AI Masters Cup
User Guide March 2009

How the AI Masters Cup tournament works

The Rescue Detroit Case

AI MASTERS CUP Competition : The **AI Masters Cup** is a business competition – based on a series of dynamic, interactive business simulations which deal with real issues in the global automobile industry. The simulations are all "single user" games, where you will compete against programmed "intelligent competitors".

Every 3-6 months a new Case Study will be released – exclusively for AI readers – which will highlight urgent and current scenarios from the automotive business.

Go top http://masters.ai-online.com

RESCUE DETROIT : The first exciting business simulation in the **AI Masters Cup** is **"Rescue Detroit"** – you take over the management of a major auto producer, try to save it from bankruptcy, and compete for market share and profits against two other major players (virtual "intelligent competitors"). A detailed description of the scenario is given later in this document.

Objectives : Your principal objective is to increase your stock price above that of your competitors in the game, and ultimately to generate the highest stock price in the AI competition.

Your stock price is a function of your company's profitability: you will take management control for 12 quarters, or 3 years, and your decisions in the marketplace over this time period will affect your share price

Choosing to invest and develop certain product markets, setting higher or lower pricing and advertising levels, or devising a quality, HR or R&D strategy are some of the areas you can decide on to build your new business plan - and increase profitability

Your competitors will react to your decisions according to their own strategic business plan – this is a closely guarded secret. With careful study of their management actions, and of the following notes, you may find some clues to their approach – and use this to beat them in the market.

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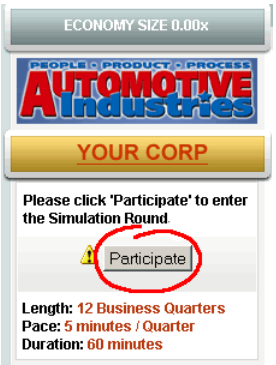
This note assumes you are on the AI Masters Cup website at http://masters.ai-online.com/, that you have registered as a user and have logged in, using the username and password that we have sent to you

The notes enclosed here are intended to be an additional explanation to complement our general "Game Instructions" which appear on the website

Bryan Rimmer - Tycoon Systems 2009



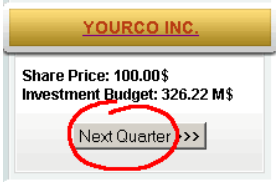
PARTICIPATE

As soon as you click "PARTICIPATE", the game starts running. The game will run for three business years, in quarters – ie 12 quarters in total. At the end of 12 quarters, the game will be "scored" and the final result is recorded in our database against your user name. You then have further opportunities to improve your score, perhaps using different business strategies, by logging in again and playing another competition. You have 5 chances in total to improve your final score.

You will find the "Participate" button in the leftmost column of the screen

If you do NOT click on "Participate", the game will not run

DO NOT CLICK ON "PARTICIPATE" UNTIL YOU ARE READY TO PLAY



TIMING OF DECISIONS

From the time at which you click on "Participate", the simulation will start running and automatically advancing at the rate of **one business quarter every 5 minutes**. You are now in control of your company and you have 5 minutes to make all your business decisions for every quarter or round.

Should you wish to proceed at a faster rate, or if you are satisfied with your decisions in a particular round, click **"Next Quarter"** to proceed to the next quarter without waiting for the 5 minute interval. You will not be penalised by the system for being too fast – but you should remember that over-hasty decisions can be costly.

If you take more that 5 minutes over your decisions in any round, the system will automatically advance to the next round after this time. The maximum amount of time you can spend in a simulation game is therefore 60 minutes. The minimum time you can spend depends on your own speed of decision-making

Your virtual assistants will be on hand to help you from time to time

WHAT YOU NEED TO DO

Once the simulation starts running, you need to start making your business decisions. You have 12 business quarters to Rescue Detroit from bankruptcy.

To start, you need a clear business strategy (see the following pages) – including :

Where do you want to compete ? Which existing or new product-markets do you want to invest in ? Which product markets will you withdraw from ?

How will you compete ? How will you position your company ?
How will you compete on the dimensions of quality, innovation, staff, customer service levels, and sustainability ? What value proposition are you proposing to your customers ? Set your pricing and advertising policies.

Each quarter the competitive landscape will change.
As the simulation proceeds, your competitors will be taking decisions that may affect you negatively, so you may need to react – re-set prices, rethink advertising spend, reset your strategic initiatives, make decisions about additional product line investments, expansion or rationalisation ("upsize" and "downsize"), relaunch a product range - or even market withdrawal ("liquidation").

Tactical adjustments – Check your business and financial performance through the wide array of reports available to you – Too much inventory ? Reduce prices ? Increase advertising spend ? Products seem outdated ? Relaunch ? Market is over-crowded ("Supply levels")? Prices falling ? Withdraw/liquidate ? Attack with a sales drive at lower prices / better value proposition ?

Your business performance is reported in real time, and summarised in a stock price. How do you compare to your competition ? How are *they* succeeding ?

AS YOU TAKE OVER YOUR COMPANY …. SOME QUESTIONS:

- What is your company's current financial position ?
- What are the urgent issues to solve ?
- What action can you take to address any immediate financial problems ?
- What product markets are you invested in now ? Are you making money ?
- Are these product-markets growing - or declining ? How mature are they ?
- Which markets are attractive ? Why ?
- How intense is the competition ?
- Are they making money ?
- What is the apparent business strategy of your competitors ?
- How do you want to compete ?
- What is your relative cost base ?
- What competitive advantage can you build ?
- How will you do this ?

RESCUE DETROIT – CASE DETAILS & BACKGROUND

The Auto Industry market is a dynamically competitive arena.

There are two main competitors in the business, apart from your own company – The Big Car Corporation (Ticker : BigCar), and DynAuto Industries (Ticker : DynAuto)

BigCar has a somewhat traditional approach to business – it places high value on its customer relationships, and prides itself on a long pedigree in the automobile markets. It has a reputation in the industry for excellent staff and labour relations, with many of its employees spending most of their working lives with the firm. Their training programs are renowned in the industry, with many young apprentices and graduates being promoted through the firm to senior management levels over an extended period.

Recently, BigCars' products - which once offered world-beating technology and quality - have come to look dated. Consumers' taste have changed over the years, but BigCar's range has not moved with them. A company spokesman recently pointed to market research which showed that BigCar have the highest Loyalty Index amongst regular buyers in the business - and that there were no plans to abandon these "faithful partners in our business success"

DynAuto is more of a maverick in the market – constantly improving their technology, investing in lean manufacturing processes and always testing new product ideas. They were the first company in the market to introduce a new Hybrid Car range in response to changing tastes and customer trends. They have also avoided some of the more traditional product-markets which are increasingly being left in car showrooms as the economic and credit crises develop. DynAuto is therefore seen by investors as having slightly brighter prospects than other players in this market

Both of these competitors will (probably) react to market opportunities according to their own well established corporate strategies – they are both suffering from the recession, and have said they see opportunities for growth in their existing as well as entering into new markets

PRODUCTS

The main product groups in your market are shown here : (you are represented by “YourCo”)

Luxury Cars	Investment Required per Production Line	$528 M
	Number of Producers (BigCar, YourCo)	2
	Current Supply Level (3 production units)	82%
	Product Base Price	$ 62,000
	Current Market Price	$ 71,300
	Average Product Maturity	130%

Sports Cars	Investment Required per Production Line	$357 M
	Number of Producers (BigCar)	1
	Current Supply Level (2 production unit)	90%
	Product Base Price (Recommended Price)	$ 54,000
	Current Market Price	$ 59,940
	Average Product Maturity	113%

SUVs	Investment Required per Production Line	$656 M
	Number of Producers (BigCar, YourCo)	2
	Current Supply Level (2 production units)	86%
	Product Base Price	$ 35,000
	Current Market Price	$ 40,250
	Average Product Maturity	130%

Hybrid Cars	Investment Required per Production Line	$206 M
	Number of Producers (DynAuto)	1
	Current Supply Level (1 production unit)	32%
	Product Base Price	$ 24,000
	Current Market Price	$ 27,600
	Average Product Maturity	100%

Compact Cars	Investment Required per Production Line	$307 M
	Number of Producers (DynAuto, BigCar, YourCo)	3
	Current Supply Level (7 production units)	69%
	Product Base Price	$ 18,500
	Current Market Price	$ 21,275
	Average Product Maturity	113%

Small Cars	Investment Required per Production Line	$156 M
	Number of Producers (DynAuto, YourCo)	2
	Current Supply Level (6 production units)	63%
	Product Base Price	$ 15,000
	Current Market Price	$ 17,250
	Average Product Maturity	113%

The Secret Project	*Limited information at the present time* *Launch may be imminent, subject to further road testing and regulatory approval* *Delays are expected.*

For definitions of terms used here, please go to our Business Terms section

OPENING BUSINESS POSITIONS

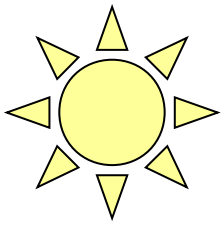
The tables below summarise the relative market positions and principal financial data for each of the main players in this market. A study of the revenue and profit contribution of each product line is recommended

BigCar's Current Business Position

Model	Luxury	Sports	SUVs	Compact	Small	Hybrid	Total
Sales Price, $	82,460	71,820	46,550	24,605			-
Days Inventory	8	15	8	10			-
Revenue $M / Qtr	**64.2**	**49.1**	**79.8**	**50.1**			**$ 243.2**
EBIT $M / Qtr	5.4	5.4	6.7	8.2			$ 25.7
EBIT %	8.5%	10.9%	8.4%	16.3%			10.6%
Net Income $M / Qtr							$ (5.3)
Production Plants	2	2	2	2			8
Fixed Assets $M	1,104	685	1,260	590			$ 3.6 Bn

DynAuto's Current Business Position

Model	Luxury	Sports	SUVs	Compact	Small	Hybrid	Total
Sales Price, $				24,235	19,650	31,440	-
Days Inventory				1	1	4	-
Revenue $M / Qtr				**89.9**	**80.5**	**22.4**	**$192.6**
EBIT $M / Qtr				18.9	12.1	4.3	$ 44.3
EBIT %				21.1%	26.3%	19.2%	23.0%
Net Income $M / Qtr							$ 21.5
Prod'n Plants				3	4	1	8
Fixed Assets $M				884	598	198	$ 1.7 Bn



YourCo - Current Business Position

Model	Luxury	Sports	SUVs	Compact	Small	Hybrid	Total
Sales Price, $	81,840		46,200	24,420	19,800		-
Days Inventory	7		7	5	7		-
Revenue $M / Qtr	**33.1**		**41.2**	**52.4**	**33.4**		**$ 160.1**
EBIT $M / Qtr	0.2		0.3	7.7	6.2		$ 14.4
EBIT %	0.7%		0.7%	14.7%	18.6%		9.0%
Net Income $M / Qtr							$ (1.4)
Prod'n Plants	1		1	2	2		6
Fixed Assets $M	507		630	589	299		$ 2.0 Bn

For definitions of terms used here, please go to our Business Terms section

YOUR OPENING FINANCIAL POSITION

Balance Sheet Month 0			
Assets		**Liabilities and Equity**	
Current Assets	**103,692,103$**	**Current Liabilities**	**19,882,166$**
Cash	70,764,338$	Accounts Payable	19,882,166$
Accounts Receivable	16,011,270$	Short Term Debt	0$
Inventory	16,916,495$	**Long Term Debt**	**1,020,000,000$**
Long Term Assets	**2,025,423,671$**	**Shareholders Equity**	**1,089,233,608$**
Property, Plant & Equipment	1,924,152,487$	Seed Equity	1,100,000,000$
Intangible Assets	101,271,184$	Retained Earnings	-10,766,392$
Total Assets	**2,129,115,774$**	**Total Liabilities and Equity**	**2,129,115,774$**

Profit & Loss	Month 0	% of Rev.
Revenues	160,112,700$	100.00%
./. Cost of Goods Sold	87,843,280$	54.86%
= Gross Profit	72,269,420$	45.14%
./. Marketing Costs	4,617,960$	2.88%
./. Overhead Costs	11,868,364$	7.41%
= EBITDA	55,783,096$	34.84%
./. Depreciation&Amort.	41,335,177$	25.82%
= EBIT	14,447,919$	9.02%
./. Interest	15,831,185$	9.89%
./. Taxes	0$	0.00%
= Net Income	-1,383,266$	-0.86%

Cash Flow	Month 0	% of Rev.
Net Income	-1,383,266$	-0.86%
+ Depreciation&Amort.	41,335,177$	25.82%
./. Change in Inventory	10,076,846$	6.29%
./. Change in Accounts Receivable	0$	0.00%
+ Change in Accounts Payable	0$	0.00%
= Operating Cash Flow	29,875,065$	18.66%
Investing Cash Flow	0$	0.00%
Financing Cash Flow	-29,875,065$	-18.66%

Opening stock price is $100.00

STRATEGIC DECISIONS

Product Markets : *Where* will you compete ?

Evaluate the profitability of your current portfolio of activities, and decide which markets look attractive to you – now and for the future.

Where can you make money ? Where are you losing money ? Can you rescue the poor performers, or do you cut them loose ? What is the cost of exiting from a market?

Market attractiveness will depend on the following and other factors:

- The intensity of competition in those areas – effect of greater price competition
- Current and expected supply levels (market saturation, market crowding)
- Current maturity (product life cycle, impact on pricing and profitability)
- The potential to dominate market share, and so influence pricing
- Ability to build volumes and to achieve cost reductions through economies of scale

Make a strategic plan for investing in attractive product-markets. How much financing do you need ? How much is available to you at any time ?

Review the methods available to you to Invest, Relaunch, Upsize, Downsize or Liquidate a business unit. There are costs associated with each option – these are detailed on screen at appropriate times

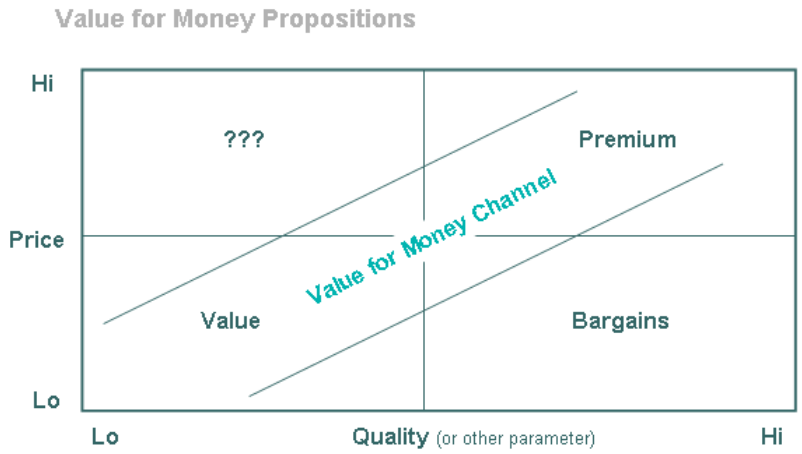
Strategic Positioning : *How* will you compete ?

You have a number of decisions to make and track constantly throughout the simulation.

- Pricing levels and Advertising Expense
- Customer Service Investment
- Investment in Quality Improvements
- Innovation ad R&D investment
- Training and HR Budgets
- Sustainability & Corporate Social Responsibility

Offering Value For Money

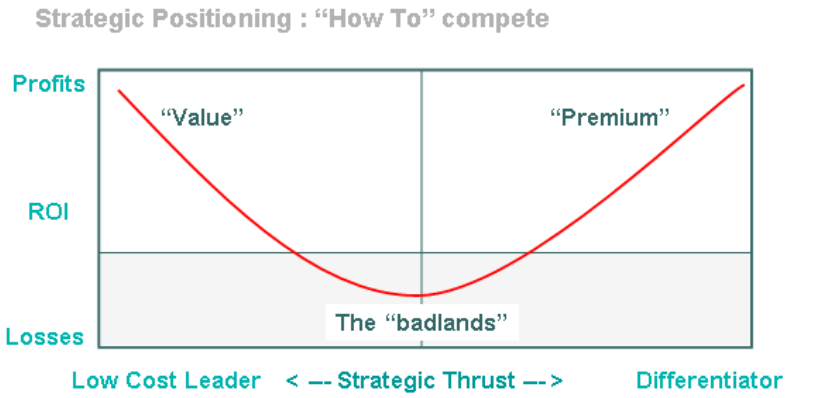
When designing a price / value proposition, you will need to consider the relative strengths of your products compared to competition, and price according to the value you will offer :



- Matching price and quality with strategic positioning

Focusing on a Sustainable Strategy

Deciding "How" to compete will also involve setting a path that is rational – profitable firms often focus their efforts on one of two approaches as indicated in the chart below: a Cost Leadership strategy, or a Differentiator approach. Either can lead to profitable and successful operations



- **Each position has cost and revenue implications** Porter's Generic Strategies
- **Low Cost Leadership is NOT necessarily Low Price Leadership**
- **Low Cost Leadership requires high efficiencies, scale economies … and ….**
  Exceptional attention to detail

After M. Porter; Harvard Business School

Setting Prices and Marketing Budgets

Review current Contribution Profit Margins - as well as EBIT Margins - by product. How do you compare to the competition ? Margins are function of Selling Prices and Total Product Costs. Offering lower prices *might* build market share and sales volumes, which could lead to lower production costs as larger scale economies are realised. There is a possibility that this might improve profitability. Additionally you may wish to lower prices if you fear that inventories are too high, with too many unsold vehicles waiting for buyers.

On the other hand, raising prices could increase margins in certain markets – where for example, there is very little inventory available for eager buyers.

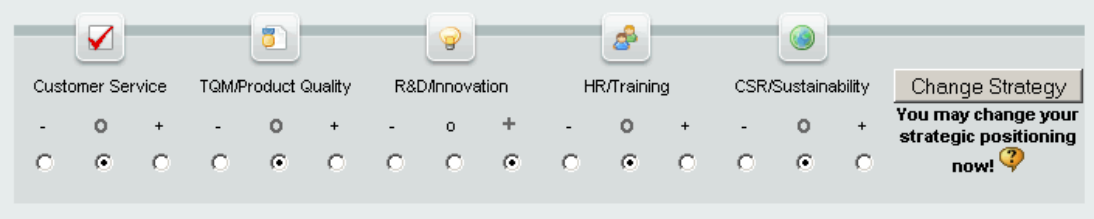
Marketing spending will go hand-in-hand with pricing and inventory control decisions. There is little point in setting a heavy spend on marketing if there is no available inventory in a rising market – you will be able to sell most of your offering at a relatively high price, with no promotion. However, if you are setting lower prices to clear inventory, or to try to build market share, then a higher marketing budget might be appropriate to support that initiative

Use the **GREEN PLUS** and **RED NEGATIVE** buttons on screen to change prices and marketing budgets. Click on these repeatedly to make several price or marketing level changes if needed

Strategic Positions

By balancing service, quality, innovation, personnel policies and CSR – relative to a proposed price level, and compared to competitive offerings in the market – you can increase the appeal of your products and possibly gain market share.

You can increase or decrease spending in these areas by clicking on the radio buttons on the Strategy Panel - on the main "My Corporation" screen. Click either "+" or "-" to set the required level of spending – the click "Change Strategy" to set these variables – if you do NOT click Change Strategy, the changes will be LOST.



Your settings should reflect your overall business strategy – what are you trying to offer your customers ? High quality, innovative products as good prices ? Or a lower quality, but still adequate product at a lower price point ? Increasing spending in these areas will be reflected in increased costs, and will also have an impact on demand.

The following diagram shows how increased spending in various areas of your operation will impact your business and the financial statements. Lower spending will have the reverse effect.

For example, increasing the Customer Service budget will increase Demand (1st green bar in the diagram above) – your customers will appreciate the extra care and attention you are offering; but will increase production cost (1st red bar in the diagram above) – because of the additional cost of supplying this higher level of service.

A successful combination of settings will depend on various factors like market saturation, product maturity, debt ratio and relative competitor activity – all of which fluctuate during the simulation.

Customer Service:
Higher levels of customer service will be expensive – principally extra staff costs. This should be matched by setting higher prices, if you are trying to maintain profit margins. In a cost leadership strategy, a lower customer service budget might be appropriate.

TQM/Product Quality
High quality products are generally more complex, and require matching of higher industry standards, so increasing production costs. A company with a high quality position should also move prices upwards, to maintain margins. A cost leader might reduce investment into quality improvements, to cut costs.

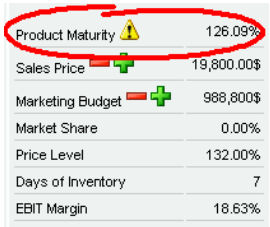
R&D/Innovation
Increasing research and development spending should lead to more innovative products, for which there will be higher demand from consumers. R&D costs will be added to production costs – so again, increases in R&D spending should be matched with a higher price strategy, so that profits can be maintained. A cost leader may wish to set a lower R&D budget.

HR/Training of staff
Extra staff training will increase employee satisfaction and motivation levels, leading to better operational efficiency. Productivity will improves, and important savings in fixed costs will result. Production output will increase with increased training budgets, but staff costs will inevitably rise.

CSR/Sustainability
Corporate Social Responsibility and Environmentally Friendly policies are becoming increasingly important to global corporations. Such a policy will combine and balance environmental, social and economic business objectives – there is a cost, but consumers in different countries increasingly value such initiatives, and reward CSR-focused companies with extra business. Additionally, many governments offer substantial tax incentives to reward and encourage such behaviour – which are valuable to companies which are making profits.

In the simulation, a 40% tax reduction is available to those companies who choose to invest in CSR policies

STRATEGY and MARKETING ISSUES



Ageing, Maturity, the PLC and Pricing
Every product has a theoretical **Product Life Cycle,** which indicates the behaviour of sales revenues and profits available at different stages throughout a product's life. Typically these stages are referred to as the **Introduction** phase, followed by a rapid **Growth** phase, slowing to **Maturity** and then (probably) a **Decline** phase.

The PLC effect will impact the likely level of sales of each product line in this simulation. Where the product is new or growing, then pricing can be relatively high, profits will generally improve, and sales will be on an upward trend. The period of maximum attractiveness and business activity will be at the end of the growth period, after which prices and sales volumes will stabilise or fall; later on the product will be seen to be relatively old and dated.

Selling products in these type of markets (where maturity is greater than 100%) will become more challenging, and high prices will become more difficult to achieve

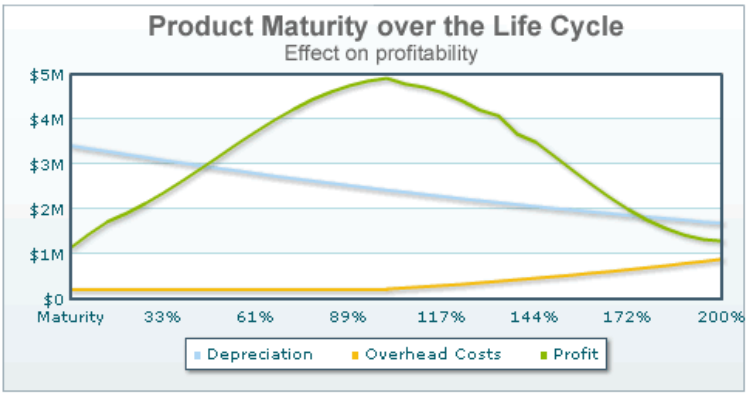
Product Maturity	126.09%
Sales Price	19,800.00$
Marketing Budget	988,800$
Market Share	0.00%
Price Level	132.00%
Days of Inventory	7
EBIT Margin	18.63%

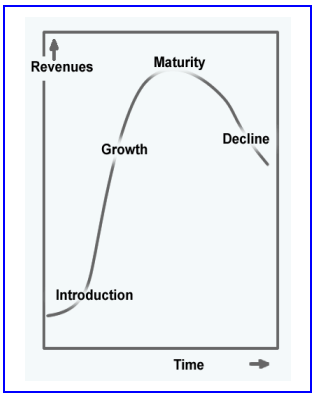
Upsizing and Relaunching Products

Upsizing and Relaunching are available under certain circumstances – both will affect the apparent maturity of a product.

Upsizing - increasing your investment in one extra production plant – will result in averaging the age of the older plant(s) and the new investment – thus making the product – on average – younger.

Relaunching will refresh the product line with new branding, new designs, new technologies etc. Relaunching is available for products whose maturity exceeds 120%, and if you have a large enough investment budget available to you. After relaunch, product maturity is reset to 80% - to allow further growth





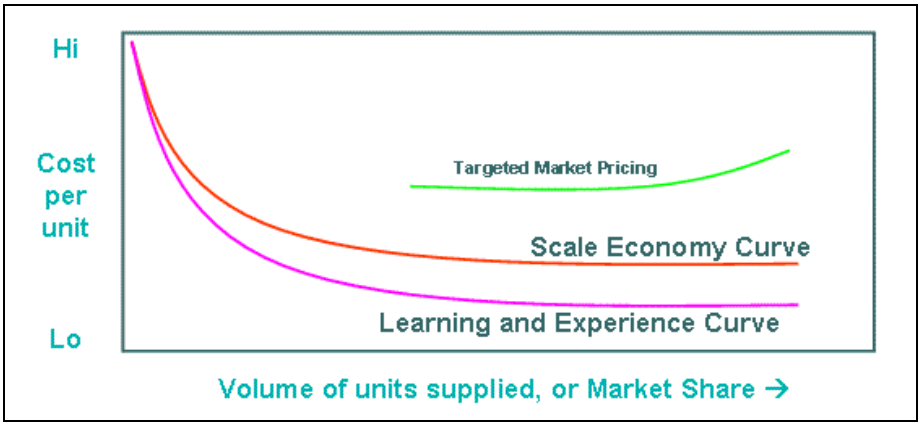
STRATEGY and MARKETING ISSUES

Economies of Scale and Scope

With increasing volumes of production or sales of a product or a range of products, central overheads and other costs start to spread across a larger base. The cost of production per unit, or the cost of delivery per unit, will therefore start to come down.

If you can build market share and generate extra sales from the same cost base, then the average cost per unit will continue to decrease, and profitability will rise. This is called Economy of Scale – unit costs will reduce to a level where the overhead part of your cost structure is relatively small compared to the direct, variable costs of manufacturing, delivery or service. The cost reduction per unit is not a “straight line” relationship, which will forever decline - more of an exponential curve which reaches an optimum operational cost level.

Market share-driven cost reduction is a major factor in creating profitable operations in a “high fixed cost” business such as automobile manufacturing. Cost sharing benefits are also evident when you increase a range of products that can share the same operational expense base – such as a common sales force, a customer service center, or a logistics system. This is referred to as the “economies of scope”



Additional cost reductions may occur as a result of "experience" or "learning" – sometimes these cost benefits are shared across industries ("industry learning") as techniques and knowledge get passed around, or staff move between companies.

A company that is striving to become a cost leader in its industry will focus heavily on driving costs down, including the application of economies of scale and experience curves.

A key driver in this simulation is relative cost advantage, because of the high fixed cost / high fixed asset investment nature of the auto industry. You can improve your cost advantage with greater market shares

STRATEGY and MARKETING ISSUES

Supply Levels and Pricing - Market Crowding – Fragmented Markets

In each product-market, manufacturers individually decide to invest in extra facilities, in order to satisfy the demand for the cars they produce. Overall industry demand is a function of the size of the economy, and the rate of growth of this economy is related to the investment decisions of all the competitors in the simulation. The demand for *individual* products is also related to the size of the economy, as well as to adjusting factors such as pricing, price changes and value propositions.

The degree to which the market for each product is currently satisfied is referred to as the "Supply Level" : the percentage of *current* demand that is satisfied by *current* producers.

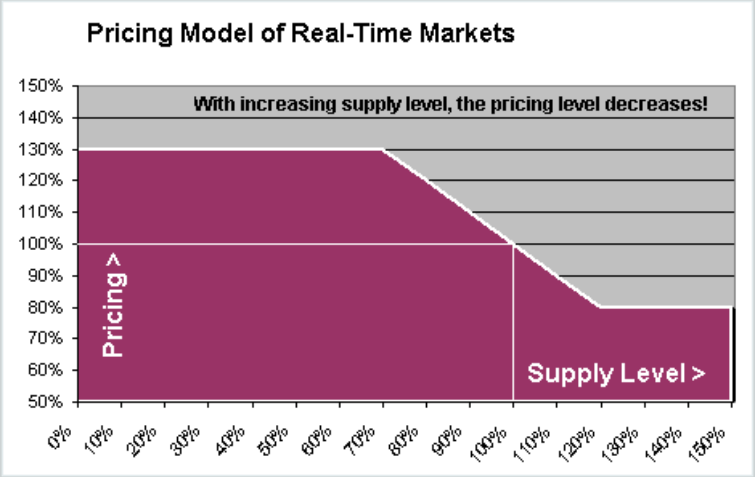
As players expand and continue to invest in new production facilities, the supply of cars available will increase – so the *supply level* goes up. Each new investment decision leads to the establishment of an extra production unit with a fixed capacity – the capacity increase is referred to as "1x", "2x", "3x" etc.

If new competitors enter a segment with new investments, the market becomes more crowded – and *supply levels also increase*. When supply levels rise well *above 70%,* the market average price level will start to decline – consumers will have a wide range of competing products to choose from, and will start to bargain for lower prices. Producers then need to start making attractive offers to maintain their sales volumes

A supply level of *over 100%* leads to much lower profit margins in the industry – even driving some producers into losses.

You should be aware of Supply Levels in all the market segments where you are operating. As you and your competitors make investment decisions, the supply level will change quickly – this **will** affect your ability to raise or even maintain high prices. Your competitive position is closely linked to Supply Levels for your product-markets.

Wherever possible, choose to invest in and promote businesses where Supply Levels are relatively low, to give you a better chance of survival and higher profitability



STRATEGY and MARKETING ISSUES

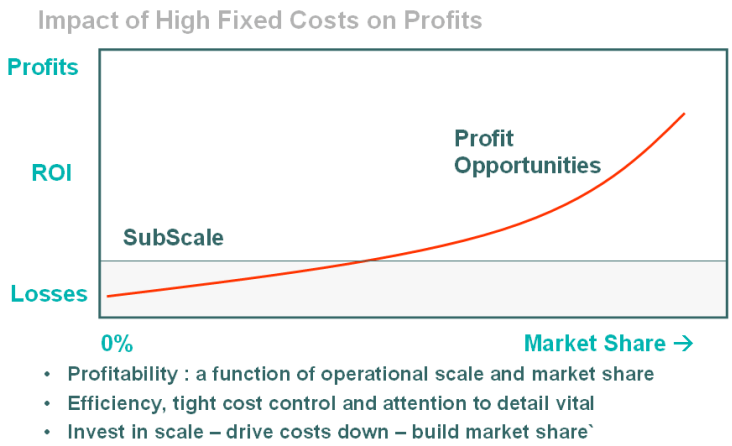
Market Dominance and Pricing

As you invest in new production facilities for a specific product, you will increase the Supply Level for that product, but also increase the market share available to you.

In this simulated market, investment in facilities increases the scale of your operations and can also reward you with a larger share of the market. Other factors, such as pricing and your value proposition (quality, innovation, R&D input etc), will also have an effect on your demand and market share, but the scale of your operations is a major factor. To grow market share then, it is important to continue to invest in new production facilities.

Because of the effect of scale economies, profitability is closely linked to higher market shares, and the market will also reward you with higher prices – in effect you become a price leader, not a price follower.

At some point, continued investment in extra production units will increase the Supply Level to unsustainable levels; pricing comes under pressure, inventory builds up and sales may fall. At this point, market share is less important as losses could mount up.



FINANCIAL MANAGEMENT

Seed Equity	1,100.00M$
Investment Budget	326.22M$
Credit Rating	CCC

Debt and Leverage

Every quarter, your Treasury Department notifies you of the investment budget – the amount of money available to you for expansion or redevelopment of your business. This is made with reference to the level of credit agreed with your main bankers, based on the current availability of credit, your credit standing and your current level of borrowing.

The investment budget is made up of seed equity available to you from your shareholders, and loans available form the bank

Credit rating is based upon debt ratios :- debt as a percentage of combined debt and equity financing in your balance sheet. A credit rating of “AAA” would be exceptionally high, indicating low borrowings: “D” would be the lowest rating, before bankruptcy.

Your company will be declared bankrupt if your debt ratio rises above 80% - so be careful when expanding and using credit limits. In the event of bankruptcy, you company’s assets will be sold (at a discount), with the proceeds being used to repay bank loans.

Leverage is also a term used to indicate debt ratios – use of leverage can boost profitability in your company. You can expand faster, leading to higher market shares, more dominant pricing, and scale economies. Further, the return on investment for stockholders can increase, subject to certain considerations.

However, these gains have to be viewed in the light of higher bank interest costs, and a higher risk of bankruptcy as you approach credit and lending limits

INVESTMENT DECISIONS

PRODUCT-MARKETS

Seed Equity	1,100.00M$
Investment Budget	326.22M$
Credit Rating	CCC

Check the investment budget that is available to you for this quarter's operations

This is found at the top (right side) of the "My Corporation" page

2x Compact Cars

AUTOMOTIVE
2 Competitors
Supply Level **69.1%**
Synergy 4.31%
Cycle 23 months

Upsize 306.76M$
(Supply Level: 79%, Product Maturity: 84)

Relaunch 184.06M$

Downsize 206.23M$

Liquidate 415.59M$

Review Investment options available to you in each product market.

These options will change each quarter, depending on the investment budget available, and the current state of the markets (supply levels, product maturity etc)

These details are found within the individual product sections of the "My Corporation" page

By clicking on any photograph of any car, you will be taken to a product screen, where more product and market detail is available, as shown below

Market & Product Data for Compact Cars (Sector AUTOMOTIVE)

Initial Investment	306,759,600$
Product Life Cycle	23 months
Number of Competitors	3
Supply Level (7x)	65.02%
Supply Level +1x	74.31%
Product Base Price	18,500.00$
Current Market Price	21,275.00$
Current Capacity	7x
Average Product Maturity	126.09%

Producer Ranking for Compact Cars

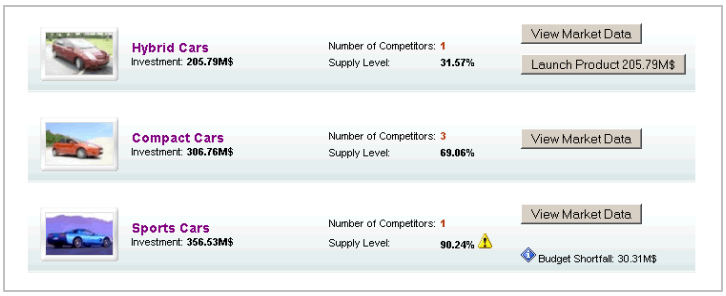
Rank	Corporation	Capacity	Revenues	Market Share	Sales Price	Cost per unit	Days of Inventory	Product Maturity
1	DynAuto	3x	90M$	48.68%	24,605.00$	18,053.66$	1	113%
2	**YourCo**	**2x**	**47M$**	**25.73%**	**24,420.00$**	**19,006.15$**	**9**	**139%**
3	BigCar	2x	47M$	25.59%	24,235.00$	18,486.05$	19	126%

Summary information on all products is also available under the Industry Sector tab. Click on the links : "Sector: Automotive" or "view more details" to see the screen below

SECTOR: AUTOMOTIVE

- Small Cars (2)
- Hybrid Cars (1)
- Compact Cars (3)
- Sports Cars (1)
- Luxury Cars (2)
- SUVs (2)

view more details...

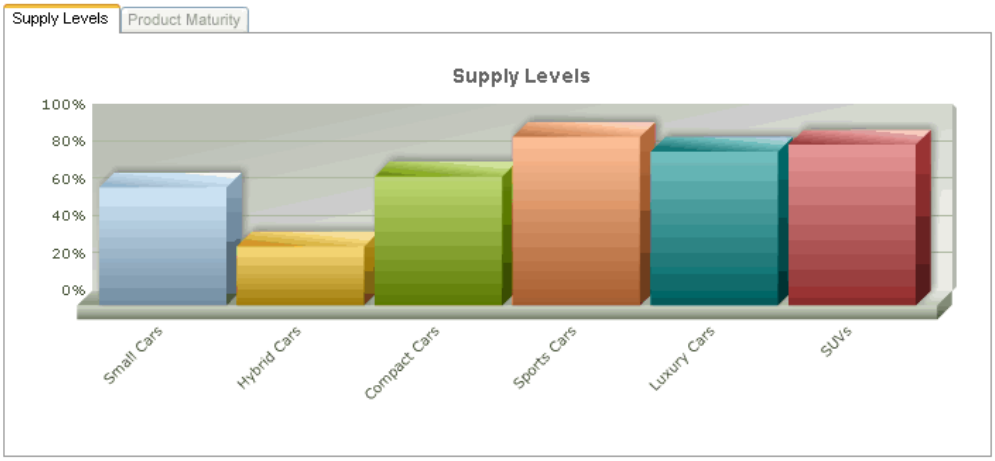


Overhead Costs : With each new investment, overheads will increase – these are costs associated with managing the new production units you have started. There is some "synergy" effect – a sharing of knowledge and systems - between different product lines in the same industry, which will balance some of this cost increase.

As part of your analysis, you will be interested in the market potential and product life cycle stage of each product. In the Industry Sector page you see two charts which indicate the degree of saturation of each market (Supply Level), and the ageing apparent in each market.

Remember that low, current supply levels indicate greater growth potential, and that products with a high maturity will experience much greater price competition.

Which products appear attractive from the view shown here ?



Finally, to keep a check on who is investing, where and how much : at the top of your screen on every page you will see the NewsTicker. This will be updated at every quarter, and shows recent investment activity by you and by your competition

Newsticker **Quarter: 1/12 Status: running Level: High**

Quarter 1	DynAuto invested 205.79 M$	Hybrid Cars (2x)
Quarter 1	DynAuto invested 155.74 M$	Small Cars (5x)
Quarter 1	BigCar invested 316.85 M$	Luxury Cars (2x)
Quarter 0	YourCo invested 205.79 M$	Hybrid Cars (1x)
Quarter 0	YourCo invested 93.44 M$	Small Cars (2x)

If you click on any corporation's name in this list, you will be able to go to see what that company's summary corporate information looks like – and, potentially, be able to understand their business strategy, their strengths and weaknesses

If you click on any product link, you will be taken to the product summary page. This shows which competitors are active in that sector, as well as a range of data charts with detailed, comparative market information

UPSIZE / DOWNSIZE/ RELAUNCH / LIQUIDATE

Aa further investment decision area is where you wish to reshape your product portfolio to become more competitive. Your choices are :

UPSIZE	
Demand/Sales	+
Supply Ratio	+
Maturity	-
Production Output	+1x
Per Unit Cost	-
Synergy	o

UPSIZE – Where you wish to expand your production capacity, to try to grow market share. Each "upsize" operation is costed for you – and is available on a product-by-product basis when you have sufficient investment budget. Each Upsize investment indicates growth in available capacity – termed a "1x" increase (*one-ex*). Upsizing :

- **Increases the Supply Ratio**, so you should evaluate how saturated or how well-supplied the product market is at the current time.
- **Reduces Product Maturity** – as new production methods and technologies come on stream
  Reduces Production Costs - the new unit can be managed within the current central management budget – which means average margins will improve, and overhead costs remain the same.
- **Average Market Pricing** may decline if Supply Level increases beyond 70%

An alternative approach to expansion is to "Relaunch"

RELAUNCH	
Demand/Sales	+
Supply Ratio	o
Maturity	80%
Production Output	o
Per Unit Cost	o
Synergy	o

RELAUNCH – From time to time it will make sense for you to refurbish your plants, re-brand your products, and introduce new systems which improve performance.

No extra capacity is built, so supply levels remain the same. This may be a better solution than upsizing, where existing or near future Supply Levels might approach 100% or more.

Relaunching increases demand and sales (new brands are more attractive), and also reduce Maturity to 80%, as new features and technologies make the product perform better, pleasing customers.

There is no effect of Supply Ratio, costs, or synergies

DOWNSIZE	
Demand/Sales	-
Supply Ratio	-
Maturity	o
Production Output	-1x
Per Unit Cost	+
Synergy	o

DOWNSIZE – When Supply Levels exceed 100%, you may be offered the option to downsize your production – this mothballs one production unit, and lays off all the employees in that unit.

Maturity will not be affected, but Supply level obviously reduces – leading to a rise in average market prices.

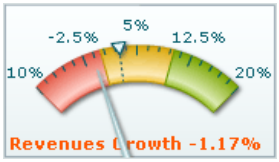
Production Costs per unit will rise as fewer operating units are absorbing central overheads. Profit margins will depend on how far prices rise compared to the increase in costs.

LIQUIDATION – To allow you to exit from a market. All plant and equipped is closed down, stripped out and sold off, and all employees terminated.

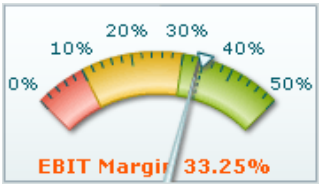
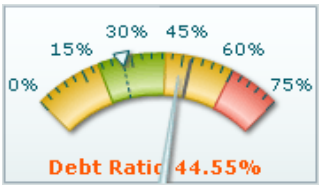
Because of union agreements, this option is only available when products reach at least 100% maturity, with an EBIR of less than 3% - ie when you are clearly not making any money on a mature product. Alternatively, if Supply levels exceed 140% - where the market is clearly saturated – you will also be offered the option to close down.

Liquidation results in selling off any related Assets in the business unit for 70% of Book Value – the 30% accounting loss is written to the P&L, so your profitability, equity and share price will be hurt for that period

INSTRUMENT PANEL



The Instruments on the main “My Corporation” page show important key ratios that are required to manage the corporation and take investment decisions. For each ratio the corporates current value is shown next to the ratio name and is also shown on the scale by the main indicator. The grey solid line on the scale indicates where the corporates value was last tick. The dotted line with the little triangle indicates the current benchmark for this ratio, based on all players values

	**Revenues** Growth reflects the change of Revenues from the last tick to the current tick. In the example shown the current Revenues Growth (-1.17%) is below the average Revenues Growth of all Players and in the red (negative) range. A negative revenues growth indicates investments in new or existing Business Units.
	The **EBIT (Earnings before Interest and Taxes) Margin** is a measure for the profitability of the companies operations and is calculated as: EBIT Margin = EBIT / Revenues. In the example shown the current EBIT Margin (33.25%) is slightly below the average EBIT Margin of all Players but still in the green (good) range.
	The **Debt Ratio** indicates how much the company relies on debt to finance assets and is calculated as: Debt Ratio = Debt / (Equity + Debt). In the example shown the Debt Ratio (44.55%) is well above average and in the yellow range, close to the green. Further Investments should be made as soon as the Indicater reaches the green range. The red range indicates a very risky situation where high interest rates are to be paid.
	**Profitability** is based on the ROE (Return on Equity) and is a measure of how well a corporation used its seed capital and reinvested earnings to generate additional earnings. This measure is also the underlying driver for the share price!

BUSINESS TERMS

Annual Report
An official quarterly or annual financial document published by a public company, showing Profit & Loss Statement, Balance Sheet and the Cash Flow Statement.

Balance Sheet
Quantitative summary of the financial condition of a company at a specific point in time, including assets, liabilities and net worth. The first part of a balance sheet shows all the productive assets a company owns, and the second part shows all the financing methods (such as liabilities and shareholders equity). also called statement of condition. The term balance sheet is derived from the simple purpose of detailing where the money came from, and where it is now.

The balance sheet equation is fundamentally:

(where the money came from) Capital + Liabilities = Assets (where the money is now).

Hence the term double entry - for every change on one side of the balance sheet, so there must be a corresponding change on the other side - it must always balance.

Capital Invested
Money (borrowed or owned) invested in a company's operations. Calculated by: Total Assets less Excess Cash minus non-interest-bearing liabilities. The sum of a corporations long-term debt, stock and retained earnings. also called invested capital.

Cash
Currency and coins on hand, bank balances, and negotiable money orders and checks.

Cash Flow
A measure of a companys financial health. Equals cash receipts minus cash payments over a given period of time; or equivalently, net profit plus amounts charged off for depreciation, depletion, and amortization.

Cash Flow Statement
One of the three essential reporting and measurement systems for any company. The Cash Flow statement provides a third perspective alongside the Profit and Loss account and Balance Sheet. The Cash Flow statement shows the movement and availability of cash through and to the business over a given period, certainly for a trading year, and often also monthly and cumulatively. The availability of cash in a company that is necessary to meet payments to suppliers, staff and other creditors is essential for any business to survive, and so the reliable forecasting and reporting of cash movement and availability is crucial.

Corporate Social Responsibility (CSR)
Corporate Social Responsibility is a concept whereby companies integrate social and environmental concerns into their business operations and in their interaction with their stakeholders (employees, customers, shareholders, investors, local communities, government), on a voluntary basis.

Cost of Goods Sold (COGS)
The directly attributable costs of products or services sold, (usually materials, labour, and direct production costs). Sales less COGS = gross profit.

Credit Rating
A published ranking, based on detailed financial analysis by a credit bureau, of ones financial history, specifically as it relates to ones ability to meet debt obligations. The highest rating is usually AAA, and the lowest is D. Banks use this information to decide whether to approve a credit.

Current Assets
A balance sheet item which equals the sum of cash and cash equivalents, accounts receivable, inventory, marketable securities, prepaid expenses, and other assets that could be converted to cash in less than one year. A companys creditors will often be interested in how much that company has in current assets, since these assets can be easily liquidated in case the company goes bankrupt. In addition, current assets are important to most companies as a source of funds for day-to-day operations.

Debt
A liability or obligation in the form of bonds, loan notes, or mortgages, owed to another person or persons and required to be paid by a specified date (maturity).

Debt Ratio
Debt capital divided by total assets. This will tell you how much the company relies on debt to finance assets. When calculating this ratio, it is conventional to consider both current and non-current debt and assets. In general, the lower the companys reliance on debt for asset formation, the less risky the company is since excessive debt can lead to a very heavy interest and principal repayment burden. However, when a

company chooses to forgo debt and rely largely on equity, they are also giving up the tax reduction effect of interest payments. Thus, a company will have to consider both risk and tax issues when deciding on an optimal debt ratio.

EBIT
A financial measure defined as revenues less cost of goods sold and selling, general, and administrative expenses. In other words, operating and nonoperating profit before the deduction of interest and income taxes.

Equity
Ownership interest in a corporation in the form of common stock or preferred stock. It is the risk-bearing part of the companys capital and contrasts with debt capital which is usually secured and has priority over shareholders if the company becomes insolvent and its assets are distributed.

Gross Profit
Pre-tax net sales minus cost of sales. also called gross income.

Gross Profit Margin
Gross profit divided by sales, expressed as a percentage.

Interest Cost
The fee charged by a lender to a borrower for the use of borrowed money, usually expressed as an annual percentage of the principal; the rate is dependent upon the time value of money, the credit risk of the borrower, and the inflation rate. Here, interest per year divided by principal amount, expressed as a percentage.
Also called interest rate.

Interest Rate
A rate which is charged or paid for the use of money. An interest rate is often expressed as an annual percentage of the principal. It is calculated by dividing the amount of interest by the amount of principal. Interest rates often change as a result of inflation and Federal Reserve policies.
For example, if a bank charges a customer M$90 in a year on a credit of M$1000, then the interest rate would be 90/1000 *100% = 9%.

Long-Term Assets
On a balance sheet, the value of a companys property, equipment and other capital assets expected to be useable for more than one year, minus depreciation.

Net Income
Sales minus taxes, interest, depreciation, and other expenses. Net Income is one of the most important measures of a companys performance, since the pursuit of income is the primary reason companies exist. Sometimes Net Income includes one-time and extraordinary items, and sometimes it does not.
Also called net earnings or bottom line.

Profit & Loss Statement
An official quarterly or annual financial document published by a public company, showing earnings, expenses, and net profit. also called income statement or earnings report. The P&L typically shows sales revenues, cost of sales/cost of goods sold, generally a gross profit margin (sometimes called contribution), fixed overheads and or operating expenses, and then a profit before tax figure (PBT). Basically the P&L shows how well the company has performed in its business activities.

Profit Before Tax
P&L position that shows the profit on ordinary activities before taxation.

Return on Equity (ROE)
Return on Equity. A measure of how well a company used reinvested earnings to generate additional earnings, equal to a fiscal years Net Income divided by Equity, expressed as a percentage. It is used as a general indication of the company's efficiency; in other words, how much profit it is able to generate given the resources provided by its stockholders. investors usually look for companies with returns on equity that are high and growing.

Return on Investment (ROI)
A measure of a corporation's profitability, equal to a fiscal years income divided by Long-Term Assets. ROI measures how effectively the firm uses its capital to generate profit; the higher the ROI, the better.

Sales (Revenues)
The final amount of sales, determined by subtracting the amount of sales returns and allowances and sales discount from the total amount of sales, for a fiscal period.

Stock (Balance Sheet)
A company's merchandise, raw materials, and finished and unfinished products which have not yet been sold. These are considered liquid assets, since they can be converted into cash quite easily. There are various means of valuing these assets, but to be conservative the lowest value is usually used in financial statements.

Synergy
Arrangements which are mutually beneficial to the parties involved. Corporate synergy occurs when corporations interact congruently. A cost synergy refers to the opportunity of a combined corporate entity to reduce or eliminate expenses associated with running a business. Cost synergies are realized by eliminating positions that are viewed as duplicate within the merged entity. Examples include the head quarters office of one of the predecessor companies, certain executives, the human resources department, or other employees of the predecessor companies.

Taxes
Taxes are compulsory, unrequited payments, in cash or in kind, made by institutional units to government units; they are described as unrequited because the government provides nothing in return to the individual unit making the payment, although governments may use the funds raised in taxes to provide goods or services to other units, either individually or collectively, or to the community as a whole.

Total Assets
The sum of current and long-term assets owned by a person, company, or other entity.

Total Equity & Debt
The sum of Equity and Liabilities owned by a person, company, or other entity.