

Virtual Village Pub Limited
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## The Virtual Village Pub Business Game

## Introduction



Welcome to the charming village of Little Chadwick.
During this business simulation, you and your co-workers will be behind the bar at one of the village's eight (yes, eight) equally colorful pubs:

The Black Horse The Red Lion The Bluecoat Arms The Golden Eagle<br>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. You will have just one year to turn its fortunes around.

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, pub owners will have to focus on how to make their offerings 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, and dog-eared. Your pub is a blank canvas just waiting for your management team to apply some color!

1. Log in at onlinevvp.com; enter your three-digit Game Code.
2. Send a blank email to control@virtualvillagepub.com.
3. Game controller will send you a four-digit pub key to access your pub's private page from where you'll download your pub's decision grid and (in later rounds) your pub's latest accounts and reports. The grid is a one-page Excel file.
4. At the agreed time, reply to the controller's email, attaching your grid (with the latest column completed).

## The Eight Pubs of Little Chadewick


(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


| DECISION GRID |  |  | Summer | Fall | Winter | Spring | Summer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Pre game | Q1 | Q2 | Q3 | Q4 |
| HOURS |  |  |  |  |  |  |  |
| All day opening | 0 or 1 | 1= open 3pm to 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, $0=n$ | 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 F 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 | $\mathbf{0}$ |  |  |  |  |
| Price promotions - food | $0,1,2,3$ | strength of promo | $\mathbf{0}$ |  |  |  |  |
| Print advertising | $0,1,2,3$ | degree of exposure | $\mathbf{0}$ |  |  |  |  |
| Online marketing | $0,1,2,3$ | degree of exposure | $\mathbf{0}$ |  |  |  |  |
| Market research | $\$ 3 \mathrm{k} / \$ 4 \mathrm{k} / \$ 5 \mathrm{k}$ |  | $\mathbf{0}$ |  |  |  |  |
| Fam ily friendly | $0,1,2$ | $0=$ no kids allowed | $\mathbf{0}$ |  |  |  |  |

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 |  |  |  |  |

## 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 fall quarter and the simulation runs over one year.

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 long-term capital items (see page 10) 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 page 3.

## All Day Opening

You may decide to close your pub between 3pm and 7pm. Otherwise, your pub will be open from noon until 11 pm. No pubs are allowed to stay open after 11 pm .


## Products \& Prices

## Drinks margin

This is the cents of profit from every dollar of drinks sales (after knocking off the sales tax 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 sales tax 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 $\$ 1.05$ :

| Cost price | $=35 \%$ | $=\$ 1.05$ |
| :--- | :--- | :--- | :--- |
| Margin | $=65 \%$ | $=\$ 1.95 \quad[1.05 \times(65 / 35)]$ |
| Pub gets | $=100 \%$ | $=\$ 3.00$ |
| Govt gets | $=20 \%$ | $=60 c$ |
| Customer pays | $=120 \%$ | $=\$ 3.60$ |



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 sales tax and that the simulation assumes a sales tax rate of $20 \%$ throughout.

This margin is what you might call your 'baseline' 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.

## Range of beers and other drinks

As you take over your pub, the drinks range is level 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

Working with Percentages

| $\begin{aligned} & \text { COST } \\ & \text { PRICE } \end{aligned}$ | + | GROSS <br> MARGIN | $=$ | EX SELLIN [always | es tax <br> PICE <br> 0\%] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 35\% | + | 65\% | = | 100\% | [\%'s] |
| 0.35 | + | 0.65 | = | 1.00 | ecimals |

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...
$\$ 1.05 \div 35=\$ 0.03$ [this is $1 \%$ ]
$\$ 0.03 \times 100=\$ 3.00$ [this is $100 \%$ ]
The customer actually pays $120 \%$ after adding on the sales tax.
$\$ 1.05 \div 35=\$ 0.03$ [this is still $1 \%$ ]
$\$ 0.03 \times 120=\$ 3.60$ [this is $120 \%$ ]

## 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 you're paying interest on.

## 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 of choice 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 management). 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, your pub may get a lot busier! At the start of the game, you have one manager and one assistant manager. A second assistant manager will be needed if you
 create a function room, dining room or hotel rooms.

## Pay per hour

This is the average pay rate (excluding the management and any chef). You must pay at least the minimum indicated. At the lower rates, your staff will be less experienced and this means they could be less customer-friendly and less efficient. If the village is unable to meet the labor demands of the eight pubs, it is less generous payers (and those who overwork their staff) who will struggle to recruit.

Overall, the model looks at your staffing levels and pay rates and looks 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.

## 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).

## Gaming 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

Televised sport is passing Little Chadwick by. Your pub can steal a competitive advantage by screening matches and other big sporting 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 can be very effective at increasing footfall. 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 | $=40 \mathrm{c}=20 \% \quad[2.40 \times(20 / 120)]$ |  |
| Pub gets | $=\$ 2.00=100 \%$ |  |
| Cost price | $=\$ 1.05=4.50$ |  |
| Margin | $=95 \mathrm{c}=47.5 \% \quad[(0.95 / 2.00) \times 100]$ |  |



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 ("Capex")

## 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 fall 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 on which you are paying interest to your head office.

Because these assets will stay in the business for several years, it is not fair to put all of their cost on the Income Statement 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 amortization. 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 amortization.

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 amortized.
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 amortization charge will assume that the room arrived at the start of the quarter.

## Outdoor Options

## Garden

Providing a garden increases the popularity of your pub across all groups, though its impact is particularly strong in the summer and almost nonexistent 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.

## Indoor Options

## 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. Without a proper dining room, your only
 ever offering 'bar food', whatever the quality.

## 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 competition, 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 four quarters that you will be running your pub.

Quarterly Amortization Charges per Unit of Capital Expenditure

| Option | Cost per unit | Est. life (yrs) | Est. life (qtrs) | Amortization/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 Income Statement

This report shows you how much profit (or loss) your pub made in the latest quarter. There are also year to date figures (your pub's accounting year runs from Autumn to Summer, with a year end of 31 August).

The report can be split into three parts:

## Gross Profit

What you made from selling your goods (before any overheads)
Overheads
What 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 | $\mathbf{x}$ |
| :--- | :--- | :--- |
| MINUS | Cost of Sales | $\underline{\mathbf{x}}$ |
| EQUALS | Gross Profit | $\underline{\bar{x}}$ |

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

## 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. Businesses include stock in the calculation of profit when they sell the stuff, not when they buy it.

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 - beer in the pipes, corked wine, overly generous measures, food past the sellby date and maybe even pilferage - must be added to that Cost of Sales figure. The value of these 'stock losses' are 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 <br> 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 Income Statement). 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.

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

## Overheads

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

|  | Sales revenue | x |
| :--- | :--- | :--- |
| MINUS | Cost of Sales | $\underline{x}$ |
| EQUALS | Gross Profit | x |
| MINUS | Overheads | $\underline{\mathbf{x}}$ |
| EQUALS | Operating Income | $\underline{\mathbf{x}}$ |

## Labor 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 (they require more labor than drink sales). 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 employment taxes will be a percentage of the salaries and wages and will thus increase with those figures.

## 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 gaming 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

It is many years since anyone spent any money on your pub - all of its fixed assets have been completely written off in the books! This means that any amortization you see on this line during the game will be the amortization of the assets that you have decided to buy.

The pubs each pay property tax. 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 local tax bill is higher for those pubs with the advantages (broadlyspeaking, the ones in the centre of the village), so that each pub ends up with the same chance of winning the game.

## Bottom Line

|  | Sales revenue | x |
| :--- | :--- | :--- |
| MINUS | Cost of Sales | $\underline{\mathrm{x}}$ |
| EQUALS | Gross Profit | $\underline{\mathrm{x}}$ |
| MINUS | Overheads | $\underline{\mathrm{x}}$ |
| EQUALS | Operating Income | $\underline{\mathbf{x}}$ |
| MINUS | Interest | $\underline{\mathbf{x}}$ |
| EQUALS | Net Contribution | $\underline{x}$ |

## Operating income

This figure, also known as "Profit before Interest and Tax" and (more colloquially) as "the bottom line", is one of those key figures in the accounts. It is the profit your pub has made before taking into account how the business has been funded, how much tax you have to pay or what you are going to do with your profit. Some businesses prefer to report the profit before the amortization charge is included. This is EBITDA (Earnings before Interest, Tax, Depreciation \& Amortization - technically, 'depreciation' is writing down tangible assets, 'amortization is writing down intangible assets, but in the US the word amortization tends to be used for both).

## Interest paid

Companies with long-term funding from banks would show the interest on those loans here (and interest received on their investments). In this simulation, your pub is not a separate company but a 'branch' within a larger organisation. The company's Head Office charges your pub 2\% per quarter on any cash tied up in stock or in long-term fixed assets (except for the building itself).

## Net Contribution

The profit made by your pub, after interest, would get added to the net contribution made by all the other pubs in the chain.

At a Company level, the Income Statement would then end like this:

|  | Total Net Contribution (sum of all the pubs' profits or losses) | x |
| :--- | :--- | :--- |
| MINUS | Central 'Shared' Costs (HR, Finance, IT etc) | $\underline{\mathrm{x}}$ |
| EQUALS | Company Operating Income | $\underline{\mathrm{x}}$ |
| MINUS | Interest (on bank borrowings) | $\underline{\mathrm{x}}$ |
| EQUALS | Profit before Tax | $\underline{\mathrm{x}}$ |
| MINUS | Corporate Tax (federal and state) | $\underline{\mathrm{x}}$ |
| EQUALS | Profit after Tax |  |

The Profit after Tax is owned by the stockholders (because they own the company). They can either take the money out straight away by declaring a dividend, or they can allow the company to keep hold of the profits to fund further growth. In larger companies, stockholders delegate the recommending of the amount of dividend to a board of directors (but they will still need to approve it at the Annual General Meeting).

## Reports

## How to Understand the 'Competitor Analysis'

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, e.g. it does not stand out as being either particularly good or particularly bad.

Where an item is colored green, it means it has increased in that pub in that quarter. If it is colored red, it has decreased. If you just have the background color, 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 and is based on customer numbers for food and drink and on sales revenue for the hotel market.

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 - also called 'Revpar' in the hotel sector) 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, this tells you with which of fifteen different groups you are
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 competitive in the other markets - food and accommodation?
How much capital have we got tied up in our business - what interest are we paying?
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 sales tax on to the sales figures and then divides by the number of customers. Remember that guest rooms will often have more than one customer.

## Gross Margin

For both the drink and food markets, you can see your gross profit margin compared to the average in the village. If your gross margin is $65 \%$, it means that for every dollar of sales (excluding any sales tax), 35 cents are going on the stock and 65 cents are left over as gross profit (from which you'll pay your overheads and, hopefully, make a bottomline profit). The figure in italics to the right is the variance between your margin and the village average.

Any hotel revenue always has a $100 \%$ gross margin because there is no cost of sale.
The third line is a weighted average of your drinks gross margin, your food gross margin and, if you have rooms, your hotel gross margin. You can find your weighted average gross margin by simply dividing your total gross profit by your total sales revenue.

The actual gross margins you make on drinks and food will be lower than the 'baseline' margins you are putting into the decision grid each round. That's because some of your stock won't get sold and, if you're doing price promotions, some of it will get sold at lower prices. The calculations 'reconcile' your baseline margins to your actual margins.

## 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. Lower pay may also lead to recruitment problems.

## Games

If you have one or more pool tables or gaming machines, this tells you the total revenue and total rental cost of each type (i.e. it breaks down the net figure that appears on the face of the Income Statement).

## 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 (if the weather is nice).

## 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 (at the bottom of the second page) 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 customers will leave without making a purchase.

The colors 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 are overstaffed and you are not working your resources 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 orange territory (ie the right side of $100 \%$ but not by too much!)

## What are the Graphs Showing?

## First page (graphs based on your decisions)

| Drinks Margin | Your 'theoretical' or 'base line' margin. If all drinks stock is sold at full price it's the cents left over <br> from every pound of sales after covering the cost of the stock. Your cost prices are the same as the <br> 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 <br> from every dollar of sales after covering the cost of the stock. A higher margin means the gap <br> between the cost price and selling price is higher but remember that higher quality food will mean <br> a higher cost price. This means that high quality food with a low margin may actually be more <br> 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 <br> number of pubs who have entered the market, regardless of how many rooms they have. So if one <br> pub has 1 room at $\$ 60$ and another has 5 rooms at $\$ 40$ (and the other pubs have no rooms at all), <br> 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 <br> 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 <br> sponsorship. |
| Reinvestment Index | This reflects how much money you have invested in the downstairs areas of the pub (ie ignoring any <br> guest rooms). It roughly equates to the 'quality feel' of the establishment. |
| Restaurant Quality | This measures the full dining experience - food quality, service, ambience. |

## Second page (graphs based on your pub's performance)

| Number of Drinkers | A person visiting the pub twice a day for a week would count as 14 drinkers for the purposes of this <br> measurement. |
| :--- | :--- |
| Number of Diners | This is actually the same as the number of meals served in the quarter. |
| Drinks Sales | Top line of the Income Statement. The dotted line will show you if the total market is expanding or <br> contracting in size. |
| Food Sales | Total food sales only. Drinks bought by diners appear in the Drink Sales figures. The dotted line will <br> show you if the total market is expanding or contracting in size. |
| Drinks GP\% (actual) <br> Food GP\% (actual) | The actual \% margin your pub achieves will be rather less than the percentages you are inputting <br> for drink and food. These are your 'theoretical' margins on which you base your pricing. The actual <br> margins will be reduced by shrinkage (stock which is used up without being sold) and by any price <br> promotions. These promotions involve giving away cheap stock or free stock and thus cause your \% <br> margin to be diluted. The more attractive the promotion (from the customer's point of view), the <br> greater the level of dilution. The actual margin achieved will depend on how successful your <br> 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 <br> 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 21-25's from your market share for the 50-70s. <br> Thus a line in the top half suggests an older clientele and a line in the bottom half suggests a <br> younger one. |
| Gross Profit | Total Sales (Drink, Food \& Hotel) less Total Cost of Sales (Drink \& Food). Note that there is no stock <br> involved in selling a hotel room, thus the sales revenue feeds straight into the Gross Profit. There <br> will, however, be additional overheads incurred in the bottom half of the P\&L. |
| Staffing Cost | Managers' salary, staff wages and employment tax. These costs are straight off the Income <br> Statement. |
| Other Overheads | All overheads except for staff (which are shown above). Does not include Interest - that comes in <br> below the Operating Income level. |
| Total Overheads | All costs below the Gross Profit line, ie staffing, operating, marketing, entertainment, <br> administration, property. |
| Operating Income | Gross Profit less Total Overheads equals Operating Income. |

