

MARKETING
STRATEGY



LABSAG
MARKESTRATED

USER'S MANUAL



CONTENT

| | |
|--|----|
| INTRODUCCTION | 3 |
| THE WORLD ACCORDING TO MARKESTRAT..... | 7 |
| 1. Industrial Structure..... | 7 |
| 2. Intra-organization structure | 7 |
| 3. Market Structure | 9 |
| START UP PROCEDURES | 19 |
| Strategies | 19 |
| Using the Perceptual Map: example | 20 |
| Designing a Marketing Plan | 25 |
| The Budget | 26 |
| Marketing Plan form..... | 26 |
| INSTRUCTIONS FOR PARTICIPATION | 27 |
| 1. Introduction | 27 |
| 2. General Explanation | 27 |
| 3. Which products do exist in the market? | 28 |
| 4. How is the “Decision Sheet” filled out?..... | 28 |
| 5. Which results are emitted? | 31 |
| 6. Which market studies may be acquired? | 32 |
| 7. Useful recommendations | 34 |
| APPENDIX 1..... | 40 |
| MARKESTRATED: REPORT FIRM 5 PERIOD 3 | |
| APPENDIX 2..... | 44 |
| MARKET RESEARCH STUDIES | |
| APPENDIX 3..... | 53 |
| Perceptual Objectives Specifications of Semantic Scales Data | |
| APPENDIX 4..... | 55 |
| FREQUENTLY ASKED QUESTIONS | |
| APPENDIX 5..... | 60 |
| IMPORTAN CONSIDERATIONS | |

I

INTRODUCTION

Over time, teaching methods have been incorporating new techniques and aids for the purpose achieving a greater participation in the learning process.

The most elementary pedagogical method is the teacher-student vertical situation in which the first dictates and the second takes note and learns. This is a very passive relationship. If we take dictation as a pedagogical basis, we see that, in order to gain a better understanding of the subject of study, audiovisual aids (slides, films, etc.) are incorporated at first. However, despite obtaining a vision of the problem under study, the participant still maintains a passive position regarding the solution

One technique that allows subject participation by the subject is the development of work meetings based on cases, in which, through directed exercises, the participant contributes their ideas to the solution of the problem in a group setting. An even more active method is through a Role Play, where the participant is an active part of the solutions raised.

Thus, we arrive at simulations. Their main objective is to observe and learn from the consequences of different decisions without incurring the costs or risks of their actual implementation, through the creation of their representative model of simplified real conditions.

In this specific case, the MARKESTRAT / ED model concentrates mainly on the marketing functions of the company and on the elements of the environment that have a greater impact on these functions. The other functions have not been deliberately minimized, because the case modeled in the simulator corresponds to that of a trading company and therefore does not depart from reality. There are many companies dedicated exclusively to commercialization, subcontracting production and depending financially on the budgets assigned to them by the parent companies, as in the scenario of Markestrat.

Simulation becomes a learning tool, where it occurs in a competitive and stimulating environment. Compared to the traditional approach of the case method, simulation provides a much more dynamic situation in which different courses of action can be tested and modified. Compared to reality, this simulation reproduces satisfactorily the main aspects but compresses the time, reducing costs and, of course has fewer risks.

Participant Requirements

By participating in a simulation, you will immediately find yourself in a dynamic and very competitive situation. This requires some knowledge of Economics, Basic Statistics *, and accounting rudiments, because in Markestrat the Income Statements are transparent in the sense that the profits are the result of subtractions on the sales revenue of each product, which corresponds to an organization based on "utility centers" rather than simple cost centers.

Special attention should be given to understanding how the Pyramid of the Hierarchy of Effects works, and how to interpret market studies. A helpful text to understand the studies is Naresh Malhotra's "Market Research: A Practical Approach" published by Prentice Hall.

As a text guide on the concepts and techniques of Marketing we recommend Philip Kotler's "Directorate of Marketing" published by Prentice Hall. The chapters that can be revised from this text are the following:

- Chapter 3 "How to establish bases through market-oriented strategic planning"
- Chapter 4 "Process Management and Marketing Planning"
- Chapter 11 "Identification of market segments and selection of target markets"
- Chapter 12 "Differentiation and positioning of the market supply"
- Chapter 13 "Development, testing and launching of new products".

From these Chapters 3 and 4 must be read before making the decision for Year 2. Chapter 11 on segmentation illustrates how the segmentation that is already operational in Markestrat was achieved. Chapters 11 and 12 should be read before the decision for Year 4.

A more recent text by the same author is "Marketing Direction - Millennium Edition", published by Prentice Hall, 2000. The chapters to study are:

- Chapter 3 "Winning Markets: Market-oriented Strategic Planning".
- Chapter 9 "Identifying Segments and Selecting the Target Audience".
- Chapter 10 "Strategies for positioning the marketing offer throughout the product life cycle".
- Chapter 11 "Developing New Market Offerings".

Markestrat Scenario and Objectives

Markestrat operates in a market where the price is alternated with other variables to produce demand, corresponding to markets in which the economy is not simple, that is to say, those where complex and branded products are traded,(unlike commodity markets, where no producer can influence the price). Decisions will be made based on the public information available and, from Year 1, based on the Market Studies ordered. The consequences of several months of simulated activities will be obtained quickly. Learning will be achieved by testing different actions and interpreting the behavior of competitors. In the final session you will be able to know the strategies used by your competitors and to associate them with the results achieved. You will also gain specific experience in strategy.

Markestrat allows the practice and evaluation of marketing strategy concepts. You have been recruited as an executive of a marketing division of a large corporation. The previous management team has left a background, Year 0, quite succinct because it did not want to order market research studies, preferring to use publicly available data about the environment and even about the two products that were left in their hands. This is a common behavior. You will have to analyze and interpret this process to decide whether to continue the path they have set, change it radically, or draw a middle course. Each of the five competitors receives a somewhat different backgrounds from the executive team they replace. The members of the new team do not have direct experience in the world of Markestrat. They will compete with four other companies formed by executives in the same situation. During the simulation you will make several decisions:

- Market strategy: target segments and positioning of their brands among them.
- Analysis of strengths and weaknesses of your products and those of your competitors.
- Specification of production plans in specific volum
- Fix and select the elements of the marketing mix: price, advertising, sales force.
- Strengthen current products or launch new ones in coordination with R & D.
- Order market research studies for Year 1.

Markestrat function

Markestrat focuses on the company's marketing functions, and on the market's elements that have the most impact on these functions. Special emphasis is placed on the main elements of the marketing strategy: positioning and segmentation. In Markestrat, as in reality, marketing mix: elements such as product, distribution, price, advertising and sales force policies are considered as a means to implement a global marketing strategy. This is reinforced with the duration of the decision periods that are equivalent to one year, and therefore, the participants are in effect implementing an Annual Marketing Plan. The simulation should extend between six and ten periods, the equivalent of 6 to 10 years, a sufficient horizon to test marketing strategies. The other functions such as finance, production or even Research and Development, are involved in Markestrat as a corporate profit center only as a support of the market strategy .

Several market studies can be purchased at Markestrat, from Year 1, to assist in decision making. In addition to traditional studies such as surveys, panels, and sales forecasts, Markestrat offers more sophisticated information such as Perceptual Maps and Experiments on Sales Force and Advertising. Each of these is explained in this Handbook.

II

THE WORLD ACCORDING TO MARKESTRAT

The Markestrat market is represented by a population of approximately 250 million inhabitants. Its monetary unit is the dollar (\$) and the global behavior of its market is equal to most durable consumer goods markets, being affected by inflation and the growth of GNP, (both fairly stable), and in general being applicable to the principles accumulated by the experience in business.

1. Industrial structure

Five companies compete in the MarkeStrat market, each marketing with two brands which make a total of ten competing brands. Products are similar to medium appliances but companies can cancel a brand and introduce new ones changing their physical attributes. Companies can market up to five brands each in MarkStrat

The companies start with different backgrounds, performance and initial situations although none has a particularly advantageous situation over the other at the beginning of the simulation if the long term is taken into consideration. The immediate impact of this is manifested in different competitive positions clearly noticeable in market share, level of brand awareness by consumers, as well as in the level of penetration of brands in distribution channels. Thus, the development of a marketing strategy for a company must arise from its peculiar situation in the industry. Similarly, the final results of the simulation should be compared to the starting point.

2. Intra-organization structure

In all companies, the executive team is responsible for the design and implementation of their strategies, as well as their operations. In addition, it is responsible for the general orientation of the company, being able to make decisions on the levels of production for each one of its brands. It can also carry out research and development projects that lead to the introduction of new brands or modify existing ones.

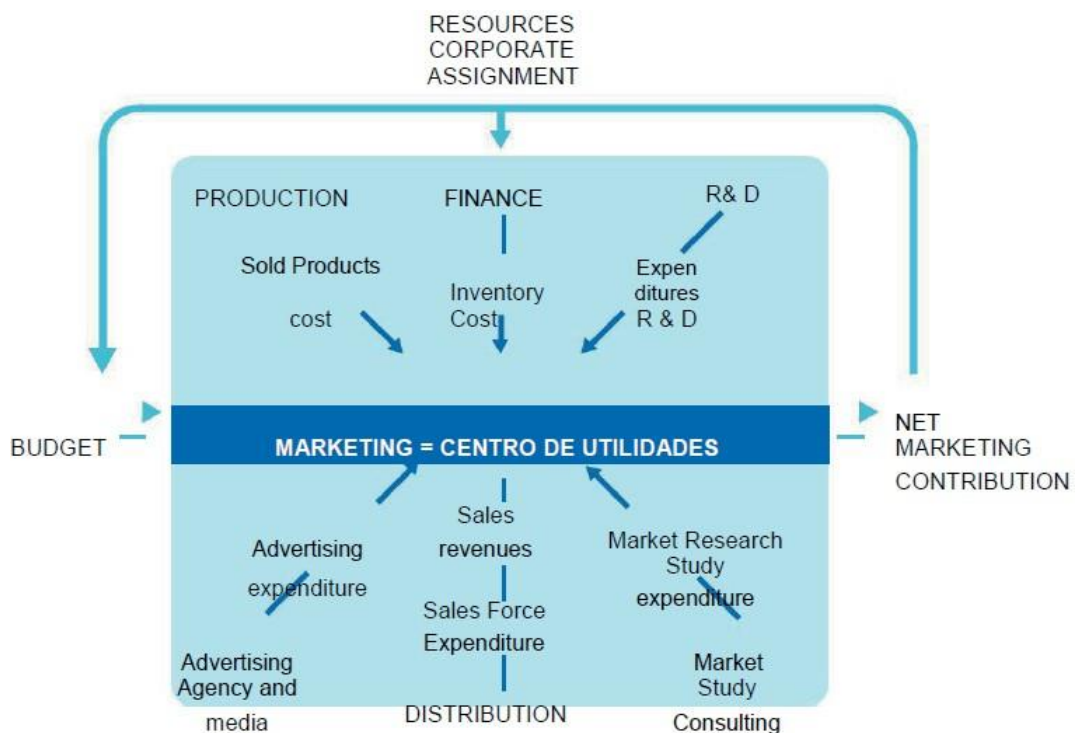
How the following costs and expenses will be assumed by managers of a trading company:

- a) Production Transfer Cost: units produced according to the Marketing Plan are charged to your company at an internal transfer cost which represents the cost of production. The transfer cost can be reduced by means of R&D.

- b) Storage costs and excess inventory costs due to overproduction.
- c) Research and Development project costs.
- d) Advertising.
- e) Sales force.
- f) Market research expenditure.

The performance of the marketing company as a profit center is measured by Net Marketing Contribution, obtained from total sales revenues minus costs of products sold (data that will be printed) and expenses detailed above.

The new management has therefore considerable decision making power over the general marketing strategy of the company being empowered to affect the goals of other profit centers of the corporation, such as Production and the Research and Development Centre, but is also completely responsible for the inefficiencies that may be caused. They are not engaged in financial problems or cash management, since they receive a budget which they cannot surpass but that will increase as the Net Marketing Contribution increases.



3. Market Structure

The MarkStrat market demand has grown very slowly over the last 20 years. After several technological breakthroughs, products have begun to attract more customers and only recently the rate of growth of demand has begun to show an interesting rate. The current market is well established, with five major competitors, and well organized distribution channels. During the years the companies in the market have acquired knowledge of consumer behaviour, of established industrial practices, and of the macro-economic characteristics of the market itself.

a) The products

Products in the MarkStrat market belong to the Sonite category, a new electronic sound equipment, which is a relatively sophisticated manufactured product. Products have five different physical attributes and one cost component. At the start of the MarkStrat world, physical attributes of each brand and cost components are well known and are displayed in the following table.

Table 1

| BRANDS | Attributes | | | | | |
|--------|----------------|----------------|--------------|----------------|-----------|--------------------|
| | Weight (lbs.) | Design (Score) | Volume (Dm3) | Max.Freq (Mhz) | Power (W) | Transfer Cost (\$) |
| SAKA | 11 | 9 | 20 | 25 | 10 | 100 |
| SATO | 12 | 9 | 37 | 25 | 30 | 125 |
| SERI | 18 | 7 | 51 | 30 | 85 | 160 |
| SEFA | 14 | 5 | 65 | 40 | 90 | 200 |
| SIMO | 10 | 3 | 50 | 20 | 10 | 50 |
| SICA | 11 | 9 | 35 | 25 | 20 | 100 |
| SOTO | 17 | 7 | 50 | 30 | 70 | 163 |
| SOLO | 10 | 3 | 70 | 20 | 90 | 180 |
| SUXI | 10 | 3 | 50 | 25 | 20 | 70 |
| SUTE | 15 | 6 | 40 | 20 | 70 | 175 |

It is easy to recognise each brand through the four letters that make up its name. The first letter denotes membership in the Sonite market, the second is a vowel identifying the company ("A" is company 1). The last two letters identify the brand and can only be used once in R&D as they give the brand its unique personality.

Production costs are evaluated based on the average variable cost per unit incurred in the production of the first 100,000 units of a given SONITE. This means that above 100,000 units the average variable cost will tend to decrease, being able to decrease up to 20% if the volume of production is doubled to 200,000 units. The opposite, if the number of units is less than 100,000 units, will mean much higher average variable costs than indicated.

The companies, if they consider it advantageous, may invest in the development of projects in order to modify the attributes of their brands or develop a new one, according to their positioning strategy. These modifications may include their costs to better serve the needs of each segment, ie to achieve a better positioning. The changes will represent changes in the physical attributes and the average variable cost. The improvement of brands and the introduction of reformulated or completely new brands naturally depends on the ability of companies to design projects that can be successful in the Research & Development Center, another center of utility of the parent corporation. All new brand names must follow the same trademark conventions: S as the first letter, and the corresponding vowel as the second. The latter two are freely chosen but their selection will have no influence on the market's reaction to the new brand

b) New Technologies

Recently the advent of a new technology has been announced, which will allow the development of a very different category of products, the Vodites, a category with technical attributes that can be manufactured and assembled in the current production facilities, using components of this new technological breakthrough.

The new Vodite category has been designed to completely satisfy different consumer needs in contrast with Sonite's but can be sold through the same distribution channels. Nothing is known yet about what market reaction will be to Vodite's. The brand names in this new market start with a "V", using vowels to designate companies.

Knowledge about the Vodite market is very scant, but it is believed it will follow the same sort of life cycle of the Sonite's. The main physical attributes of Vodite's are as follows:

1. Autonomy (m)
2. Max. Freq. (1000 HZ)
3. Diameter (mm)
4. Design (score)
5. Weight (lbs)
6. Cost (\$)

c) Consumer Behaviour

Decision making units are households and persons 18 or older. Several studies performed during the last years have uncovered five segments with different characteristics and consumer behaviours. The segmentation below is completely exhaustive, that is, all consumers fall in one and only one segment.

The fans Segment 1: very enthusiastic about the category, and the most technically knowledgeable. They can distinguish precisely between the many technical features of products and are constantly aware of innovations. They are the most interested in product quality and technical features.

The Unattached (Segment 2): single people and single-households; they are not as technically proficient as the fans but they demand good product performance. They are intensive and heavy users of the category.

The Educated (Segment 3): well educated professionals with above average earnings. They have very independent minds and like to entertain socially. Purchases of consumer durables and gadgets are motivated by a desire to maintain a high social status.

High Income (Segment 4): consumers with high incomes but not very high education; less independent and opinionated than Segment 3.

The Remaining Mass (Segment 5): People who do not belong to the other four segments. They represent the largest proportion of the market's population. It is the segment least penetrated by the Sonite technology.

The segment of Fans generally represents the most intensive users of Sonite's accumulating the largest number of units bought, 30 % of the total. Segment 3 accounts for 20 %, segment 5, 19 %, segment 4, 16 % and segment 2, 15 %. Industry sources acknowledge, however, that each of the five segments is in different stages of development in terms of usage and this reflects upon their different rates of market growth. Nevertheless, the entire Sonite market has had a mean rate of growth of 35 % over the last three years. Segment 1 has stalled; segments 2 and 5 have grown 25 % and 30 % respectively, while segments 3 and 4 have grown at twice that rate.

d) Distribution

Channel 1: Specialized gadget stores which carry Sonite's in their inventory as well as other minor home appliances and gadgets. These stores offer installation and maintenance services.

Channel 2: Appliance stores sell a complete line of appliances and gadgets for household use.

Channel 3: Department stores carry a very large variety of goods and may have a home gadget department.

It has been estimated that there are about 3,000 stores in channel 1, 35,000 in channel 2 and 4,000 in channel 3. All these stores can potentially distribute Sonite and Vodite brands but each channel differs regarding brand penetration and how much they attract customers from each market segment. There are also differences in the margin each type of store charges, differences that are caused by the volumes purchased and the level of service offered to store customers. Margins are expressed as a percentage of final recommended retail prices and are the same for all brands inside a certain channel. The percentages are 40%, 35% and 40% for channels 1, 2 and 3 respectively. The margins represent an industry practice that has been maintained over the years and nobody is willing to change them.

e) Prices

Companies in MarkStrat fix a recommended retail price for each brand. These prices are accepted by all channels except during promotions, but these never last more than a week and so they represent a very small proportion of sales. The overall annual average price is always very near the recommended retail price. During the last three years prices for Sonite's have increased regularly following inflation. The most common error found in MarkStrat is to forget to include in the final recommended retail price the percentage of margin that the store will charge for sales. As a general rule of thumb retail final prices should be set at between three and four times the transfer cost.

f) Sales Force

In order to be able to satisfy each channel's different needs and requirements salespeople are organized by each distribution channel. Each salesperson sells the complete line of company's brands. Companies can reassign salespeople from one channel to another channel without incurring any transfer costs. The size of the sales force can be changed by incurring discharge costs, training costs and salaries. Changes in the size of the sales force influence the degree of channel penetration of each company's brands

g) Advertising

It is the practice of the MarkStrat companies to advertise each brand separately rather than investing in generic category campaigns but the aggregated investments in communication have benefited the entire industr .

There are two kinds of advertising investments. The largest part is committed to purchasing space or spots in the media and the smaller is dedicated to advertising research. On average companies spend 4% of their sales in advertising. About 5% of their advertising budget is allocated to advertising research performed by advertising agencies devoted mainly to the selection of media, pre-tests, post-tests and specially copy-testing. Companies can increase the proportion dedicated to advertising research if they want to achieve greater effectiveness in their communication efforts.

h) Marketing research

MARKESTRAT companies must purchase at least one of the 15 studies available to marketing consulting firms. These studies are described belo .

i) Research and Development

The management team can send a request to the R&D Center, another profit center of the parent corporation, specifying the projects to be developed to improve existing brands or to introduce new ones.

The R & D project is requested indicating a project name, a budget and the complete physical characteristics of the desired product. The project will take a full year to develop. In the following year's results, the company will know if the project was successful or not. If it was not, the R & D report will indicate why it could not be developed, the attribute responsible for the failure, and the investment required to overcome the obstacle. In this case, the additional funds requested for the project should be allocated plus expected inflation, without changing the name of the project and repeating the physical characteristics, except for the one that must be modified according to the R & D report. The alternative may be to abandon the project but then you would lose all the investment

made. If only one of the characteristics of the desired product is changed (except cost) it would mean registering a new project with a different name, losing the investment made.

If the R & D project is successfully completed, your company can use it in two ways: to modify an existing brand, or to introduce a new brand. The project name does not restrict the application to a brand. For example, the approved PSARO project can be used to modify the existing SALT brand or to launch a new SATE brand. Alternatively, the company may choose not to immediately launch a new product, leaving it for the future. Given the delay between project and launch, the Marketing R & D relationship must be handled with great care.

A request to the Research and Development Center consists of a project name, which must be unique, in a budget and in the values of the physical characteristics that the new product should possess. Project names begin with the letter "P". The second letter should be an S if it is a Sonite or a V if it is a Vodite. The last three letters should be selected to represent the project key, and this key must be unique, ie the last three letters of an existing product should not be used. All projects must have a different complete name. In the past, each company was able to complete R & D projects with which its two current brands were launched in Year 0.

The budget for a given project represents the investments that the company is willing to make so that the Research and Development Center tries to develop the specified product during the next year. This amount must be covered by the marketing budget. When specifying the physical characteristics of the desired product, managers should evaluate the opportunities of any alternative offer.

The values of physical characteristics for Research and Development projects should be prescribed in appropriate units and in the feasible ranges indicated in Table 2. The last characteristic for both SONITES and VODITES represents the average variable cost per unit in the production of the first 100,000 units of a new product

In Year 0, a successful project for a Sonite would cost between \$ 100,000 and \$ 1 million, depending on the degree of differentiation between the desired characteristics of the project and the cost characteristics of the company's products. To develop a Vodite, industry experts believe it will be necessary to invest a minimum of \$ 2 million in R & D.

Table 2

| ATTRIBUTES | | Feasible Range |
|------------|------------------------|----------------|
| S | 1. WEIGHT (KG) | 10 – 20 |
| O | 2. DESIGN (SCORE) | 3 – 10 |
| N | 3. VOLUME (DM3) | 20 – 100 |
| I | 4. MAX FREQUENCY (MHZ) | 5 – 50 |
| T | 5. POWER (W) | 5 – 100 |
| E | 6. COST (\$) | 50 – 500 |
| S | | |
| V | 1. AUTHONOMY (M) | 5 – 99 |
| O | 2. MAX FREQUENCY (MHZ) | 5 – 20 |
| D | 3. DIAMETER (MM) | 10 – 100 |
| I | 4. DESIGN (SCORE) | 3 – 10 |
| T | 5. WEIGHT (KG) | 10 – 100 |
| E | 6. COST (\$) | 50 – 500 |
| S | | |

Research and Development has to develop a product with established physical characteristics, but also has to find the raw materials and technology that will allow production at the specified cost. The more rigorous this economic restriction, the more difficult it will be for Research and Development to develop the corresponding new product. If the new product is eventually marketed, the transfer price will be determined based on this cost, but may vary depending on the quantities produced and learning effects, as well as inflation

Research and Development can simultaneously receive up to four projects. If a project does not end successfully in a year, and is unlikely to be successful in the future because the specifications are too rigorous, this will be indicated by Research and Development in a special message printed on the results. If a project is not completed due to lack of funds, Research and Development will communicate an estimate of the additional budget that would be necessary to complete it. It is enough to feed that quantity, repeating the other physical characteristics, and without changing the name of the project, so that R & D makes a second attempt. The probability of success of a project depends mainly on the cumulative costs incurred and the degree of similarity between the desired products and the existing products. Research and Development is also a profit center and in this way will use all the funds allocated to it in the course of a year.

The following Technical Note explains in detail the use of Research & Development
Technical Note on Research and Development.

When a project is submitted to the R & D department, the physical characteristics presented are compared with those of the company's existing products.

Project to reduce costs

This establishes if the company has the ability to produce a prototype of those specifications. If the first five characteristics of the new project are identical to those of a current brand, or an earlier project, then the new project clearly intends to improve the cost of a product already available. The cost of this product may be the cost of transfer if it is marketed and therefore has benefited from the production experience curve, or the sixth feature of the project. The "normal" budget that would ensure the successful completion of the project can be estimated as \$ 10,000 for each \$ 1.00 reduction in the cost of production adjusted for inflation. For example, a \$ 50 reduction in the cost of a product will normally require an R & D budget of \$ 500,000 in Period 0, and more later to reflect the inflation of 9

Other projects

However, if at least one of the first five characteristics of the project differs from the existing products of the company, this will indicate that the development of a new product is sought and not simply the reduction in the cost of an existing product. In the case of the product sought, being new, there is no reference production cost. Here the "standard" cost is calculated as a linear function of the first five characteristics. For example, increasing one unit (Wat) in the fifth physical characteristic (Power) can be expected to increase the cost of production by \$ 1.5 / unit. The increases in standard production costs caused by increments of one unit in each characteristic are as follows (for Period 0).

Table 3

| Type | Weigh/Auton | Design/Frec | Vol/Diam | Frec/Des | Power/weigh |
|--------|-------------|-------------|----------|----------|-------------|
| Sonite | \$ 0.15 | \$ 4.70 | \$ 0.25 | \$ 0.80 | \$ 1.50 |
| Vodite | \$ 1.00 | \$ 4.00 | \$ 1.00 | \$ 5.00 | \$ 2.00 |

The cost of transferring, brands in Period 0 is approximately equivalent to their standard cost calculated on the basis of these coefficients. The procedure for estimating the standard cost of a product before its development can be conceived as a relationship affected by experience. As an example, the standard cost of SAKA in Period 0 would be the following

$$11 \times 0.15 + 9 \times 4.70 + 20 \times 0.25 + 25 \times 0.80 + 10 \times 1.50 = \$ 83.95$$

While its transfer cost in Period 0 is \$ 100.

The following are the smallest differences between the five characteristics of the products to be developed and the characteristics of all current products. These differences for each characteristic are used to represent the effort that the R & D department will have to make to develop the new product given the existing technology in the plant. The same procedure applies to the sixth cost characteristic, calculating the difference between the requested cost and the standard cost as calculated above to represent the effort that the R & D department should make in the selection of materials and production processes.

The budget required to achieve a new product project is calculated on the basis of the effort required to change each characteristic compared to the standard cost, or to reduce the cost below the standard cost of production. Increasing by one unit (1000 Mhz) the value of the fourth characteristic (Maximum Frequency) for a Sonite would require a budget of \$ 20,000 in Period 0. The budgets required to change the first five characteristics in a unit and reduce by one unit the Sixth, cost, are the following, in thousands of dollars, for Sonites and Vodites:

| Characteristics | Budget (,000\$) |
|-----------------|-----------------|
| 1 | 30 |
| 2 | 70 |
| 3 | 15 |
| 4 | 20 |
| 5 | 20 |
| 6 | 10 |

The "normal" budget for a project is calculated as a linear function of the budgets required to change that characteristic. Once this normal budget has been calculated, it is possible to determine the probability that the project will succeed. If the requested cost is more than 30% higher than the standard cost calculated, the project can not be successfully completed. R & D will issue a report indicating what would be the realistic minimum cost and the budget required if the cost is not modified

In general the probability of a project depends on its distance from the "normal" budget. A project with 70% of the "normal" budget has a 70% probability of being approved.

j) Productivity

Unit production costs will tend to decline due to productivity improvements obtained from experience, although this effect can be cancelled by inflation. Notwithstanding inflation, costs should drop about twenty percent every time production volume is doubled.

k) The macro economic environment

The MarkStrat industry operates in an economy with a relatively high inflation rate of 9 % annually. This rate affects advertising, production, sales force, R&D and the costs of market research studies. The government might try to quell inflation by imposing price controls at any time.

III

START UP PROCEDURES

Strategies

The MarkStrat simulation will proceed during several simulated years, which means that a company's management team must formulate long term marketing strategies. Each decision logged on the Internet will represent an annual marketing plan. To access the web page you must have received at your email address an ID and a Password from the Professor in charge of the simulation.

Before registering a decision, however, your team must decide which strategic orientation to adopt in at least three fields

- Product strategy: how many brands and which brands to support.
- Positioning strategy: which segments to target and how products will be positioned towards them.
- Marketing mix: which combination of price, production, advertising and sales force levels to set and which channels of distribution should back the positioning strategy.

At the end of approximately 10 simulated years, your team will make a public presentation explaining the results achieved and the decisions taken which, during the simulation have been kept in secret as managerial prerogative permits, except for a few elements of public data such as sales, profits accumulated, changes in the physical attributes of products and the launching of new products. This type of data is always freely available in the industry specialized press. The performance of each management team will be measured mainly by the Accumulated Net Profit Contribution made to the corporation

For the start-up of marketing strategies it is essential to have knowledge of the environment, which can be achieved in several ways. The first is through the information provided at the beginning of the simulation in "company's backgrounds". There you can see the prices of your competitors, their market shares in money and units, which will measure the current situation of the company. A second way is through the purchase of information (market research) to marketing consulting firms that go beyond public data to understand what is really happening in the market.

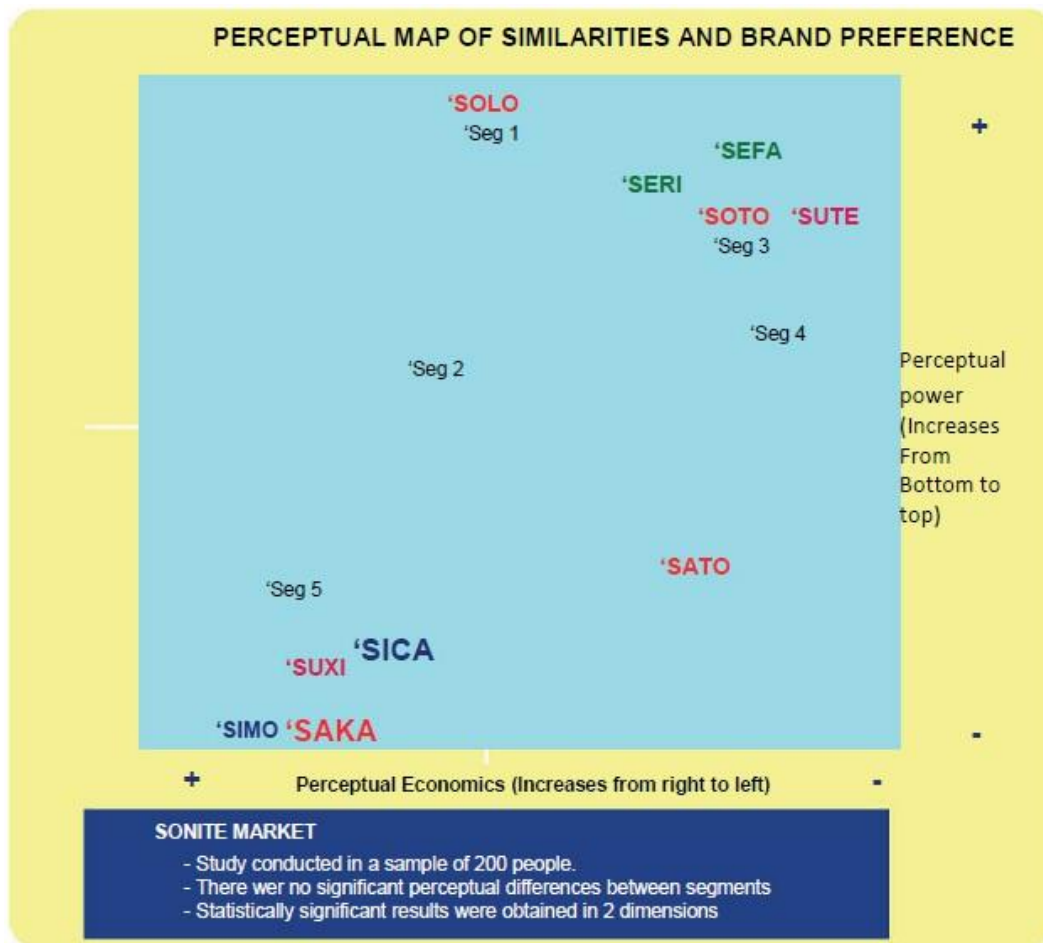
Given a certain level of knowledge of the structure of market behavior, a marketing strategy can be designed, in terms of re-positioning existing brands, and positioning new brands to occupy positions in one of the five consumer segments. Actions should then

be implemented so that the elements of the marketing mix support the chosen marketing strategy. This three-stage process is fundamental: to obtain information, to design and formulate strategy and to implement the strategy, using marketing mix as a means to achieve a strategy and not as an end in itself.

Using the Perceptual Map: an example

Each simulated company takes management with two brands of Sonites, one with better performance than the other. During the simulated years companies can introduce new brands, reduce current ones, or change them, (changes denominated "re-positioning"). The maximum number of brands per company is five at a time. The positioning and re-positioning of brands in relation to the needs of the consumer segments is the central aspect of the marketing strategy.

A basis for the analysis of the positioning of competing brands is the Perceptual Map of Similarities and brand Preferences obtained from Study 5. You can consult the book by Naresh Malhotra "Market Research: A Practical Approach" Prentice Hall, specifically in the Chapter "Multidimensional Scales and Joint Analysis". An illustrative example is presented below, and should not be used in the simulation since it is completely fictitious. The Map shows a diagram of two dimensions, one vertical and one horizontal. The vertical axis represents the Power attribute, and the horizontal axis is the Economy attribute. The numbers 1,2,3,4 and 5 on the map represent the position of the ideal points of each of the 5 segments of the market.



| Segment | Axis X: Perceptual Economics | Axis Y: Perceptual Power |
|-----------|---------------------------------|-----------------------------|
| Segment 1 | -0.5 | 15.7 |
| Segment 2 | -5.7 | 0.7 |
| Segment 3 | 9.5 | 8.7 |
| Segment 4 | 11.3 | 3.7 |
| Segment 5 | -12.7 | -8.9 |

| Segment | Axis X: Perceptual Economics | Axis Y: Perceptual Power |
|---------|---------------------------------|-----------------------------|
| SAKA | 10.4 | -16.6 |
| SATO | 6.6 | -7.2 |
| SEFA | 9.5 | 13.9 |
| SERI | 5.2 | 12.2 |
| SIMO | -14.5 | -15.4 |
| SICA | -7.5 | -11.6 |
| SOTO | 9.5 | 9.9 |
| SOLO | -1.2 | 17.2 |
| SUXI | -10.3 | -12.8 |
| SUTE | 12.5 | 9.9 |

“Ideal points” means the ideal and preferred mixture of Power and Economy that the segment seeks. For example, consumers in segment 3 will prefer a brand that is positioned at coordinates 9.5 on axis 1 and 8.7 on axis 2. A brand perceived in that position will attract many more consumers in segment 3 than another brand perceived at a greater distance than that precise place. The letters on the map each represent a brand. The coordinates of the segments and the brands are at the bottom of the map.

However, no significant difference has been observed in the perceptions of brands between the various segments, and therefore, only a map of the brands perceptions is required. This shows that the segments differ mainly by ideal preferences but not in the perception of each brand.

The map graphically synthesizes the way brands are perceived, that is, their positioning, and shows. The relative competition among brands. The biggest competition for the SEFA brand is with SERI following in descending order SOTO and SUTE.

These brands are perceived by consumers as very close, and very similar, to each other. There is little competition, however, between SEFA and SAKA because they are positioned at a great distance, from which it is inferred that both brands satisfy different needs from different segments. One brand can make disappear to the another one, it can occur if the same company's brands are positioned too close together as it must be happening between SIMO and SICA as both are from the same company but are located too close to each other.

The relative preference of a segment can also be inferred from the distance between the ideal point of a segment of the brands position. In the example SICA, SUXI, SIMO and SAKA are the main competitors for segment 5 customers. SOLO, on the other hand, has a privileged position in segment 1. It can clearly be seen that no brand is positioned in segment 2, which opens many possibilities for a new brand designed specifically for that segment, or for the re-positioning of another one.

Using the information in the Perceptual Map, a company can choose several alternative strategies:

- Specialization in a single segment.
- Penetration into two segments at the same time with the same brand.
- Re-positioning: through R & D, re-design of a product that re-launches without change of brand, which will benefit from the accumulated brand awareness
- Design of a new brand for a segment with the physical characteristics inferred from the coordinates of the map and the study of Semantic Scales (Study 4). The scales of the map, however, are different from the units in which the physical characteristics of the products are expressed. An appendix to this Handbook explains how to relate physical characteristics to percept characteristics.

Thus, through a more accurate knowledge of the market, strategies can be designed in terms of positioning new brands and / or re-positioning existing ones. While the first option depends fundamentally on the success of a research and development (R & D) project, the second option may depend on both the development of a project of this type and the approach of an advertising strategy. There are three ways to establish the advertising strategy in the "Decision Sheet":

1. The way of directing advertising ("targeting" the target audience) is done by directing advertising towards specific points on the perceptual map

For example, if you want to direct SERI closer to the ideal point of segment 1, you must enter in the Decision Sheet the coordinates of the ideal point of segment 1, -0.5 on axis 1 and 15.7 on axis 2. Advertisers will take these coordinates as communication goals

for the design of communication platforms, slogans and media choice.

2. The form of establishing the magnitude of the publicity will be through the allocation of a budget for the brand. The higher the budget, the easier it will be to reposition the brand.
3. The way to make the advertising investment more efficient is to allocate an advertising research budget for the brand, in order to develop the appropriate advertising actions such as the development and pre-test of texts and the selection of effective means. The higher the ratio of the total advertising budget to the advertising research studies, the more effective advertising will be as a whole.

Advertising repositioning is limited by physical characteristics. Consumer perceptions can be altered only in a certain range, as can changes in physical characteristics if they are not accompanied by an adequate advertising campaign. This leads to the conclusion that the strategies of both positioning and segmentation should be a mixture of both alternatives, taking into account the user's preferences in terms of design, distribution channels, advertising orientation and any other component that can contribute to the development of Marketing-mix.

This description illustrates the great utility of Perceptual Maps of Similarities and Preferences for the conception of positioning and re-positioning strategies. However, it can lead to wrong decisions if the map data is taken without regard to other important factors. It is essential, for example, to take into account the differences that consumers have in the degree to which they know each brand. Thus, a brand can be positioned near an ideal point of a segment but attract very few consumers because of a low brand awareness. On the other hand, re-positioning a brand with high brand awareness is very difficult to achieve. The five segments represent different sales volume potentials and are at different stages of their life cycles. Their needs change with time and with them the positioning of ideal points. Although the perceptual map satisfactorily reproduces the similarities and brand preferences obtained from a sample of consumers, it is certainly incomplete; other dimensions, such as the Style Index, operate underneath and affect the final positioning of a brand. Finally, a brand's marketing strategy must take into account the reactions and actions of competitors that could seriously affect the market situation in the following year.

The scores of the Semantic Scale (Study 4) also give indications about the brands perception and preference. These results are less accurate than the Perceptual Map, because of a simpler methodology which makes it less expensive.

Designing a Marketing Plan

Once the competitive structure of the market is analyzed, and a market strategy chosen, it must be supported by the deployment of a specific marketing mix. After Year 1, R&D projects will be accepted by the R&D Department. Once approved they may be launched by changing a current brand or creating a new one, but in either case, a price level must be fixed and, an advertising budget set, and a percentage of this must be set aside for advertising studies. Advertising will help positioning and repositioning of a brand. Although advertising investments have certain inertia into the future, they must be maintained because consumers naturally tend to forget.

To attain a high level of net profit contribution, a good balance must be achieved between the probability of stock outs and the probability of excess carry over inventories. During the year the production staff, and particular the production programmer, can adjust manufacturing to the size and frequency of actual shipments. This adjustment can cover plus or minus 20 % of the production plan registered in the decision form. For example if the final real demand for a brand was 150,000 units but the production plan registered just 100.000, the production programmer would adjust upwards, adding 20 thousand units. Even then the firm would lose the 30 thousand extra units that it could have sold with a better forecast. The opposite can also be subject of adjustment. If real demand was much less than the production units ordered, the production programmer would adjust downwards production to avoid a high level of inventory carried over to the next year.

The Budget

The parent corporation will assign a budget every year but this budget has specific limits that must be respected. The budget can be used to cover the following items of expense:

1. Advertising
2. Sales force
3. Research and Development
4. Market Research
5. Inventory carry over cost

The company that programs expenses in excess of the allocated budget will be deducted the difference of the advertising expenses. Among the forms of assistance (see below) is a Budget Sheet to neatly formulate the marketing budget and avoid exceeding the corporate boundary. It also allows estimating the net contribution of marketing because it has the same structure as the first sheet of the Annual Report, and when comparing with

what actually happens, determines where the greatest variation is. The crucial point is undoubtedly the estimation of sales by product. The following "Sales forecast" formalizes the forecast exercise in terms of market size and market share in each segment of each brand.

Marketing Plan form

It serves to formalize quantifiable objectives and evaluate the company as a whole during the simulated years. The four main types of expenditure under direct control are specified

INSTRUCTIONS FOR PARTICIPATION

1. Introduction

As you and your team start reading this document, you will have read the MARKESTRAT case in its technical aspects. Now it's time to read the administrative aspects of it; that is, how to make decisions, to create new products, etc.

We recommend that you choose from amongst the members of the team one person to take care of these administrative aspects, in such a way that others do not take up too much time on this (as there is little available). In such a way, a more efficient use of time will be possible.

2. General Explanation

The first thing you need to know is the following

The MARKESTRAT case is a technical marketing case in which you are expected to analyze it in a group and do the following:

- a) Imagine that you must run your business for 10 years.
- b) You must make decisions on production, price, advertising, etc., based on ten annual periods.
- c) For each annual period you must fill out a "Decision Sheet" on an Internet web page.
- d) The "Decision Sheets" of each group will be processed and general results lists will be issued for each "year" in which you will be able to see the effects of your decisions (greater sale, more profits, penetration, etc.)
- e) After the general results have been issued, your team will receive the market studies they decided to buy in the "Decision Sheet" of the previous year.
- f) With the market studies and analysis sessions, your team will make decisions for the following year, starting the process again.
- g) In each year (except the first) you can decide to create a new product (research and development).

3. Which products do exist in the market?

Each company will initially market two brands of "SONITE" product. The brands' names are composed of 4 letters, which will identify the products in the following way:

- a) The first letter is "S" for a product "SONITE" and "V" for a product VODITE (when it is released).
- b) The second letter identifies the company as follows

| Second letter | Company number |
|---------------|----------------|
| A | 1 |
| E | 2 |
| I | 3 |
| O | 4 |
| U | 5 |

4. How is the "Decision Sheet" filled out?

As an example, the "Decision Sheet" format attached has the following fields

Sample Decision

| DECISIONES DE MARKETING | | | | | | | |
|---|---|--|--|--|--|--|----|
| Nombre de Marcas ? | Nombre del Proyecto de I&D (Modificación o Introducción) ? | Planificación de la Producción (En miles de Unidades) ? | Presupuesto Publicitario (En miles de \$) ? | % de Estudios Publicitarios ? | Precio Aconsejado de Venta al Detalle (En \$) ? | Objetivos Perceptuales de -20 a +20 ? | |
| SAKA | | 220 | 2000 | 5 | 265 | 4 | 5 |
| SATO | | 100 | 1500 | 5 | 240 | -2 | -6 |
| SAMA | PSAMA | 100 | 3000 | 5 | 290 | 5 | 9 |
| | | | | | | | |
| | | | | | | | |

| FUERZA DE VENTAS ? | | | |
|---|----|----|----|
| Canales de Distribución: | 1 | 2 | 3 |
| Número de vendedores: | 20 | 15 | 30 |

| I&D | | | | | | | |
|--|--|--|---|----|----|----|-----|
| Nombre del Proyecto ? | Gastos (en miles de \$) ? | Atributos ? | | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| PSARI | 1000 | 15 | 9 | 22 | 30 | 25 | 180 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| ESTUDIOS DE MERCADO ? | | | | | | | | | | | | | | |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------|--|--|-----------------------------|
| 1 <input checked="" type="checkbox"/> | 2 <input checked="" type="checkbox"/> | 3 <input checked="" type="checkbox"/> | 4 <input checked="" type="checkbox"/> | 5 <input checked="" type="checkbox"/> | 6 <input type="checkbox"/> | 7 <input type="checkbox"/> | 8 <input type="checkbox"/> | 9 <input type="checkbox"/> | 10 <input type="checkbox"/> | 11 <input type="checkbox"/> | 12 <input type="checkbox"/> | 13 <input checked="" type="checkbox"/> | 14 <input checked="" type="checkbox"/> | 15 <input type="checkbox"/> |

The program will automatically identify your company after entering your username and password.

Marketing Decisions: Record the decisions to be made for each of the brands present in the market. It consists of the following parts:

- a. Name of brands: Identification of the brands that will be brought to market in the period. (For example, SAKA and SATO brands will be distributed).
- b. Names of R & D projects: This column will only be used in the cases of launching new brands to the market or modification of existing ones. The name of the project from which the new mark or modification for the existing one will come will be entered in the respective box. As long as the projects are still under development, their registration will be done only in the R & D part (section n), while when the project is successfully completed and launched to the market, its registration will be removed from this section, the product will then be identified with a brand name, and the product of origin will be registered only once in this section (for example, the SAMA brand comes from the PSAMA project).
- c. Production planning: Indicate the number of units to be produced per brand (expressed in thousands). To maximize the net marketing contribution, production will readjust, based on the existing demand and the respective stocks, the number of products to be manufactured. However, this readjustment shall not exceed 20% of the budgeted amounts.
- d. Advertising budget: Amount allocated for advertising by brand (in thousands of \$).
- e. Percentage in advertising studies: Represents the allocation for the analysis of advertising for the brand (not the market studies that can be optionally purchased) in order to improve the perception of consumers towards the brand. All this expressed as a percentage of the budget advertised.
- f. Advised retail price: value that the final buyer of the brand pays in the market.
- g. Perceptual objectives: Where the desired coordinates for the re-positioning of a mark according to the perceptual map (market study 5) will be indicated. The coordinates are only applicable to SONITE products because for VODITES consumers have not yet developed sufficient product knowledge to differentiate them perceptually into segments.
- h. Sales force: It will record the number of sellers of the company to be placed per distribution channel.

- i. Research and development projects: The following sections will record data on R & D projects that will start or which, although in previous periods did not reach success, wish to continue:
 - a. Name of the project: According to specifications given in point 7 of this manual.
 - b. Expenses: Budget to be allocated for the development of the project.
 - c. Objectives: They will indicate the physical characteristics to obtain for a new product or the reforms to be included in existing brands.
- j. Market Studies: Boxes are presented where the market studies to be acquired are selected.

5. Which results are emitted?

The main means of information for the company regarding the situation of its products and the market in general is the annual report, delivered at the beginning of each period.

The main features of this report are shown below, an example of which can be seen in Annex A.

Sheet 1: Record the general results of the product, from its manufacture to its commercialization. Total sales, inventory levels, major deductions and net marketing contribution, which measures the management of the marketing company and the marketing budget for the next period (taken as a percentage of the net contribution), can be seen. You can also find here the number of retail stores covered by brand and distribution channel, as well as the number of company sellers assigned to each channel.

Sheet 2: Messages: This sheet will record warnings to establish necessary corrective actions.

Sheet 3: R & D: It will give information about the projects that are being developed, specifically if they have been successful or not, and in the latter case will estimate the amount necessary for their completion. At this point it is necessary to emphasize that the experience indicates that for the development of a SONITE a budget must oscillate between \$100,000 and \$1,000,000 as minimum quantity, depending on the specifications that are given to the attributes, whereas for a VODITE, the minimum indispensable would be \$2,000,000.

Sheet 4: Cumulative Results: It will show the results obtained by the company up until the previous period. This is the most important listing, since it contains the performance of each company from the first year.

Sheet 5: Information Bulletin: It will give the groups knowledge of the global economy for a period and markets for SONITES and VODITES, as well as new products incorporated into the market in the period. It will also indicate the prices of the market studies for the following period.

6. Which market studies may be acquired?

In order to gain a more complete understanding of the environment, companies will be able to acquire up to fifteen different market studies from a consulting company. Most studies are aimed at both the SONITES and VODITES markets, with the exception of study 5 (perceptual map), for which insufficient information is recorded in the VODITE market because it is still in its infancy. The main features of these studies are given below and models of all of them can be found in Annex A.

- Studies 1 and 7: Consumer surveys. SONITE and VODITE markets, respectively. Studies carried out on samples of 800 people allow a knowledge of the demand in terms of spontaneous brand recall, intention to buy a particular brand by segment and preference of channels, all this by segments and in proportions of the total. SONITE y VODITE.
- Studies 2 and 8: Panel of Consumers - Market S and V, respectively. These studies give the market share of brands for each of the segments, based on the units sold. Total sales in each segment are also reported in thousands of units.
- Studies 3 and 9: Panel of distributors - Market S and V, respectively. These studies indicate for each SONITE or VODITE brand the market share in each of the distribution channels, based on the units sold. Total sales in each channel are also indicated in thousands of units.
- Studies 4 and 10: Semantic scales - Market S and V, respectively. These studies are based on a questionnaire of semantic differential scales applied to 600 individuals.

The semantic scales that were presented to the interviewees are as follows, and correspond to the physical characteristics of the SONITES.

The lightest 1 2 3 4 5 6 7 The heaviest

Each interviewed person was asked to evaluate each brand with a score of 1 to 7 according to their perception of that brand. Each person was also asked to specify their preferred value (or "ideal") on each scale and classify it by its importance. The results given are the mean values for each brand and for the ideal values of each segment over the three semantic differential scales that were classified as the most important ones

- Study 5: Perceptual map of similarities and preferences - Market S. This study offers a multidimensional non-metric set map. This map is based on data of similarity and preference, obtained on the total set of brands. SONITES, through a sample of 1,200 people. Firstly, it indicates the minimum number of dimensions sufficient to obtain a good fit to the data, and also allows to obtain a probable interpretation of the axes, which is based on the answers to the semantic scales.

Each axis is graded on an arbitrary scale ranging from -20 to 20+, where the ideal positioning of each of the consumer segments (represented by numbers 1 to 5) and the different brands presented in the Market at the time of the study (represented by letters A to O).

- Study 6: Market Forecast S. Market size forecast SONITE in thousands of units for each segment.
- Study 11: Sales Forecast of the Vodites Market.
- Study 12: Estimating the total advertising expenses of the competition. The total estimates of the advertising expenditures of each competing brand are given by a market research company. These estimates are also given for the brand of the applicant company to control estimation errors.
- Study 13: Estimation of the sales force of the competition. It represents estimates of the size of the sales force of the competing companies, as well as their distribution by distribution channels. The same estimates are also obtained as reference for the client company, in order to control estimation errors.
- Study 14: Test of the sales force. You can organize a test on the sales force in a region that serves as a test market by increasing the number of sellers per channel. Based on the results of the experiment, the study gives an estimate of the number of distributors and the market share for each of the client company brands if the size of the sales force was increased by 5 vendors per channel Distribution, in the given period.
- Study 15: Test of Advertising. A test on advertising is organized by selectively increasing it in regions that serve as test markets. The results of the experiment are used to project the level of knowledge or awareness of brand and market share that would have been obtained if the advertising had been increased by 10% above the current level for each of the company's brands in the total market. Estimates are also broken down by segment. The experiment tests only the size of the budget and not the changes in the other elements in the communication strategy.

7. Useful recommendations

The game administrator will play several roles: they will be a consultant on specific problems; they will be able to sell unsolicited market studies on the Decision Sheet (at a fixed price later) and negotiate the liquidations of inventories of products that may eventually be eliminated from the market, to liquidate them at a loss.

At this point in the Handbook, you should be ready to participate in Markestrat. Of course, all the information contained in this manual has not yet been assimilated. Thus the main objective of the first decision will be to become completely familiar with the universe of the simulator. After being assigned to a simulated signature by the Simulator Administrator, you will be sent a username and a password with which to enter the designated web page. There you will find the Participant Instructions, a copy of this Manual, and the results for Year 0. These are the results that the previous management reached. Each company receives a different Year 0 so they will start competing from different positions but potential equivalents. In the Report you will see that the company has two brands with different market shares and you will be able to compare the initial position of your company against the others in the market. However, as the previous manager did not use market research, they will not be able to put together the Year 1 Marketing Plan, ie to make the first decision. That is why you should note the following restrictions applicable only to Year 1:

- Change prices only until predicted inflation
- Do not formulate perceptual objectives since there is no Perceptual Map.
- Do not undertake R & D projects to reformulate or launch new products until receiving Market Studies.
- Do not modify the advertising policy, sales force or production.

For the first decision it is essential to develop good teamwork relationships. Each team member should be involved in the discussion and analysis of options. Later, when each member has an in-depth knowledge of strategic results, and when management becomes more complex, certain people may be delegated certain specific problems

BASIC BACKGROUND INFORMATION

1. The average annual inflation rate in the last three years = 9
2. The average annual increase in prices in the SONITES market in the last three years = 1%
3. Percentage of SONITE units sold in each segment in the last three years:
Segment 1 = 30%
Segment 2 = 18%
Segment 3 = 15%
Segment 4 = 21%
Segment 5 = 16%
4. Average annual increase of the SONITE units sold during the last three years:
Segment 1 = 0%
Segment 2 = 25%
Segment 3 = 50%
Segment 4 = 60%
Segment 5 = 30%
Total = 35%
5. Total number of potential retailers of SONITES or VODITES: Channel 1 = 3000
Channel 2 = 35000
Channel 3 = 4000
6. Average margins charged by retailers:
Channel 1 = 40%
Channel 2 = 35%
Channel 3 = 40%
7. Average increase in advertising expenditures during the last three years = 4%.
8. Average expenditure on advertising research as a percentage of total advertising expenditure over the past three years = 5%.

MARKESTRAT MARKETING PLAN

Industry: _____

Company number: _____

| General Results | | Period | | | | | | | | | |
|---|-------------|--------|---|---|---|---|---|---|---|---|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Sales (in thousands of \$) | Objectives | | | | | | | | | | |
| | Realization | | | | | | | | | | |
| Market share (% Retail sales) | Objectives | | | | | | | | | | |
| | Realization | | | | | | | | | | |
| Net marketing contribution (in thousands of \$) | Objectives | | | | | | | | | | |
| | Realization | | | | | | | | | | |

Marketing Expenditure

| | | | | | | | | | | | |
|--|-------------|--|--|--|--|--|--|--|--|--|--|
| Advertising expenditure (in thousands of \$) | Objectives | | | | | | | | | | |
| | Realization | | | | | | | | | | |
| Sales force expenditure (in thousands of \$) | Objectives | | | | | | | | | | |
| | Realization | | | | | | | | | | |
| R & D expenditure (in thousands of \$) | Objectives | | | | | | | | | | |
| | Realization | | | | | | | | | | |

| | | | | | | | | | | | |
|---|-------------|--|--|--|--|--|--|--|--|--|--|
| Market research expenditure (in thousands of \$) | Objectives | | | | | | | | | | |
| | Realization | | | | | | | | | | |
| Total marketing expenditure (in thousands of \$) | Objectives | | | | | | | | | | |
| | Realization | | | | | | | | | | |

Otros

| | | | | | | | | | | | |
|--|-------------|--|--|--|--|--|--|--|--|--|--|
| | Objectives | | | | | | | | | | |
| | Realization | | | | | | | | | | |
| | Objectives | | | | | | | | | | |
| | Realization | | | | | | | | | | |
| | Objectives | | | | | | | | | | |
| | Realization | | | | | | | | | | |
| | Objectives | | | | | | | | | | |
| | Realization | | | | | | | | | | |

MARKESTRAT BUDGET SHEET

Industry: _____

Company number: _____

Period: _____

| Brands | | | | | |
|-----------------------------------|--|--|--|--|--|
| Production (Units) | | | | | |
| Quantity Sold (units) | | | | | |
| Inventory (units) | | | | | |
| Retail Price (\$) | | | | | |
| Sale Price Medium (\$) | | | | | |
| Transfer unit Cost | | | | | |
| Revenues (in 000 Of \$) | | | | | |
| Sold Products Cost (In 000 of \$) | | | | | |
| Inventory cost (In 000 \$) | | | | | |
| Advertising (In 000 \$) | | | | | |
| Gross marketing Contribution | | | | | |

R&D (in thousands of \$)

Sales force (in thousands of \$)

Market Research (in thousands of \$)

Exceptional profits or expenditures (in thousands of \$)

Net Marketing contribution (in thousands of \$)

Total marketing expenditures (in thousands of \$)

| |
|--|
| |
| |
| |
| |
| |
| |

SALES FORECAST FOR THE BUDGET

This table may guide you to formulate the necessary sales forecast for the annual budget.

| | TOTAL MARKET Sonite (In thousands Units.) | TOTAL MARKET Vodite (in thousands Units) | BRANDS MARKET SHARE (units) SALE (in thousand units) | | | | | | | | | |
|---------------------|---|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | |
| Segment 1 | | | | | | | | | | | | |
| Segment 2 | | | | | | | | | | | | |
| Segment 3 | | | | | | | | | | | | |
| Segment 4 | | | | | | | | | | | | |
| Segment 5 | | | | | | | | | | | | |
| Cumulative forecast | | | | | | | | | | | | |

APPENDIX 1

MARKESTRATED: REPORT FIRM 5 PERIOD 3

1 - GENERAL RESULTS

(IN ,000 EXCEPT WHEN INDICATED)

(U)= UNITS

(\$)= IN USD\$

| BRANDS | SUXI | SUTE | SUMO |
|--------------------------|--------|--------|--------|
| PRODUCTION (U) | 32,000 | 60,000 | 48,000 |
| UNITS SOLD (U) | 82,206 | 60,000 | 48,000 |
| INVENTORY (U) | 56,458 | - | - |
| RETAIL PRICE(\$) | 190 | 420 | 200 |
| AV.SEL.PRICE(\$) | 117 | 257 | 123 |
| UNIT TR.COST(\$) | 78 | 192 | 155 |
| REVENUES | 9,581 | 15,418 | 5,899 |
| COST OF G.S. | 6,427 | 11,508 | 7,455 |
| INV. HLD.COST | 508 | - | - |
| ADVERTISING | 1,500 | 500 | 500 |
| GROSS MKTG. CONTRIBUTION | 1,146 | 3,410 | -2,056 |
| | | | 2,500 |

| R & D | \$ 0 |
|----------------------------|-----------|
| SALES FORCE | -\$ 2,109 |
| MARKETING RESEARCH | -\$ 402 |
| COST OR PROFIT | \$ 0 |
| NET MARKETING CONTRIBUTION | -\$10 |
| NEXT BUDGET PERIOD | \$ 9,065 |

2- MARKETING

| BRANDS | SUXI | SUTE | SUMO |
|-------------------------|-----------|-----------|-----------|
| MARKET SHARE (ON UNITS) | 4% | 3% | 3% |
| NUMBER OF DISTRIBUTORS | | | |
| CHANNEL 1 | 1,664 | 1,598 | 1,594 |
| CHANNEL 2 | 6,477 | 6,220 | 6,206 |
| CHANNEL 3 | 1,524 | 1,463 | 1,460 |
| | CHANNEL 1 | CHANNEL 2 | CHANNEL 3 |
| SALES FORCE | 38 | 10 | 27 |

03 - MESSAGES

04 - R & D

05- CUMULATIVE RESULT (IN THOUSAND \$)

| BRAND | LAUNCHING YEAR | UNITS SOLD | ADVERTISING | CUMULATIVE NET MARKETING CONTRIBUTION |
|-------|----------------|------------|-------------|---------------------------------------|
| SUXI | - | 216 | \$ 5,700 | -\$ 832 |
| SUTE | - | 295 | \$ 5,000 | \$ 26,151 |
| SUMO | 3 | 48 | \$ 500 | -\$ 2056 |

| | |
|---|------------|
| TOTAL CUMULATIVE RETAIL SALES | \$ 184,138 |
| TOTAL CUMULATIVE ADVERTISING | \$ 11,200 |
| TOTAL CUMULATIVE GROSS MARKETING CONTRIBUTION | \$ 24,927 |
| TOTAL CUMULATIVE R&d EXPENDITURES | \$ 700 |
| TOTAL CUMULATIVE SALES FORCE EXPENDITURES | \$ 7,049 |
| TOTAL CUMULATIVE MARKET RESEARCH EXPENDED | \$ 30,600 |
| TOTAL CUMULATIVE NET MARKETING CONTRIBUTION | \$ 7,400 |

6 - NEWSLETTER

(ALL MONEY AMOUNT IN \$)

| | |
|---|-----------|
| - GNP GROWTH RATE THIS YEAR | 4% |
| - GNP GROWTH NEXT YEAR | 4% |
| - ESTIMATED INFLATION RATE NEXT YEAR | 9% |
| - RATE OF INFLATION NEXT YEAR | 9% |
| - COST OF SALESMAN NEXT YEAR | \$ 30,600 |
| - COST OF FIRING A SALESMAN NEXT YEAR | \$ 7,400 |
| - COST OF TRAINING A NEW SALESMAN NEXT YEAR | \$ 4,300 |

| Cost of Marketing Research Studies Next Year | | | |
|--|---------------|-------------------------|---------------|
| 1= \$ 77,600 | 2= \$ 129,400 | 3= \$ 77,600 | 4= \$ 12,800 |
| 5= \$ 45,200 | 6= \$ 25,800 | 7= \$ 51,700 | 8= \$ 90,500 |
| 9= \$ 64,700 | 10= \$ 12,800 | 11= \$ 25,800 | 12= \$ 38,800 |
| 13= \$ 19,200 | 14= \$ 30,900 | 15= \$ 45,200 | |
| INVENTORY HOLDING COST PER YEAR: | | 11.5 % OF TRANSFER COST | |

NEW BRANDS, PRODUCTS LAUNCHED OR MODIFIED IN THE LAST PERIOD

| BRANDS | FEATURES | | | | | | RETAIL PRICE |
|--------|----------|---|----|----|----|-----|--------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| SUMO | 10 | 9 | 10 | 23 | 35 | 120 | 200 |

| Information about SONITE market | | | | | |
|---------------------------------|------------|---------------------|--------------|----------------|------------------|
| BRANDS | UNIT SALES | MARKET SHARE(Units) | RETAIL PRICE | SALE S\$ | %MARKET SHARE \$ |
| SAHA | 175.610 | 9% | 5300.00 | 529.307.730 | 7% |
| SATO | 84.000 | 5% | S 430.00 | 549.731130 | 5% |
| SE RI | 465. | 25% | \$485.00 | \$ 57.673.000 | 30% |
| SE FA | 24.000 | 1% | S 530.00 | 5 37.048.410 | 2% |
| SIMO | 122317 | 7% | S 259.00 | 58. | 4% |
| SICA | 306.000 | 16% | \$370.00 | 561.585.300 | 15% |
| SOTO | 450.000 | 24% | \$490.00 | 5 274.015.000 | 29% |
| SO LO | 44. | 2% | S 392.00 | 511.472.620 | 2% |
| SUXI | 82206 | 4% | \$190.00 | S 3.804.371 | 2% |
| SUTE | 60.000 | 3% | \$420.00 | 562.941.020 | 3% |
| SUMO | 48.000 | 0% | S 200.00 | S 3.804.371 | 1% |
| Total | 1.308.611 | 100:% | | \$ 596.020.887 | 100% |
| AVERAGE PRICE = \$ 455.46 | | | | | |

APPENDIX 2

MARKET RESEARCH STUDIES

**The following pages contain the market research reports requested by company 5
in Period 5 of markstrat simulation**

0 STUDY 1: CONSUMER SURVEY - S MARKET

*** BRAND AWARENESS (NO SIGNIFICANT DIFFERENCES BETWEEN SEGMENTS)

| | | | |
|------|------|------|------|
| SAKA | .341 | SATO | .230 |
| SERI | .217 | SEFA | .286 |
| SIMO | .391 | SICA | .381 |
| SOTO | .217 | | |
| SUXI | .192 | SUTE | .279 |

*** PURCHASE INTENTIONS

| | SEGMENT 1 | SEGMENT 2 | SEGMENT 3 | SEGMENT 4 | SEGMENT 5 | TOTAL |
|------|-----------|-----------|-----------|-----------|-----------|-------|
| SAKA | .024 | .046 | .014 | .027 | .220 | .083 |
| SATO | .034 | .027 | .039 | .244 | .045 | .093 |
| SERI | .214 | .042 | .152 | .081 | .041 | .079 |
| SEFA | .067 | .021 | .313 | .039 | .028 | .071 |
| SIMO | .118 | .731 | .032 | .053 | .379 | .314 |
| SICA | .040 | .035 | .043 | .155 | .071 | .079 |
| SOTO | .060 | .026 | .165 | .332 | .035 | .133 |
| SUXI | .013 | .026 | .006 | .009 | .134 | .047 |
| SUTE | .430 | .046 | .236 | .061 | .046 | .102 |

0** PURCHASING HABITS

| | | CHANNEL 1 | CHANNEL 2 | CHANNEL 3 | TOTAL |
|-----------|-----|-----------|-----------|-----------|-------|
| SEGMENT 1 | .57 | .07 | .36 | 1.00 | |
| SEGMENT 2 | .37 | .17 | .46 | 1.00 | |
| SEGMENT 3 | .02 | .57 | .41 | 1.00 | |
| SEGMENT 4 | .17 | .47 | .36 | 1.00 | |
| SEGMENT 5 | .07 | .27 | .66 | 1.00 | |

0 STUDY 2: CONSUMER PANEL - S MARKET

0 (MARKET PORTIONS BASED IN SOLD UNITS)

| | SEGMENT 1 | SEGMENT 2 | SEGMENT 3 | SEGMENT 4 | SEGMENT 5 | TOTAL |
|------|-----------|-----------|-----------|-----------|-----------|-------|
| SAKA | .026 | .080 | .024 | .030 | .311 | .106 |
| SATO | .020 | .025 | .036 | .145 | .035 | .077 |
| SERI | .389 | .114 | .367 | .129 | .093 | .168 |
| SEFA | .004 | .002 | .023 | .002 | .002 | .005 |
| SIMO | .062 | .542 | .017 | .020 | .205 | .142 |
| SICA | .061 | .075 | .064 | .164 | .110 | .118 |
| SOTO | .112 | .070 | .349 | .481 | .073 | .279 |
| SUXI | .019 | .050 | .006 | .007 | .147 | .048 |
| SUTE | .306 | .043 | .114 | .023 | .025 | .058 |

INDUSTRY SALES

| | SEGMENT 1 | SEGMENT 2 | SEGMENT 3 | SEGMENT 4 | SEGMENT 5 | TOTAL |
|---------------------|-----------|-----------|-----------|-----------|-----------|-------|
| (THOUSAND UNITS) | 166. | 349. | 341. | 1009. | 618. | 2483. |

0 STUDY 3: DISTRIBUTION PANEL - MARKET S

0 (MARKET PORTIONS BASED IN SOLD UNITS)

| | CHANNEL 1 | CHANNEL 2 | CHANNEL 3 | TOTAL |
|------|-----------|-----------|-----------|-------|
| SAKA | .077 | .091 | .145 | .106 |
| SATO | .066 | .093 | .073 | .077 |
| SERI | .200 | .162 | .157 | .168 |
| SEFA | .004 | .008 | .006 | .005 |
| SIMO | .206 | .104 | .139 | .142 |
| SICA | .112 | .122 | .120 | .118 |
| SOTO | .215 | .353 | .255 | .279 |
| SUXI | .042 | .038 | .066 | .048 |
| SUTE | .096 | .041 | .052 | .058 |

INDUSTRY SALES (THOUSAND UNITS)

| CHANNEL 1 | CHANNEL 2 | CHANNEL 3 | TOTAL |
|-----------|-----------|-----------|-------|
| 656. | 913. | 913. | 2482. |

0 STUDY 4: SEMANTIC DIFFERENTIAL SCALES - MARKET S

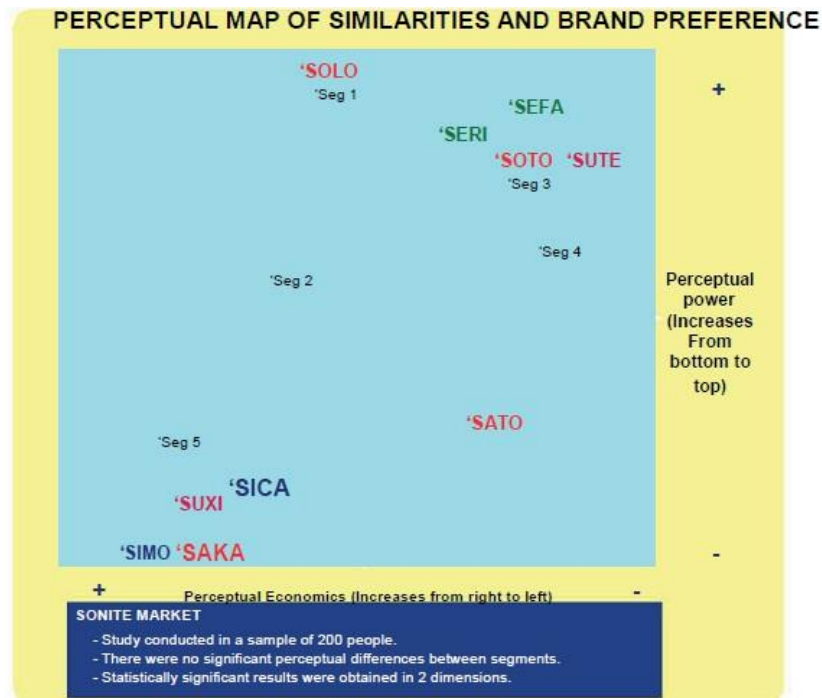
* THE THREE MOST IMPORTANT PERCEIVED SCALES

1- ECONOMY 2- POWER 3- DESIGN

HIGH SCORES CORRESPOND TO: LOW ECONOMUC, HIGH POWER, AND BETTER DESIGN

| | ECONOMY | POWER | DESIGN |
|-------------------|---------|-------|--------|
| IDEAL SCORE SEG.1 | 4.30 | 6.13 | 5.20 |
| IDEAL SCORE SEG.2 | 2.80 | 4.78 | 5.68 |
| IDEAL SCORE SEG.3 | 6.04 | 5.68 | 5.32 |
| IDEAL SCORE SEG.4 | 5.35 | 4.03 | 5.62 |
| IDEAL SCORE SEG.5 | 2.05 | 3.16 | 5.62 |
| SAKA | 3.49 | 1.64 | 6.10 |
| SATO | 5.58 | 3.38 | 6.44 |
| SERI | 5.08 | 5.46 | 6.10 |
| SEFA | 6.40 | 5.91 | 3.85 |
| SIMO | 3.28 | 4.26 | 4.97 |
| SICA | 5.69 | 2.72 | 6.25 |
| SOTO | 5.79 | 4.56 | 5.50 |
| SUXI | 2.58 | 2.08 | 2.50 |
| SUTE | 5.13 | 5.91 | 4.90 |

0 STUDY 5: PERCEPTUAL MAP OF SIMILARITIES AND BRAND PREFERENCES



| Segment | Axis X: Perceptual Economics | Axis Y: Perceptual Power |
|-----------|---------------------------------|-----------------------------|
| Segment 1 | 3.5 | 14.5 |
| Segment 2 | -7.7 | 5.5 |
| Segment 3 | 13.9 | 11.5 |
| Segment 4 | 9.3 | 0.5 |
| Segment 5 | -12.7 | -5.3 |
| Brands | Axis X: Perceptual Economics | Axis Y: Perceptual Power |
| SAKA | -3.4 | -15.8 |
| SATO | 10.5 | -4.1 |
| SEFA | 7.2 | 9.7 |
| SERI | 16 | 12.7 |
| SIMO | -4.8 | 1.7 |
| SICA | 11.3 | -8.6 |
| SOTO | 11.9 | 3.7 |
| SUXI | -9.5 | -12.8 |
| SUTE | 7.5 | 12.7 |

STUDY 6: MARKET FORECAST - S MARKET

EXPECTED SIZE OF THE MARKET FOR THE NEXT PERIOD (,000 UNITS)

| SEGMENT 1 | SEGMENT 2 | SEGMENT 3 | SEGMENT 4 | SEGMENT 5 | TOTAL |
|-----------|-----------|-----------|-----------|-----------|-------|
| 158. | 488. | 307. | 958. | 741. | 2653. |

0 STUDY 7: CONSUMER SURVEY - V MARKET

**BRAND AWARENESS (NO SIGNIFICANT DIFFERENCES BETWEEN SEGMENTS)

| | |
|------|------|
| VERO | .057 |
| VICA | .047 |
| VOTO | .041 |

**PURCHASE INTENTIONS

| | SEGMENT 1 | SEGMENT 2 | SEGMENT 3 | SEGMENT 4 | SEGMENT 5 | TOTAL |
|------|-----------|-----------|-----------|-----------|-----------|-------|
| VERO | .158 | .158 | .158 | .158 | .158 | .162 |
| VICA | .641 | .641 | .641 | .641 | .641 | .660 |
| VOTO | .172 | .172 | .172 | .172 | .172 | .177 |

0**PURCHASING HABITS

| | CHANNEL 1 | CHANNEL 2 | CHANNEL 3 | TOTAL |
|-----------|-----------|-----------|-----------|-------|
| SEGMENT 1 | .77 | .05 | .18 | 1.00 |
| SEGMENT 2 | .77 | .05 | .18 | 1.00 |
| SEGMENT 3 | .77 | .05 | .18 | 1.00 |
| SEGMENT 4 | .77 | .05 | .18 | 1.00 |
| SEGMENT 5 | .77 | .05 | .18 | 1.00 |

0 STUDY 8: CONSUMER PANEL - V MARKET

0 (MARKET PORTIONS BASED IN SOLD UNITS)

| | SEGMENT 1 | SEGMENT 2 | SEGMENT 3 | SEGMENT 4 | SEGMENT 5 | TOTAL |
|------|-----------|-----------|-----------|-----------|-----------|-------|
| VERO | .098 | .098 | .098 | .098 | .098 | .101 |
| VICA | .742 | .742 | .742 | .742 | .742 | .764 |
| VOTO | .131 | .131 | .131 | .131 | .131 | .135 |

INDUSTRY SALES (THOUSAND UNITS)

| SEGMENT 1 | SEGMENT 2 | SEGMENT 3 | SEGMENT 4 | SEGMENT 5 | TOTAL |
|-----------|-----------|-----------|-----------|-----------|-------|
| 40. | 13. | 13. | 40. | 67. | 175. |

0 STUDY 9: DISTRIBUTION PANEL - MARKET V

0 (MARKET PORTIONS BASED IN SOLD UNITS)

| | CHANNEL 1 | CHANNEL 2 | CHANNEL 3 | TOTAL |
|------|-----------|-----------|-----------|-------|
| VERO | .098 | .000 | .098 | .101 |
| VICA | .742 | .000 | .742 | .764 |
| VOTO | .131 | .000 | .131 | .135 |

INDUSTRY SALES (THOUSAND UNITS)

| CHANNEL 1 | CHANNEL 2 | CHANNEL 3 | TOTAL |
|-----------|-----------|-----------|-------|
| 143. | 0. | 36. | 179. |

0 STUDY 10: SEMANTIC DIFFERENTIAL SCALES - MARKET V

* THE THREE MOST IMPORTANT PERCEIVED SCALES

1- ECONOMY 2- POWER 3- DESIGN

HIGH SCORES CORRESPOND TO: LOW ECONOMUC, HIGH POWER, AND BETTER DESIGN

| | ECONOMY | POWER | DESIGN |
|-------------------|---------|-------|--------|
| IDEAL SCORE SEG.1 | 4.66 | 3.16 | 2.41 |
| IDEAL SCORE SEG.2 | 4.66 | 3.16 | 2.41 |
| IDEAL SCORE SEG.3 | 4.66 | 3.16 | 2.41 |
| IDEAL SCORE SEG.4 | 4.66 | 3.16 | 2.41 |
| IDEAL SCORE SEG.5 | 4.66 | 3.16 | 2.41 |
| VERO | 2.61 | 6.18 | 6.49 |
| VICA | 3.85 | 2.34 | 4.81 |
| VOTO | 5.36 | 5.07 | 6.49 |

STUDY 11: MARKET FORECAST - V MARKET

EXPECTED SIZE OF THE MARKET FOR THE NEXT PERIOD (,000 UNITS)

| SEGMENT 1 | SEGMENT 2 | SEGMENT 3 | SEGMENT 4 | SEGMENT 5 | TOTAL |
|-----------|-----------|-----------|-----------|-----------|-------|
| 69. | 23. | 23. | 69. | 114. | 297. |

0 STUDY 12: ADVERTISING COMPETITIVE ESTIMATES (THOUSAND \$)

| | | | | | |
|------|--------|------|-------|------|-------|
| SAKA | 1457. | SATO | 583. | | |
| SERI | 24278. | SEFA | 97. | VERO | 1942. |
| SIMO | 4557. | SICA | 3385. | VICA | 3255. |
| SOTO | 19423. | VOTO | 7769. | | |
| SUXI | 1457. | SUTE | 486. | | |

0 STUDY 13: SALES FORCE COMPETITIVE ESTIMATES

| | CHANNEL 1 | CHANNEL 2 | CHANNEL 3 | TOTAL |
|-------|-----------|-----------|-----------|-------|
| FIRM1 | 4 | 47 | 18 | 69 |
| FIRM2 | 9 | 50 | 46 | 105 |
| FIRM3 | 13 | 18 | 34 | 65 |
| FIRM4 | 10 | 29 | 35 | 74 |
| FIRM5 | 32 | 9 | 25 | 66 |

0 STUDY 14: SALES FORCE EXPERIMENT

(EXPECTED RESULTS IF SALES FORCE IS INCREASE BY 5 PER CHANNEL)

| | CHANNEL 1 | CHANNEL 2 | CHANNEL 3 |
|--------------------|-----------|-----------|-----------|
| SUXI | | | |
| NUMB. DISTRIBUTORS | 1587. | 7267. | 1382. |
| MARKET SHARE | .049 | .059 | .086 |
| SUTE | | | |
| NUMB. DISTRIBUTORS | 1577. | 7220. | 1373. |
| MARKET SHARE | .115 | .058 | .066 |

0 ESTUDY 15: ADVERTISING EXPERIMENT

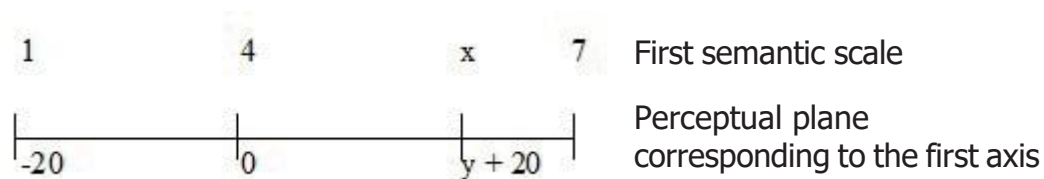
(EXPECTED RESULT IF THE BUDGET INCREASED BY 10% TO A REGISTERED)

| | SEGMENT 1 | SEGMENT 2 | SEGMENT 3 | SEGMENT 4 | SEGMENT 5 | TOTAL |
|------------|-----------|-----------|-----------|-----------|-----------|-------|
| SUXI | | | | | | |
| KNOWLED. | .190 | .190 | .190 | .190 | .190 | .190 |
| MARK.PORT. | .019 | .050 | .006 | .007 | .147 | .057 |
| SJTE | | | | | | |
| KNOWLED. | .275 | .275 | .275 | .275 | .275 | .275 |
| MARK.PORT. | .306 | .043 | .114 | .023 | .025 | .060 |

APPENDIX 3

Perceptual Objectives Specifications of Semantic Scales Data

The semantic scales are defined in a range of 1 to 7, whereas the perceptual objectives are defined in terms of coordinates in a perceptual map, which can take values between -20 and +20:



The range of a unit on the semantic scale can be interpreted as $40/6$ or $20/3$ on the axis of the perceptual map.

If only the semantic scales are available, and if an "x" value of a semantic scale is determined as a target in a repositioning of a mark, the corresponding perceptual objective expressed in terms of a "y" coordinate on the perceptual map can be calculated using the following formula:

$$Y = \frac{20}{3} (x - 4)$$

"Y" is the value that has to be used as a perceptual goal when filling in the Decision Sheet. Obviously this transformation is crude, but the use of numbers should not disguise the intrinsic qualitative nature of perceptual goals.

Example :

If a particular brand must be repositioned towards the value 6 of the first semantic scale, the perceptual objective to be bounded in the Decision Sheet for axis 1 is:

$$y = \frac{20}{3} (6 - 4) = 13,3$$

The same procedure is applied for the transformation of the values of the second semantic scale, to perceptual objectives of the second axis of the perceptual plane.

APPENDIX 4

FREQUENTLY ASKED QUESTIONS (F.A.Q.'S FREQUENTLY ASKED QUESTIONS)

1. When can I start doing Research & Development?

After period 1, when the market research is analyzed. When ordering a new product you must place all the characteristics even when some already have them in some other product. If you are going to rework a current product, repeat the features you already have. In addition to the new ones you want.

It is unlikely to achieve via R & D 35% above or below what a product is already capable or unless you decide to invests many millions.

2. Can I change price in Period 1?

Only with inflation, that is, no more than what is expected will be inflation. After period 1, the market will not accept price increases / reductions greater than 30%.

3. How could I make a decision in Period 1 if I do not have Market Research?

Like any little technical company, it has two paths: intuition or alignment to macro data.

- (1) The first one involves guessing what the executives who handled the company really wanted to do before you, and what they did right and wrong. The bad thing is clear in one of the products. One option is to eliminate the greater and strengthen the good. Ask yourself what would happen if you do. Another option is to do nothing until you have Market Research that diagnoses the positioning of each product. Look at your sellers, see that there is more in one channel than in another, do you think it is right?.
- (2) Aligning to the macro is raising production of a product based on the expected increase in GDP (if it sold so well that it ran out of inventory the previous year), increasing the fair price within inflation
- (3) A decision will always be as good as the information on which it is based. Ask for all market research reports.

4. What happens if I do not program a production for a product because it has inventory?

Sales will be made from inventory.

5. What happens if I leave out the decision to a product even when I have an inventory?

You are reporting that you no longer want it. The inventory will be settled at the cost of transfer as loss. It could be a big loss.

6. How do I delete a product?

You may see question 5 again.

7. How is the final price set and how does it relate to the transfer cost?

Ensuring that your company has a margin above (1) the cost of transfer and (2) the average commission or margin of the channel. If the final price is less than the transfer cost. You are giving away the product. An acceptable margin for your business could be similar to that of the channel.

8. When to introduce a new brand?

A Research and Development Project must be previously approved, with a letter P below and the letter "S" if it is Sonite and "V" if it is Vodite, but the vowel that corresponds to your company. The other two letters are free but must be different from those that carry their current products so that the program does not confuse their new project with those who preceded the introduction of their current products. This applies even when a current product is reformulated.

For example if you want to change to SEFA you can not place a PSEFA project as it already existed. You must put PSEFO, for example, because the FO still does not use it at all. Approved PSEFO, place that acronym next to the old SEFA in the second column of the first portion of the Decision Sheet, ordering in effect, to be assigned to the old SEFA the new features achieved in the PSEFO Project.

9. How much to invest so that a research and development is successful?

The manual gives some examples. See page 12 under "Sheet 3". For entirely new products, ie with 30% bandwidth features delimiting their current capabilities, including cost, more than \$ 2 million is recommended. The greater the investment with features closes to the capacity band, the greater the probability of success. But it is a timba as in reality to discover something new and effective. Use the example of the approved Vodite project at the end of the Handbook.

10. How much will be the cost of transferring a new or improved product?

It depends on how many units you can produce in the first year. The approved transfer cost refers to the unit cost of the first 100,000 units

11. Can I stop making Market Research?

No. It is mandatory from period 1 to 10, it is requested at least one study.

12. The percentage of Advertising Studies where does it come from?

It comes from the Advertising budget. If you invested \$ 2'500,000 in advertising and 5% what you place as a budget for advertising research means you will invest \$ 125,000 in advertising research (focus groups, commercial quantitative pre-tests, quantitative post-tests etc).

13. If I do not succeed in a research and development project, what can I do?

The R & D department will tell you if it is impossible to plan or you omitted something. If investment was missing or a feature should be reduced because it is too much, simply repeat the project, with the suggested modification and the new budget

14. Why sometimes the amount produced does not correspond to the program is shown in the Decision Sheet?

It is because the factory has an Intelligent Production Programmer during the 12 months covered by its production program. If the Programmer notices that from the third month on, the sales, that is, the shipments that are leaving the plant are below the production schedule that you ordered; then adjust the production down to 30%. You can adjust it up to 30% if the Scheduler observes higher sales that were programmed via production.

15. How to use the Market Research reports?

The Study 1 is the most basic and the study 5 is the most difficult to understand but the one of essentially strategic nature.

The first one presents data on the Pyramid of the Hierarchy of effects, according to which nothing is bought, if it is previously not preferred, and if before it is not remembered.

Formally, a cognitive state precedes an affective one, and an affective one precedes an active state (the purchase). In the example of Appendix A (corresponding to a company 5 in Period 3) at the end of the Manual, there is the case of SUXI, where there is a brand awareness among 19.2% of the market, half of the recognition indicated in 39.1 % Of SIMO. SUXI's demand "ceiling" is half that of SIMO, suggesting that it

needs more publicity. If one examines Study 12 it can be seen that SUXI made only \$ 1457 in advertising (\$, 000) while SIMO INVESTED \$ 4557.

How much advertising generated recall and how much persuasion / intent to purchase? Compare the proportion of brand awareness to the proportion of "total" purchase intent in the "Purchase Intentions" box. SUXI shows 4.7% while SIMO shows 31.4%. So not only SUXI does half the publicity but the one that does only generate memory, and very little persuasion / intention to buy: $4.7 / 19.2 = 0.24$, which means that 76% of SUXI advertising does not produce persuasion of any class. Where does SUXI produce it? Explore the SUXI line and look for the largest proportion. 13.4% of the Segment 5. SUXI advertising is making it more remembered in Segment 5 that in Segment 3, "it is taking it" means "positioning it" perceptually. You can change the direction, or point more correctly, by placing in the "coordinates" box the perceptual location of segment 5 (-12.7 -5.3)

Will SUXI's sales come from any particular segment? Segment 5 gives the answer by examining the proportions of the SUXI line: yes, in fact, 14.7% of segment 5 members bought SUXI's, the third brand after SAKA and SIMO in attracting consumers of that segment.

It can be concluded that SUXI competes with SAKA and SIMO in segment 5. however SIMO sells even more in segment 2. You can check the competitive position of SUXI visually in the Perceptual Map Study 5. SUXI represented by letter H is in the same place, looking vertically, as SAKA (A) and SIMO (E), but SIMO is closer to segment 2 because of its attractiveness to those consumers. It means that these three brands are positioned in the lower half of the map (the horizontal), SIMO being differentiated from the other two by having more power (the vertical).

Now you know how you are positioned, with whom you compete, and you lack enough publicity. How well positioned is SUXI? Study 4 provides the ideal points, each segment on semantic scales. Remember that these are from 1 to 7 and that the data are expressed in averages. SUXI for example resulted in an average of 2.08 in Power, i.e. below the midpoint of the scale (4) where the maximum 7 means "High Power". How much is the ideal of segment 5? 3.16, a score significantly higher than SUXI

16. What happens if I spend more from the assigned Budget?

The corporation discounts it in advertising.

17. What does it depend on me to increase the budget?

It depends in the Increasing Net Marketing Contribution.

18. How is that used in the decision sheet on “coordinates”?

They allow us to point more precisely to the core of a segment by limiting the advertising agency to sending messages that only have to do with that mix of attributes. For example, you can change the direction, or point more correctly, by placing in the “coordinates” box the perceptual location of segment 5 (-12.7 -5.3) to force the agency to concentrate all its creativity on that segment. Naturally the brand will not move strides but gradually and more efficiently. The fastest way to move a brand perceptually is to alter the price or some other feature so that it moves to another segment with some publicity.

APPENDIX 5

IMPORTANT CONSIDERATIONS

IMPORTANT CONSIDERATIONS: The team can implement any of the following strategies:

- Especialization (stay where they are): Improving their weak brand.
- Diversification (multi-segment approach, one brand for each segment of the current market):
Set 05 market segments and 05 brands, one brand for each market segment.
- Extension (filling gaps in the market): Create a complete product line.
- Innovation (new product in new market): Enter to the VODITES market

RESTRICTIONS

As stated above, there are 5 teams and each team can have a maximum of 5 brands (simultaneously) between the product lines of SONITE and VODITES through the 10 simulated periods.

To reach 5 brands, teams must have previously made R&D projects and each team can do a maximum of 5 R&D projects during the whole simulation. For example, if the simulation administrator decides to set up a simulation with 8 decision periods, teams will only be able to make 5 R&D projects during the 8 periods.

If a team reaches the limit of 5 active brands in the market and has an approved R&D project ready to be launched in the market, that team will have to choose which brand of theirs will be totally taken out of the market by following the two guidelines below:

1. Having input zero (0) in the production field on the two previous periods continuously.
2. Input zero (0) in the production field in the brand that has a stock of "zero" (0).
When a product with zero stock has an assigned production of zero, the brand gets eliminated automatically.

Alternatives to improve the current product or launch new products in the market.

The first step teams must do to implement any of these options above is, to have an R&D project 100% approved.

Example 1: Firm 1 makes a product improvement for SATO brand.

| MARKETING DECISIONS | | | |
|---------------------|--|---|---|
| Brand Name ? | Project Name of I&D (Modification or Introduction) ? | Production Planning (In thousands of Units) ? | Advertising Budget (In thousands of \$) ? |
| SAKA | | 100 | 2500 |
| SATO | PSAMA | 72 | 3000 |
| | | | |
| | | | |
| | | | |

SALES FORCE ?

As we can see in the image above, the approved project PSAMA is being assigned to the SATO brand, this means that, from this period onwards, the SATO brand will take the characteristics approved from the project PSAMA; maintaining the original brand name SATO.

Example 2: Firm 1 with brands SAKA and SATO, wishes to launch a completely new brand to the market, in this case SAMA.

| MARKETING DECISIONS | | | |
|---------------------|--|---|---|
| Brand Name ? | Project Name of I&D (Modification or Introduction) ? | Production Planning (In thousands of Units) ? | Advertising Budget (In thousands of \$) ? |
| SAKA | | 100 | 2500 |
| SATO | | 72 | 3000 |
| SAMA | PSAMA | 80 | 4000 |
| | | | |
| | | | |

SALES FORCE ?

As we can see in the image above, the third line has of the decision sheet has filled inputs with SAMA in the brand name and PSAMA in the project name, which was previously approved by the R&D department. When launching a new brand to the market, the team must assign to it a production level, advertising budget, etc.

In case that Firm 1 wishes to take out the market the SATO brand, and remain only with the SAKA and SAMA brands, the team must delete all inputs in the decision sheet for SATO; brand name, production level, advertising budget, etc.

When deleting a brand, remember not to leave empty rows in the decision sheet.

| MARKETING DECISIONS | | | |
|---------------------|--|---|---|
| Brand Name ? | Project Name of I&D (Modification or Introduction) ? | Production Planning (In thousands of Units) ? | Advertising Budget (In thousands of \$) ? |
| SAKA | | 100 | 2500 |
| SAMA | | 80 | 4000 |
| | | | |
| | | | |
| | | | |

SALES FORCE ?

MARKSTRAT

GUIDELINES FOR THE FINAL REPORT MARKSTRATED SIMULATOR

Digital archive containing::

- Participants names
- Course name,
- Simulator's name
- Date and University.

Orientation:

Report submitted to the group of directors / shareholders to retain the team or to choose a new management team.

Points to take into account

- Analysis of the company's performance in general and by product-market (a decision-making based in the backgrounds company is not recommended).
- Main strategies adopted by yourself and by competitors.
- Main adjustments and adaptations made to change in the environment.
- Crucial points learned from important successes and failures.
- Recommendations the company's future.

© MICHELSEN LABSAG LTD.
www.labsag.co.uk

LABSAG
BUSINESS GAME