



SIMBIZ

Business Simulator Participant Guide

Designed and purpose built for the obkMBA

DRAFT V3.9

Introduction

You have been appointed as the CEO of a company that manufactures and distributes a dietary product that is gaining some serious traction in the market as an effective weight loss supplement.

Your predecessor, Eustace Ellcars, has eaten too much of the company's product and has faded away but before disappearing she managed to accumulate losses of £983,072.

The Board of Directors decided to remove her and appointed an interim CEO who has managed to reduce the losses. You have now been appointed as the permanent CEO and offered a place on the Board to move the business forward.

The business was originally funded with a £1,250,000 capital made up of 1.25 million £1 ordinary shares. The company remains reasonably well capitalized even after the losses to date and now has Shareholders' Funds (net assets) of about £266,928. And the good news is that it has £200,000 in a short-term investment that was set aside from, the original invested capital.

Objective of the Simulation

In addition to the many learning objectives associated with the simulation your goal is to win the GAME.

That's right. We regard business as a game in the sense that it there are multiple rivals (competitors), a known market, a wide range of prospective customers, a set of business rules, decisions that have a multiplicity of outcomes (some of which the players can control and some they can't), and there is a scoreboard.

In this game, which is played over 8 hypothetical quarters of 3 months each, the success score is the increase in total shareholder return (TSR). That will be equal to the cumulative sum of dividends paid to shareholders plus the increase in the value of the company you're running as its CEO.

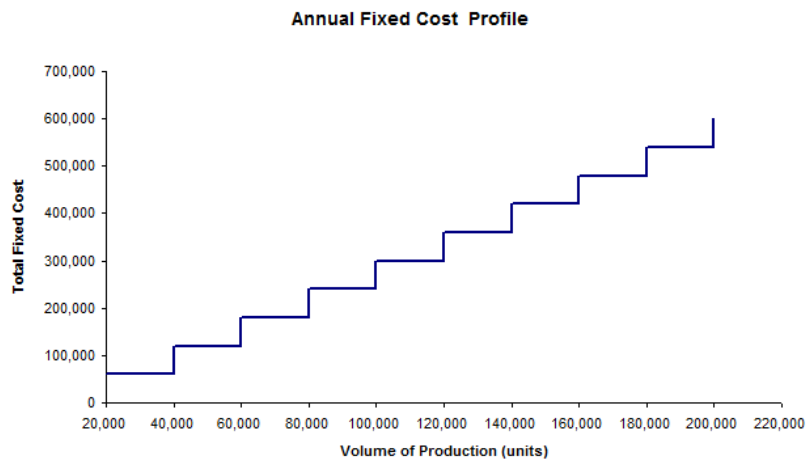
Production Capacity and Fixed Costs

The product requires the use of specialized plant that has a capital cost of £50,000. The plant is readily available but takes three months to install and commission. This means if you need to order additional production capacity you'll have to place your order one quarter in advance. Additional plant is paid for in the month it is commissioned. Each plant can last for several years but the company policy is to write it off over 5 years on a straight-line basis i.e. 20% of the capital cost per year.

Each plant can produce a maximum of 20,000 units of product per quarter and requires 2 specialist plant operators who are paid an average of £35,000 per year. This includes all salary related on-costs. You can't dispose of plant during the simulation.

Your accountant has prepared an estimate of the fixed costs which include plant depreciation and the specialized production labor for different levels of production capacity. At your request, she has created a graph showing this in Figure 1.

Figure 1



Variable Manufacturing Product Costs

You have asked your CFO to do an analysis of the likely variable costs for different package sizes. After consulting a marketing specialist and doing her own cost analysis she has come up with a table and graph that reflects her best estimate of the relationship between the selling price you could reasonably ask and the variable cost of production. This is shown in the table and Figure 2 below.

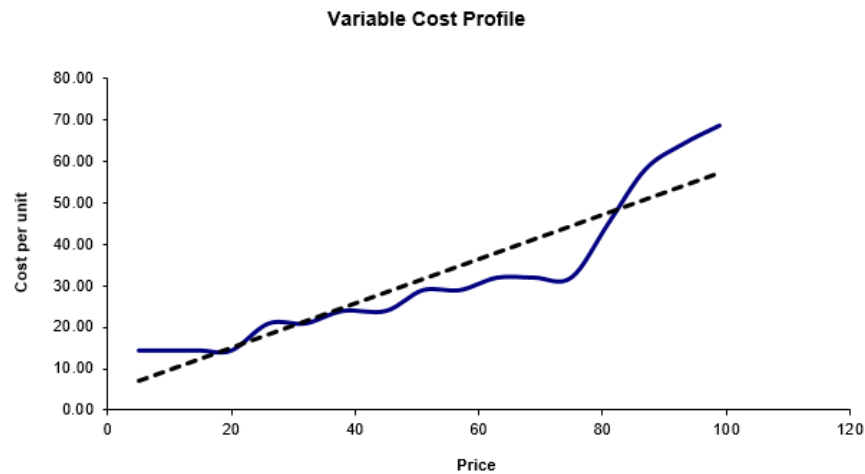
In addition to plant operator costs the weight-loss product is offered for sale in four size configurations based on weight. In addition to the weight factor, the higher weight products also require more and better quality packaging to position their price point and the largest package size includes a special, and expensive, exotic naturally occurring vitamin extracted from a rare plant only found in the Amazon Basin. This product commands a price point starting at £76. However, you have engaged a specialist pricing expert who has estimated what price ranges you could reasonably charge for different product configurations. See page 8 for a rough graph he drafted to reflect the demand function he estimated.

The following table shows the relationship between the price ranges and the cost of materials and packaging for several price points based on the pricing consultant's advice.

Price Points (£)	Variable Cost per Unit (£)
0 to 20	14.50
21 to 45	21 to 24
46 to 75	29 to 32
76 to 100	45 to 70

Your raw material suppliers offer you strict 30-day payment terms but there have been times in the past when they have had to reduce this to 15-day terms because of their own cash flow constraints. All other production costs are required to be paid for in the quarter they are incurred.

Figure 2



You sell this product to retail firms ex-factory door and all costs of distribution are paid for by your retail customers. The retailer typically prices your product on a markup of 100%. The recommended retail price ranges from £40 for the smallest basic pack to over £200 for the large premium pack.

Selling, General and Administration Expenses

You have fixed SG&A (Selling, General, and Administration) costs that reflect the size of your operation which in turn is driven by the number of plants you have in operation.

The SG&A expense includes the salary of your marketing and sales team. The board of Directors has been thinking about introducing a commission structure for your sales team but that is on hold for now.

You start the simulation with 3 plants and each of them drive about £125,000 in SG&A expenses. Therefore, you start the simulation with a SG&A expense of £375,000 per quarter.

Because you can achieve economies of scale as you add more operating capacity by acquiring more plants you'll find that once you commission more than 4 plants the SG&A expense per plant decreases by about £30,000 for each additional plant. Which means if you have 6 plants your total SG&A expense would be £690,000.

Marketing Expenses

When you take over management you note from the financial reports that Eustace allocated £100,000 last quarter for marketing. This covers the cost of all marketing collateral including point-of-sale material that you supply to your customers together with advertising and other promotion initiatives.

Understandably, you can reasonably expect the more you spend on marketing the more sales you will make. It is also reasonable to assume that if you decide to push your price up you'll need to support it with a higher investment in marketing and customer nurturing if you want to maintain or grow your sales volume.

Customer Nurturing Investment

This is an investment you decide to make in things like sales training, product feature enhancement, packaging, and customer support. Other things being equal (which they aren't) the more you invest means higher sales and vice versa.

Bank Relationship, Interest on Borrowed Funds & Administration

Because the shareholders are wealthy and well known to the bank, the company has a good relationship with its bank manager. However, the bank has insisted on a lending covenant that allows it to appoint an Administrator at a cost of £50,000 and charge penalty interest of double its current overdraft lending rate which is 8.5% per year payable quarterly. When you take over running the business, the covenant has been breached.

The covenant stipulates that the ratio of net structured debt to the balance of Shareholders' Funds at the beginning of the quarter must be less than 70%. Net structured debt includes overdraft and your term loan less the balance of funds held on deposit in an investment account if any.

The company currently has a Term Loan of £100,00 which is not due for repayment for another 3 years. It is an interest-only loan payable quarterly at an annual rate of 6.5% and the principal can be repaid in full or in part at any time if you have funds available.

In this simulation, interest is paid in the current quarter on the balance of the loan accounts at the end of the previous quarter.

You can invest surplus cash in a short term Investment account at the rate of 3.5% per year which is payable quarterly based on the balance at the end of the previous quarter. You can withdraw funds from the company's investment account on giving notice 1 quarter in advance. That is, if you expect to need additional cash resources in quarter 3, you must elect to withdraw the required amount in the decisions you submit in quarter 2.

Bank-appointed administrator

An appointment of an administrator will cost the company £50,000 per quarter and the interest on borrowed funds will double the current rate which is now 7.5%. The standard borrowing rate is at the discretion of the bank which is driven by central bank monetary policy and can change at any time.

Dividends

The shareholders have told you they are always happy to receive dividends but you advised them that they can only be paid out of earnings. At the time you take over, Eustace has managed to create significant losses so that will have to be turned around before any dividend can be paid.

You pointed out to the shareholders that any money paid out by way of dividends may prejudice the company's ability to finance profitable growth and shareholder value could be detrimentally affected.

You have also suggested that investors need to think about the relative merits of receiving dividends and investing them outside at a modest rate (but perhaps less risky) compared with leaving them in the company and benefiting from expected highly profitable growth.

Company tax

Company tax is payable on profit after being offset by carry-forward losses if any. The tax rate is 20% but there are rumors that the government is considering raising the company tax rate to 30%. No tax will be paid by the company until accumulated losses have been recovered.

Tax is paid during the 4th and 8th quarter of the simulation. Up to that point it is accrued on your Balance Sheets as a Provision for Tax.

Decisions

The game runs for 8 quarters (2 years) and each quarter you are required to make a set of 8 decisions. These are:

Price

The price must be between £10.00 and £99.00. Other things being equal (which they aren't) a lower relative price means higher sales and vice versa. Price is not the only thing that drives your market share but it is the major factor.

Production Scheduled for Next Period

Each plant has a production volume of 20,000 units. You start the simulation with 3 operating plants so the maximum volume you can produce per quarter is 60,000 units. You need to decide how many units you want to produce NEXT quarter given the number of plants you own. You don't have to run the plant at maximum capacity if you have plenty of stock on hand.

Additional Plant Capacity to be ordered

You must decide how many ADDITIONAL plants you want to bring online and be paid for next quarter. Each plant has a quarterly capacity of 20,000 units of product and costs £50,000 and is depreciated over 5 years on a straight-line basis. You do not have to order more plants if you feel you have sufficient capacity to meet your sales targets.

It is important to note that each new plant is not available for production until the month after it is installed and paid for which means if you decide to increase production by say 60,000 units in period 3 you'll need to order 3 more plants in your period 1 decisions, those plants will be installed and paid for in period 2 and will be available for production in period 3.

Marketing for this Period

This is your planned marketing spend this quarter. You will pay all your marketing costs in the quarter. Other things being equal (which they aren't) more relative marketing

means higher sales and vice versa. Beware of stocking out (see below) because that will have negative impact on your sales next quarter.

Customer Nurturing and Product Development

Refer to the earlier comment on this issue. You can spend any amount you like on this and the more you spend the more sales you will make but like most investments it's subject to the law of diminishing returns.

Dividends

This is the dividend you plan to distribute to shareholders this quarter. You can only pay a dividend out of retained earnings. The dividend will be paid at the end of the quarter.

Investment of Surplus Cash

If you have more cash than you expect to need you can place it in lots of £25,000 on 3-month term deposits with the bank. The deposit automatically rolls over unless you withdraw all or a part of it. Interest is paid at the end of each quarter at the rate of 3.5% per year. The deposit is assumed to be made at the end of the quarter and interest will be paid at the end of the next quarter.

Redemption of Cash Investment

If you think you will need additional funds to finance growth you can redeem some or all of your funds on deposit. The amount redeemed will be available for you to use at the beginning of the NEXT quarter i.e. the redemption will not appear on your cash flow statement until the next quarter.

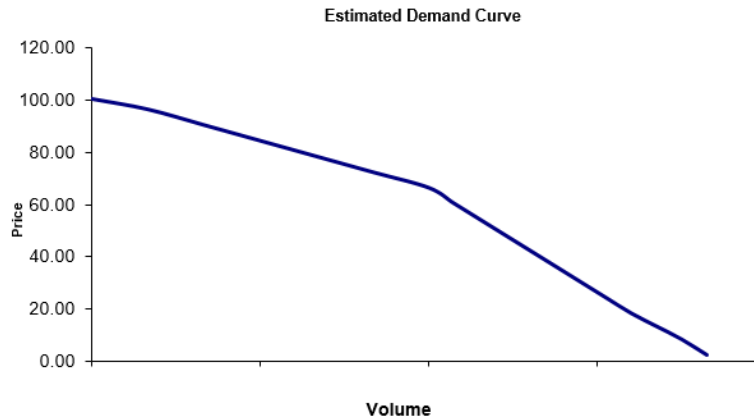
Demand for the Product

Demand for your product is looking very promising and is driven in part by natural market growth that has been about 3% per quarter. The industry's investment in marketing is the main driver of market size. Your share of the total market is reflected by, amongst other things, your investment in marketing relative to your rival producers.

Also, investment in things like sales training, customer support protocols, product development and enhancement, and packaging design will also drive your market share up. Of course, relative price is also a critical factor in determining the demand for your company's product offering.

Before Eustace disappeared, she hired a marketing and economic consulting firm that specialized in product pricing to assess the relationship between price and demand. The firm came up with a demand curve that looks like the one in Figure 3 below. He was not willing to attach volumes to the price points but felt strongly that the price elasticity of demand declined after about £65.

Figure 3



The market research firm believed there was a wide range of pricing options for the product from less than £20 per unit to close to £100 for a premium product.

However, the firm did say that a sample of your retailers' customers who participated in customer focus groups felt that there is a limit to how much they will pay for the product so price is an important issue particularly at higher levels. However, it appeared that the demand curve became more inelastic at lower prices i.e. less than about £65.

Demand Seasonality

Based on past sales experience the product is subject to quite significant seasonality. Your analysis indicates the following seasonality factors typically apply:

Season	Factor
Summer	1.00
Autumn	0.94
Winter	0.98
Spring	1.15

This data indicates that other things being equal (which they aren't) autumn sales can be expected to be 6% lower than summer, whereas spring can be expected to be 15% above summer.

You take over running the company at the end of spring so your first quarter decision period is summer.

Stock Carrying Costs and Stock-outs

This is an exciting market to be in and retail sales have been strong. However, your retail customers have made it quite clear to you that they rely on your supply and if you fail to deliver they will have no hesitation switching to one of your rivals for product supply.

It is therefore important that you do not drive demand for your product to a level that exceeds your ability to supply because you'll find the demand next quarter will be negatively

impacted and your competitors will benefit from your marketing effort. You've been told past stock-outs have resulted in sales in the following month being about 25% below what management might otherwise expect but that was not always the case.

You have warehouse capacity at the start of the simulation to store up to 30,000 units of finished goods and you have arranged with an independent warehousing service to rent additional space as required at a cost of £2.50 per unit per quarter. This is based on your average quarterly stock holding and is payable in the quarter in which the excess occurs. However, each time you invest in a new production plant you will get an extra 10,000-unit storage capacity.

Business Valuation Methodology

There are many ways to value a business. For this simulation, the value of the company will be the sum of the dividend stream paid during the 8 quarters, if any, plus the value of equity at the end of the 8th quarter.

The equity value will be determined by applying a multiple to the earnings before interest and tax, also known as EBIT. EBIT will be a matter of fact at the end of each quarter. You will start with a multiple of 0 because the losses to date are such that a buyer is unlikely to be inclined to make an offer to buy the business.

At the end of each quarter a valuation multiple will be determined. That multiple will be based on 3 factors:

1. The compound annualized revenue growth over the period. All firms start at the same place so the revenue growth metric will also reflect the annualized magnitude of revenue at the end of the period. This is important because size is something that attracts a business to a larger potential buyer. (Weighting 20%)
2. Annualized revenue volatility as at the end of quarter 8. This metric will reflect the quarter-on-quarter revenue volatility. Other things being equal, greater volatility would negatively impact value because it reflects the presence of uncontrollable forces or incompetent management. (Weighting 20%)
3. The difference between your Weighted Average Cost of Capital (WACC) and your Return on Invested Capital (ROIC) relative to the other teams participating in your group. Shareholder value is increased if ROIC is greater than WACC, and it is decreased if ROIC is less than the WACC. The way in which WACC and ROIC will be determined is explained in Appendix A. (Weighting 60%)

At the end of each decision period you will receive a report that shows how you performed during that period. The report pack will include an Income Statement, a Balance Sheets, a Cash Flow Statement, a Funds Statement, and a comparative summary of the valuation earnings multiple for each of the participating teams.

If your entire group is competing against another group simultaneously, in addition to your individual company report you will get an aggregate summary of how the other teams in your simulation group performed during the quarter.

An example of the reports and the Decision Sheet are included in the Appendix B.

Appendix A

Calculation of the Weighted Average Cost of Capital and Return on Invested Capital

The Formula for the Return on Invested Capital is:

$$\text{ROIC} = \frac{\text{Net Operating Profit Before Interest \& Tax}}{\text{Invested Capital}}$$

When ROIC is greater than the Weighted Average Cost of Capital, Shareholder value will be increased and a company can be expected to have a higher valuation.

Weighted Cost of Capital

The WACC is a measure of the true cost of capital used in the business. The cost of debt capital is simply the interest paid on the debt which is totally transparent. However, because interest is a tax-deductible expense the net cost to the business is the after tax cost.

The formula to calculate the after-tax interest rate is:

$$\text{After tax cost of debt} = \text{Interest rate on debt} \times (1 - \text{Tax Rate}\%)$$

For the purpose of the simulation the cost of overdraft finance is set at 7.5% (but can vary) and the corporate tax rate is assumed to be 20%. Given these assumptions the cost of debt is 6%. You can see that if the tax rate increases the net cost of debt will fall and vice versa.

Only structured interest-bearing debt is included in this calculation. Accounts Payable, for example, is finance provided by the company's suppliers but it does not attract interest except in the case where the terms of trade stipulate that interest is to be paid on an overdue balance. Even in that case we would characterize the interest as a trading penalty rather than a financing cost.

The cost of equity capital is a little more complex because it is essentially a subjective. Typically, we would take a long-term risk-free interest rate (e.g. government bond rate) and add a premium for the risk associated with a business investment and that premium is the "subjective" bit.

For this simulation, we will assume that the risk-free rate is 6% and that the risk premium is 125% above the risk-free rate. That is, the cost of equity will therefore be assumed to be 13.5%.

Because the cost of equity capital is not tax deductible it is a net cost and as you can see it's typically much higher than the net cost of debt capital. Therefore, it is usually prudent for management to have a blend of debt and equity in a company's capital structure.

In principle, more debt lowers the cost of capital but exposes the business to more risk. Lower debt, on the other hand, increases the cost of capital which raises the threshold for investing in growth strategies which in turn could be expected to reduce long term shareholder value.

Calculating the weighted average cost

To calculate the WACC we calculate the proportions that debt and equity each represent of the total capital being used by the business.

If you examine the Balance Sheet (Appendix B) at the time you take over running the company you will see the debt and equity finance is as shown in the table below:

	Balance Sheet Value	Relative Weighting (a)	Pre-Tax Cost	After Tax Cost (b)	Weighted Cost (a) x (b)
Debt	706,167	82.33%	7.50%	6.00%	4.94%
Equity	151,599	17.67%	13.50%	13.50%	2.39%
Total	857,766	100.00%			7.33%

Invested Capital

Capital is provided to business entities from two sources: debt and equity. Common metrics used to reflect profitability are ratios like return on total assets or return on equity (i.e. shareholders' funds or net assets) but the problem with these is that they do not reflect the true return on all the funds employed in the business.

A much more accurate way of measuring profitability and potential future bottom-line growth is the return on the total amount of capital including both debt and equity. This is what is meant by the term "Invested Capital" – capital invested by shareholders and capital provided by debt providers.

When calculating Invested Capital only structured debt is included. By that we mean debt that carries interest and is to be repaid according to an agreed schedule. We do not include finance from other sources such as vendors (Accounts Payable) or taxing authorities e.g. provision for company tax etc.

There are several ways to calculate Invested Capital and it can get quite complicated but for this simulation we add the book value of Shareholders' Funds to Structured Long Term interest-bearing debt, including overdraft finance and then we deduct surplus cash i.e. cash that is not required to finance current operations but is held by the company as a contingency reserve.

Based on the Period Zero Balance Sheet the Invested Capital is £857,766 calculated as follows:

	£	
Shareholders' Funds	151,599	Equity
Term Loan	100,000	Debt
Overdraft	806,167	Debt
Less Short-term cash investment	(200,000)	Debt offset
Invested Capital	£857,766	

If the company had made a net profit after tax of say £100,000, its ROIC would be $\frac{£100,000}{£858,000} = 11.65\%$. This is significantly higher than its WACC (7.33%) and therefore shareholder value would have been enhanced.

However, the company incurred a loss of £327,401 so shareholder value has been destroyed. Based on a WACC of 7.33% it would need to have made a NPBIT of £62,875 – a turn-around of close to £390,000. This is what you need to be shooting for.

If the difference between the ROIC and the company's WACC is positive it will positively impact the valuation multiple that applies to value your company.

Valuing Your Company

The earnings multiple that is determined based on the three factors (see page 9) will give an initial enterprise value. To determine the final share value two further adjustments will be made in accordance with normal practice.

First, we make an adjustment for the net debt. We do this because the buyer will (probably) not want to take over any structured debt and the seller will not want to give the buyer cash in the company's bank account at the time a sale is completed i.e. let's assume at the end of quarter 8.

Secondly, in the ordinary course it would be necessary to make an adjustment for working capital if the balance sheet value at the time of the sale is not a true reflection of the working capital that would be required to support the sales volume at the time of the sale.

The simulation will apply a ratio of 2.0 to current liabilities to determine a normalized value for current assets. For example, based on the Balance Sheet illustrated on the following page, if current liabilities (excluding bank borrowings and the provision for tax) is £85,000 then the normalized current asset allowance would be £170,000 and agreed working capital would be £85,000 (i.e. £170k - £85k.)

To illustrate how that will work in this simulation. Let's assume the earnings multiple is determined to be 10 and EBIT £500,000. That would give an initial enterprise value of £5 million.

Now let's assume the following information is extracted for the Balance Sheet at the time a sale transaction closes:

Using the Balance Sheet shown above, a worksheet for the final shareholder value is shown on the following page.

The Balance Sheet of a Hypothetical Company

	£	Adjusted Current Working Capital	Normalized Working Capital
Current Assets			
Accounts receivable	125,000	125,000	125,000
Stock	155,000	155,000	155,000
Short term deposit	200,000		
			(110,000)
Total Current Assets	480,000	280,000	170,000
Current Liabilities			
Bank overdraft	75,000		0
Accounts Payable	85,000	85,000	85,000
Provision for tax	10,000		0
Total Current Liabilities	370,000	85,000	85,000
Working Capital	110,000	195,000	85,000
Fixed Assets	500,000		500,000
Fixed Assets + Working Capital	610,000		585,000
Non-Current Liability			
Term Loan	100,000		0
Shareholders' Funds (Net Assets)	510,000		585,000
Share Valuation			
	£		£
Initial enterprise value			5,000,000
Add cash investment		200,000	
Less term loan debt		(100,000)	
Less bank overdraft & tax provision		(85,000)	
Net debt adjustment			(15,000)
<i>Plus</i> Adjusted working capital		195,000	
<i>Less</i> normalized working capital		(85,000)	
Working Capital Adjustment			110,000
Equity Value			5,095,000
Issued shares (assume)		1,000,000	
Price per share			£5.095

Appendix B

Period Zero Reports and Decision Sheet

Peta

Quarter 0

Team 2001

Income Statement

	£	£	Units
Sales Revenue		1,297,446	48,054
Less Cost of Sales			
Opening stock	251,000		15,000
Raw materials	900,000		
Direct labour	52,500		
Other variable manufacturing costs	360,000		
Plant depreciation	7,500		
Total	1,571,000		
Less closing stock	(564,438)	1,006,562	26,946
Gross Profit	22.42%	290,884	
Interest received		1,750	
	Total Income	292,634	
Less Expenses			
Marketing	100,000		
Customer nurturing and development	25,000		
Selling, General and Administration	375,000		
Interest paid (includes term loan interest)	4,706		
Total Expenses		504,706	
	Net Profit (Loss) before Tax	(212,072)	
	Less Tax	0	
	Net Profit (Loss) after Tax	(212,072)	

Summary Market and Production Report for Quarter 0

Your Sales volume this quarter	48,054	units
Market size this quarter	147,857	units
Estimated Product Market Value	5,189,786	£
Your Selling Price	27.00	£ per unit
Plant Capacity available next quarter 1	3	plants
Production this quarter	60,000	units
Production scheduled next quarter 1	60,000	units
Cash investments to be redeemed next qtr.	0	£
Ratio of bank borrowing to shareholders' funds	110%	70% covenant

Balance Sheet

Current Assets	£	£
Cash	0	
Accounts receivable	428,157	
Stock	564,438	
Short term investment	200,000	
Total Current Assets		<u>1,192,595</u>
Less Current Liabilities		
Bank Overdraft	626,167	
Accounts Payable	297,000	
Provision for tax	0	
Total Current Liabilities		<u>923,167</u>
	Working Capital	269,428
Add Non Current Assets		
Plant & Equipment	150,000	
Less Accumulated Depreciation	<u>(52,500)</u>	97,500
Non Current Liabilities		
Term loan		100,000
	Net Assets	<u><u>266,928</u></u>
Shareholders' Funds		
Share capital		1,250,000
Retained Earnings B/F		(771,000)
Current Period After Tax Profit (Loss)		(212,072)
Dividends paid		0
	Shareholders' Funds	<u><u>266,928</u></u>
Tax losses Carried Forward		<u><u>(983,072)</u></u>

Peta

Quarter 0

Team 2001

Cash Flow Statement

Cash Receipts	£	£
Opening Accounts Receivable		300,000
Sales this period		1,297,446
		<u>1,597,446</u>
Less Ending Accounts Receivable		(428,157)
<i>Sales Revenue Collected</i>		<u>1,169,289</u>
Interest received		1,750
Transfer from investment account		0
		<u>1,171,039</u>
<i>Total Cash Receipts</i>		1,171,039
 Cash Payments		
Opening Accounts Payable		132,000
Add Materials Purchased		900,000
Less Ending Accounts Payable		<u>(297,000)</u>
Payments for raw materials		735,000
Direct labour		52,500
Other manufacturing costs		360,000
Marketing		100,000
Customer nurturing and product development		25,000
Sales, General and Administration		375,000
Stock Carrying Cost		0
Interest paid (includes term loan interest)		4,706
Dividend paid		0
Tax Paid		0
Transfer to investment account		0
Plant purchased		0
		<u>1,652,206</u>
Total Cash Payments		1,652,206
Net Cash Flow		<u>(481,167)</u>
Opening Cash		<u>(145,000)</u>
Ending Cash Balance		<u><u>(626,167)</u></u>

SIMBIZ - Business Simulation

Peta	Quarter 0	Team 2001
Where got-gone-to Report (Funds Statement)		
	£	£
Funds from Business Operations		
Net loss from trading this period		(212,072)
Add back non cash expenses		7,500
	Deficiency from trading operations	<u>(204,572)</u>
Funds made available from Working Capital		
Reduction in Receivables		
Reduction in Inventory		
Reduction in short term investments		
Additional Payables (Inventory)	165,000	
Increase in provision for tax		
	<i>Sub total</i>	<u>165,000</u>
Funds used for Working Capital		
Additional Receivables	128,157	
Additional Inventory	313,438	
Increase in short term investments		
Reduction in Payables (Inventory)		
Reduction in Tax provision		
	<i>Sub total</i>	<u>441,595</u>
	Net Funds required for additional Working Capital	<u>(276,595)</u>
	Net cash flow from business operations	<u>(481,167)</u>
Adjustment to Business Capacity		
Investment in Plant		
Business Financing Activities		
Reduction in Long Term Borrowings		
Additional Capital Invested		
Shareholder dividends paid		
	Net Cash Flow	<u>(481,167)</u>
	Opening Cash Balance	<u>(145,000)</u>
	Ending Cash Balance	<u><u>(626,167)</u></u>

SIMBIZ - Business Simulation

Team Name	Current Qtr. Sales Revenue	Annualized EBIT	Price	ROIC
Peta	1,297,446	(829,463)	27.00	0.00%
Michael	1,297,446	(829,463)	27.00	0.00%
Mary	1,297,446	(829,463)	27.00	0.00%
Bonnie-Bo	1,297,446	(829,463)	27.00	0.00%

Business Valuation & Shareholder Return Report

Team Number	Name	Multiple	Annualized EBIT	Business Value	Total Shareholder Value
2001	Peta	0.00	(829,463)	266,928	266,928
2002	Michael	0.00	(829,463)	266,928	266,928
2003	Mary	0.00	(829,463)	266,928	266,928
2004	Bonnie-Bo	0.00	(829,463)	266,928	266,928

Player Decision Summary Form

Game Number 2000

Team Name

Team Number

Quarter	Price (\$)	Production Next Period	Additional Capacity Ordered (Number of Plants)	Marketing This Period (\$)	Customer Nurturing & Product Development (\$)	Dividend (\$)	Invest Surplus Cash This PD (\$)	Redeem Cash Investment Next Period (\$)
0	27.00	60,000	0	100,000	25,000	0	0	0
1								
2								
3								
4								
5								
6								
7								
8								

Price Must be between \$10 and \$99. Other things being equal (which they aren't) lower relative price means higher sales and vice versa.

Production Next Period Each plant has a production volume of 20,000 units. You start the simulation with 3 operating plants. You need to decide how many units you want to produce NEXT quarter given the number of plants you own.

Capacity Ordered Decide how many ADDITIONAL plants you want to bring online and be paid for next quarter. Each plant costs \$50,000 and is depreciated over 5 years on a straight line basis. You do not have to order more plants.

Marketing This PD This is your planned marketing spend this quarter. You will pay all your marketing costs in the quarter. Other things being equal (which they aren't) more relative marketing means higher sales and vice versa. Beware of stocking out because that will have negative impact on your sales next quarter.

Customer Nurturing & Product Development This is an investment you decide to make in things like sales training, product feature enhancement, packaging, and customer support. Other things being equal (which they aren't) the more you invest means higher sales and vice versa.

Dividend This is the dividend you plan to distribute to shareholders this quarter. You can only pay a dividend out of retained earnings. The dividend will be paid this period.

Invest Surplus Cash This PD If you have more cash than you expect to need you can place it in lots of \$25,000 on 3 month term deposits with the bank. At the end of each quarter you'll be paid interest at the rate of 3.5% per year. The deposit is assumed to be made at the end of this quarter and interest will be paid at the end of the next quarter.

Redeem Cash Investment Next Period If you think you will need additional funds to finance growth you can redeem some of all of your funds on deposit. The amount redeemed will be available for you to use at the beginning of the next quarter.