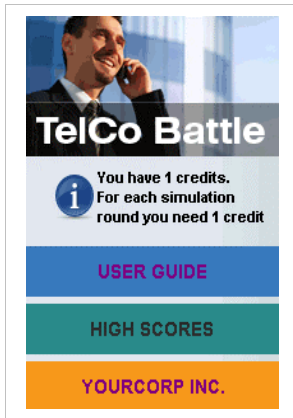


# The Telco Manager Business Simulation

## User Guide



Tycoon Systems Inc



## The Telco Manager Business Simulation

is an advanced management training tool which allows you to test your general management ability, as you try to build value for your corporation in a challenging telecoms marketplace.

This simulation is an interactive browser-based business game, which runs on our high speed servers in the USA and Europe. In this way we can deliver results instantaneously and simultaneously to any users in any part of the world.

The Telco Manager Simulation is at [www.TelcoManagerGame.com](http://www.TelcoManagerGame.com)

**Objectives :** You take over the management of a leading provider of Mobile and Broadband services, and compete against two other “virtual” players – intelligently programmed competitors.

Your principal objectives are

- a. To create long term, sustainable value for your company - and your company's shareholders. This will be reflected in a steadily increasing stock price
- b. To beat your competition in the simulation – again reflected by achieving the highest stock price
- c. To build a strong, sustainable franchise that will prosper over the long term, for the benefit of all stakeholders in the business – employees, vendors, clients, community, lenders, shareholders.

**Telecom Management Metrics :** You will build your understanding of modern management metrics – ARPU, CPGA, Subscriber Churn and many others - as you create your own TELCO business empire.

**Building A Sustainable Competitive Advantage :** Attracting subscribers becomes increasingly difficult as markets saturate, products mature, competitors become established in their home markets and try to expand into your markets. How do you build a sustainable business model ?

**Portfolio Design :** 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, leading to a higher stock price for your company.

**Business Economics :** You have to consider how to manage huge up-front capital investments, build-outs and infrastructure development programs, as these pre-define key business strategies. This will include optimising scale economies, as well as offering differentiated services that consumers are happy to pay for

**The Competition :** Your competitors will react to your decisions according to their own strategic business plan – this is often a closely guarded secret. With careful study of their management decisions during the course of the simulation - and the following notes - you may find some clues to their approach – and use this to beat them in the market.

**Stock Price :** Your stock price is a function of your company's profitability: the decisions you take will add or destroy value for your shareholders. You will take management control for a number of business quarters or business months, and your decisions in the marketplace over this time period will affect your share price

# The Telco Manager Simulation - User Guide

**A Unique Training Tool:** This is a unique tool, used in high quality telecoms management training programs worldwide - which focus on new business strategies, market and product development, financial and business acumen, as well as in general strategic management programs.

**“Single User” Access :** This simulation is available as a “single user” simulation, available 24/7 to anyone, anywhere in the world, by logging into our Learning Center at [www.industrymasters.com](http://www.industrymasters.com) or at [www.TelcoManagerGame.com](http://www.TelcoManagerGame.com)

The single user version adapts well to classroom use, in executive education, or distance- or self-learning programs

**Multi-Player access :** Contact us directly by email or phone to use our multiplayer competition version - for business tournaments, for use in business school classrooms, or for executive education programs : [info@tycoonsystems.com](mailto:info@tycoonsystems.com)

## Index

*Scroll down or click on a link to go there*

Item	Page
<a href="#">Getting Started</a>	4
<a href="#">The Telco Manager Business Simulation</a>	9
<a href="#">Strategic Issues, Methods and Concepts</a>	7
<a href="#">Decision Making</a>	15
<a href="#">Business Terms</a>	23

These notes assumes that you are

- in the Telco Manager simulation website at **[www.TelcoManagerGame.com](http://www.TelcoManagerGame.com)**
- you have registered as a user
- you have logged in, using the username and password that you have specified on registration

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

## GETTING STARTED



Intro Login **Sign Up** About Scores

### SIGNING UP

You must register as a User first, before using the simulation for the first time. To register, go to <http://www.telcomanagergame.com/>, and click on the “Sign Up” link as show above

1. Choose a UserName (alphanumeric characters only, no special characters)
2. Enter your email address
3. Choose a memorable password (alphanumeric)
4. Click the “Sign Up” button

Make a note of your UserName and Password and keep it in a safe place

You will receive an “account activation” email – follow the instructions in the email to enter the simulation

You cannot use the simulation with your UserName and Password until you have clicked on the activation link in the email we send

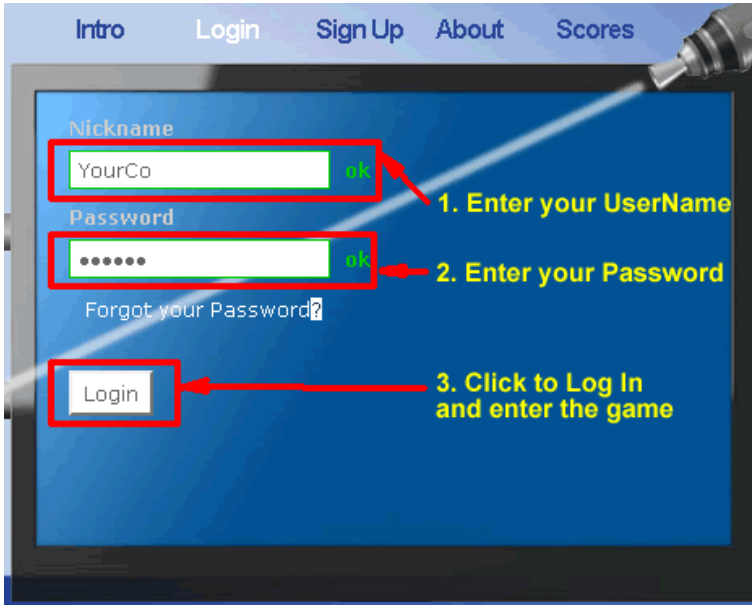
When you enter the simulation, the game will not start until you click on the “Participate” button (inside the game)

# The Telco Manager Simulation - User Guide



## LOGGING IN TO THE SYSTEM

You cannot do anything until you are logged in to the systems running on our servers. This is a browser-based, “real-time” simulation, where you need to be logged in to use it: you also need to click the “Participate” button (inside the game) to start the simulation.



Go to [www.TelcoManagerGame.com](http://www.TelcoManagerGame.com)

Click the “Log In” link shown above the right hand box

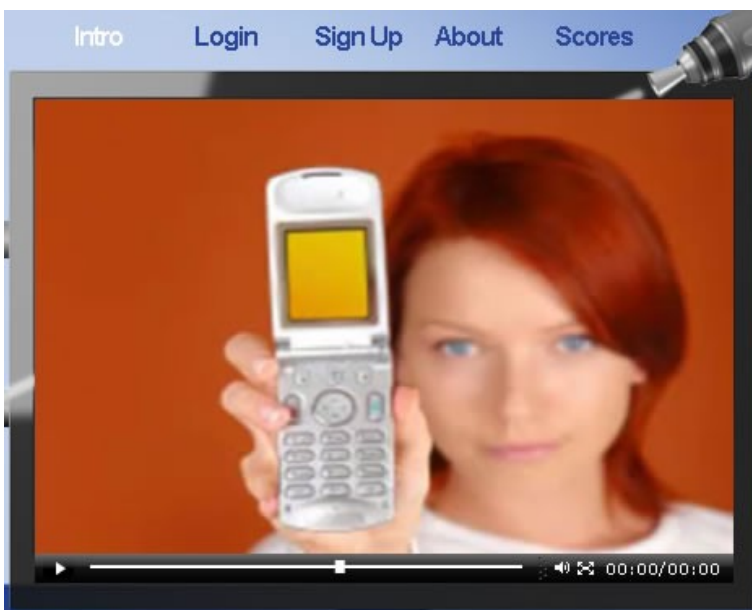
1. **Enter your UserName** – this must be exactly as you have registered it – these are case-sensitive, so upper-case or lower-case letters must be used if that is what you initially registered
2. **Enter your Password** - this is also case-sensitive, so enter it exactly as you registered. If you have forgotten or mislaid your password, click on “Forgot Password”, and we will email a reminder to you
3. **Click the LogIn button** – to enter the simulation area

*Your UserName and Password will not work for the first time, unless you have clicked on the activation link in the email we send you. After that you will use these to enter the system each time.*

Other screens on the main page :



**Intro** : On the landing page for the [www.TelcoManagerGame.com](http://www.TelcoManagerGame.com) site



A short video film about the simulation :

To view : click on the video start icon in the middle of the screen :



# The Telco Manager Simulation - User Guide

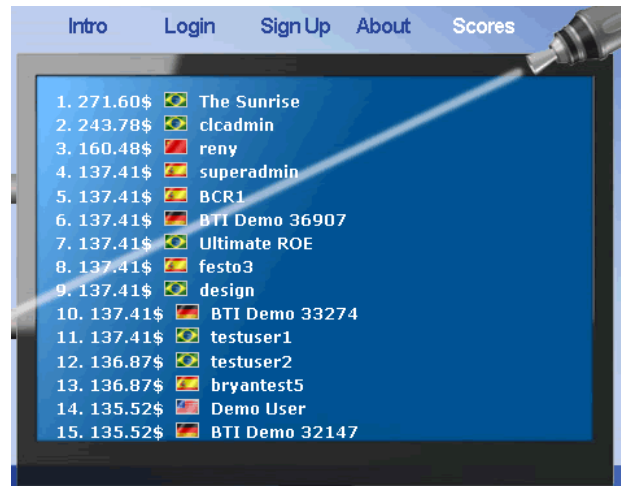
Intro Login Sign Up **About** Scores

**About** : A brief summary of the simulation



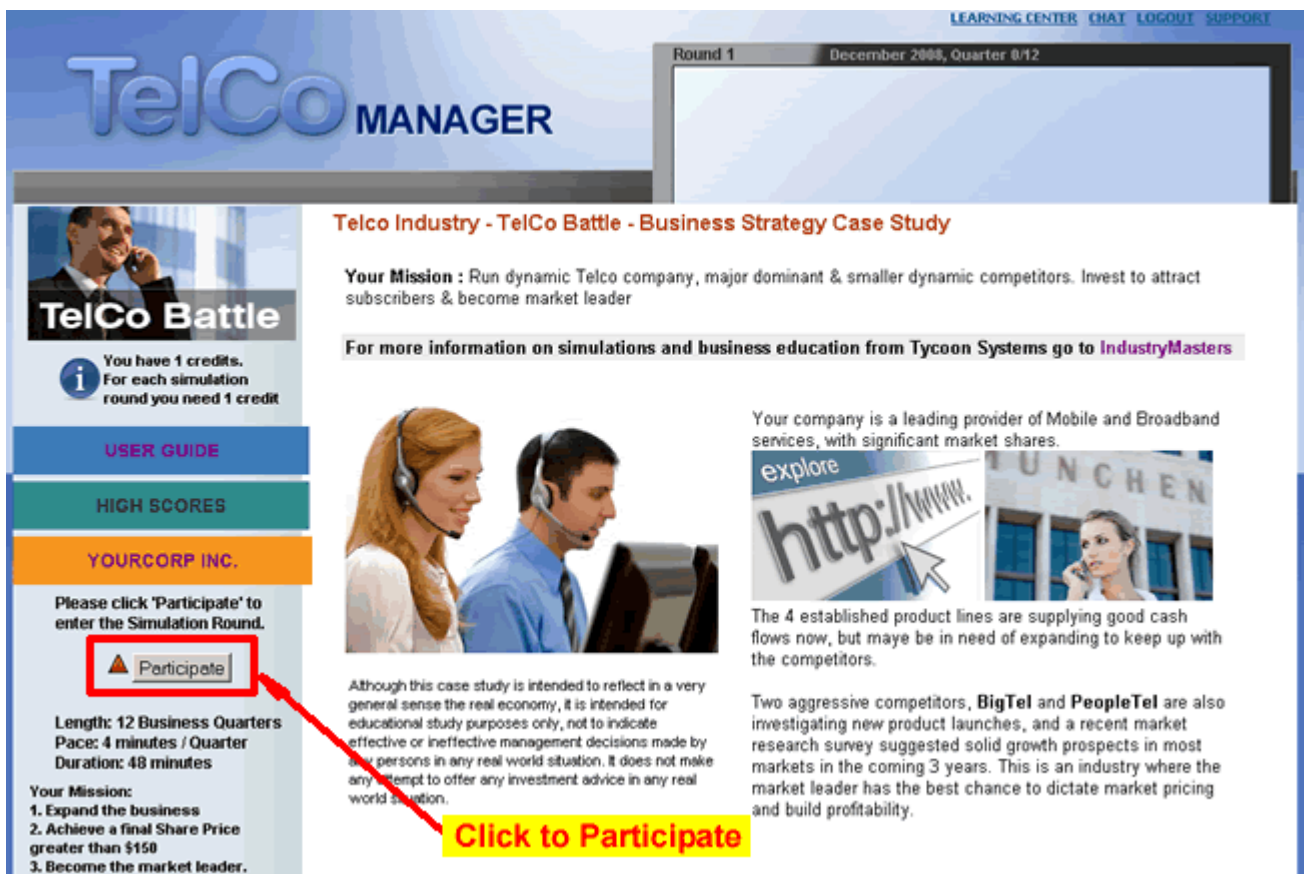
Intro Login Sign Up About **Scores**

**Scores** : Recent, highest scores from other players



## “PARTICIPATE”

When you have entered the simulation - after logon – you will see the following screen :



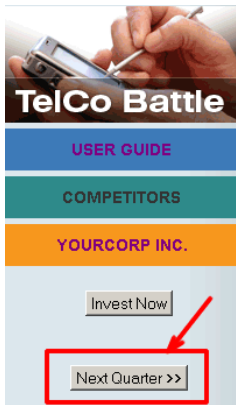
To start a simulation round, click the **Participate** button in the left column.

**Do not do this until you are ready for your simulation round – you cannot pause it once started**

If you cannot see the Participate button, this means you do not have enough credit. See the section on the next page “Using your Digital Voucher” to add credits, or pay by credit card in our PayPal Shop

# The Telco Manager Simulation - User Guide

The simulation will open after you have clicked the "Participate" button - you will have 5 minutes to initially review the business scenario facing you.



Then an automatic timer will start, and you will have 4 minutes to make decisions in each business quarter (3 months) to make your decisions. All decisions for a particular quarter must be made within this time frame.

There are 12 decision periods, representing 4 years of business activity

After 4 minutes in each decision period, the system will automatically move you on to the next business quarter

If you wish to proceed at a faster rate, you can click on the "Next Quarter" button, which will advance the simulation by one quarter, instead of waiting for the automatic timer

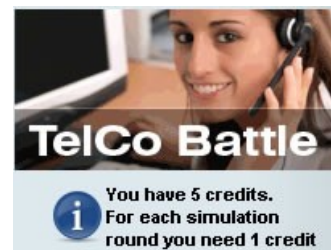
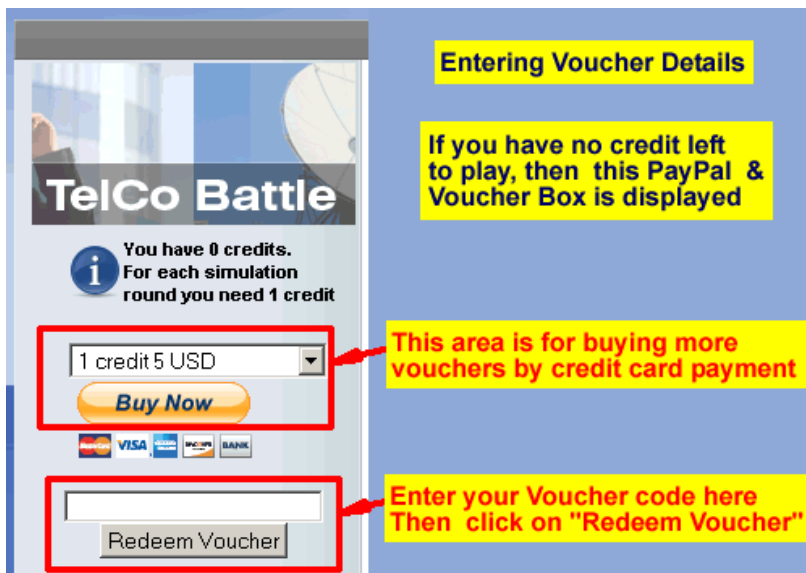
The game running time is up to 53 minutes : 5 minute start-up time plus 12 quarters of 4 minutes each

## USING YOUR DIGITAL VOUCHER (optional)

Depending on the payment model you have agreed to, a digital voucher may have been sent to you to enter the simulation. Some corporate or institutional accounts may not be using payment vouchers

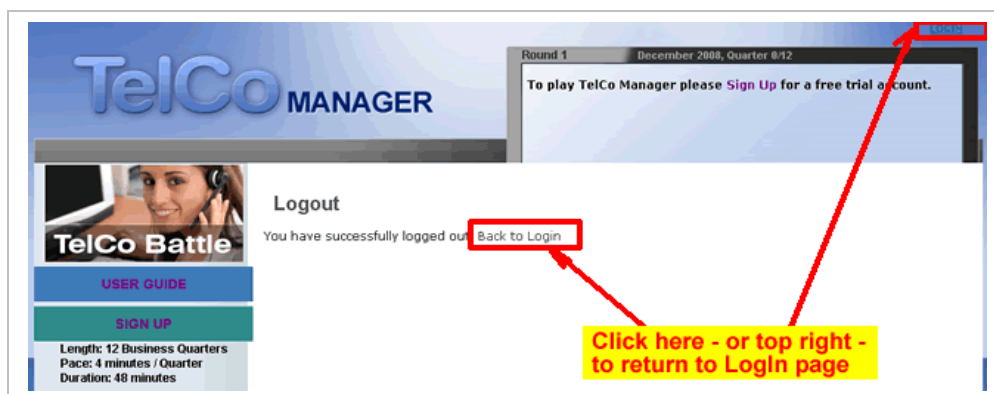
If you need to enter a payment voucher, this section shows where to enter the code in the simulation.

The PayPal shop and Voucher box will ONLY appear if you have no playing credits left. If you have credit, you will not see this box.



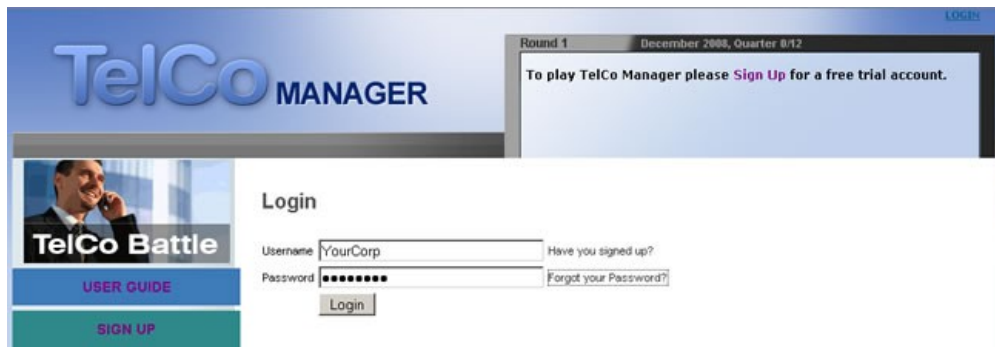
The PayPal shop and voucher box are found at top left of your screen. Enter your Voucher code in the lower box, then click "redeem Voucher"

**IF YOU HAVE LOGGED OUT OF THE SIMULATION:** To return to login, click "Back to Logon"



# The Telco Manager Simulation - User Guide

## LOG IN AGAIN - TO GO BACK TO THE SIMULATION:



If you log out of a simulation when it is running but not yet finished, the simulation will run automatically until the standard game is finished, with no decisions being made. You cannot suspend activity. If you log in again, you will be taken into a game that is still running, at the current phase of that game – not where you left it.

When that game finishes, you will then be able to start a new game

**OTHER LINKS** : *Positioned at the top right side of the screen*



**Learning Center** : links to several free simulation games

**Chat** : an interactive instant messenger/ chat system so you can communicate with other Telco Manager Game players, anywhere in the world, as you play

**Logout** : Leave the simulation

**Support** : Send a message to us about any technical issue that you have

## THE TELCO MANAGER BUSINESS SIMULATION

### DEVELOPING A BUSINESS STRATEGY



Once the simulation starts running, you need to start making your business decisions.

You have 12 business quarters to build a successful and sustainable business.

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

**Where do you want to compete ?** Which product-markets do you want to invest in ? How do you decide this ?

**How will you compete ?** What competitive advantage can you build ? 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 month or 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 and service line investments, expansion or rationalisation (“upsize” and “downsize”), relaunch a product range - or even product-market withdrawal (“liquidation”).

**Tactical adjustments** – Check your business and financial performance through the wide array of reports available to you – Low network utilisation ? 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 ?

#### Some questions you should ask :

- 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 are the important metrics to show you how – and if - you are making progress
- What is your relative cost base ?
- What sustainable competitive advantage can you build ? How will you do this ?

# The Telco Manager Simulation - User Guide

## TELCO MANAGER MARKETS – YOUR BUSINESS POSITION

You take over a business that is already invested in several markets, and is already facing intense competitive pressures.

Your operations are in four market segments – providing mobile and broadband services to both Home and Small Business markets. Your competitors also have a presence in these or other markets. Your two main competitors in the business - BigTel and PeopleTel – are considering aggressive expansion into your markets



**BigTel** was for many years the dominant market player in traditional, fixed line telecoms supply. Recently, as deregulation opened up telecom markets to new players, they have lost ground in some areas. However, they are still the major player in this sector, and have substantial financial resources at their disposal to enter any new markets for mobile and data that they choose to. They are still focusing on fixed-line services, but have recently entered the mobile markets for home and for office users on a trial basis



**PeopleTel** is a smaller, more dynamic and fast-growing competitor, which is concentrating on building its business in “home” markets (voice and data), and also supply a wide range of accessories to domestic customers. They also dominate the phone accessories business.

## TELCO MANAGER – SPECIAL CHARACTERISTICS OF THE MARKET

This is fundamentally a service business – with no inventory. There is a small part of the market which deals with phone accessories – and in this sector inventory has to be controlled in the normal way.

The Telco operator market derives its profit from high efficiency operations of its networks - very large investments in high technology fixed assets, followed up with intensive marketing programs to attract subscribers. Many marketing offers will attempt to “lock in” users to reduce the amount of “churn” in their customer base – the tendency of subscribers to switch loyalties in and out of different providers depending on the best current offers. Handsets are often provided to subscribers below cost as part of that marketing effort, and so are recognised as operating or marketing costs

Marketing practice in the simulation is assumed to be “subscriber package” based : offer a bundle of telecom services to subscribers for a set monthly price

Profitability is measured and managed using industry specific metrics, which focus on maintaining high utilisation of network capacity, improving customer loyalty, and maximising revenues on a platform of high fixed costs. These include :

ARPU	Average Revenue Per User	The average revenue generated by an existing customer (subscriber)
CPGA	Cost per Gross Addition	The cash cost of acquiring a new customer, including marketing and sales costs, as well as handset subsidies
CCU	Cash Cost per Unit	Network Operating Expenses per subscriber
CCPU	Calculated Contribution Per User	ARPU less CCU less churn-adjusted CPGA
Churn	Customers lost per month relative to the customer base	Net subscriber deactivations divided by the average number of subscribers

# The Telco Manager Simulation - User Guide

## PRODUCTS and SERVICES

The main products and services in your market are shown here (*you are represented by "YourCorp"*)



<b>Mobile Home</b>	Investment Required per Business Unit	\$38 M
	Providers (YourCorp, BigTel, PeopleTel)	3
	Current Supply Level (3 business units)	39%
	Current Market Price	\$ 37.69
	Current Market Capacity, subscribers/month	250,000



<b>Broadband Home</b>	Investment Required per Business Unit	\$25 M
	Providers (YourCorp, PeopleTel)	2
	Current Supply Level (2 business units)	26%
	Current Market Price	\$ 21.53
Current Market Capacity, subscribers/month	208,000	



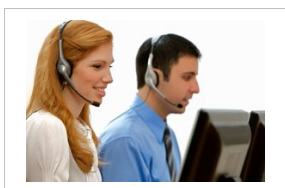
<b>Fixed Line Home</b>	Investment Required per Business Unit	\$55 M
	Providers (BigTel)	1
	Current Supply Level (4 business units)	65%
	Current Market Price	\$ 32.31
Current Market Capacity, subscribers/month	556,000	



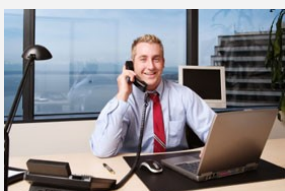
<b>Accessories Home</b>	Investment Required per Business Unit	\$13 M
	Providers (PeopleTel)	1
	Current Supply Level (3 business units)	39%
	Product Maturity (PLC)	70%
	Current Market Price	\$ 113.07
Current Market Capacity, units/month	25,000	



<b>Mobile Small Business</b>	Investment Required per Business Unit	\$38 M
	Providers (BigTel, YourCo)	2
	Current Supply Level (2 business units)	29%
	Current Market Price	\$ 37.69
Current Market Capacity, subscribers/month	167,000	



<b>BroadBand Small Business</b>	Investment Required per Business Unit	\$25 M
	Providers (YourCo)	1
	Current Supply Level (1 business unit)	15 %
	Current Market Price	\$ 17,250
Current Market Capacity, subscribers/month	104,000	




<b>Fixed Line Small Business</b>	Investment Required per Business Unit	\$55 M
	Providers (BigTel)	1
	Current Supply Level (4 business units)	73%
	Current Market Price	\$ 31.39
Current Market Capacity, subscribers/month	556,000	

# The Telco Manager Simulation - User Guide


## 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


### Bigtel's Current Business Position

	Home Mobile	Home Broadband	Home Fixed Line	Home Accessories	Business Mobile	Business Broadband	Business Fixed Line	Total
Sales Price, \$	37.69		32.31		37.69		31.39	-
<b>Revenue \$M / Qtr</b>	<b>3.1</b>		<b>18.0</b>		<b>3.1</b>		<b>17.4</b>	<b>\$ 41.7</b>
Profit Contr'n \$M/Qtr	1.1		6.4		1.1		5.9	\$ 14.6
Contribution %	35%		35%		35%		34%	35%
Network Utilisation %	100%		100%		100%		100%	
Business Units	1		4		1		4	10
ARPU, \$	43.0		37.0		43.0		35.0	

### PeopleTel's Current Business Position

	Home Mobile	Home Broadband	Home Fixed Line	Home Accessories	Business Mobile	Business Broadband	Business Fixed Line	Total
Sales Price, \$	37.69	21.53		118.7				
<b>Revenue \$M / Qtr</b>	<b>3.1</b>	<b>2.2</b>		<b>3.0</b>				<b>\$ 8.35</b>
Profit Contr'n \$M/Qtr	1.3	0.9		0.7				\$ 2.9
Contribution %	40%	40%		23%				34%
Network Utilisation %	100%	100%		-				
Business Units	1	1		3				5
ARPU, \$	42.7	24.3						

### YourCo - Current Business Position

	Home Mobile	Home Broadband	Home Fixed Line	Home Accessories	Business Mobile	Business Broadband	Business Fixed Line	Total
Sales Price, \$	37.69	21.53			37.69	21.53		
<b>Revenue \$M / Qtr</b>	<b>3.1</b>	<b>2.2</b>			<b>3.1</b>	<b>2.2</b>		<b>\$ 10.7</b>
Profit Contr'n \$M/Qtr	1.2	0.8			1.2	0.8		\$ 4.1
Contribution %	39%	38%			39%	38%		38%
Network Utilisation %	100%	99%			100%	99%		
Business Units	1	1			1	1		4
ARPU, \$	43.01	24.34			43.01	24.34		

For definitions of terms used here, please go to our [Business Terms section](#)

## STRATEGIC DECISIONS REQUIRED DURING THE GAME



### Product-Service Markets : *Where* will you compete ?

Evaluate the profitability of your expected or 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.

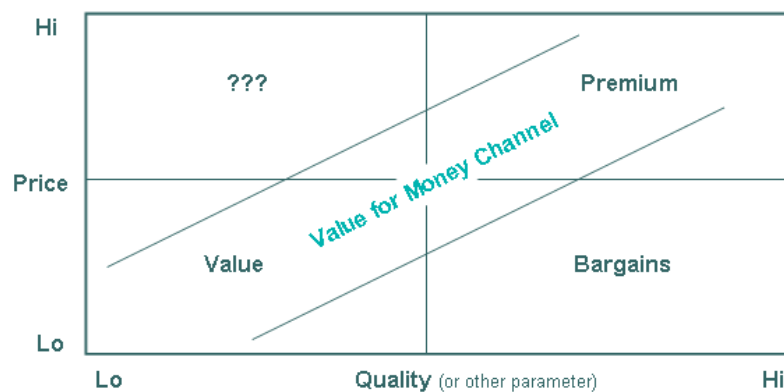
- Pricing levels and Advertising Expense
- Customer Service Investment
- Investment in Quality Improvements
- Innovation and R&D investment
- Training and HR Budgets
- Sustainability & Corporate Social Responsibility



### 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 :

#### Value for Money Propositions



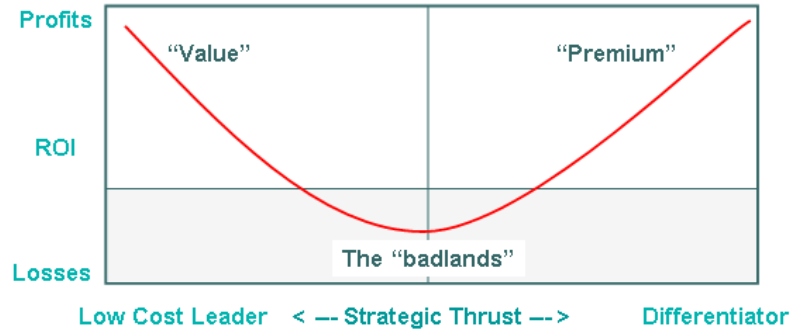
- Matching price and quality with strategic positioning



## 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

Strategic Positioning : “How To” compete



- 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

Review current Contribution Profit Margins - as well as EBIT Margins - by product. How do you compare to the competition ? Profit margins are a function of Selling Prices and Total Service Costs. Offering lower prices *might* build market share and sales volumes, which could lead to lower 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 capacity utilisation is too high.

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

Marketing spending will go hand-in-hand with pricing and capacity utilisation decisions. There is little point in setting a heavy spend on marketing if there is no available capacity 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 build utilisation, or to try to build market share, then a higher marketing budget might be appropriate to support that initiative

# The Telco Manager Simulation - User Guide

Offer Price  
36.88\$ - +

Use the **GREEN PLUS** and **RED NEGATIVE** buttons in the “Sales” Tab to change prices. Click on these repeatedly to make several price level changes if needed


**3x Mobile Home**



Utilization 64% 

- Sales
- Marketing
- Competitors
- Expand

Revenues



5.92M\$ [5.92M\$|3.14M\$]

Revenues	5,924K\$
Profit Contribution	1,411K\$
Contribution Margin	23.83%
Sales units	160,617

Offer Price  
36.88\$ - +

Average Market Offer Price = 37.39\$

## Marketing Budgets

The **Marketing Tab** shows your marketing spend, the impact on subscriber numbers and the level of utilisation of your network. Change the budget with the red & green buttons.

**2x Mobile Small Business**



Utilization 73% 

- Sales
- Marketing 
- Competitors
- Expand

Utilization



72.94% [100%|50%]

+ Additions	9,721
- Deactivations	3,660
= Subscribers	97,560

Marketing Budget 


1,749,793\$ - +


 Marketing Budget should be more than 2,063,859\$


## Competition

The **Competitors Tab** shows who is competing in a particular product-service market, along with their market share for that market, pricing as well as subscriber numbers and growth

**2x Broadband Home**



Utilization 79% 

- Sales
- Marketing
- Competitors
- Expand 

Rank	Name	Market Share	Offer Price	Subscribers	Growth
1	PeopleTel	63.82%	21.53\$	214,263	↑ 8.95%
2	YourCorp	36.18%	21.53\$	131,723	↑ 11.19%

## Expansion




Expansion opportunities are explained in the **Expand Tab** – with advice and “hurdle” on suitability of the action proposed. “Upsizing” is offered where you have the required budget available to invest and where your credit rating is above a minimum standard. Supply Level issues are highlighted as necessary

**1x Broadband Small Business**



Utilization 100%

- Sales
- Marketing 
- Competitors
- Expand 

Supply Level Forecast	21%	
Required Budget	29.99M\$	
Credit Rating	BB	

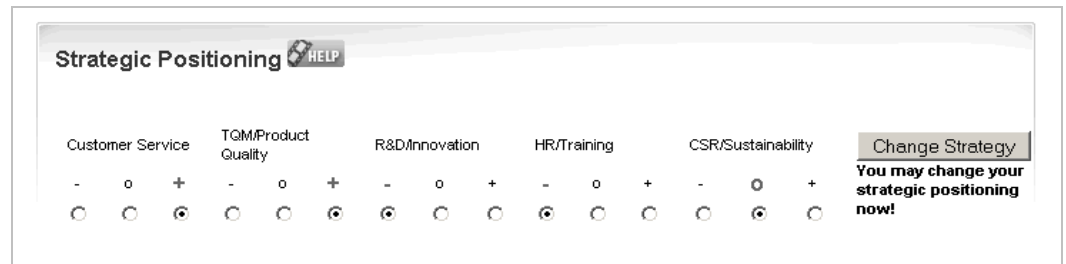
Upsize 24.99M\$

# The Telco Manager Simulation - User Guide

## 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 (1<sup>st</sup> green bar in the diagram above) – your customers will appreciate the extra care and attention you are offering; but will increase delivered cost (1<sup>st</sup> 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, 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 improve, 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

### Economies of Scale and Scope

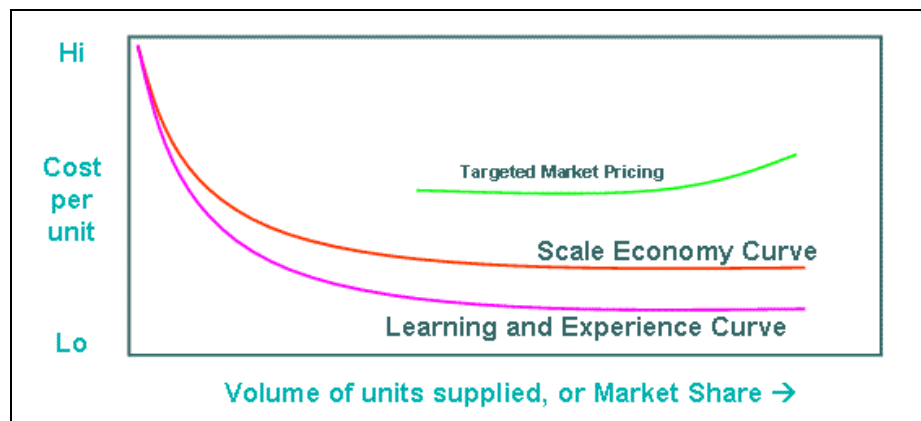
With increasing volumes of production or sales of a product or a range of products, central overheads and other costs start to spread across a larger base. The cost of production per unit, or the cost of delivery per unit, will therefore start to come down.

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 many businesses in the world today

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 industry. You can improve your cost advantage with greater market shares

## STRATEGY and MARKETING ISSUES

Supply Level Forecast	21%	✓
Required Budget	29,99M\$	✓
Credit Rating	BB	✓

### Supply Levels and Pricing - Market Crowding – Fragmented Markets

In each product-service market, providers individually decide to invest in extra facilities, in order to satisfy the demand for the services they offer. 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* product-services 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* providers.

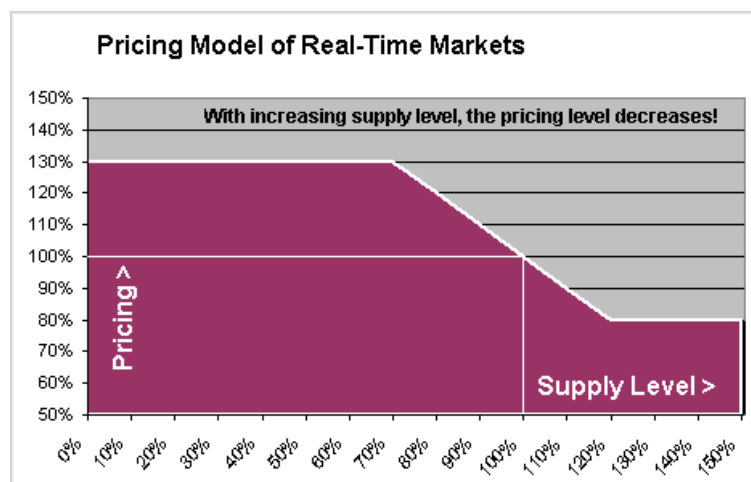
As players expand and continue to invest in new facilities, the supply of network capacity available to subscribers will increase – so the *supply level* goes up. Each new investment decision leads to the establishment of an extra business unit with a fixed capacity – the capacity increase is referred 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. Providers then need to start making attractive marketing offers to maintain or grow their sales volumes

A supply level of *over 100%* leads to much lower profit margins in the industry – even driving some providers 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 in your 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

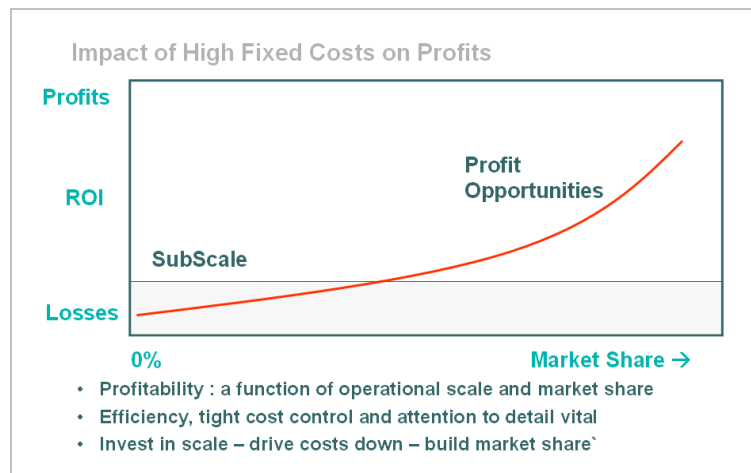
### Market Dominance and Pricing

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, the industry has excess network capacity and sales may fall. At this point, market share is less important as losses could mount up.



## FINANCIAL MANAGEMENT

Investment Budget	93.36M\$
Seed Equity	100.00M\$
Credit Rating	BB

### 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 from the bank

Your INITIAL SEED CAPITAL is \$100M

Your Available Budget for investing will normally be  $\text{Your Capital} + 120\% \times \text{Your Capital in Bank Loans}$ . Example  $\$100\text{M} + \$120\text{M} = \$220\text{M}$

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: “F” would be the lowest rating, before bankruptcy (D).

Your company will be declared bankrupt if your debt ratio rises above 90% - so be careful when expanding and using credit limits. In the event of bankruptcy, your 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

Investment Budget	93.36M\$
Seed Equity	100.00M\$
Credit Rating	BB

**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.

Supply Level Forecast	21%	
Required Budget	29.99M\$	
Credit Rating	BB	
<a href="#">Upsize 24.99M\$</a>		


**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 etc).

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

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

### Mobile Home (Sector Mobile)

Initial Investment	38.00M\$
Subscription Based	
Avg. CPGA	0\$
Number of Competitors	3
Supply Level (6x)	68.42%
Supply Level +1x	79.83%
Current Market Price	37.69\$
Current Capacity	499,998 Subscriber / Month




#### Producer Ranking for Mobile Home

Rank	Corporation	Capacity	Revenues	Market Share	Offer Price	ARPU	CCPU	Utilization	Subscribers
1	YourCorp	3x	4.78M\$	38.56%	39.31\$	53.32\$	10.59\$	49%	89,670 <span style="color: green;">▲ 6.73%</span>
2	PeopleTel	2x	4.31M\$	34.73%	37.69\$	50.91\$	19.97\$	68%	84,585 <span style="color: green;">▲ 4.74%</span>
3	BigTel	1x	3.31M\$	26.72%	38.77\$	48.35\$	20.43\$	104%	68,524 <span style="color: red;">▼ -1.67%</span>


Summary information on all offerings is also available under the Industry Sector tab. Click on the link "INDUSTRY SECTORS" to see the screen below.

#### INDUSTRY SECTORS


- Broadband (3)
- Mobile (5)
- Fixed Line (2)
- Accessories (1)
- [view more details...](#)
- HOME
- SMALL BUSINESS




**Broadband**  
∅ Investment: **24.99M\$**      Number of Competitors: **3**      [view more details](#)



**Mobile**  
∅ Investment: **38.00M\$**      Number of Competitors: **5**      [view more details](#)



**Fixed Line**  
∅ Investment: **55.01M\$**      Number of Competitors: **2**      [view more details](#)



**Accessories**  
∅ Investment: **13.00M\$**      Product Life Cycle **30** months      Number of Competitors: **1**      [view more details](#)

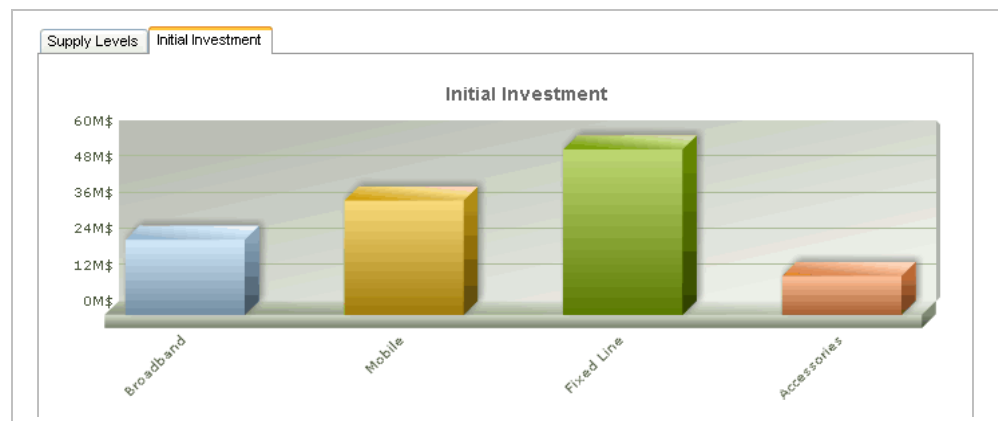
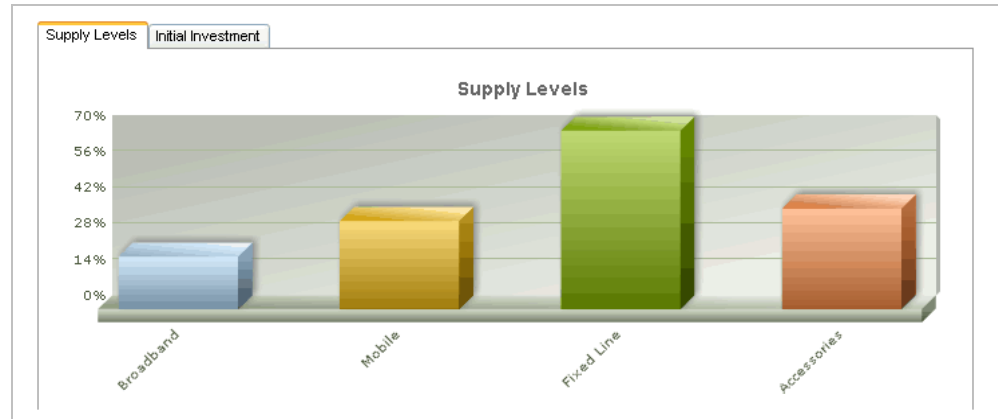
**Overhead Costs** : With each new investment, overheads will increase – these are costs associated with managing the new production units you have started. There is some "synergy" effect – a sharing of knowledge and systems - between different product lines in the same industry, which will balance some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

# The Telco Manager Simulation - User Guide

As part of your analysis, you will be interested in the market potential of each product-service. In the “Industry Sectors” page you see two charts which indicate the degree of saturation of each market (Supply Level), and the initial investment required to enter each market.

Remember that low, current supply levels indicate greater growth potential - products in high supply level markets are subject to much greater price competition.

Which products appear attractive from the view shown here ?



## COMPETITOR INVESTMENT ACTIVITY

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			September 2010, Quarter 7/12		
Q 7	PeopleTel invested 13.00M\$	Accessories Home (8x)			
Q 7	PeopleTel invested 24.99M\$	Broadband Home (7x)			
Q 7	BigTel invested 38.00M\$	Mobile Small Business (5x)			
Q 6	PeopleTel invested 13.00M\$	Accessories Home (7x)			
Q 6	PeopleTel invested 24.99M\$	Broadband Home (6x)			

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

# The Telco Manager Simulation - User Guide

## UPSIZING / DOWNSIZING / RELAUNCHING / LIQUIDATING

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

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

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

- **Increases the Supply Ratio** - you should evaluate market saturation or supply ratios for the current product market
- **For physical products - 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”

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

**RELAUNCHING** – 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%, for physical products as new features and technologies make the product perform better, pleasing customers.  
There is no effect on Supply Ratio, costs, or synergies

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

**DOWNSIZING** – 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 for physical products 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 **physical products** reach at least 100% maturity, with an EBIT of less than 3% - ie when you are clearly not making any money on a mature product.  
Alternatively, if Supply levels on **any product** 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



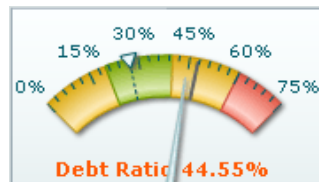
The Instruments on the main “My Corporation” page show important key ratios that are required to manage the corporation and take investment decisions. For each ratio the corporates current value is shown next to the ratio name and is also shown on the scale by the main indicator. The grey solid line 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 Indicator reaches the green range. The red range indicates a very risky situation where high interest rates are to be paid.



**Market Share** – based on the number of subscribers that you have developed in each market, or the number of products sold (if physical products)

## FINANCE AND ACCOUNTING REPORTS

### Your Stock price (share price)

This is shown at the top of your main company screen



At the bottom of your main company screen are a range of detailed financial reports which you should track – the basic reports are Balance Sheet, Income Statement and Cash Flow. These reports automatically update each quarter.

Balance Sheet Quarter 10			
Assets		Liabilities and Equity	
<b>Current Assets</b>	<b>77,082,330\$</b>	<b>Current Liabilities</b>	<b>493,751\$</b>
Cash	76,054,977\$	Accounts Payable	493,751\$
Accounts Receivable	1,027,353\$	Short Term Debt	0\$
Inventory	0\$	<b>Long Term Debt</b>	<b>0\$</b>
<b>Long Term Assets</b>	<b>104,900,374\$</b>	<b>Shareholders Equity</b>	<b>181,488,953\$</b>
Property, Plant & Equipment	99,655,355\$	Seed Equity	100,000,000\$
Intangible Assets	5,245,019\$	Retained Earnings	81,488,953\$
<b>Total Assets</b>	<b>181,982,704\$</b>	<b>Total Liabilities and Equity</b>	<b>181,982,704\$</b>

Profit & Loss	Quarter 10	% of Rev.
<b>Revenues</b>	30,971,253\$	100.00%
J. Cost of Service	7,406,262\$	23.91%
<b>= Gross Profit</b>	<b>23,564,991\$</b>	<b>76.09%</b>
J. Marketing Costs	4,845,216\$	15.64%
J. G&A Expenses	5,537,394\$	17.88%
<b>= EBITDA</b>	<b>13,182,381\$</b>	<b>42.56%</b>
J. Depreciation&Amort.	2,039,592\$	6.59%
<b>= EBIT</b>	<b>11,142,789\$</b>	<b>35.98%</b>
+ Other Items	0\$	0.00%
J. Interest	0\$	0.00%
J. Taxes	3,899,977\$	12.59%
<b>= Net Income</b>	<b>7,242,812\$</b>	<b>23.39%</b>

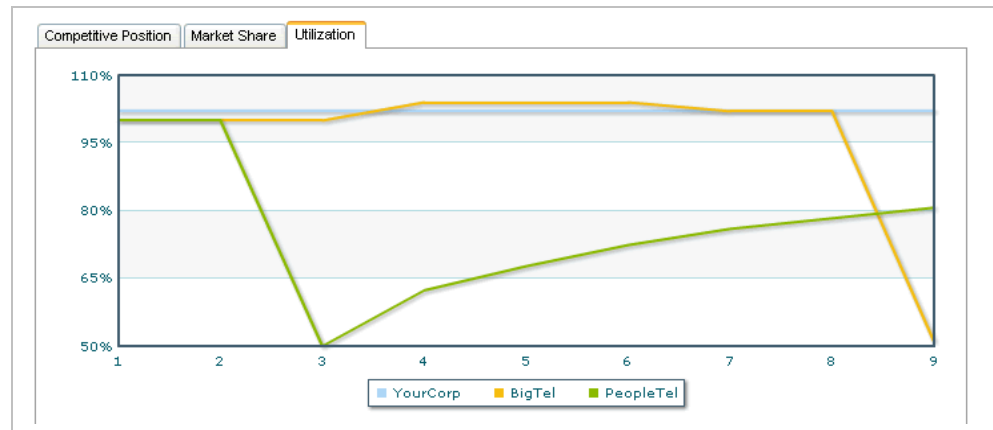
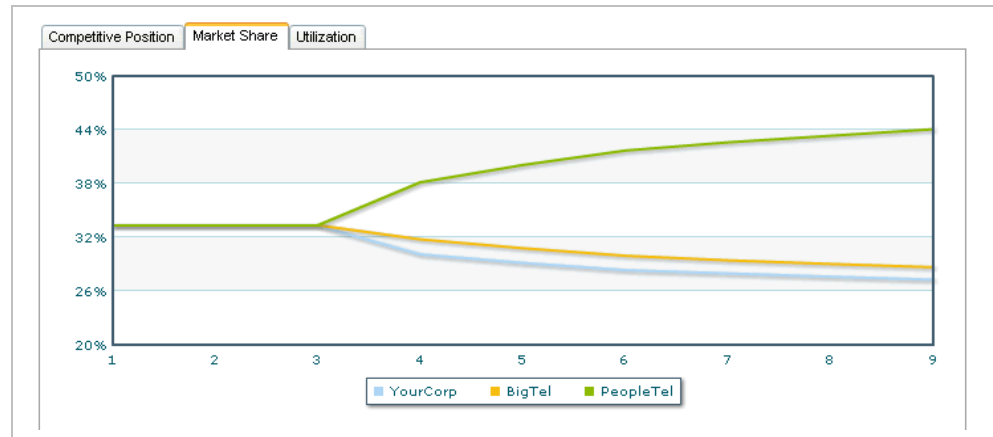
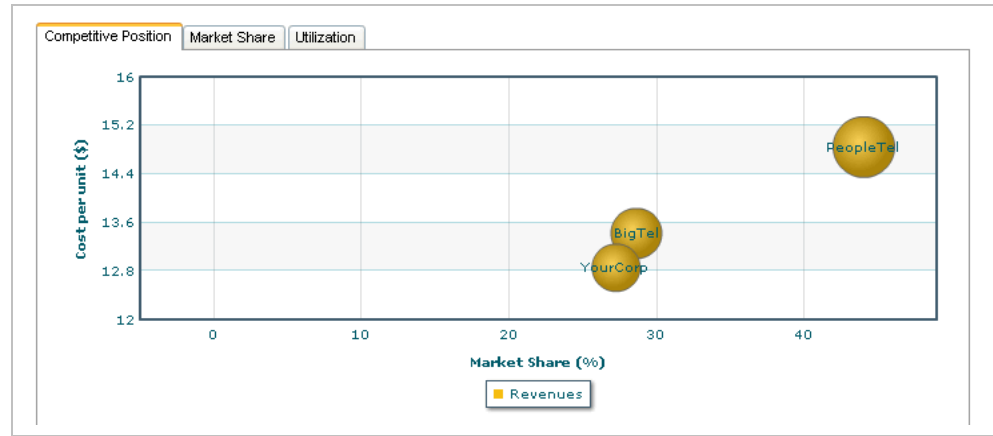
Cash Flow	Quarter 10	% of Rev.
<b>Net Income</b>	7,242,812\$	23.39%
+ Depreciation&Amort.	2,039,592\$	6.59%
J. Change in Inventory	0\$	0.00%
J. Change in Accounts Receivable	-15,739\$	-0.05%
+ Change in Accounts Payable	0\$	0.00%
<b>= Operating Cash Flow</b>	<b>9,298,143\$</b>	<b>30.02%</b>
<b>Investing Cash Flow</b>	0\$	0.00%
<b>Financing Cash Flow</b>	0\$	0.00%

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## Charts :

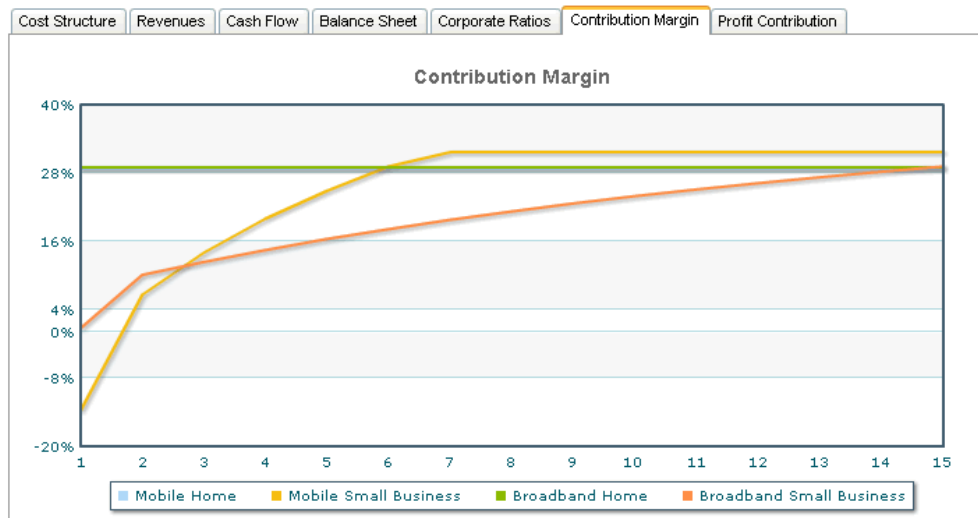
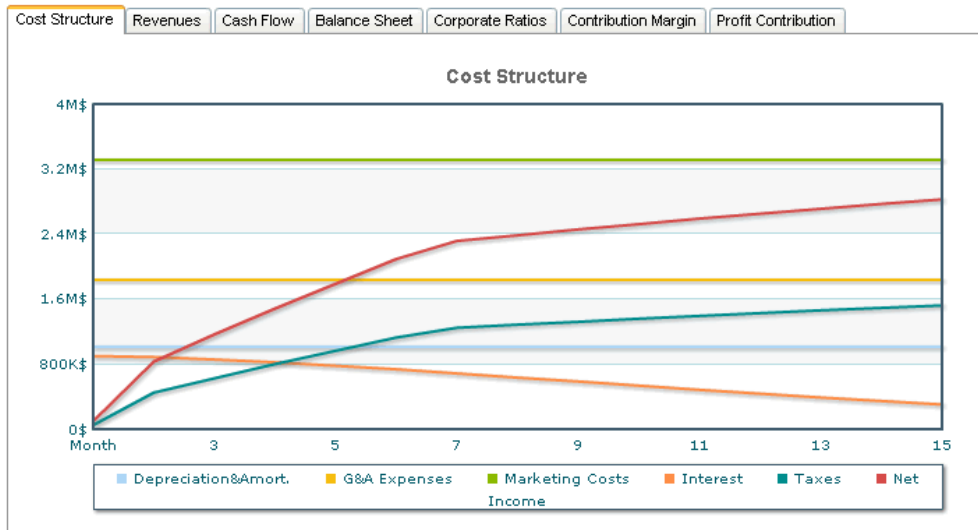
There are many charts to assist your decision-making and control procedures

**For each product market** , a series of business strategy helpers, eg competitive position, market shares and network utilisation as shown below



# The Telco Manager Simulation - User Guide

Financial Charts : for example, cost structure, total corporate contribution margins etc



## 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 corporation's 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 company's 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.

# The Telco Manager Simulation - User Guide

## **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 company's 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 company's 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 non-operating 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 company's 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.

# The Telco Manager Simulation - User Guide

## **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 company's 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 company's 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 (inventory) 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.