year end of 31 August.

Essentially, the P&L shows all the sales revenue you earned in the period and then subtracts all the costs. If the figure at the bottom is positive, you've made a profit; if it's negative, you've made a loss.

The key to unlocking the P&L is to appreciate that it adheres to the **Matching Principle**. Therefore:

- We **match** sales to the period in which we earned them (regardless of when we receive the money)
- We **match** the sales to any costs directly related to those sales (so they appear in the same period's P&L)
- We **match** our other costs to the period they relate to (ignoring when we actually make our payments)

The P&L will usually be split into three parts:

Gross Profit
What you made from selling your goods (before overheads).

Overheads
What other costs you incurred during the period.

Bottom Line
What profit you made overall and what happened to it.

Gross Profit

This is the difference between 'sales revenue' and the 'cost of sales'. In effect, it is the profit on the revenue stream before overheads are taken account of.

	Sales Revenue	**x**
MINUS	**Cost of Sales**	**<u>x</u>**
EQUALS	**Gross Profit**	**<u>X</u>**

Sales Revenue
Initially you will have two revenue streams – drink and food. You may decide to add a third stream by opening one or more guest rooms. Note that any revenue you may get from pool tables and fruit machines is netted off the cost of renting the equipment and is included further down the report.

Do remember that there are opportunities for cross-selling. Customers who have a meal will probably buy a drink (and those who come in for a drink may decide to have a meal). Overnight guests are very likely to eat or drink.

The number of customers you attract will depend on the size of the market in a given quarter and what you are offering compared to your competitors. How much you can sell to each customer will depend on who they are. Additional market research reports will be useful in pinning down the size of the various market segments, their likes and dislikes and their spending habits.

The Matching Principle

*The key to understanding accounts. We have to **match** the revenues and costs that belong together – we can't have the money from selling a product in one period and the cost of buying or making that product in a different one – and we have to **match** the revenues and costs to the period they relate to. In working out the profit, we're not interested in **when** the cash actually moves (we let the 'Cash Flow Statement' worry about that).*

Examples of the Matching Principle:

- *We include sales revenue when we provide the goods or services, not when the customer pays us, maybe 30 days later (that's not an issue for the pubs as they're cash businesses).*
- *We include **stock** when we sell it, not when we buy or make it, so we can match the revenue to the cost in the same period. That means we'll use the Cost of Sales figure in our gross profit calculation and not the Purchases figure.*
- *We **depreciate** capital expenditure over the asset's estimated life, so we match the capital cost to the whole period that we expect to benefit from its use, rather than penalising the period in which we buy or replace the asset.*
- *We include costs we've incurred even if our suppliers have given us 30 days to pay.*
- *We estimate costs we've incurred in a period where the invoice hasn't been received and include those in our P&L (these are **accruals**)*
- *We don't include costs we've paid upfront if they don't relate to this period (so we include one twelfth of the annual insurance premium – the bit we haven't included is a **prepayment**)*
- *We don't include money we've received if we haven't yet provided the goods or service to the customer – this is **deferred income**.*

The sales revenue figure (also known as 'Sales', 'Revenue', 'Turnover' and 'Income', just to confuse you) is the total you have sold the drink, food and guest rooms for during the period and it excludes any VAT.

Because pubs are retailers, they will receive the money at the same time they make the sale (plus an extra 20% VAT which they'll pass on to the government). Businesses that sell to other businesses usually do so on credit terms (eg

30 days), and we include the sale in the P&L when we provide the goods (or services) and raise an invoice – not when the customer gets round to paying us.

Cost of Sales
This is the cost price of the stock that has been used up during the period. It is almost certainly not the same as the value of stock purchased as there is likely to have been some change in the level of stock being held. We include stock in the calculation of profit when we sell the stuff, not when we buy it. This is because the revenue must appear in the same period as the cost of the stock that we used up in making that sale, as per the Matching Principle.

In simple terms, you work out the cost of sales thus:

Opening stock + Purchases – Closing stock = Cost of Sales

Or Purchases + Reduction in stock level = Cost of Sales

Or Purchases - Increase in stock level = Cost of Sales

But any stock that has been wasted – over-generous measures, corked wine, food past the sell-by date and maybe even pilferage – must be added to that Cost of Sales figure. The value of these 'stock losses' (or 'shrinkage') is only known with accuracy when you do a physical stocktake:

	Opening stock (as per the previous stocktake)
Plus	stock purchases
Less	theoretical cost of sales (which the pub's computer system will work out, ie the cost price of all the stock that has been sold in the period)
Less	closing stock (as per the latest stocktake)
Equals	stock losses

In other words, the stock losses are the missing figure when you do a stocktake! The value of stock losses then gets added to the cost of sales figure. In between stocktakes, there will be a theoretical stock figure (opening stock plus purchases less theoretical cost of sales).

Because accountants are **prudent**, most businesses assume there will be some stock losses even before they have been accurately counted. This is done by making a **stock provision** (writing down the stock value on the balance sheet and increasing the cost of sales figure on the P&L). The provisions will not affect the size of the real stock losses over the company's life but they will affect the period in which such losses are reported. (This contravenes the Matching Principle but, in accounting, it's usually trumped by the Prudence Principle!)

Note that there is no cost of sale in selling a hotel room, so all the hotel revenue appears as hotel gross profit.

Cost of Sales in Manufacturing

In manufacturing, the cost of the goods sold is not just the material cost, but also the costs incurred in turning raw materials into finished goods. This will typically include production labour and energy.

To apply the Matching Principle, those costs should only hit the P&L (in the Cost of Sales figure) when the goods are sold. This means that the value of unsold stock (which sits on the Balance Sheet) will include an element of labour and energy etc. Accountants will find a sensible way to allocate these costs to units being produced and then they will move from the Balance Sheet (Stock) to the P&L (Cost of Sales) when the units are sold.

Product which is partially completed is shown as Work in Progress (with all the material cost and some of the labour and energy cost).

Cost of Sales in Services

In organisations that sell services, the bulk of the 'product' cost is actually labour time. The Matching Principle should still apply, so hours of chargeable time may be posted to Work in Progress on the Balance Sheet and will then move to Cost of Sales when the job is invoiced to the client.

In this way, the revenue from a job is matched to the cost of providing the service to the client – together in the same period. Only by doing this will the P&L truly reflect the profit made in a particular period.

For some organisations, it may not be appropriate to have a Cost of Sales figure and a Gross Profit subtotal, eg if the revenue and associated costs appear in the same period by default. These organisations will just subtract all the costs from the sales revenue to reach their profit figure.

Overheads

These are the costs you incurred in making your Gross Profit and they have to be taken off to arrive at the Operating Profit or 'bottom line profit'.

	Sales Revenue	x
MINUS	Cost of Sales	<u>x</u>
EQUALS	Gross Profit	x
MINUS	**Overheads**	**<u>x</u>**

EQUALS	**Operating Profit**	**X**

Labour Costs
These will be the largest overhead of your pub. The management salaries will be £15,000 per quarter, to cover a manager and an assistant manager. We call this a 'fixed cost', as it is unrelated to the sales level. If you decide to put in any guest rooms, or a function room, or a dining room, you will need a second assistant manager and the quarterly cost will grow to £21,000.

The staff wages figure is crucially important. You affect it directly with your choice of how many people you have on duty when you are at your busiest and your choice of hourly rate. You also affect it indirectly in various ways. If you have high quality food, this will mean a higher wage figure. If you have more dining and accommodation in your sales mix, this will increase your wage figure because these activities require more labour resource. Above all, if you give the market lots of reasons to come along to your pub you will be busier more often and thus will need to be staffed at those peak levels on a more regular basis. The wages is thus what we could call a 'semi-variable' cost, since it increases somewhat as the volume of sales goes up.

The national insurance cost will be a percentage of the salaries and wages and will thus increase in tandem with those figures.

Cost Behaviour

It's useful to analyse costs into different categories according to how they behave. This will aid in management decision-making.

***Variable Costs** increase in proportion to the sales figure (eg Cost of Sales)*

***Fixed Costs** are unrelated to the sales figure (eg business rates)*

***Semi-variable Costs** will have both a fixed element and an element that varies with sales (eg wages, energy, cleaning, repairs)*

***Stepped Fixed Costs** are unrelated to sales within a certain activity range but then jump up to a higher level (eg management salaries – fixed until a second assistant manager is recruited).*

Operating Costs
Although we tend to think of overheads as being fixed (i.e. independent of the sales level), many in reality, and in Little Chadwick's pubs, have a variable element. Energy will vary mainly according to the time of year – but more meals cooked will mean more energy consumed. The pub will be cleaned every morning – but a busier pub will need more time and effort to clean, especially if there are bedrooms to be attended to. Glasses and crockery will need replacing more quickly if the pub has more customers and there will be more linen to wash and more things to repair. The garden maintenance will not be influenced by the sales figure – only by the season and the size of the garden you have created.

Entertainment Costs
The revenue from the pool tables and fruit machines will be set against the cost of the machines, so do not be surprised to see a minus figure among these costs (and remember that a negative cost is good news!)

Marketing Costs
The cost of your print advertising and the maintenance of your online presence are shown in this section. If you buy any extra bits of market research, you will find the cost in this section too. And don't forget to look out for a sponsorship opportunity later in the game.

Administration Costs
Not a cost that you are directly controlling but a cost that must nevertheless be covered from your gross profit before you can start making a profit.

Property Costs
Depreciation is another example of the Matching Principle. If a car park will help us earn money for 10 years, it makes no sense to put the whole cost of building a car park into one period's P&L. Instead, we put one tenth into each year and call it depreciation. When one of these long-term 'fixed assts' is bought, we put it on the Balance Sheet and then gradually write down its value over its estimated life, as its purchase price is 'drip-fed' from the Balance Sheet onto the P&L.

When you take over your pub, all of the long-term 'fixed assets' have been fully depreciated – it's a long time since anyone spent any money on these pubs! This means that any depreciation you see in your property costs during the game will be the depreciation of the fixed assets that you have decided to buy.

The pubs each pay business rates (ie local authority taxes). This is used to make the game fairer. Some of the pubs have in-built advantages (or disadvantages) borne of their location so, all other things being equal, some of the pubs would make more profit than others. To re-level the playing field, the rates bill is higher for those pubs with the advantages (broadly-speaking, the ones in the centre of the village), so that each pub ends up with the same chance of winning the game.

Bottom Line

Operating profit
This figure, also known as "Profit before Interest and Tax" and (more colloquially) as "the bottom line", is one of the key figures in the accounts. In a large multi-unit organisation, there will be lots of mini-P&Ls prepared for different branches, business areas, regions etc and this is likely to be, quite literally, the bottom line of those reports.

But the pubs are all set up as individual companies, each with their own bank debt, tax bill and shareholders. So, to link the P&L to the Balance Sheet we need to go a bit further….

	Sales revenue	x
MINUS	Cost of Sales	x
EQUALS	Gross Profit	x
MINUS	Overheads	x
EQUALS	**Operating Profit**	**x**
MINUS	**Interest**	**x**
EQUALS	**Profit before Tax**	**x**
MINUS	**Taxation**	**x**
EQUALS	**Profit after Tax**	**x**
MINUS	**Dividends**	**x**
EQUALS	**Retained profit**	**x**

Interest paid
Your pub has a large but flexible bank loan on which you are paying interest at 5%. If you generate more cash than you spend, the loan is automatically paid down. If you spend more cash than you generate, the loan is automatically extended. The faster your loan is repaid, the less of your operating profit will go in funding your debt.

Profit before Tax
Real-world tax figures can vary a lot, depending on things like capital investment and past losses, so pre-tax profits are a much better guide to performance than post-tax profits. When public companies report their profits to the stock exchange, this is the one they report.

Taxation
The pub pays 20% Corporation Tax on its profits at the end of each quarter. If it has made a loss, the tax authorities send it 20% of the loss. If only life were that simple.

Profit after Tax
This one is of particular interest to the business owners as it is only the post-tax profit that is available to either grow the business or to reward shareholders by paying **dividends**.

Dividends
This represents a payment of the profits made to the shareholders. You may declare a dividend at any time, even if you have not reported a profit (it just means that you are paying the dividend out of previous periods' profits).

Two important points. Firstly, remember that your retained profit is not a great pot of money just waiting to be paid out to the shareholders. Rather, it is where the money tied up in your business has come from in the past. The retained profit (along with the share capital and the bank loan) is what has funded your business. Paying a £100,000 dividend would mean either selling your pub to turn the building back into cash, or borrowing the cash from the bank!

Secondly, any cash that your pub generates over and above what it requires, is used to repay your bank loan and thus reduce your interest charge. For the most part then, your pub is better advised to hold off on the dividends and to repay the bank instead. Public companies would, in reality, need to consider the dividend expectations of their shareholders.

Note that only £10,000 of the bank loan may be repaid in any one quarter. If you generate more than this, the extra will simply be dumped into your current account. In the early quarters it is likely that you will be reinvesting much of the cash you generate in fixed assets but if a time comes when your pub is pretty much how you want it, and you're hitting the £10,000 ceiling, that is the time to think about a dividend. How much? Your pub is a retailer so it needs some cash to function – maybe about £5,000. Anything over £5,000 could perhaps be considered surplus to requirements.

Retained Profits

This is the amount of this period's profit that is **not** being paid out in dividends but is being reinvested in the business.

So what exactly is "EBITDA"?

Lots of companies use these terms as well:

> **EBIT**
> This stands for **Earnings before Interest and Tax** and is the same thing as **Operating Profit** (or **Profit before Interest and Tax).**
>
> **EBITDA**
> With depreciation being a 'book entry' that doesn't involve a cash movement (because the cash moves when we buy the asset, not when we depreciate it), many businesses focus on the profit before depreciation is deducted. EBITDA stands for "Earnings before Interest, Tax, Depreciation & Amortisation" – amortisation being the write-down of *intangible* fixed assets like licences and patents.

How to Understand the Balance Sheet

Whereas the Profit & Loss Account looks at the profit you made over a *period* of time, the Balance Sheet looks at the state of your business at a ***single instant in time*** – midnight on the final day of the quarter.

The balance sheet shows everything the business **OWNS** (the 'assets') and everything it **OWES** (the 'liabilities'). The liabilities include amounts owed to third parties and amounts owed to the owners (the shareholders).

Because any retained profits are actually owed to the owners, balance sheets will **always balance**. This means that every transaction must also balance, in terms of its impact on assets and liabilities (hence the term 'double entry bookkeeping').

Some balance sheets are prepared with all the assets in the top half and all the liabilities in the bottom half. Some net off the shorter-term liabilities against the assets. Some net off *all* the third-party liabilities against the assets and just show the amounts owed to owners in the bottom half (also known as the **Equity**).

But as long as any liabilities brought into the top half are made into negative figures, the balance sheet will still balance.

Your pub prepares its balance sheet like this:

> The **top half** includes the assets and the short-term liabilities, showing ***where your money is sitting***,
>
> The **bottom half** includes the long-term liability to the bank and the money owed to the shareholders, showing ***where your money came from***.

Where's the money sitting? (top half)

Fixed Assets
Your freehold building is valued in the books at £495,000. It will not change throughout the game. All capital expenditure that you undertake will appear on the 'other fixed assets' line, less any depreciation that gets charged in the P&L.

Stock
Wet stock is drink, dry stock is food. Expect to see the drinks figures increase if your range of beers or other drinks goes up, or if the size of the menu expands.

Receivables (or Debtors)
A pub's receivables figure would be minimal since it is a retailer (i.e. selling for cash rather than selling on credit). But business-to-business sales are usually done on credit terms (eg 30 days) and so this figure is often significant.

Invoices are raised when goods and services are provided and the sale is included in the P&L at that point, in accordance with the Matching Principle.

Prepayments
These arise when a business pays for goods or services upfront which it has not yet received. The Matching Principle means that the cost hits the P&L in the period that the cost relates to, not in the period that the money leaves our bank account (if different).

Cash
Your pub needs to have a cash balance of around £5,000 in order to function. If it needs to source more cash to get up to this level it will borrow more from the bank. If it generates more cash than it needs, it will repay some of its debt.

All the assets which are not Fixed Assets are known as **Current Assets**.

We also include two liabilities in the top half of the balance sheet. These are short-term demands on the pub's money. We are taking these two items away from the assets because this money is already 'spoken for' – so don't get any ideas about using it to pay off the bank or reward the shareholders!

Payables (or Creditors)
Although your pub is selling for cash, it is buying on credit. This figure is the amount you owe the brewery (and perhaps others) at the end of the quarter. Expect it to rise if the level of purchases increases.

Accruals
These occur when a business pays for goods or services after it has already enjoyed the benefit of them. Typically, energy gives rise to an accrual since we tend to get billed quarterly but are using energy every month.

These two **Current Liabilities** are taken away from the Current Assets to give the **Net Current Assets** figure, though, if it's negative, we call it the **Net Current Liabilities** figure. Because pubs are retailers, buying on credit but selling for cash, they are likely to have a Net Current Liabilities figure. This figure is often referred to as the **Working Capital** of a business.

Where did the money come from? (bottom half)

The business is funded by a combination of share capital, loan capital (from a bank) and retained profit (i.e. profits that have been made by the business in the past and have been reinvested rather than being paid out to shareholders in a dividend).

Share Capital
The shareholders put £100,000 into the business when it was set up (or bought). This figure will stay the same throughout the game.

Loan Capital
Your pub has a very flexible bank loan on which it is paying interest. The more cash you generate, the more quickly you repay the bank loan. If you need more cash, the bank will lend it to you. The annual interest rate is 5%.

The maximum permitted loan repayment in any quarter is £10,000. If you generate cash beyond that amount, the excess will be placed in your cash balance in the top half of the balance sheet. That cash may be used to fund further expansion or marketing etc but you may alternatively decide to pay a dividend to your shareholders.

Retained Profit
This is all the profit that your business has made in the past that has been reinvested rather than being given to the shareholders in a dividend. It is still the shareholders' money (as it is, after all, the shareholders' business). It is also known, rather confusingly, as '**Reserves**'. This makes us picture some great pot of money being held 'in reserve' that can be used to buy things with. It isn't. It is simply profit that has been made in the past which has been 'reserved' in the business (i.e. retained).

How to Understand the Cash Flow Statement

This shows how your business's cash balance moved between the balance sheet at the start of the period and the balance sheet at the end of the period. It does this by reconciling the quarterly profit figure on the P&L with the change in the cash figure during the quarter.

The starting point is the profit figure. If your pub makes a profit of £5,000 during a quarter you would expect, all things equal, that your cash would increase by the same amount.

But all things aren't equal; cash and profit are not the same thing. The main reason why they are not going to be the same thing is the workings of the **Matching Principle**. The P&L applies the principle – only including revenues and costs that relate to the period. The Cash Flow Statement ignores the principle and includes all the cash that came in and all the cash that went out, regardless of the period that those cash flows relate to.

So the Cash Flow Statement adjusts the profit figure by going through all those items where the hit to the P&L and the hit to the bank account occur at different times, effectively 'reversing out' the application of the matching principle.

Depreciation of fixed assets?

In arriving at the profit figure we will have knocked off an amount for depreciation. But no cash moves when you depreciate a fixed asset – you pay for an asset when you buy the thing, not when you depreciate it. So this gets added back to the profit.

Change in the stock level?

You pay for stock when you buy it – but it hits the P&L when you sell it. So a fall in your stock means you have more cash and an increase in your stock means you have less cash.

Change in the receivables figure?

You include sales when you provide the goods or service but your cash balance only increases when your customer pays you. A fall in receivables means there is more cash in your bank account and less in your customers'. An increase in your receivables means the sales are in your profit figure but you do not have the cash yet. Because pubs are retailers, the receivables figures are very small.

Change in the payables figure?

A fall in the payables figure means there you are taking less credit from the brewery and thus have less cash. An increase in the creditors means you have perhaps delayed payment and therefore have more cash in the bank.

Change in the accruals figure?

We make accruals where we have had the benefit of goods or services but have not yet been billed for them and thus estimate how much cost we have incurred (e.g. how much energy we have used). An increase in accruals means that a greater cost has hit the P&L but no cash has left the bank account yet, so any increase gets added to the profit figure to get to the cash increase figure. A decrease in accruals would imply a reduction in the cash figure (because we would be paying for less in arrears, i.e. receiving less credit from our suppliers).

Change in the prepayments figure?

Conversely, prepayments are calculated where we have paid upfront for something and have not yet had the benefit of it (such as where we pay for insurance at the start of the year). An increase in prepayments would cause a fall in the cash balance; a decrease in prepayments would cause and increase in the cash balance.

Fixed assets purchased?

If we're adding back the depreciation charge, we must include the actual fixed asset purchases (or sales, in theory), as this is when the cash actually moves

The 'balancing figure' on your pub's Cash Flow is the movement on your bank loan. As you automatically use spare cash to pay down your loan, it is this figure which is effectively measuring the cash you have generated in the quarter.

The movement on your loan is effectively your pub's **Free Cash Flow** (which is basically the profit you'd get if you didn't apply the matching principle).

Reports

How to Understand the Public Domain Report

A lot of information on your competition can be gleaned simply by walking around Little Chadwick. This report tells you factual information about all eight pubs. For example, who is the most expensive on food or drink, who has a pool table, where can you go to avoid karaoke, who has been advertising a lot recently, who has the biggest car park…

There is also anecdotal information about who seems to be popular with which groups. Not very scientific – it's just the feeling you get when you open the pub doors. "The Golden Eagle? Seems to be full of students."

Where a pub is not given a rating on, say, décor, it means that it is not worthy of comment, i.e. it does not stand out as being either particularly good or particularly bad.

Where an item is coloured green, it means it has increased in that pub in that quarter. If it is coloured red, it has decreased. If you just have the background colour, it has not been changed.

How to Understand the Marketing Reports

Drinks, Food & Hotel Markets

Market size and share
This gives you the relative size of the drinks, food and hotel markets in the most recent quarter. The drinks market is further analysed according to its age profile.

There are eight pubs in the village so an average market share is 12.5%. Market share data is given for each revenue stream. Figures for the drinks and food market are based on the share of customers (not revenue). The overall percentage share is based on revenue.

If your pub has any overnight accommodation you receive the following figures:
rooms available
rooms sold
yield (which is the hotel revenue divided by the available rooms)
occupancy (rooms sold divided by rooms available)
market share (pub's hotel sales divided by all eight pubs' hotel sales).

Who Drinks at Your Pub
Again based on customer numbers.
Very popular (market share > 16%)
Fairly popular (market share between 13.5% and 16%)
Fairly unpopular (market share between 9% and 11.5%)
Very unpopular (market share < 9%)
If a group does not appear at all it means you are neither popular nor unpopular with this particular group (i.e. your market share is decidedly average - in the range 11.5% to 13.5%).

Remember the game is about maximising profitability, not popularity. It's nice to be popular but there is a lot that this data is not telling you:

Are we actually making any money from these sales?
Are we controlling our costs?
Are we also competing in the other markets – food and accommodation?
How much capital have we got tied up in our business?

Tip: if you want to be the most popular pub in Little Chadwick, sell all your stock at cost price…

Spending per Head
This tells you how much your drinkers, diners and overnight guests are spending per visit. It adds the VAT on to the sales figures and then divides by the number of customers. Remember that guest rooms will often have more than one customer.

Promotions
This tells you how much of your revenue was brought in by your price promotions and what proportion of your sales was made at these discounted rates. If the % gets too high, there will be a serious dilution of your baseline gross margin %.

Functions
If you have a function room, this will tell you how much food and drink revenue it brought in and what % of the functions revenue in the village this figure represents.

Staff & Pay
This tells you how many staff the pub with the most people has and how many the pub with the fewest people has at peak times. It also tells you the highest and lowest pay rate in the village.
Lower rates of pay are likely to attract less experienced personnel. These people are sometimes a little less customer-friendly and less able to cope when the pub is very busy. Poor customer service can result in lost sales. If there is a shortage of labour in the village, it will be the pubs with the lowest wages (and the most overworked staff) who will struggle to recruit.

Games
If you have one or more pool tables or fruit machines, this tells you the total revenue and total cost of each type (i.e. it breaks down the net figure that appears in the P&L).

How to Understand the Resource Management Report

There are two ways in which your pub may encounter capacity problems.

> **Space**
> You have a finite amount of room and, particularly if your pub is a high volume/low margin affair, this can be a problem. Available space for drinkers can be reduced by elements such as dining rooms, entertainment and gaming machines. Diners can find themselves squeezed out if the pub makes no separate provision for them. Function rooms can provide extra space, as can your garden (weather permitting).
>
> **Staffing**
> You may find yourself understaffed if you try to cut back on staffing or fail to plan adequately when scheduling significant price promotions. More experienced (i.e. expensive) staff will help – but sometimes there is no substitute for getting extra bodies on the ground.

This short report gives you a figure for the proportion of your sales revenue you have lost due to being under-staffed or having too little space.

It also compares the space and service requirements for both your drinkers and your diners. Where your customers' requirements exceed what you are providing, these percentages will fall below 100% and that is the point at which you will start to lose revenue.

The colours behind the figures just emphasise how 'close to the wind' you are sailing. Red means below 100, green is comfortably over 100, yellows and oranges are in danger territory.

Be careful though. If everything is lit up in green, there could be a case for saying you're overstaffed and you're not working your assets hard enough. Unless you're planning on making your pub a very exclusive establishment, renowned for its customer service, you probably want to be in the oranges (ie the right side of 100% but not by too much!)

Ratios

Each quarter your pub will receive a number of key ratios (also known as key performance indicators). These take figures from your accounts and compare them to other figures in the accounts. It is the ratios that allow accountants and analysts to get 'under the skin' of a set of financial statements and to work out what is going right and what is going wrong in the business.

In the simulation, there are two useful comparisons that you can make:

This quarter's performance to the previous quarter's performance,

Your pub's performance to the average score across the eight pubs of Little Chadwick.

In reality, you are unlikely to have such detailed information on your competitors. What you will have instead (apart from a lot more historical data) is a **budget**, providing a target level for each of these ratios. The process of systematically comparing your actual results to budget (and history) is replaced in this simulation by the systematic comparison to the market average in the village.

Margins & Overheads

Gross Margin %

$$\frac{\textbf{Gross Profit (P\&L)}}{\textbf{Sales (P\&L)}} = \qquad \%$$

What proportion of the sales revenue is left after paying for the stock? Remember, the Gross Profit (or Gross Margin) is the difference between the Sales and the Cost of Sales on the P&L.

Although important at a total level, you should also monitor your gross margins for your separate revenue streams – drink and food (the hotel gross margin is always 100% because there is no cost of sale).

Your total gross profit margin will depend on four factors:

1) your 'baseline' margin, i.e. the theoretical margin that you choose to enter on the grid for drink and for food sales
2) the extent of your price promotions. The bigger the promotion, the greater the dilution of your margin.
3) stock losses - the greater your stockholding, the more stock will be wasted.
4) the mix between your revenue streams, i.e. the proportion of your total sales each revenue stream accounts for (assuming they have different gross margin %s)

Overheads %

$$\frac{\textbf{Overheads (P\&L)}}{\textbf{Sales (P\&L)}} = \qquad \%$$

What proportion of the sales revenue is taken up by the overheads? Or, for every pound of sales, how many pence go on the overheads?

This is then broken down further:

$$\frac{\textbf{Labour (P\&L)}}{\textbf{Sales (P\&L)}} \qquad \frac{\textbf{Entertainment (P\&L)}}{\textbf{Sales (P\&L)}}$$

For every pound of sales, how many pence go on labour? Or on entertainment? Or on marketing, administration…..

.

Operating Profit %

$$\frac{\textbf{Operating Profit (P\&L)}}{\textbf{Sales (P\&L)}} = \quad \textbf{\%}$$

What proportion of the sales revenue is left after paying all costs (except interest)?
Or, for every pound of sales, how many pence are left over after paying for all the costs apart from interest?

Balance Sheet Ratios

Stock Days

$$\frac{\textbf{Stock (B/S)} \times \textbf{365}}{\textbf{Cost of Sales (P\&L)}} = \quad \textbf{number of days}$$

How many days of sales do we have stocks to cover?
(i.e. how much stock have we got, relative to our sales level?)

Note that we use Cost of Sales rather than Sales (because our stock is stated at cost price and therefore our sales should also exclude the profit we make on the sale)

Expect to see your stock days go up if you increase the range of your stock or if you suffer a slump in your sales.

Creditor Days

$$\frac{\textbf{Payables (B/S)} \times \textbf{365}}{\textbf{Cost of Sales (P\&L)}} = \quad \textbf{number of days}$$

What is the average time we are taking to pay our suppliers?
(i.e. how high are our payables, relative to our purchases level?)

For simplicity we tend to use the Cost of Sales figure rather than the total purchases for the period (remember, the purchases do not appear in the P&L, since we include the cost of stock when we sell it rather than when we buy it).

Gearing Ratio

$$\frac{\textbf{Loan Capital (B/S)}}{\textbf{Total Capital (B/S)}} = \quad \textbf{\%}$$

What is the proportion of Loan Capital to Total Capital (i.e. who is bearing the risk - the shareholders or the lenders?)

The figure for Total Capital is the sum of the Loan Capital and the Shareholders' Funds (i.e. Share Capital plus Retained profit).

You may also see the Gearing Ratio calculated by dividing the Loan Capital by the Shareholders' Funds. This is more popular in the US and is also called "debt to equity".

A company is 'highly geared' if it has a high proportion of debt (say 40 or 50% based on the first formula). High gearing may enable a company to expand faster but it exposes it to a higher risk of defaulting on interest payments.

Graphs

After the first quarter, you will be able to view two pages of graphs that compare your pub (solid line) to the market average (dotted line). This quick guide tells you what the graphs are showing.

The first page of graphs is just based on the decisions you have taken for your pub…

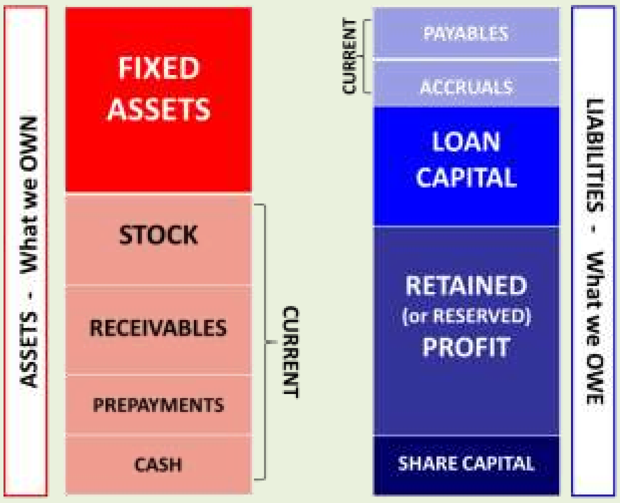
Drinks Margin	Your 'theoretical' or 'base line' margin. If all drinks stock is sold at full price it's the pence left over from every pound of sales after covering the cost of the stock. Your cost prices are the same as the other pubs', so a higher margin will mean your selling prices will be higher.
Food Margin	Your 'theoretical' or 'base line' margin. If all food stock is sold at full price it's the pence left over from every pound of sales after covering the cost of the stock. A higher margin means the gap between the cost price and selling price is higher but remember that higher quality food will mean a higher cost price. This means that high quality food with a low margin may actually be more expensive for customers than poor quality food with a low margin!
Hotel Room Rate	This is the rate at which you are selling any guest rooms. The average room rate is based on the number of pubs who have entered the market, regardless of how many rooms they have. So if one pub has 1 room at £60 and another has 5 rooms at £40 (and the other pubs have no rooms at all), the average will be shown as £50.
Staffing Index	This reflects both the number of staff on duty at busy times and the experience level of staff you are able to attract at the pay rates you are offering.
Entertainment Index	This reflects the amount of entertainment being provided, including gaming facilities.
Marketing Index	This reflects the amount of exposure your pub is securing through advertising, online marketing and sponsorship.
Reinvestment Index	This reflects how much money you have invested in the downstairs areas of the pub (ie ignoring any guest rooms). It roughly equates to the 'quality feel' of the establishment.
Restaurant Quality	This measures the full dining experience - food quality, service, ambience.

The second page of graphs is based on the outcome of those decisions…

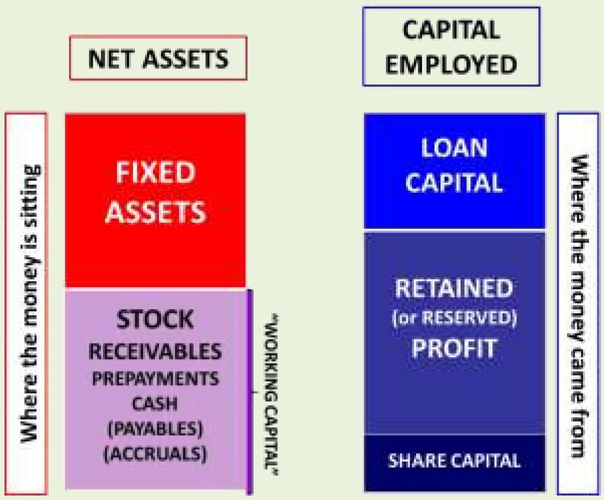
Number of Drinkers	A person visiting the pub twice a day for a week would count as 14 drinkers for the purposes of this measurement.
Number of Diners	This is actually the same as the number of meals served in the quarter.
Drinks Sales	Top line of the P&L. Figures exclude VAT - as all P&L figures do. The dotted line will show you if the total market is expanding or contracting in size.
Food Sales	Total food sales only. Drinks bought by diners appear in the Drink Sales figures. The dotted line will show you if the total market is expanding or contracting in size.
Drinks GP% (actual) Food GP% (actual)	The actual % margin your pub achieves will be rather less than the percentages you are inputting for drink and food. These are your 'theoretical' margins on which you base your pricing. The actual margins will be reduced by shrinkage (stock which is used up without being sold) and by any price promotions. These promotions involve giving away cheap stock or free stock and thus cause your % margin to be diluted. The more attractive the promotion (from the customer's point of view), the greater the level of dilution. The actual margin achieved will depend on how successful your promotions are - and that will in turn depend on your competitors' promotions.
Hotel Sales	What you sold your hotel rooms for during the quarter. Any food and drink revenue from overnight guests will be included in food and drink sales respectively.
Hotel Share	This is your hotel revenue as a % of the whole village's hotel revenue.
Age Profile	This measure subtracts your market share for the 18-25's from your market share for the 50-70s. Thus a line in the top half suggests an older clientele and a line in the bottom half suggests a younger one.
Gross Profit	Total Sales (Drink, Food & Hotel) less Total Cost of Sales (Drink & Food). Note that there is no stock involved in selling a hotel room, thus the sales revenue feeds straight into the Gross Profit. There will, however, be additional overheads incurred in the bottom half of the P&L.
Staffing Cost	Managers' salary, staff wages and national insurance. These costs are straight off the P&L.
Other Overheads	All overheads except for staff (which are shown above). Does not include Interest - that comes in below the Operating profit level.
Total Overheads	All costs below the Gross Profit line, ie staffing, operating, marketing, entertainment, administration, property.
Operating Profit	Gross Profit less Total Overheads equals Operating Profit.
Gearing	Long-term (bank) borrowings as a % of the company's total funding. What isn't owed to the bank is owed to the shareholders (in share capital and retained profits).
Interest	Running cost of your bank loans - depends on size of loans and the interest rate %.

		Autumn	Winter	Spring	Summer	Notes
SALES						
Your pub's market share						*Contest 1: Sales share. Average is 100% ÷ 8 = 12.5%*
Average market share		12.5%	12.5%	12.5%	12.5%	
GROSS MARGINS						
Drinks margin	This pub					*Contest 2: the gap between your selling prices and cost prices. Subtract average margin from your pub's margin. A positive variance is when your margin is bigger than average. The third line is a weighted average of drinks, food and hotel margin (hotel margin is 100% as no cost of sale).*
	Market avg					
	+ or -	0.0%	0.0%	0.0%	0.0%	
Food margin	This pub					
	Market avg					
	+ or -	0.0%	0.0%	0.0%	0.0%	
Average margin	**This pub**					
	Market avg					
	+ or -	**0.0%**	**0.0%**	**0.0%**	**0.0%**	
OVERHEADS						
Labour	This pub					*Contest 3: a positive variance is if your overhead % is less than the market average - it means you're spending fewer pence in every pound of sales on people, marketing etc than your rivals are spending.*
	Market avg					
	+ or -	0.0%	0.0%	0.0%	0.0%	
Operating	This pub					
	Market avg					
	+ or -	0.0%	0.0%	0.0%	0.0%	
Entertainment	This pub					
	Market avg					
	+ or -	0.0%	0.0%	0.0%	0.0%	
Marketing	This pub					
	Market avg					
	+ or -	0.0%	0.0%	0.0%	0.0%	
Administration	This pub					
	Market avg					
	+ or -	0.0%	0.0%	0.0%	0.0%	
Property	This pub					
	Market avg					
	+ or -	0.0%	0.0%	0.0%	0.0%	
Total overheads	**This pub**					
	Market avg					
	+ or -	**0.0%**	**0.0%**	**0.0%**	**0.0%**	
OPERATING PROFIT %						
	This pub					*Brings together contests 2 and 3. Will be gross margin less overheads. Variance will be gross margin variance less overheads variance.*
	Market avg					
	+ or -	**0.0%**	**0.0%**	**0.0%**	**0.0%**	
OPERATING PROFIT £k						
For market average profit, multiply total market sales by average Op profit % then divide by 8 pubs.	This pub					*Links operating profit % to the market share. More £ profit than average is positive!*
	Market avg					
	+ or -	**£0**	**£0**	**£0**	**£0**	
INTEREST						
	This pub					*Record the interest charge from your P&L*

Balance Sheet One:
Assets vs. Liabilities
(balances because Share Capital and Retained Profit are technically a liability – they're owed to the shareholders)



Balance Sheet Two:
Net Assets vs. Capital Employed
(ie short-term or 'current' liabilities' netted off against the short-term or current assets)



How the Profit & Loss Account and the Cash Flow get you from one Balance Sheet 'snapshot' to the next.