

Strategic Business Simulation

B-STRAT

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Introduction to B-STRAT

Welcome dear reader,

Welcome to the **B-STRAT** virtual reality. The purpose of this textbook is to provide the needed knowledge that you need to effectively use to successfully manage your virtual company in this simulated business environment.

Your primary objective is to get acquainted with this simulated business world, with the way of making the business decisions, which is basically the same as in the real business life. **B-STRAT** represents the simplified model of the reality with all the core principles incorporated.

The most important thing when making the first decisions is to work out the team spirit within the company fast. All the team members should be involved in all the issues and be aware in overall situation.

Remember!

You are the only one responsible for your results. The better decisions and more adequate choices you make, the better the results of those decisions and choices will be.

But you should not judge only from your position only. Know that business is a fight and all the competitor companies compete with you. Therefore you should consider their position and rethink the situation from their angle. Judge first and act after. Use the information that you get as the report of your company activity as well as the information that you can buy, even the one that you can get as a result of nonformal relations with your competitors.

Important notes:

- ✓ Concentrate on strategic issues first and only after that allocate time on minor things;
- ✓ Analysis is important. Make sure you assess the situation adequately before you make the decision. Do not be lured by the first conclusions, they may be just wrong. It is not enough to analyze your situation based on the past results, current realities and future objectives. Consider actions of the competitors as well; what their decisions would most probably be? Complex analysis of the situation will greatly contribute to the adequate decision-making;
- ✓ Time distribution. It is important to allocate time on the issues based on their importance. You have specific time frame before submitting the decision form, so use this time wise;
- ✓ Administrative issues. Be careful when filling in the decision form. Even the single minor mistake can drastically affect your results. For example if you write – instead of +, or typing in the additional zero;
- ✓ The deadlines are important during the distance learning programs like B-STRAT. Do not wait to send the decision form at the last moment. If internet connection will fail, you may fail too;
- ✓ Artificial corrections. Try not to loose time on artificial corrections of figures when finalizing on the numbers. Instead, stay focused on the main

thing. For example, it does not matter much if the price will be 549.95 \$ instead of 550 \$. This artificial "correctness" drives your attention from strategies to figures, that is not advisable;

- ✓ What is the role of the program administrator? He is your link to the computer program, like a mediator. The administrator creates the scenario from the very start of the simulation round after which you are the sole responsible for your results. The main role of the administrator is to create the fair competitive environment for the players;
- ✓ No matter that you will have your company results, information packages to drive the uncertainty to minimum, may be even the information that you will get from the competitors ... still ... your judgement should bear be the leading role;

Remember!

There are no standard recipes of solutions in B-STRAT. Improvize, but within the rules of the simulation. Never try to stretch the rules over yourselves. Instead, elaborate decision alternatives, analyze and leave only those that are adequate. Good judgment and analysis will bear their fruit.

B-STRAT and the decision-making in business

Managing business is about making business decisions first of all, the decisions that are adequate to the ever changing situation. Making business decision is making a choice between at least two alternatives.

What are the fields of business decision-making?
What does **B-STRAT** offer us here?

B-STRAT is a business simulator. Nearly all the main decisions that exist in the life of a TOP manager are simulated here. You will be convinced in it a soon as you play your "game". Participation in **B-STRAT** will help you to better understand the problematic of the TOP manager. Here you will make business decisions just as if you were the TOP managers.

Of course making those decisions in an informed way is what actually counts. This is the prerequisite of your success. Some fields of decisions are clearly described below in more details.

Market analysis

Every single business should concentrate on the market needs first of all nowadays. Businesses usually study the market needs first and only after that, they make customized products to satisfy the market needs.

You must understand your market in **B-STRAT** as well. You must identify market needs first and create the product with those technical characteristics [and not only], what your target segment requires. If you miss this important point, your market will not buy your products and you will fail. Even worse, market will buy your competitors products and you will loose even more.

Study of competition

Do you really think that making adequate business decisions is the only thing that is required for your success?

If the answer were yes, that would leave us with other factors beyond our control having no weight, which is not true. This would be a terrible mistake of ours. What decisions will our competitors make is REALLY important.

Let us just face the severe reality: It is not enough today to study the market and create the products according to the market needs. Even taking care about the customer satisfaction is not enough for guaranteed success. All the competitors can do that today. So, where is the opportunity then? Where is the next level resource of enlarging your business?

Grab it from the competitor!

Conclusion: Study the competitors before they study you!

The same goes in B-STRAT. You study the competitors because you want to avoid their minefields. You will be able to buy marketing information package and the intelligence package. They will help you to make informed business decisions.

Negotiating with competitors

Negotiate with competitors. Find something in common. Flexibility is the big advantage.

You can negotiate with competitors in B-STRAT; you can even elaborate a joint strategy with them. This fully corresponds with the reality where at least two competitors operate. The alliance is the powerful mechanism against the divided competitors.

Remember:

The ability to create successful alliances is the true key to the success in the strategic simulations. Only in this case you may have a serious chance of winning.

Marketing management

Marketing is leading all the show. That is undisputable. No businesses can survive without marketing orientation today.

The same is in **B-STRAT**. In order to reach stated objectives of your company you should use marketing "muscles" to get maximum result. As in the real business life here you also have those instruments that will let you impact the results of any player company.

Production management

You need uninterrupted production process in order to provide market with the products and you truly care about that.

You do exactly the same in B-STRAT. The difference is that you do not think of details, like delivering the raw materials to the production department. Instead, you make main decisions: You order the specified number of products and the production department deals with the details. It produces and delivers them to market in a due time. You just pay production cost.

Like any manager you do the main thing in B-STRAT: make decisions and plan.

Product management

The product management includes all the spectrum of business decisions including product creation, what to offer to the market, what product to withdraw from the market etc. The ultimate goal of any business is to create,

market and maintain certain number of successful products in the business portfolio.

Exactly the same thing happens in B-STRAT. First, you study the market, then you create your products according to the market needs, then you should penetrate the market with your products and do whatever it takes to make money out of them.

Distribution management

What is the point in having the wide spectrum of products if the buyers can not see them on the shelves of the supermarkets? That is why you should use distribution channels to deliver your products to the "shelves". You need to make it easy for the buyer to find the product. If your product will fail to be placed on the shelves, your competitor will gain those places and respectively sales too.

Exactly the same thing happens in B-STRAT. You have distribution channels and you should use them to deliver your products to the buyers. You recruit distributors, who deliver products to the sales points in each distribution channels. You just control everything by making the respective business decisions.

Managing research activities

The "best product" is not enough to gain and keep maintain the place and share on the market. This approach becomes obsolete as soon as the competitor will come up with the better product.

The "good" strategy is truly the way to stay long on top. Constant research and development activities will help you there. The simple example can be doing a research that will improve the product characteristics of the product to fit the consumer requirements better. This increases the expertise of the R&D department on its turn that may result in decreasing the costs of research.

Exactly the same thing happens in B-STRAT: You create products through research; you modify them and create different versions with the help of R&D department.

Advertising activities

Do you agree to the opinion that "good product" does not need advertising?

If yes, then you are totally wrong. Even if your product is the best in the world, it is not enough for successful sales. Even the best product will fail without proper advertising.

You advertise your company brand and your products in B-STRAT. These two are important in order to spread the voice of your product on the market and stimulate the potential buyers to make their purchasing decisions in your favor.

Buying information for decision-making

"Anyone can make a decision if s/he has all the needed information. Good managers can make decisions even if they lack needed information. The ideal managers can manage that even in the total informational vacuum".

We could dispute that "Murphy law", but the reality tells us: the more useful information you have, the more informed decisions you can make. This definitely increases the chances of those decisions to be adequate and bring the positive results in the end.

You can get/buy different kinds of business information in B-STRAT. You can use them in your decision-making. What you get/buy, and what you will not, as well as what you will use and what you will not ... that is up to you.

Simulated business world

Is it possible to create the simulated model of the business environment?

Modeling the business environment is pretty possible [based on the assumptions and limitations] and B-STRAT is the true confirmation as well as lots of other computer simulations that are used in the field of education for ages already.

Let us characterize this virtual business environment step by step and you will understand how close this simulated environment can be to the actual business reality around us.

You create your company in B-STRAT and operate in the virtual society with the population of around 1,250 million. The local currency is called B-STRAT Dollar – BSD [sign used - \$]. This virtual society develops just like any other real country. Here everything has its characteristics. The key to success lies in understanding the driving factors of this environment.

The economy increases 2-5% in average per year. That's important for market development as higher growth rate means more sales.

Annual inflation is 2-6%. It increases all prices, whether its a product cost or information cost.

The companies pay taxes in B-STRAT like every other business in the real business environment. To simplify, 20% of all the net marketing revenue goes into the state budget.

Each company aims to win as more cash, as possible. This is the ultimate criteria of performance evaluation. No tests, no theory, no standard lecturing ... just making money! The companies may earn virtual money as a result of the activities each virtual year. Based on the yearly results they get certain place in the list and the respective points. These points serve the purpose of identification of the winner company or the individual.

The different elements of the virtual business environment are discussed below:

Industry and company organization

All the companies automatically represent the certain industry and they operate all there. The companies produce and sell the similar products for entertainment of long-term use. The product is an E-center . The number of companies in an industry can be up to 100.

Each company is named by the owner team. But in order to "translate" the names for the computer program special indexing system is used. The companies have indexes like - c01, c02, c03, c04 etc. The same way, the individual players also have their indexes. The number of virtual year's changes from round to round, but that is from five to nine.

NOTE:

None of the companies or the individuals have any competitive advantage over others when the program starts up. Just the knowledges, skills, experiences, attitudes of the participants make difference. The first decisions, made by the participants in the program, will change the situation.

The team members define the name of the company from the very start and inform the program administrator. They also choose the company administrator, who signs the decision form and is responsible for the communication with the program administrator.

Following departments serve the companies:

1. Marketing department;
2. Production department;
3. Research & development department;
4. Distribution department;
5. PR department;
6. Finance department;

The company can also buy the services from the:

1. Advertising company;
2. Marketing research agency;
3. Detective agency;

Its important to know, that, each of the departments are the profit centers [despite financial department that serves all the company]. That means that departments make their own profits. Marketing has the leading role in the whole structure. It is responsible for the overall success of the company.

Marketing department gives order to production department on production of certain number of products. Once produced, the products are transferred to the marketing department each for a certain price, where production department's profit is included.

The same way, the marketing department requests product research & development from the R&D department. The latter also works for its profit.

The PR department makes sure the company has a strong public image. It also elaborates the strategies for destroying the public image of the competitor companies and their products.

Outsourcing agencies that provide advertising, marketing research and intelligence services are very important "extensions" for the companies. The advertising agency does advertising research and manages advertising campaigns. Marketing research agency provides yearly marketing information package. The detective agency does intelligence.

The overall activity of the company that is of a marketing department is evaluated by the annual net profit.

Every year the company has a specific amount of marketing budget to spend on marketing activities for the specific year. This marketing budget covers following

costs: company and product advertising costs, R&D costs, distribution agent costs, costs that ensure strong public image and better internal climate, information costs, black PR costs. If the company makes a mistake and plans more marketing cost than the allocated budget, it will be fined and next years marketing budget will be 1.000.000 BSD less than usual. If this happens, the actual budget will stay within the limits of the allocated costs. The surplus is deducted first from the advertising costs, then the distribution costs etc.... until it gets back to the limit.

To summarize:

Marketing has the leading role. All the other departments just perform the orders of the marketing department.

The main agreement between the marketing and the production departments is around two fields: 1) adaptation percentage of production volume to the market demand and 2) product transfer cost.

The range of production plan adaptation

The planned amount of production number can change based on the potential sales that the product can get for the specific year. If the marketing department will plan 100 KU production of a certain product the actual production number can be within the range of 100 KU $\pm 20\%$. That is the production department may produce more or less and 20% adaptation to both directions is the limit.

That is a good stabilizer tool in the hands of the companies. If the prognosis say that the demand can be between 80 KU and 120 KU the team can plan 100 KU and the actual production will be changed based on the actual demand on the market.

If the market demands more, more products will be produced and the company will make more profit. If the demand for the product is lower than expected, this adaptability will minimize the volume of products that will be produced and respectively minimize the probability to leave reserve in stock.

Product cost price

The agreement of marketing and production departments with respect to this is as follows:

1. Marketing will only pay cost price for the products that will be sold . Production costs are not covered from the marketing budget. The production costs are covered ONLY AFTER the product is sold;
2. The financial department charges marketing for the stocking of the nonsold products. They are kept in reserves and can be marketed next simulated year. The stocks can be modified based on the decision of the company managers [at no additional cost];
3. The basic cost price is calculated on the first batch of 100 KU;
4. The product cost price increases along with inflation;

Products

The companies produce the E-center – the product for entertaining. The product has five technical characteristics. Choosing them “correctly” is vitally important when the decision about product research and development is made. The characteristics are:

- | | |
|------------------------|--------|
| 1. Weight (Kilograms) | 10-20 |
| 2. Design (Index) | 3-10 |
| 3. Volume (Cubic DM) | 20-100 |
| 4. Frequency (1000 Hz) | 5-50 |
| 5. Watt (W) | 5-100 |

Each of them is an Integer. The companies MUST choose these characteristics according to the needs of their target segments.

The way the product can be named is defined. Example: 01-11, where

1	2	-	3	4
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1 and 2 – come from company index

3 and 4 – identify the product and differentiate it (11, 22, 24, 33, ... 99)

“23-15” means that it was developed by the company indexed as c23. Note, that there is a dash between the figures and there are no spaces.

In order to better satisfy the market the better products are produced. Therefore, each of the competing companies tries to develop highly customized product for the market. Each company can have maximum five products on the market simultaneously. The company can withdraw the lousy product from the market, but cannot get it back any more. The company can also market new product whenever it considers doing so.

If the company withdraws the product from the market the stock reserves will be automatically sold in the outer world for the 10% of the cost price and this income will be depicted in the item named by – extraordinary income. The same time the production department will charge marketing department for full – 100% cost price. Therefore, the company will loose 90% of the cost price. That is it can be a lousy operation to withdraw the product with stock reserves from the market.

Remember that all the technical characteristics of the products should be integers within the respective ranges. The company cannot have two products with the same name simultaneously on the market. However, having two products on the market with different names but the same characteristics is allowed.

Consumers

Who buys the products that the companies produce?

There are three markets in **B-STRAT** business world:

1. International market;

2. Corporate market;
3. Household market;

The actual buyers are the individuals of more than 15 years old. Let us characterize the markets:

International market

We are open economy and we have trade relations on the international market. There is a demand for our product there, but the market demand is specific. The details will be known to the product participants after they will get their scenario. International buyers buy our product via Internet. Express mail service is involved to deliver products.

Special requirement:

The quality of the products that this market will buy will always be higher than average.

Corporate market

Organizations too buy our products, business, government and etc organizations. They need our product for their operating purposes. Their buyer behavior is unique. The details will be known to the product participants after they will get their scenario.

Special requirement:

The market price of the products that this market will pay will always be higher than 300 BSD. This is pretty informed society, so they will prefer those products, that have better ration of price/quality.

Household market

Household market is the biggest market in the simulated business world. 6 segments of this market, that are identified by the field experts, have quite different requirements for the products they buy:

Segment 1:

Low income households. They can not buy products with high technical characteristics due to their high price. They are very sensitive to price.

Segment 2:

The individuals that are not covered by any of the segments. They demand more, but are not ready to pay adequately.

Segment 3:

Enthusiastic and knowledgeable individuals who know this product category quite well. They are mostly interested in quality and high technical characteristics.

Segment 4:

Highly educated individuals with high income with independent spirit. They are interested in self actualization and self realization therefore engage in many societal events. They buy products partly due to their status requirements. They are therefore ready to pay more for even less quality.

Segment 5:

High income individuals, but with less education. Less active and independent people than in the 4-th segment. But they want to get more for their money.

Segment 6:

Highly demanding individuals that can pay well. They know exactly what they want and are ready to pay for it.

This segmentation covers all the possible buyers on the household market.

When the new round of simulation is launched the program administrator sends the scenario to the companies. The scenario includes all the needed information including the starting volumes of markets and segments, their growth rates, market shares. These data is changed every time new round begins.

Distribution

There are three distribution channels that serve the purposes of distributing the products on the market, specifically on the household market.

Channel 1 – Specialty stores.

This is the network of prestigious selling spots, where electronic entertaining products are sold in an enormous volume. This is the best source for high quality products. Great service and fast delivery is what specifies this network. There are 3500 selling spots in the whole economy. Due to many factors, this network mainly sells high price items as people with higher incomes visit these spots usually.

Channel 2 – Stores of electronic equipment.

These kinds of stores sell our products class but its not their main business, so they are not highly motivated to sell them. There are 45000 stores of this kind in the whole economy. The network is less prestigious, so the segments that come here pay less. This results in the sales of lower priced products mostly.

Channel 3 – Trade centers

The trade centers sell large assortment of brands and configurations of products. Here they have whole sections of entertaining products. All the representatives of all the segments come here. There are 5500 trade centers in the virtual world.

The profit margin of each channel was formed at around 30%. It means that the channels to cover their costs and contribute to their profits will withdraw 30% of the market price of any products sold in these channels.

The products will usually be sold in all the channels, but numbers will differ based on the specific characteristics of the products, market prices, segment preferences.

Selling on the international market is different. Here the express mail services the companies and performs a function of a distribution channel. The express mail gets 15% out of the market price of a sold product.

We do not have distribution cost when we sell to the corporate market. The local carrier company delivers the products for 10% fee from the product market price.

If the company is not doing brand advertising, [company advertising] distribution channels do not take products. Therefore, the company distributors also refuse to work.

Pricing

The companies set market prices for each product.

Each product has its cost price defined based on the first batch produced – 100 KU. That cost price may be between 100 and 200 BSD. Market price set by the company can be from 200 to 600 BSD. The companies can change market price whenever they consider needed to reach their market objectives, but it should be carefully done, as the product may lose its target segment as well as acquire the new one.

The companies can arrange sales campaigns of their products, that is lower the price of the selected products by up to 20%. The anticipated results of such actions should be carefully planned as sale may fail. Changing the price usually results in the repositioning of the product, but no repositioning happens when the price is lowered under sales campaign.

One way to define the market price is: to take the cost price, add the desired profit, add marketing channel income. Another method is to see what price is segment ready to pay on the perception map and set that price. That is the price that the segment is willing to pay psychologically. Some other more useful methods can be “invented” by the companies themselves. The important thing is that the companies need to choose themselves.

Distributors

In order to transport the products from the production or stock facilities to the market the companies use distributors, who are organized around three distribution channels. This means that each distributor delivers all the products of a certain company to the specific selling spots of a certain channel only. Each company has their own distributors and their number can change every virtual year.

The company pays 1) annual salary, 2) recruiting and 3) training costs for every NEW distributor every year. For the old distributor the only money paid is only annual salary. All these costs are covered from the company marketing budget. The costs of annual salary, recruiting and training are depicted in the NewsPage that the companies get free together with their yearly activity report.

The companies need to guess themselves how many distributors they may need in each channel. The logic is following: the more distributors company has, the higher will be the selling spots they will cover, but each additional distributor will

cover less selling spots. So the companies should increase the numbers every time. The minimum number of distributors in each channel is 20.

Company and product advertising

The companies spend significant portion of their marketing budget on company brand and product advertisements. Therefore, the synergy in advertising exists. The function of advertising is to inform the buyers about the products and remind them from time to time. The buyers need to be reminded, or they will forget about the company and its products. That will benefit competition.

If the spending on advertising will not be enough, it may have less impact, taken that the competitors also spend on advertising. The logic is that the higher is spending, the higher is result. The buyers will hear the company that will spend more.

The convincing power of advertising is too important. The more buyers are convinced that the products fit their needs, the more they will buy. The volume of advertising spending also influences the segments as they develop to the certain direction. The advertising also affects distributor results directly as well as advertising creates barriers for competitors as higher advertising lures buyers from competitors.

Product advertising is directed on two things:

1. Customizing the message, researching and
2. The cost of time for passing the ad;

The first one takes around 5-10 % of the entire allocated budget on the advertising of a specific product. This is spent with the purpose to do research to formulate better message to have higher effect on the buyers. The rest of money is used to buy the media time. The higher is percentage of customization cost, the higher the effect of the message, but the lower is the total advertising time.

The companies should always spend for advertising of their brand and products. The minimum and maximum amounts of BSD on each item of advertising whether product or company is 300 K\$ and 1000 K\$.

Black PR

The companies can work on the destroying of the public image of the competitor company or its product. The PR department does this job. The company can spend money on the black PR of seven companies and seven different products. The competitors can even agree to destroy the image of a target company by joining the efforts. 50 K\$ is the defined cost that can a company pay for the image destruction of a specific company or product annually.

The black PR activities should be carefully planned and executed. If the company has money it better be spent on the advertising of the company image or products, this way the money will have maximum positive effect for the future of

a company. When the money is spent on black PR this hurts the target company or product, but helps all the other companies on the market, not only the one who paid for that black PR.

Black PR is absolutely REAL thing happening everywhere around us. It is hidden from the eyes of the buyers usually. Therefore, none of the companies in B-STRAT will know who actually spent money on discrediting of their company or products. They will just know how much money was spent.

Marketing research and market intelligence information

To simplify the decision-making process the companies can buy marketing information package. Marketing research is done by the separate agency, the order is performed for the whole year and the results are submitted together with the company activity report. The cost of the package is given separately on the NewsPage. The inflation affects the price of the information.

In order to get insider information about the competitors the companies can buy intelligence reports from the detective agency. The order is performed during the whole year and the results are submitted together with the company activity report. The cost of the package is given separately on the NewsPage. The price is affected by the inflation.

Research & Development

The product that is supplied to the market should be accompanied with the R&D project that ensures its existence. Both should be represented in the decision form. If the product is typed in the first line of the product management section, its project should be typed into the first line of the R&D management section. This is important. See the sample below:

Product Management								
Product	Production Plan [KU]	Product Advertising Budget K\$ [300-1000]	Company Advertising Budget K\$ [300-1000]	Advertising Research Budget % [5-10]	Product Market Price 200-600 \$	Sale % [0-20]	Target on Perception Map	
							Axis 1 [0-40]	Axis 2 [0-40]
02-11	250	1000	1000	10	240	0	4.00	7.00
02-22	150	1000		10	430	0	23.00	33.00
02-33	120	1000		10	480	0	28.00	25.00
Research & Development Management								
R & D Project Name	The Name of the Final Product	R & D Project Budget K\$	Technical Characteristics of the Product					
			1 (10-20)	2 (3-10)	3 (20-100)	4 (5-50)	5 (5-100)	
p02-11	02-11	267	12	6	34	13	22	
p02-22	02-22	447	18	9	85	42	85	
p02-33	02-33	480	16	7	70	33	65	

This is the abstract from one of the decision forms used. Note that the list of the products from the product management section [02-11, 02-22 below and 02-33 lower] is fully copied in the R&D management section [p02-11, p02-22 lower and p02-33 lower]. This form of listing is important. If you fail to follow this rule, you may loose a year.

The order given to the R&D department by the marketing department consists of project name, project budget and the technical specification of the product to create. Project name consists of five symbols:

1	2	3	-	4	5
---	---	---	---	---	---

1 – is always “p” (noting project)
 2 and 3 – indicates the company index
 4 and 5 – selected by the company (11, 22, 33, 44, 55, 66, 77, 88, 99, ...)

Example: p02-11 is the name of a R&D project to create 02-11 product..

The goal of the marketing department is to use the R&D department to cheaply produce low cost products that best fit to the target segment needs to the maximum extent possible. The company success depends on it. It is important to know that the R&D department does not do other scientific researches. It just creates the product theoretically, just as the architecture creates the house on the paper first.

The R&D department should theoretically create the product within the indicated characteristics. It should find out the raw materials, technologies and “connect” them on the paper to create the desired prototype. The stricter the characteristics are, the higher will be the cost of the R&D project.

The usual cost of the R&D project ranges from 200 to 500 K\$ BSD. This includes R&D department profit as well. The marketing budget covers this cost.

Below please find the formula that is helpful in calculating the project cost given the product characteristics. Once the figure is received, add 10 K\$ on it to make sure the project will be successfully implemented.

A, B, C, D, E are used to indicate product characteristics:

A. Weight (Kilograms)	10-20
B. Design (Index)	3-10
C. Volume (Cubic DM)	20-100
D. Frequency (1000 Hz)	5-50
E. Watt (W)	5-100

The formula:

$200 + ((A-10)*5 + (B-3)*15 + (C-20)*2 + (D-5)*2 + (E-5)*2) / 2$ = the amount that the company should pay to the R&D department in order to successfully finish this specific project.

Try to create the imaginary product, select the characteristics, insert them in the formula and calculate. This is the maximum amount that can be requested by the R&D department for the project. However, the needed amount may be even lower. As more and more money is spent on the R&D department, their expertise increases and that makes it possible to develop projects at lower cost.

Please note:

Calculate properly. If you miscalculate and indicate lower budget, the requested amount will be instantly deducted from the marketing budget and you may cross the line that is you may overspend the budget. This may cause serious fine for you – 1 million BSD less in marketing budget.

The increase in any characteristics results in the increasing of the R&D project cost.

Significant Opportunity:

The companies can modify their existing products every year based on the market needs. The characteristic of the product can change, but the name should stay the same or it will be perceived as a new product by the program. Of course, modification needs budget too.

The program automatically calculates the degree of modification via comparing the old and the new characteristics in the form of percentages. If the quality change is less than 5%, the R&D department will take 50K\$ for it. If the quality change is between 5 and 9.99%, the project will cost 100 K\$. If the quality change is between 10 and 14.99%, the project will cost 150 K\$. If the quality change is more than 15 %, the project will cost as calculated by the formula upstairs weighted with the expertise coefficient.

The expertise coefficient is the indicator of the R&D department sophistication that increases along with the works performed by this department. Higher coefficient results in lower cost for R&D projects development and lower cost price of products. In order to find out the actual coefficient you need to conduct respective calculations, that is you need to “invent” the system ☺

Note:

Once you modify the product, all the reserves in stock will also be modified automatically.

How to calculate the modification percentage to properly define the project budget? That is also up to the teams. Find your the way yourselves. If you succeed, that will be your advantage!

Economies of scale

The higher the quantity of a certain product produced, the lower the cost price of that product as the experience of the production department increases. Going large and decreasing costs is one way to increase the profit margin of a company.

When the production of a certain product doubles, the cost price is going down by 15% [we talk about the cumulative production starting from the first batch of 100 KU]. Along with the rise of the cumulative production the cost price goes down but to a certain point from which the cost price will turn around and start rising again until it hits 200 – maximum cost price. Even having a product on the market may lose a sense at that moment.

Public image and its impact on sales

B-STRAT virtual reality consisted of local and international societies that have its views, values etc ... like in any country. The society may favor certain companies. The research of companies is routinely conducted to find out their public image, reputation. Fair business activities are promoted, charity programs welcomed, supporting employees worth a lot, fair competition rules are paid attention. This all is depicted in the public image of the companies and this directly affects sales. This index equals 1.00 when the companies start up and it changes every year.

All markets have different approaches to the public image of the company. The households buy every product no matter their producers' public image, but of course favor those, who have image higher. The more important is the ratio of the image to the product price. The better combination will get better sales [if all other factors are equal]. The sales on the household market start from the first year.

The corporate market will not buy products that have public image less than 1.3. Among the products they consider they will buy those that have higher image. The more important is the ratio of the image to the product price. The better combination will get better sales [if all other factors are equal]. The sales on the household market start from the first year.

The logic behind is: the organizations will usually buy those products whose producers have already established their strong public image. Sales on this market usually start from the 4-th year.

The international market will not buy products that have public image less than 1.6. Among the products they consider they will buy those that have higher image. The more important is the ratio of the image to the product price. The better combination will get better sales [if all other factors are equal]. The sales on the household market start from the first year.

The logic behind is: the international society will usually buy those products whose producers have already established their strong public image on their markets. Sales on this market usually start from the 7-th year.

What should be done in order to increase and maintain higher public image?

1. Spend on charity programs;
2. Encourage your employees;
3. Invest in community development program;

You can spend as high as 200,000 BSD in each of these directions every year.

4. Funding of Black PR negatively affects your public image;

Every company should find balance between good, bad and evil activities itself.

Marketing budget, its distribution

The company has specific marketing budget to use it for funding the marketing activities every year. This budget can be between 8 and 10 million BSD. Only the costs in the decision form are funded by the marketing budget, nothing else.

The companies plan their marketing expenditures every virtual year, but sometimes they make mistakes: they plan more expenditures, than they actually have money in the budget. Of course spending something that you do not have is not possible so the following happens: the program automatically cuts costs and drives the spending to the available budget limits. The cost cut will touch the most sensible areas first, like advertising costs, then distributor costs etc. and will continue until the available budget limit.

For example, you planned about 650 thousand BSD more spending than you have in the budget. Say you have three products on the market and you are supporting each of them with 1 million BSD product advertising budget. In this situation, the program automatically cuts about 250 thousand BSD from each product advertising budget, total about 750 thousand BSD cut [the surplus is volatile]. The cut happens in surplus, but this money is never lost. It will be shown in the company report file as well as will be added to the next years marketing budget of the company.

The company will see the actual spendings in the yearly results' page, but the advertising costs will be not the one that was planned, but the one that was left after budget cut. Each product advertising cost will be 750,00 BSD, not 1 million planned. The leftover from the marketing budget will be shown too which will be added to the next years marketing budget.

In order to check what cost you missed during planning you can simply take previous year's decision form and recalculate item-by-item. Calculate, summarize and most probably you will find the answer. You can always contact the program administrator with the questions, but check yourself before doing that and save time.

Operating instructions

Initial capital formation

Every company starts up with equal marketing budget opportunity: 9.000.000 BSD. All the budgets of all the years for all the companies may be different.

The assumption is that the holding company will always provide marketing budget to the company even if the company will absolutely fail. This amount is not considered as a loan. This is the money only for funding the marketing activities throughout the year.

But in fact the simulation participant companies have to earn their initial capital by their knowledge of this simulation textbook. They write the electronic test.

The program administrator will send the e-test with about 20-30 multiple choice questions to the participants on a predefined date/time. Each question will have 4-5 possible answer out of which only one will be correct. The teams will have 24 hours to fill in the test and send it back to the program administrator by email. The more questions will be correctly answered, the higher will be the percentage earned. Minimum capital earned can be 6 million BSD, maximum is 9 million BSD. If the team will pass the deadline for more than up to 10 hours, the team will be fined by 500 K\$. If the team will not send the answers to the test within 34 hours, the team will be disqualified from the round.

The elements of scenario

The scenario is the specific economic situation in the virtual business reality, where the companies operate.

The important role is plaid by the NewsPage, that is delivered by the program administrator to each of the company for free together with their annual reports. This form is used to plan the following year. The information contained on the NewsPage is:

1. The current and forecasted rate of inflation;
2. The current economic growth and the forecasted growth rate;
3. The cost of storing the reserve products in stock;
4. The costs of hiring, recruiting and training of the distributors;
5. Marketing research and intelligence info package costs;
6. Global message;
7. Information about the distribution channel profits;
8. As soon as the first products enter the market the information about their cost price, technical specifications and the market price is delivered also;

This textbook is also a part of scenario as it gives lots of needed information before the start of program. The scenario also contains the start up package that is delivered to the participants from the very start of simulation.

Symbols

Several symbols are often used in the program. they all have their meanings.

K - means one thousand, for example, 100 K is the same as 100.000;
 \$ - BSD - is the local currency, for example 9 000 K\$ means 9.000.000 BSD;
 U - Unit, for example 100 KU is the same as 100.00 units of product;

Please note, that none of these symbols should be typed in the cells of the decision form by the program participants. You should enter only figures/digits. Failure to comply with this may result in fines and even losing the whole year.

The company report

The company gets the activity report after every simulated year is gone. It includes the following information:

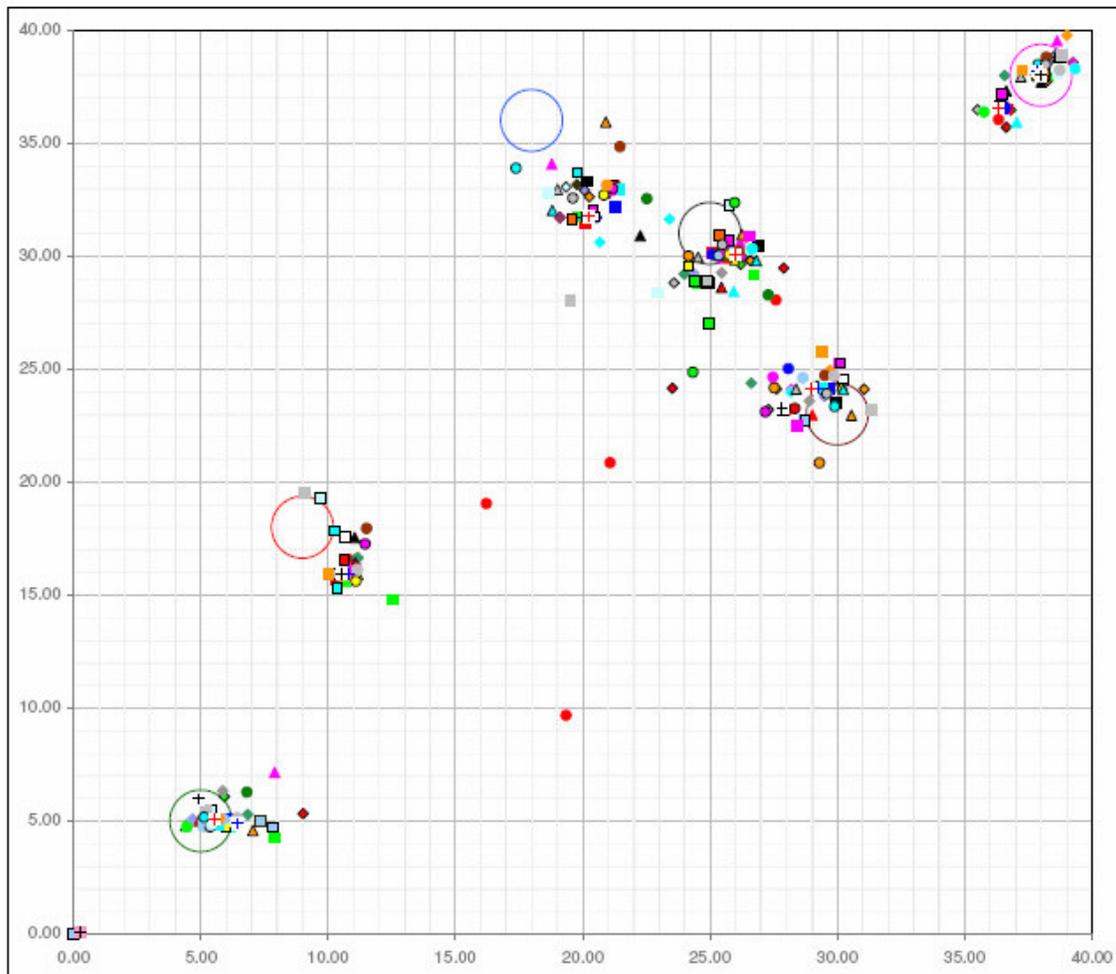
1. Financial results;
2. Distribution results;
3. R&D results;
4. Information about fines and bonuses;
5. Extraordinary costs and incomes;
6. Cumulative results including the last year;
7. Message;

Marketing research information package

The companies can buy marketing research information package for the price indicated on the NewsPage. Each of the researches has its own error probability of 5-10 %. Let us discuss them.

1. Perception map

We could explain the importance of this research by just simply saying: It is impossible to gain any significant success in B-STRAT without proper understanding this form. See the sample below.



This map can remind you Descarte's coordinate system from math. Horizontal and vertical axes each divided into 40 divisions with pictograms and circles on them each with its own coordinates ... looks like 1 2 3 ...

BUT,

No math can help you in understanding this map. Let us try to explain ...

Each of us evaluates any product in many ways. Some pay more attention to price, others to technical specifications. If we try to list the characteristics of the E-center, we would get hundreds of them in just 5 minutes. We could easily evaluate each characteristic and this all could create the summarized evaluation of the E-center. In addition, each person can have its own – different opinion.

Which of the characteristics of the E-center are important when making a purchasing decision?

Two of them would be price and quality. They are usually the most realistic ones that each potential buyer would consider first. Why only two? That is because all the other 99% of the characteristics can be united in these two.

PRICE is truly the important characteristic, but different buyers can perceive one and the same price in a different ways. For some buyers 200 BSD can be

miserably low price, but for other it can be very expensive. This evaluation is always subjective and depends on the buyer.

Conclusion:

One thing is the real price that can be 200 BSD, but its perception is completely different thing.

If we ask three potential buyers to evaluate the price of any product across the 40-point scale, we might get the following evaluation: 35, 20 and 5. They are subjective evaluations, but they are exactly those opinions that the businesses usually HAVE to deal with.

Let us take we have 15 different kinds of E-centers on the market. We can easily conduct the qualitative or quantitative marketing research to understand the opinions of the buyers about the prices of all 15 items across the 40-point scale. We can ask 100 people for example to evaluate all 15 brands.

We can definitely do that!

Each buyer would share his/her opinion and eventually we would get very important data. A bit of analysis and we can make a good point out of this data. Each brand would get evaluation on a 40-point scale. Some would get may be 7, some 15, some 19 etc.

This means that we can get the market evaluation of all the brands of the product that are on the market. Yes, that will be a subjective evaluation, but it is the reality in the minds of the buyers, this is the "truth" on the market and you got to work with it. Respect what the buyers think!

Now let us get back to the quality as a joint characteristic ...

Here the situation is quite complicated as the perception of a quality is much more diverse than the perception of quantity.

There can be numerous technical characteristics, which can play their role in defining the total quality of the product. No matter the number, it is identified that five of them are most important. Some buyers may think that design matters most, for others frequency is what matters most, etc.

Conclusion:

One thing is the true/real quality of the E-center, but its perception is completely another thing.

If we ask three potential buyers to evaluate the quality of any product across the 40-point scale, we might get the following evaluation: 33, 18 and 15. They are subjective, but they are exactly those opinions that the businesses usually HAVE to deal with.

Let us take we have 15 different kinds of E-center s on the market. We can easily conduct the qualitative or quantitative marketing research to understand the opinions of the buyers about the qualities of all 15 items across the 40-point scale. We can ask 100 people for example to evaluate all 15 brands.

We can definitely do that too!

Each buyer would share his/her opinion and eventually we would get very important data about the qualities of the brands. A bit of analysis and we could make a good point out of this data. The quality of each brand would get evaluation on a 40-point scale. Some would get may be 17, some 19, some 37 etc.

This means that we can get the market evaluation of the qualities of all the brands of the product that are on the market. Yes, that will be a subjective evaluation, but it is the reality in the minds of the buyers, this is the "truth" on the market and you got to work with it. Respect what the buyers think!

What do we got?

The price and the quality of any of the products can be evaluated on a 40-point scale. If we mark the dot with the same coordinates on our perception map where horizontal axes is price and vertical axes is quality we can get graphical representation of the market situation. We can mark all 15 dots on the map and voala ... this will be the mindplan of the buyers. We will be able to see which products are perceived in a similar ways and which are not.

Now let us go a bit forward ...

Let us ask each buyer [may be 100 is enough in our experiment] to give us the parameters of the ideal product for him/her in terms of price and quality and on 40-point scale. It is a simple task for a research. As a result, we could get the graphical representation of the ideal product characteristics for the buyers. We could have 100 dots on the map. After some analysis, we can see that some of the dots are close to each other. That can be interpreted as the buyers having same or nearly the same perceptions about their ideal products. The million-dollar question comes here: What is that?

We just identified the segments that you can see as circles on our sample perception map.

If we mark segments and products on the same map, we will get the document of the significant importance. We will see how each product is perceived as well as what the market wants.

So, what is perception map in B-STRAT?

It's a combined instrument showing the perception of each product on the market along with the needs of the market segments.

2. Market potential forecast

In order to plan better you got to have market forecast. The research can provide that. He initial situation is given from the very start. That includes segment volumes and growth rates. Important thing to know is that the actual volume will always be different than the forecasted one. Some segments may

develop more than forecasted, some even less. The companies determine that with their decisions that affect everything in the virtual world.

How to plan production better?

Consider the table below. The production should be planned for 01-11:

Product	Total Market Potential KU	Product Share on the Market %	Product Sales KU	Products in Stock KU	Market Forecasted Volume KU	What % of the Market wants the Product	Potential Sales KU	Production Volume to Plan KU
	1	2	3	4	5	6	7	8
01-11	3000	15	450	140	6000	12	720	???

1. Total market volume can be seen in the market forecasting form. Consider that to be 3.000.000 units;
2. The market share of a product based on the units sold can be seen in the company report. Consider 01-11 got 15%;
3. Actual sales of a product can also be seen from company report. Consider 450 KU of 01-11 was sold;
4. Product reserves in stock can be seen from the company report. Consider we still have 140 KU of 01-11;
5. We can find out the forecasted market demand from the market forecast form. Consider it to be 6.000.000 units;
6. The research of buyer intentions will tell us what % of the total market wants to buy the specific product. Consider it to be 12%;
7. To calculate the possible sales of the product: We know that market will take 6 million units. We also know that 12% want our product. That is 720.000 units;
8. If we forecast 720.000 sales and we have 140.000 in stock, respectively the volume we may plan to further produce is $720-140=580$ KU;

The logic is not undisputable, but can be used. You can also use any method that you consider effective. The companies have full freedom to choose whatever method they will consider useful.

3. Research of buying intentions

This research gives valuable information about the buyers' intentions: how many % of each segment of each market wants to buy each product.

4. Market shares across segments and products

This research summarizes the actual sales of each product in each segment

Intelligence information package

The companies can hire the detective agency in order to get intelligence data about the competitors. This is what is happening in the real business world and this is what happens in B-STRAT. If company has enough money it can spend money to get information. The detective agency gets the order, works for one year and submits the results at the end of the year. The intelligence report comes with the company activity report. The package contains:

1. Sales data

This tells you which competitor sells what and what kind of income the competitor gets.

2. Advertising and black PR data

Who spends what on advertising and who is appreciated with black PR costs.

3. The number of distributors, net profit, marketing budget, company public image

The respective data are contained in the report.

Finalizing the program

Once nine simulated years will pass all the companies get all the results from the administrator. If the products will be left in stock, they will be removed and sold into the outer economy with 90% loss. It is in the interests of the companies not to finalize with too much is stocks.

Detailed instructions for filling in the decision form

The decision for is the only form that the program participants fill in and send to the program administrator via email. The information in the decision form is entered in the form of numbers/digits. Below please find the sample decision form and the detailed instructions of filling it in. The guide is simple: you see the red cells and the number in them. Each number, which is what the respective cell should contain, is explained below:

Clarifications of numbers:

1. The red cell with "1" in it should contain the company name in the form of index. Sure your company may have more "human" name, but this cell is for your index, like c06;
2. If you plan year 4, so insert "4" here;
3. Insert product name in this cell, say 25-33. Note, that you can have 5 products on the market, therefore you have 5 lines in the product management section;
4. Here the planned production should be indicated. If you plan to produce 500.000 units, you should write 500 in this cell. Note, that KU means 1000 units;
5. The respective advertising cost should be indicated within the range from 300 to 1000 for each product. Note, that k\$ means 1000\$. When you write 300 in the cell that means 300.000 \$;
6. This is one joint cell as the company advertising affects the brand and each of the companies' products. The sums are the same as with product advertisements;
7. Write the number from 5 to 10;
8. Here you write the market price of the product. If you want to price it for 556 BSD write 556 in the cell;

9. If you want to do a sales campaign and do discount, write the percentage in this cell. Example: 15;
10. In the cells 10 and 11 you should indicate your target on the perception map. You should indicate the number between 0 and 40, for example 24.35;
11. Indicating the target in 10 and 11 is vitally important. This target tells the advertising campaign to properly position the product on the market. You can use the coordinates of the target segment and enter them in these cells;
12. Here in this cell you should enter the name of the R&D project;
13. Here you should write the name of the product that will be received as a result of the implementation of the R&D project;
14. Here you should enter budget for the R&D project;
15. In the cells 15-19 you should indicate the technical characteristics of the product;
20. Indicate the number of distributors in the first channel. Minimum 20 is must;
21. Indicate the number of distributors in the second channel. Minimum 20 is must;
22. Indicate the number of distributors in the third channel. Minimum 20 is must;
23. Enter number from 1 to 200 indicating your spending on the charity programs. This contributes to increasing the public image of the company;
24. Enter number from 1 to 200 indicating your spending on the community development programs. This contributes to increasing the public image of the company;
25. Enter number from 1 to 200 indicating your spending on employee satisfaction programs. This contributes to increasing the public image of the company and the mood of the employees;
26. If you want to buy and get the marketing information package next year, insert 1 in this cell;
27. If you want to buy and get the intelligence information package next year, insert 1 in this cell;
28. If you want to spend money on the black PR of any competing companies, [max 7] then just insert their indices in the cells 28, 29, 30, 31, 32, 33, 34. You can indicate one company only once;
35. If you want to spend money on the black PR of any competing company products, [max 7] then just insert their indices in the cells 35, 36, 37, 38, 39, 40, 41. You can indicate one product only;
42. The name and surname of the company administrator is written in this cell;

It is important to fill in this form attentively as each mistake can cost a fortune for the company.

Status							The form is	Free
Fill the form according to the instructions given in the B-STRAT textbook please.								
Company Decision Form								
Company Name/Index	1							
Year planned:	2							
Product Management								
Product	Production Plan [KU]	Product Advertising Budget K\$ [300-1000]	Company Advertising Budget K\$ [300-1000]	Advertising Research Budget % [5-10]	Product Market Price 200-600 \$	Sale % [0-20]	Target on Perception Map	
							Axis 1 [0-40]	Axis 2 [0-40]
3	4	5	6	7	8	9	10	11
Research & Development Management								
R & D Project Name	The Name of the Final Product	R & D Project Budget K\$	Technical Characteristics of the Product					
			1 (10-20)	2 (3-10)	3 (20-100)	4 (5-50)	5 (5-100)	
12	13	14	15	16	17	18	19	
Distribution Management				Public Image / Internal Climate Management				
Channel 1	Channel 2	Channel 3					Charity Programs - [0-200] K\$	23
[20+]	[20+]	[20+]					Community Development Programs - [0-200] K\$	24
20	21	22					Employee Satisfaction Program - [0-200] K\$	25
Information for Decision-making								
Marketing Research InfoPackage			26					
Market Intelligence InfoPackage			27					
Company Black PR [BPR] - 50 K\$								
Target Company Index >>>	28	29	30	31	32	33	34	
Product Black PR [BPR] - 50 K\$								
Target Product Name >>>	35	36	37	38	39	40	41	
Declaration of compliance								
<p>Hereby I confirm that I filled in this decision form according to the respective rules given in the B-STRAT textbook; typed in all the information in the respective cells, have not changed any element of the file format. I understand that any failure to comply to the instructions of filling this decision form may result in cancelation of the form and respectively in the losing of virtual year for my company. I understand that if I fail to comply to the instructions two times that can serve as ground for the program administrator to totally withdraw me/my team from the program.</p>								
Signature of the Company Manager				42				
Authorization from the Program Administrator								

Forming the strategic alliance

The strategic alliance is the nonformal venture of the companies that they can create in order to achieve a common purpose. For more than 13 years of existence of B-STRAT simulation, more than 40 rounds were arranged and alliances always proved their advantage. If the companies would manage to unite and create a joint strategy, their results were usually better as well as the chances to win.

The winning chances of the companies that will create an alliance can be due to three main reasons: 1) Elaborating and implementing a joint strategy, 2) alliance member usually do not undermine each other, 3) alliance member companies can black PR others in an organized way.

How to elaborate a thoughtful strategy?

Well, there is no recipe here, that is definitely not easy, but if you manage that, you may soon enter the circle of leaders. Note, that the strategy is effective if it gives planned results.

The minimum that the alliance member companies can do is not to undermine each other. For example not to black PR each other, do not cheat, do not lie to each other etc. They can negotiate and divide the market segments to work.

The power is in UNITY!

The companies can attack the competitors by the joint forces. For example the alliance members choose the target and all do black PR on that target. All the rest of the "negotiations" are up to the participants and their fantasy. Everything that is not prohibited in this program is allowed until the program administrator imposes a new rule.

How to form an alliance?

Your friends may participate in the program by their companies. Contact them and offer cooperation. Contact other companies and cooperate with them even if you do not know them. Remember, that thoughtful cooperation is a win-win approach.

Take into account that the program administrator does not monitor alliance creation and development progress. The alliances are not officially registered. This process is "boiled" between the companies and the administrator will never know anything unless told by the companies themselves.

The companies should also take into consideration that they need to find a way to ensure fair attitude from their partners. Lying, sabotage, information leakage are common problems in B-STRAT as well as in the real business world. However, this is up to the companies and their members. If you manage to fund a "cure" here, that is going to be your advantage.

Auction

The auction is the opportunity for the active participants of the simulation to buy the companies of those, who already failed and quit. This way they can live up those companies and make additional points. If the auction is planned within the round, it is appointed and conducted by the program administrator, who will also decide language, time and the instrument. SKYPE is usually the choice.

NOTE:

The auction is not conducted in all the rounds of the simulation. The participants usually get that notice from the start of the round.

Before the auction:

1. The program administrator makes the list of the companies for sale and provides that information to the participants;
2. Delivers auction rules to the participants by email;
3. All the participants of the auction should register in advance by mail. That is, they send the confirmation that they want to participate. The name, company index and the Skype account should be sent to the administrator by email [to be confirmed];
4. The program administrator will add the Skype accounts of the participants on his main account;

Rules of auction:

1. Only the active participants of the round can participate in the auction. Active means that the player has not quit the program;
2. The auction will be arranged on a specified date/time and the participants will be informed about that;
3. The program administrator decides how many auctions to arrange within a specific B-STRAT simulation round, or not to arrange at all;
4. The participants should have Skype accounts and they should send these accounts to the administrator by email;
5. The administrator can not be responsible for the internet connection failures at the participant sides;
6. All the individuals participate in the auction only with their virtual money. No one can take a loan;
7. All the individuals participate alone, without teaming with anyone else. The buyer can be only one individual;
8. All the deals are made by nominal amounts;
9. The deal can be canceled if it will be found out that the buyer did not have enough virtual money to buy the lot. The buyer will additionally be fined with the amount he was going to pay. If the action will be found to be intentional, the fine may be tripled. The final decision is made by the program administrator and it can not be disputed;
10. One individual can buy only one company on the auction;
11. The companies will be suggested to auction sales according to their index number. Lower index numbers will go first;
12. The total number of the companies to sell on auction will be predefined; some of them will be disqualified companies, some may be new ones. The program administrator forms the list;
13. When the individual buys the company, s/he gets the virtual money and the points earned by this company. The paid money is deducted from the number of virtual money that the individual has;

14. All the debts and profits as well as the public image index of the sold company are driven down to minimum. All this information will be provided to the potential buyers before the auctions;
15. The auction participant is not allowed to call the program administrator during the auction by phone;

The program administrator reserves the right to impose additional rules, or change/cancel existing whenever he considers needed.

Example:

Let us consider the company c07. The situation before the auction:
The total number of points of c07 is 40;
the total net profit of c07 up to this point: 100 mln;

Individual	– Ind. Points	– Ind. Budget
p025	- 10 Points	- 25 mln
p026	- 10 Points	- 25 mln
p027	- 10 Points	- 25 mln
p028	- 10 Points	- 25 mln

The individual by index p025 [that is the specific participant of the round] bought C99 Company for 17 million BSD, but p026, p027 and p028 bought nothing. Additionally, consider that after the auction c07 managed to get 8 points and 40 million and c99 managed to get 13 points and 30 million BSD profit.

The finalized results will be:

In case of p026, p027 and p028 individuals:
Each of them had 10 points and 25 million BSD before the auction. Out of the points and the profit their company got [8points and 40 million] each of them get additionally 2 points and 10 million. Therefore, each of them will have 12 points and 35 million BSD.

As for the p025

S/he had 10 points and 25 million BSD before the auction. c99 cost 17 million and this is deducted from his virtual money amount. At the end of the simulation, s/he will get 2 points and 10 million BSD out of his/her native company. Additionally c99 made 13 points and 30 million profits. Therefore, the total number of points and money will be $10+2+13=25$ points and $25-17+10+30=48$ mln BSD.

The winner will be identified based on the points made. p025 may earn a place in the list and the certificate according to the importance of his/her 25 points with respect to other participants' points.

The program administrator sends the auction report to all the program participants.

Investment Activity

Introduction

Each round of B-STRAT is usually finalized with the earned capital and points of the participant individuals and the companies. If the round is team based [that means the competition is between the teams] the capital and point numbers are not divided between the individuals. But if the competition is the individual one, which means the participants that are in all teams compete, then the earned capital and the total point number is divided and each individual gets $\frac{1}{4}$ -th part of its company's earned capital and points. This happens at the end of every virtual year.

Only if the competition is individual the participant persons have the opportunity to earn capital by conducting investment activities within the virtual economy.

NOTE: The only opportunity for the individual participant to do the investment activity is when the competition is individual. Here the winner can be individuals [not groups] and they get the places and prizes.

Capital and point distribution

The earning or the loss of the company and respectively the earned points if any are distributed among the company member individuals and each one gets $\frac{1}{4}$ -th part. If the company incurred a loss, then the points are not earned, and the individuals have to cover the $\frac{1}{4}$ -th part of the loss from their virtual capital.

When planning the first virtual year none of the companies and individuals has anything to start their investment activity with, so they stay idle. Consequently the investment activity can be started only after the first virtual year is gone and individuals have money to invest. Respectively they can already invest while they are planning the second virtual year.

Conclusion: The individual investment activities start when planning the second virtual year right after the first year results are sent out IF the year was successful. That means that the individuals have to have earned virtual money by that time.

Investment activity

Starting the second virtual year the individuals can invest their capital in 4 means:

1. State Treasury Bonds;
2. Private Venture Foundation - PVF/CI;
3. Private Venture Foundation - PVF/MOI;
4. Bank Deposit;

Clarifications:

1. State Treasury Bonds

The state treasury bond is the variation of a loan, taken by the government from the individuals. This is the way for the loan givers to earn the stable but comparatively low percentage of income on their investment. The percentage varies between 4.5, 5 or 5.5 % a year. Definitely the percents are low here but the income is guaranteed, which is the advantage.

The yearly percent depends on the following factors: the overall state of an economy, economic growth rate, the percentage of inflation, the overall tax withdrawn by the government from the companies, the overall volume of investment made in the state treasury bonds and its share in all the invested capital and other minor factors.

The upper limit of the investment of each of the individuals in the state treasury bonds is limited only by the capital of the investor individual. They have to decide themselves what share of their existing capital they will invest in this option.

2. Private Venture Foundation - PVF/CI;

This venture foundation is the outer private body, that attracts investments from the individuals and invests them into the private companies, those, who participate in the current B-STRAT simulation round. Investor earning is pretty volatile in this case and largely depends on the quality of the foundations activities which in its turn largely depends on lots of other factors, especially on the overall quality of the activities of the current B-STRAT simulation round participant companies.

Percentage income can be between -5 % and +15% yearly, that means there can be a loss too in the worst situation. That also means that the earning can go as high as +15%. There is no guaranteed earning here. The yearly percent depends on many factors like economic growth, level of inflation, the volume of money invested in this private venture foundation and its share in all the invested capital, the development of the markets, the volume of the NET profits of the companies, cumulative advertising spending, cumulative spending on black PR and other factors of minor importance.

The upper limit of the investment of each of the individuals in the private venture foundation - PVF/CI is limited only by the capital of the investor individual. They have to decide themselves what share of their existing capital they will invest in this venture.

3. Private Venture Foundation - PVF/MOI;

This venture foundation is the outer private body that attracts investments from the individuals and invests them into the existing market opportunities. Investor earning is also volatile in this case and largely depends on the quality of the foundations activities which in its turn depends on lots of other factors.

Percentage income can be between -10 % and +20% yearly, that means there can be a significant loss too in the worst situation. That also means that the

earning can highrocket as high as +20%. There is no guaranteed earning here as well. The yearly percent depends on many factors like economic growth, level of inflation, the volume of money invested in this private venture foundation and its share in all the invested capital, the level of the state tax and other factors of minor importance.

The upper limit of the investment of each of the individuals in the private venture foundation - PVF/MOI is limited only by the capital of the investor individual. They have to decide themselves what share of their existing capital they will invest in this venture.

4. Bank Deposit;

This is a typical investment in the banking sector. The bank attracts money from the individuals and pays the stable yearly percent from 5 to 7 %. Of course this can not compare with the maximum earning of the private investment funds but it gives stable earning, which is an advantage ... and this is attractive too.

The yearly percent can be 5, 6 or 7% and depends on many factors: the economic growth rate, the percentage of inflation, the overall tax withdrawn by the government from the companies, the overall volume of investment made in the bank deposit and its share in all the invested capital and other minor factors.

The upper limit of the investment of each of the individuals into the bank deposit is limited only by the capital of the investor individual. They have to decide themselves what share of their existing capital they will invest in this opportunity.

To summarize:

The individuals have to decide themselves how much and where to invest. Depending on their perception of a reality they need to evaluate themselves the attractiveness of each of the investment opportunities. The important thing is to stay within the limits of their existing capital. If the individual will plan to invest more that s/he has, the investment order will be canceled and no investment will happen.

The investment amount and the earning from the investment activities is becoming of vital importance for each individual as capital now plays significant role in the overall evaluation of the individual together with earned points. All the capital of the individual will be converted into points at the end of the round and will add up to the existing points of the same individual. The conversion rate is set by the program administrator at the start of the round. The total number of points will identify the winners and places.

The main idea: The individuals will not have any research, or prognosis, or data referring to the attractiveness of any of the ways of investment. They need to find the way out themselves, make right conclusions based on this manual and make wise choices.

Individual investment form

The individual invest form is a simple document of MS Excel that the individuals need to fill in and send to the program administrator by mail. The main form in B-STRAT is the decision form that is sent by the company to send the yearly plans to the program administrator. The investment form is strictly individual. The table below gives the idea about the main differences between the two forms:

	Individual Investment Form	Decision Form
Purpose	<u>Individual participants</u> conduct investment activity, they invest	The participant <u>companies</u> plan the virtual year activities
Responsible on filling it in	Individual participant independently	Company team
The sender	The investor individual, who sends the file from the email that is registered at the program administrator	The leader of the participant company team from the email that is registered at the program administrator
What should be the name of the excel file, that is sent by mail?	Each individual has its personal index like p045. File name should be exactly that	Each company has its index like c25. File name should be exactly that.
Delivery deadline	The yearly deadline set by the program administrator.	The yearly deadline set by the program administrator.
What should be written in the "subject line" of the sent email?	Program name, company name, company index, individual index separated by dash. Example: *** _ *** _ *** _ ****	Program name, company name, company index separated by dash. Example: *** _ *** _ ***

Only the differences are described in the upper table. All the other rules referring to the decision form are valid in case of the individual investment form as well [and listed in the rules & procedures file].

How to fill in the individual investment form

The individual investment form is the only MS Excel form that is filled in and sent to the program administrator individually by the program participants. The file is in MS 2003 format and this should not be changed. The form screenshot and the instructions are provided below. Some cells are red as u see with the figures in them. Each of those red cells should contain a specific content.

Clarifications:

1. The red cell with "1" in it the company name is indicated. This is the "human" version of the company name that is given by the team itself. For example: "Inspiration";
2. Here you write your company index. For example: "c05";
3. Indicate your personal name and surname if you fill it in and send it;
4. Place your personal index here if you fill in and send it afterwards. For example: "p055";
5. If you plan for year 4, place "4" here;
6. Write the amount from your existing capital that you are planning to invest in the State Treasury Bonds. Please note, that if you plan to invest one million BSD, you should write 1000000, seven digit figure;
7. Write the amount from your existing capital that you are planning to invest in the Private Venture Foundation - PVF/CI. Please note, that if you plan to invest one million BSD, you should write 1000000, seven digit figure;
8. Write the amount from your existing capital that you are planning to invest in the Private Venture Foundation - PVF/MOI. Please note, that if you plan to invest one million BSD, you should write 1000000, seven digit figure;
9. Write the amount from your existing capital that you are planning to invest in the Bank Deposit. Please note, that if you plan to invest one million BSD, you should write 1000000, seven digit figure;
10. Write your name and surname in this cell please;

It is important to fill in this form carefully. You should follow directions precisely and as described.

Status				The form is	Free
Fill the form according to the instructions given in the B-STRAT textbook please.					
Individual Investment Form					
Company Name	1				
Company Index	2				
Name and Surname	3				
Individual Index	4				
Year Planned	5				
Investment Management					
State Treasury Bonds	\$	6			
Private Venture Foundation - PVF/CI	\$	7			
Private Venture Foundation - PVF/MOI	\$	8			
Bank Deposit	\$	9			
Confirmation of Responsibility					
<p>Hereby I confirm that I filled in this form according to the respective rules given in the B-STRAT textbook: typed in all the information in the respective cells, have not changed any element of the file format. I understand that any failure to comply to the instructions of filling this decision form may result in cancelation of the form and respectively in the losing of virtual year for my company. I understand that if I fail to comply to the instructions two times that can serve as ground for the program administrator to totally withdraw me from the program.</p>					
Individual Signature				10	
Authorization					

Investment activity results forms

There are two forms that convey the investment activity results to the program participants and teams. The first one is the yearly document, where the investments of each individual and his/her earnings are listed for the last specific year. The second is the cumulative form uniting all the years' data into one file. From the transparency perspective both forms are free and delivered to all the participant teams/individuals every year together with the results' package.

Both forms will inform each individual about the earnings of competitors, but its impossible to get information about who invested where and how much exactly. All individuals have their own data in this respect and can be knows to others only if shared.

Disclaimer of the program administrator

There can be 100 teams and up to 400 participant individuals simultaneously in each B-STRAT round [at least theoretically]. If the individual investment form is not delivered precisely filled in as described, the form will be canceled and no investment for that individual and for that year will happen.

Strategies

Production strategies

Consider reserves in stock when indicating production plan

If you have products in stock but still want to indicate additional production you need to indicate only additional amount into the decision form. That is, if you have 50 KU in stock and you plan to sell 150 KU, just type 100 in the respective cell in the decision form.

Indication 0 as production plan

If you have products in stock and you think that it does not make sense to add/produce more, just write 0 in the decision form production plan cell. Your products in stock will automatically enter market. They will be automatically modified if you decide to do so.

Forecasting production volume

When planning the production volume you need to carefully consider what you win or loose if you will not be able to sell all.

In the short term perspective having a reserve in stock is not a problem. You just pay a bit for storage cost and you can always take those products on the market. Storage cost is around 10-20 % of the cost price.

If you think that you are producing the winning product, you will be interested to produce even more [beyond the real sales] as you can benefit from the economies of scale. The cost price will go down and your profit margin goes up as a result IF you will manage to eventually sell the entire batch. However, if you will not, the storage cost may destroy your business profits. Think before you plan!

If you remove product from the market all its reserves in stocks will be sold out in the outer economy for the loss to you. They will be sold for 10% of the cost price. The production department will take all cost price and you will suffer from 90% loss. The same happens to all the stocks at the end of the round.

Conclusion:

Having reserves in stock is ok in the short term perspective, but may create a major disaster if you will not be able to sell them by the end of simulation.

Sales

When the company plans a sales campaign it usually plans to sell higher volumes of products. However, before offering something for sale, you should first think all the possible results through: does it make sense? A sale for up to 20% is the opportunity that the companies can use in B-STRAT.

Advertising strategies

Advertising and black PR

Companies advertise their products and brands every year as well as they try to destroy the reputation of the competing companies and its products with black PR.

Black PR is an important tool to undermine competitor, its brand, its products. The target is usually selected according to the degree of threat to the company. Target can be selected based on the strategy defined by the alliance of companies. The joint forces in black PR can multiply the effect.

Important thing to consider:

If the volume of money spend by all the companies in the economy on a specific target is high enough this may generate scandal, which may positively affect sales of the target products and companies. That is because scandal is a free advertising and if managed properly that may generate even more positive effect than the negative one.

The effect of former advertising spending

The advertising that was done during the previous years will affect several consecutive years. The higher the old advertising cost, the better it is for sales.

However, it is becoming a problem when repositioning a product. The larger the volume of old advertisement costs, the harder is to reposition the product to the desired point on the perception map.

Distribution strategies

Leaving the same number of distributors

The company can leave the same number of distributors that it had previous year. The marketing budget will cover only annual salary of distributors in this case.

Adding new distributors

If the company will add new distributors, it will have to pay all three costs on each distributor: salary, recruitment, and training.

Reallocating the distributors between the channels

The company can reallocate distributors from one to another channel. The decision should be based on the company preferences.

Research & Development

Defining the budget for the R&D project of a specific product

There is a formula in the textbook that helps the companies to define the budget for the project according to the product specifications.

If the company makes a mistake in calculations and allocates less budget than needed the project will still be done, but the additionally money will be taken from the marketing budget. That is ok if you have left some money unspent. However, if not, you may eventually get deficit in the budget, which will result in 1.000.000 BSD loss in the marketing budget of the following year.

Note that you are unable to calculate the exact cost price of the marketed product in advance. The only way to get the exact figure is from the company report that is received after the year is gone.

Marketing budget

What actually marketing budget is?

This is actually the "right to spend a specific amount of money" on marketing activities of a company for a specific virtual year. You do not have this money at hand. You should plan your future marketing activities within this money. The budgets may differ from year to year but the principle of its formation will always stay the same.

Saving the budget

One strategy the company can use is to save some budget this year to use it on the next year. You can save up to 1.000.000 BSD. This saved amount will be added to the next years marketing budget totally. If you will save more than 1.000.000 BSD, the amount over 1KK\$ will be lost. One of the reasons to save the budget this year is to keep that in order to support the new product next year. The companies can find many reasons to save as well as many ways of use of the reserved money.

Bonuses and fines

The bonuses and fines are the important elements of the program that affect the companies, specifically their marketing budgets.

	Rule	The fine for violation [k BSD]
3	If the company will send the decision form for up to 5 hours late. After 5 hours the form will not be counted.	250
4	It is vitally important for the teams to use EXACTLY that excel file, which they received from the administrator when the program was starting. The teams should not change the formatting of the decision form; they MUST only enter the figures in the right cells. The excel file should be in the format of Microsoft office 2003.	500
6	Marketing budget limit violation	1,000

The company will get bonus 300 K\$ if the decision form will be provided on a due time and the team will not get any fine.

Repositioning strategies

Repositioning is the process of changing the buyer perception of a product.

When the product first enters the market the buyers usually formulate their ideas/views about this product. The kind of created perception is much dependent on the efforts of a business company that advertises the product as well as on the readiness of the buyers themselves. Additional money spent on the advertisements may strengthen that initially inserted image/perception in the minds of the buyers or change it in the direction preferred by the business company. This process is not easy, but it is possible. Some tools of repositioning are changing of the market price, changing of the quality and targeted advertising campaign.

Repositioning by market price manipulation

All the products should have their market prices since their introduction. The companies can change that price from time to time in order to make more

money or loose less. Price is the criterion that is important when the buyers make the purchasing decision so its changing may change the perception of a product. Lowering the price may result in lowering the demand form the prestigious segment for example; heightening of price may result in loosing the price sensitive segment. Still, repositioning by changing the market price is possible.

Repositioning by changing the quality

The company can modify the technical characteristics of the products every year that is it can regulate the actual quality. Each technical characteristic has its weight in the total quality of a product so the team can calculate the quality change percentage [if they will find out the way].

Repositioning with targeted advertising campaign

Repositioning with targeted advertising campaign is always done as for each product the team needs to indicate the target on the perception map in the product management section of the decision form. Those targets are set for the advertising campaigns to target them to the needed position. That is how the product should be presented to the buyers.

Repositioning from segment to segment

This means that the company tries to present the product to other segment to make them like and eventually to buy the product. That is present the product in such a way, to associate it with the ideal product of the target segment. The product will get closer to the target segment on the perception map if everything is done properly. How closer will it get to the point depends on many factors including advertising spending and a bit of luck too.

Hitting the segment

This means that the product perception is the same as the perception of an ideal product for the segment. This rarely happens, but it is possible. The product is in the center of the segment circle on the perception map in this case. The closer the product is to the target segment, the better the sales in that segment will be in general.

Partner relationship strategies

Leadership and delegation of responsibilities

Each companies have administrators, elected. S/he may be in touch with outer bodies in the name of the company. However, the leadership does not mean to make all the decisions solely. Developing the team spirit within the company member individuals is important and it depends on the teams itself. Delegating the responsibilities is not recommended. Better each to be aware of all aspects of a company.

Treason

Treason can be done in many forms and refers to any activity that is done by any member of a company that somehow damages the company. Being late on the meeting and the shadow deals with the competitors are just some of those actions.

Consensus is the best way to make decisions. Company members should use the resource of negotiations to the maximum extent possible.

Working with segments

What do the segments want, the products with the best technical characteristics or products that fit the requirements in terms of price and quality?

The segments do not just think with only REAL market price or REAL quality, they have their perceptions about both and these perceptions are depicted on the perception map

Pricing strategies

How does lowering of price work?

Price is usually lowered in order to get more sales, but that may not be the result. Price can also be lowered in order to reach the repositioning purposes. When doing that the perception of a product will change and where it will stop no one can know exactly. This new position will highly determine the actual sales.

Pricing competition

Pricing competition works in this virtual reality, but hitting the product closer to the target segment on the perception map is much more important.

Negotiation between the companies, individuals

All the competing companies and individuals can perform any kind of negotiations that are not prohibited by the rules of the program defined by the program administrator.

[The document was last updated on Sep 12, 2011]