

# NewShoes <br> Principles of Marketing Simulation 

Willbann D. Terpening, Gonzaga University James G. Helgeson, Gonzaga University Michael L. Ursic, Gonzaga University

Charlottesville, Virginia, USA

## Copyright Notice

This manual and the simulation described in it are copyrighted with all rights reserved by Interpretive Software, Inc. Under the copyright laws, neither this manual nor the simulation may be copied, in whole or in part, without written consent of the authors, except in the normal use of the simulation for educational purposes, and then only by those with a valid license for use. The same proprietary and copyright notices must be affixed to any permitted copies as were affixed to the original. This exception does not allow copies to be made for others, whether or not sold. Under the law, copying includes translating into another language or format.

Purchasing the simulation experience gives the owner the right to participate in a unique learning event. Each student or participant must purchase the simulation to take part in the event or the institution sponsoring the event must purchase for the entire group participating in the event.

Limited Warranty on Media and Manuals
In no event, will Interpretive Software, Inc. be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect in the software or its documentation, even if advised of the possibility of such damages. In particular, the authors shall have no liability for any programs or data stored in or used with the computer products, including the cost of recovering such programs or data.

This simulation experience is sold, "as is," and you, the purchaser, are assuming the entire risk as to its quality and performance. The warranty and remedies set forth above are exclusive and in lieu of all other, oral or written, express or implied.

For more information about other products from Interpretive Software, please contact:

Interpretive Simulations
1421 Sachem Place, Suite 2
Charlottesville, VA 22901
Phone: (434) 979-0245
Fax: (434) 979-2454
Website: http://www.interpretive.com/

## Discover a Better Way to Learn. Active Learning through Business Simulations.

Copyright © 2006-2017 Willbann Terpening, James Helgeson, Michael Ursic, and Interpretive Software, Inc. Images © iStock.com and © BigStock.com.

All rights reserved. Printed in the United States of America. No part of this book may be used or reproduced in any manner whatsoever without written permission of Interpretive Software, Inc. Graphic images copyright © BigStockPhotos, copyright © iStock.

## Contents

Copyright Notice ..... ii
Contents ..... iii
About the Authors ..... iv
NewShoes Introduction ..... 1
NewShoes Quick Start Guide ..... 3
NewShoes Manual ..... 4
NewShoes Case ..... 5
The Athletic Shoe Industry ..... 6
The NewShoes Industry ..... 8
Product ..... 9
Place ..... 10
Price ..... 11
Promotion ..... 12
Production Costs ..... 13
Market Research and Decision Analysis ..... 15
Summary of Decisions Variables ..... 16
Next Steps ..... 16
Marketing Concepts ..... 19
The Marketing Function ..... 20
Product ..... 21
Price ..... 21
Promotion ..... 22
Place ..... 23
Marketing Strategy ..... 23
The Decision-Making Process ..... 25
Models as Decision Aids ..... 26
Forecasting ..... 28
Types of Decisions and Response Functions ..... 29
Measuring Results ..... 31
Summary ..... 35
Appendix ..... 37
Regional Market Descriptions ..... 38
Glossary ..... 40
Index ..... 44

## About the Authors

WILLBANN TERPENING is Professor of Operations Management at Gonzaga University's School of Business Administration. He teaches courses in operations management, research methods, spreadsheet modeling, and process management at the undergraduate and graduate levels. Dr. Terpening's areas of expertise are process management, the use of information in operations management, and human judgment and decision-making. His research has been published in leading journals, including Psychology and Marketing, the Journal of Psychology, and the Journal of Business and Management. Professor Terpening consults in the areas of operations, information systems, and research methods. He sits on the board of Sirti, a state economic development agency and other nonprofit organizations. He also has programmed systems to support managerial decision-making for several organizations. He received his Ph.D. and M.A. from Southern Illinois University and his B.A. from the University of Montana.

JAMES HELGESON is Professor of Marketing at Gonzaga University's School of Business Administration. His area of expertise is behavioral decision-making, with a focus on consumer and respondent decision-making and information processing. He teaches marketing theory and practice, marketing strategy and qualitative decision-making in the undergraduate and graduate business programs. He was awarded the Gonzaga University Great Teachers Program Award for Distinguished Scholarship in 1995. Dr. Helgeson's research has been published widely in leading journals, including the Journal of Consumer Research, the Journal of the Academy of Marketing Science, Organizational Behavior and Human Decision Processes, the Journal of Behavioral Decision Making, the Journal of Marketing Research, the Journal of Consumer Psychology, Psychology and Marketing, the International Journal of Market Research. Dr. Helgeson received his Ph.D. from the University of Oregon and his M.B.A. and B.A. from Eastern Washington University.

The late MICHAEL URSIC served on the faculty at Gonzaga University's School of Business Administration, where he taught marketing research and consumer behavior. His areas of expertise were decision-making and public policy. His research was published in the Journal of Consumer Research, the Journal of Public Policy and Marketing, the Journal of Consumer Affairs, Psychology and Marketing, Industrial Marketing Management, the Journal of the Academy of Marketing Science, the Journal of Business Research, and the Journal of the Market Research Society. He received his Ph.D. from the University of Oregon.


NewShoes is a
competitive simulation
covering basic concepts in marketing.

## You will learn about

developing a product,
while pricing and promoting it in different markets.

## You will compete

against your peers in a
NewShoes industry. All competitors start in the same position.

## By researching the

markets, making good
marketing decisions, and analyzing the results, you will gain experience with marketing management.

Newshoes is a marketing simulation which offers you the chance to manage a brand of athletic shoe, and to experience the exhilaration of competition in the marketplace. Consider the simulation an opportunity to apply the marketing concepts you have studied or will study this term. Thoughtful decisions will go far toward achieving success in NewShoes. As is true in the real business world, luck can also play a role in business success. But as is also true in the real business world, relying solely on luck and not sound business decisions, is a high-risk strategy.

You and your team are responsible for deciding which markets to compete in, as well as pricing and promotion decisions for each market. You will also need to decide how much to develop your product in order to remain competitive in the marketplace. As you manage the marketing for your brand of shoe you will gain a practical understanding of business strategy and how various factors interact and affect one another in a marketing organization. By analyzing information, making decisions, and observing the results, you will experience first-hand the challenges and rewards of strategic marketing.

Unlike the real market in athletic shoes, every NewShoes company starts from the same position, so there is no competitive advantage for any team at the beginning of the simulation. Your goal is to increase sales and profits for your company. By making better decisions than your competitors, you will increase your company's share of sales in the market and be more profitable. Key factors in making good decisions are: understanding your situation, evaluating all your options, and assessing the results of your choices. By working together with your team in each of these areas, you will learn much about managing a brand in the marketplace.

To get the most out of the NewShoes experience, we recommend the approach outlined on the following page.

## NewShoes Quick Start Guide



[^0]The remainder of this manual is divided into the sections described below. Understanding and success in NewShoes will be greatly enhanced by reading this manual before you begin the simulation. The sections listed below will answer most of the questions students typically have during the simulation experience, and reading them have the added benefit of improving your competitiveness. Finally, the operations guide and NewShoes case are also available on-line in the simulation software.

Section 1: NewShoes Case contains a brief history of the athletic shoe industry and background on the current situation of your firm. It also provides details of the decision variables that you will set over the course of the experience. A summary table of all the decisions you will face in NewShoes is also included.

Section 2: Marketing Concepts presents a general discussion of the marketing function, the 4Ps, the strategic planning process, how to make decisions, and an introduction on how to analyze the effectiveness of your decisions.

Appendix: This section provides a description of the regional markets' customer groups in the NewShoes environment. This section details customer expectations by region and can help guide you in marketing approaches to advertising, sales promotion, price, etc. The decisions and research request form will be useful for recording and analyzing your company's decisions. The glossary contains marketing terms that are used in the simulation. An index concludes the appendix.


## The Athletic Shoe Industry

The Athletic Shoe Industry is a dynamic and exciting industry with sales of over \$70 billion worldwide. In recent history, increases in product demand were fueled by health and physical fitness trends, but the advent of athletic shoes goes back to the 1800s. Now athletic shoes are common and designed to meet many different consumer needs.


When the jogging and fitness craze began in the mid-1970s, athletic shoe manufacturers were dubbed "Adidas and the Seven Dwarfs" because of the success of West Germany's Adidas company. But the early dominance of Adidas was no guarantee of future success. In the mid-1970s, Adidas not only underestimated the amount of growth that was about to occur in the athletic shoe market but also the aggressiveness of other manufacturers, such as Nike in the United States.

The rise of Nike in the athletic shoe industry is a Cinderella story. A university runner (Phil Knight) and his former coach (Bill Bowerman of the University of Oregon) went into business distributing Japan's Tiger running shoes in the United States. In 1971, they developed their own shoe and named it Nike. Fiddling with a waffle iron and some urethane rubber led Bowerman to develop the "Waffle" sole. This product improvement gave Nike its initial impetus. On the marketing side, the now famous "swoosh" trademark on the shoes was developed by an art student at a cost to the company of a mere $\$ 35$ !

Nike experienced phenomenal sales growth from \$14 million in 1976 to \$920 million in 1984. Although Adidas remained "number one" outside the United States, fast-rising Nike dominated the domestic market by the early 1980s. In the mid-1980s, Nike had several problems to contend with, including a peak in demand in the athletic shoe industry, quality control difficulties, and a loose and paternalistic management style that appeared inadequate for a billion-dollar firm. As Nike faltered, a new player, Reebok, surged.

Beginning its life in the United States as a subsidiary of a British firm, Reebok became a publicly held firm that went on to own its former parent. Reebok's revenues zoomed from $\$ 4$ million in 1982 to $\$ 900$ million in 1986. Although Nike lost its position as number one in market share to Reebok in 1986, it regained it through astute changes in its management style, improved marketing strategies, and product development. During the 90s, Adidas dropped to fifth place in

United States market share. But ever the competitor, Adidas has come back and now battles with Reebok for the number two market share position, behind Nike.
Other competitors also entered the scene, such as L.A. Gear, whose sales skyrocketed in the early 1990s, driven by a focus on fashion athletic footwear. In recent time, L.A. Gear has lost its edge. In the late 90 s, Italian-based Fila surged to third place behind Nike and Reebok in United States athletic shoe sales. It too, has lost its edge. New Balance has done well, pulling into the number four market share position on occasion, focusing on serious athletes and unique products that come in varying widths. Puma, with roots that actually connect it to Adidas in its early days, duels with New Balance for position in the U.S. athletic shoe market. Brooks (owned by Berkshire Hathaway), Converse (now owned by Nike), Asics, Under Armor, Keds, and Skechers brands play more niche roles, but make the market interesting and competitive. And, Adidas now owns its old rival Reebok! Today, the athletic shoe industry in the United States generates approximately \$15 billion in sales annually.

As can be seen in this brief history of the athletic shoe industry, it is a competitive market with changing market trends and fads that result in a dynamic business environment. The NewShoes simulation will allow you to experience this sampetition, excitement, and dynamism.


ATHLEIC SHOE INDUSIRY


## The NewShoes Industry

The industry in NewShoes is made up of competing firms from your class, each selling one basic shoe. You have been hired as a member of the new marketing management team for your company. In the simulation, there are three regions representing different kinds of markets. The home region is a geographic sub-market, such as the Pacific Northwest in the United States or the Prairie Provinces in Canada. The domestic region represents a national market, such as the entire United States or Canadian market, minus the home market. The foreign region is the entire international market outside the home and domestic regions. The home market is generally a smaller market than the domestic market, with the foreign market being the smallest market of the three, at least early in the simulation. It is not known what the full potential of the foreign market might be.

In NewShoes, athletic shoes are sold by manufacturers such as your company to distributors in a market, who then sell to consumers in retail stores. Price is a significant factor in sales, but how you market to distributors and consumers can also impact sales. Through personal selling and dealer promotion, you can encourage distributors to "push" your product and increase sales. By advertising and offering consumer promotions, you can make consumers aware of your brand and persuade them to buy it. Each market is unique, with distributors and consumers responding to your marketing decisions in different ways, so your task is to find the correct marketing mix for each region.


When your team takes over marketing for the firm, there are two periods of results available for you to evaluate the condition of the company. A "period" in the world of NewShoes can be viewed as a month, a quarter, or a year of operations. It is simply a period of company operation and of competition with the other NewShoes company teams. At the beginning of the simulation, your company is struggling to make a profit. After a loss of $\$ 2.4$ million in Period -1 , the previous marketing team decided to raise the price from $\$ 90$ to $\$ 110$ in the home market, and expand into the domestic market. The changes were a qualified success. Total revenue increased from $\$ 9.2$ million to $\$ 19.2$ million, but home sales dropped somewhat, and the company still lost $\$ 1.2$ million.

## Table 1.0.A: Sales and Revenue (previous two periods)

|  | Home Sales | Domestic <br> Sales | Total <br> Revenue | COGS | Expenses | Net Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period 0 | $\$ 7.5$ | $\$ 11.7$ | $\$ 19.2$ | $\$ 7.9$ | $\$ 12.5$ | $-\$ 1.2$ |
| Period -1 | $\$ 9.2$ | $N A$ | $\$ 9.2$ | $\$ 6.4$ | $\$ 5.2$ | $-\$ 2.4$ |

As a member of the new marketing management team, you face challenging decisions concerning your product, its pricing and promotion, and new distribution opportunities. While the same product is sold into all the regions, you must make price and promotion decisions for each market. Thus, you must consider the four Ps of marketing in managing your firm: product, price, promotion, and place. That is, you must decide where to distribute (place) your product, what price to charge, and how to promote it.

## Product

All companies begin with the "Basic Version" of athletic shoes and each firm sells only one version at any given time, in all regions. Investment in new product development can lead to a new version of your athletic shoes. The firm spent $\$ 800,000$ on product development in Period -1 , and $\$ 900,000$ in Period 0 . Higher and more regular investments tend to result in shorter development times, but expenditures beyond $\$ 2$ million in a given period have a diminishing effect on product development.

As is true in the athletic shoe industry, there is some uncertainty as to when the next breakthrough in shoe development will occur. A new version of your product can be developed from Version 1 up through Version 10, though it is unlikely that Version 10 will be attained in a NewShoes competition. Version 5 or 6 is usually the highest version that can be reached after 8 to 10 decision periods. Each time your company releases a new version, that new version is automatically distributed in all the regions where you have a presence, and each region receives approximately the same positive effect on sales.

## Place

Your firm is well established in the home market at the start of the simulation. Distributors have been carrying your brand for some time, so additional salespeople and dealer promotions are only marginally effective. Customers in this market are looking for a high quality shoe with a price that is "just right"-not too high and not too low. A drop in revenue after a recent price increase may be an indication that the current price is above what customers expect to pay. Advertising is a good way of reaching customers, and consumer promotion is also helpful.

In the domestic region, your firm has just entered the market, and initial sales have met expectations, but it is not clear if the marketing mix chosen by the previous management team is optimal. Early research indicates that customers in this market consider price an important factor in their decision, and they are not willing to pay as much as customers in the home market. Though advertising is helpful in reaching new customers in this market, they are more likely to pay attention to consumer promotions. Access to distribution in the domestic market is more difficult than in the home market, and requires higher levels of salespeople and dealer promotions.

As the simulation progresses, the foreign market may open up as an opportunity for your firm. Be aware that a marketing mix that works well in the home and domestic markets may not work well in the foreign market. Customers interested in athletic shoes in the foreign region are looking for a high quality product, and price is not much of an issue. They will not be swayed very much by advertising and consumer promotions. Getting your product distributed will be a big challenge, and requires spending on salespeople and dealer promotions.

You may enter new markets when available, and leave market regions as you choose, though you do need to maintain a presence in at least one market. There is no charge for leaving a region. There is, however, a $\$ 750,000$ start-up charge each time you enter or re-enter a region. All you have to do to enter or re-enter a region is to input marketing decisions for the region, being sure to choose a marketing mix that is appropriate for the region. If your entry into a region has not been successful, and you would like to concentrate on other markets, you can leave a region by zeroing out the decision variables for that market. Remember, it costs $\$ 750,000$ to enter a new market or re-enter a market you previously left, so think carefully before abandoning a region.

The firm entered the domestic market in Period 0 , and along with the consumer and dealer promotion expenses, there was a charge of $\$ 750,000$ for the period. That amount is included in the total expenses shown for the Period 0 results.

In addition to selling into the regular distribution channels, a major retailer may ask you to bid on a contract to sell a large quantity of shoes directly to them so they can market them as a store brand of athletic shoe. This means the purchaser will put its own brand name on the product, and your brand name will not appear on the shoes. Contracts are awarded based on the lowest
bid, and sales to the contract winner are guaranteed. In case of a tie bid, the contract will be split equally between the companies submitting the winning bids. In NewShoes, contract sales have no impact on sales in the regular distribution channels. You may choose to bid or not to bid on these contracts if they become available.

You may also have the opportunity to sell directly to consumers by establishing a presence on the web and setting up an order processing system. The potential for direct sales to consumers is estimated to be about $10 \%$ of sales through the retail channels in the home and domestic markets. Foreign market customers will not be able to buy direct.

## Price

Different selling prices can be charges for each region in which you are operating. For Period 0, the previous marketing team set a price of $\$ 110.00$ in the home market and $\$ 90.00$ in the domestic market. Decisions on selling price are in dollars and cents, as opposed to the other NewShoes variables, which are entered in whole dollars (or numbers) only. The price you set represents the price to the distributors in the region, and there is no discounting decision in NewShoes. Although you do not have control over the actual price that retailers will charge for your products, retail prices will reflect the price you set, and consumers will respond to any changes you make.

> A word of caution:
> While each market
> responds differently to
> the selling price you set, prices over $\$ 150$ can cause a rapid decrease in sales in any NewShoes market region.

The decision you make on selling price is very important and has a major impact not just on sales of your shoes, but on your company's profitability. Your pricing decision should take into account a number of factors:
o Company objectives, such as growth and profitability
o Fixed expenses and unit costs
o Competitors' pricing
o Market response to price
The previous marketing team had thought that raising the price in the home market from $\$ 90.00$ in Period -1 to $\$ 110.00$ in Period 0 would help the bottom line without hurting sales too much. While losses were not as great, home sales dropped more than expected, from $\$ 9.2$ to $\$ 7.5$ million, and management wants your team to re-evaluate pricing, particularly in the home market.

If you have the opportunity to bid on a contract or sell directly to consumers on the web, you will have additional pricing decisions to make. When selling to another business rather than into the retail market, pricing becomes especially important. You must set your price low enough to win the contract, but high enough to make the contract profitable. If your price is too high, you will
get no sales. Too low, and you will lose money on the deal, and possibly face charges of predatory pricing.

Bypassing retail channels by selling directly to consumers over the web brings additional issues to the pricing decision. Undercutting the retail distribution channels can cause some stores to drop your product and reduce sales in the channel. In NewShoes, pricing for direct sales needs to be coordinated with the prices set for the home and domestic markets. Customers in the foreign market cannot purchase your product from the website, so the direct pricing decision will not have an impact on sales there.

## Promotion

Promotion is often divided into two general categories: consumer promotion (e.g. promotion targeting consumers/end-users) and channel or dealer promotion (e.g. promotion targeting the distribution channel). In NewShoes, there are two consumer-oriented decisions and two channel promotion decisions to be made in each region. The following are brief descriptions and some guidelines regarding decisions for the four different types of promotion in NewShoes.

## Consumer Promotion

Consumer advertising is money spent on promotion presented through the media (television, radio, newspapers, magazines, websites etc.) that targets the consumers of your product. In Period 0, advertising expenditures were $\$ 1.5$ million in the home and $\$ 2.0$ million in the domestic market. You need to enter the dollar amount for consumer advertising for each region, but be aware that expenditures over $\$ 2.0$ million per period in a market will have little marginal effect on sales.

Consumer sales promotion is money spent in promotional items aimed at the consumer, such as rebates, contests, and premiums. You will need to enter a dollar amount appropriate for the market. Period 0 amounts were $\$ 2.5$ million in the home market, and $\$ 1.5$ million in the domestic market. Management thinks the previous marketing team placed too much emphasis on consumer sales promotion, and wants your team to take a look at these expenditures. It is thought that spending more than $\$ 1.0$ million per period in any market will have little effect on generating additional sales.

## Channel or Dealer Promotion

Personal selling involves having a salesperson from your company contact a distributor to persuade them to carry your product. Salespeople only call on middle-people in the distribution channel and do not deal with consumers or end users of your product. You must decide the number of the salespeople in each region. The effect of your salespeople varies by region, but
having more than 10 salespersons in any market region will have little effect on generating additional sales. Each salesperson's salary, commission, benefits, support, travel, and other expenses cost your company $\$ 80,000$ each period. Salespeople may be hired or fired at any time with no training or separation expense. In Period 0, you had 7 salespeople in the home region, and 7 in the domestic region. To change the total number of your salespeople, simply change the number of salespeople for each region.

Dealer sales promotion is the money spent on a variety of promotional items aimed at the middle-person in your distribution channel. These items include sales assistance and training, contests, and free displays. You need to decide the appropriate dollar amount to spend in each region. Expenditures per period over $\$ 1.0$ million in any market region seem to have little marginal effect on sales. Your firm's expenditures in Period 0 were $\$ 1.2$ million in the home market, and $\$ 1.0$ million in the domestic market.

All four promotion variables can be adjusted separately in each of the three market regions and primarily affect sales in the period in which money is allocated to them. There is little carryover into the following periods. The amount spent in any of these areas of promotion can be changed as often as desired while you are making your decision. Simply change the number in your decision input. Just be sure to review your decisions before the simulation is advanced to confirm that the last input entered is your final decision for the period.

## Production Costs

Production does not have to be scheduled in NewShoes because your company manufactures its athletic shoes to meet demand. This simplification of reality means that you do not have to be concerned about inventory control if you over-produce, or about missed sales and employee overtime expenses if you do not schedule enough production.

One of the major reasons the loss in Period 0 was not as great as in Period -1 was a lower manufacturing cost of the product. Cost per unit (a pair of athletic shoes) fell from $\$ 62.59$ in Period -1 to $\$ 40.00$ in Period 0 as production expanded from 102,000 units in Period -1 to 198,000 units in Period 0. Manufacturing expects cost of goods sold (COGS) to decline even further as the firm gains more experience with purchasing the component materials, making better use of equipment, and developing more efficient manufacturing processes. They estimate that the company is on a $75 \%$ learning curve, which means that costs are expected to fall $25 \%$, to $75 \%$ of their previous level, each time cumulative production doubles.

## Table 1.B: Production Costs (previous 2 periods)

|  | Home Units | Domestic <br> Units | Total Units | Unit Cost | COGS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Period 0 | 67,600 | 130,400 | 198,000 | $\$ 40.00$ | $\$ 7.9$ million |
| Period -1 | 102,000 | NA | 102,000 | $\$ 62.59$ | $\$ 6.4$ million |

## 14

As your team takes over the company, cumulative production stands at 300,000 units. Based on manufacturing's estimates, average unit cost should drop from the current $\$ 40.00$ to $\$ 30.00$ when cumulative production reaches $600,000(\$ 40.00 \times 0.75=\$ 30.00)$, and drop further to $\$ 22.50$ when cumulative production reaches 1.2 million units ( $\$ 30.00 \times 0.75=\$ 22.50$ ). A graph of the Learning/Experience Curve for manufacturing is provided in Figure 1.A as a visual representation of how costs are projected to decrease with future increases in cumulative production.

## Figure 1.A: Learning / Experience Curve



The current unit cost of the product is clearly an important factor in your pricing decision. But the experience effects on cost make it clear that you should not only consider current cost, but also the projected cost as sales expand. While setting a high price may seem to be the best way to maximize profitability, a lower price could increase sales enough to lower unit costs and make the company more profitable in the long run. In fact, because production costs are shared across all channels, it may be profitable simply to break even when pursuing sales in a new market if the increase in sales reduces unit costs for all markets.

Unit cost is especially important when deciding on a price if you choose to bid on a contract. Winning a contract bid can have a positive effect on the profitability of your regular business in the market regions by increasing cumulative production and reducing product unit cost for all sales. Your total cost of goods may be lower with the contract than without it as the contract bid units move you to lower costs on the experience curve.

## Market Research and Decision Analysis

To help you with your marketing decisions, NewShoes gives you experience in collecting market research, which is a vital function of the effective marketing manager. A good place to start is the Industry News report, where you can get an overview of changes in the markets. The Market Sales report provides more detail, showing not only the unit sales in each market and the number of competitors, but also projected sales for next period.


For more in-depth competitive information, you will need to purchase market research. Corporate level research is available for competitors' product levels and spending on product development. For each market, there is information on price, advertising, consumer promotion, salespeople, dealer promotions, and customer satisfaction. By default, the reports will show industry or market averages, though more detailed information may become available as the simulation progresses.

In addition to market research, there are several tools available to help you analyze your options when making decisions. Break-even Analysis will help you determine the lowest price you can charge for your product in each market without incurring a loss. By entering assumptions about unit sales, you can calculate the breakeven price in each market, based on projected expenses from your marketing decisions. Project unit costs using the Cost of Goods

To view the market research reports in the coming period, you must order them at the same time you make your marketing decisions. Calculator. Simply enter a projection for production (total unit sales for all regions), and it will take into account experience effects to estimate your unit cost for the coming period. The Response Functions analysis screen allows you to graph the relationship between unit sales and a selected marketing variable (price, advertising, salespeople, consumer promotion, or dealer promotion) in a market. Keep in mind that there may not be a direct relationship between an individual variable and unit sales, but graphing the results of previous decisions can be helpful in deciding the best marketing mix for each region. If a contract is open for bidding, the Bid Analysis tool shows the impact on unit cost of winning a contract. Use it to anticipate the impact of additional production from contract sales on your total cost of goods.

Use the market research and decision analysis tools to help forecast what will happen and to understand why results differ from your projections. If there is a big difference, is it because of changes in overall demand? Has your price changed relative to the competition? Have you changed your marketing expenditures, or has the competition made changes to their marketing? There are no simple answers to these questions, and this is the type of complex analysis that

## 16

marketers face daily. Only by integrating customer needs, the competitive environment, and your own corporate goals into your analysis, can you learn to make the key decisions that will decide whether your firm is successful or not.

## Summary of Decisions Variables

A summary of simulation variables is provided in Table 1.C (on next page) and should be used as a reference aid when making decisions in NewShoes. Along with each decision variable, this summary includes suggested limits, costs, other factors, and general parameters of the simulation.

## Next Steps

As the new management team of a NewShoes company, several challenging decisions demand your immediate attention. First, you must formulate a strategic plan for your product to guide you in making decisions each period. Before you make the first period's decisions, you will need to choose a name to project a brand image that is in line with your vision of the company, and to differentiate your product from your competitors'.

Your parent company expects continued top line growth, but more importantly, a turnaround in profits in the near future. While declining unit costs should help the bottom line, it is up to you to decide on the best marketing mix for the home and domestic regions to maximize sales and profits. Longer term, you will need to track the competition and be ready to take advantage of new sales opportunities as they arise. Markets are dynamic, so you must constantly improve your product to keep up with changes in consumers' taste.

Good luck as you put your marketing skills to the test in the world of NewShoes!

## Table 1.C: Decision Variables

| Decision <br> Variables | Suggested <br> Limits / Region | Cost | Variability <br> by Region | Decision <br> Range | Comments |
| :--- | :--- | :--- | :--- | :--- | :--- |$|$| N/A |
| :--- |



## The Marketing Function



Marketers operate and make decisions on the boundary between the organization for which they work and the market they are trying to serve. They work as facilitators of exchange between their organization and its customers or clients. These exchanges can be for consumer products, which are products that end users use for personal non-business purposes, and/or industrial products, which are products that organizations use for resale, or as components for manufacturing, or as items needed to conduct their business. The products involved in these exchanges can be tangible, such as computers, or intangible, such as expert advice. Marketing is an important function in companies that pursue a profit, as well as for non-profit organizations. Figure 2.1 displays the various categories of organization activity to which marketing applies and the various possible combinations of these activities.

## Figure 2.1: Marketing Application Matrix



In the world of NewShoes, you will apply marketing concepts and make marketing decisions for a profit-seeking organization selling a tangible good (athletic shoes) to the consumer market. Marketing decisions are generally made in four broad areas known as the marketing mix, or the "4Ps". The 4Ps are product, price, promotion, and place (distribution). In NewShoes you make decisions for each of these components of the marketing mix as you manage your company. While you are competing in NewShoes, consider applying the concepts you are using and the decisions you are making to other categories of exchanges where marketing is applicable, as presented in Figure 2.1.

## Product

The products involved in exchanges can either be goods or services. Goods are tangible items that can be seen and felt. Services are more intangible than goods and include such things as professional services (legal, medical, etc.) and completely intangible items like ideas (using seatbelts, quitting smoking, etc.). Often, services and goods are bundled together, such as the parts and service involved in an automobile repair.

Companies in NewShoes start out selling a basic athletic shoe. By investing in product development and developing a new version of its product, a firm can differentiate itself from its competitors. Firms also need to be aware of changing consumer tastes. Having a popular product that is selling well today is no guarantee of sales in the future, so continued efforts in product development are essential for the long term success of a business.

## Price

The price in an exchange determines the amount of money required to obtain a product. Total demand for a product will vary depending on the price charged. In general, the lower the price, the larger the quantity that will be purchased. Looked at another way, as the price of a product goes up, some consumers will look to other products that are relatively less expensive, or they will opt not to buy anything. There are exceptions to the general rule. If a product is a "prestige" item, then increasing price may actual increase demand, since the status of owning the product goes up. In addition, price may be perceived as an indicator of quality, so a low price may be taken as sign of low quality. In this case, a price that is "just right" will result in the highest demand.

If maximizing revenue is a goal of the company, then paying attention to consumer response to price is essential. For example, if all other factors are held constant and the prices in the exhibit below yield the corresponding units sold, which is the best price to maximize sales?

| Price | Units Sold |
| :---: | :---: |
| $\$ 70$ | 120,000 |
| $\$ 90$ | 100,000 |
| $\$ 110$ | 80,000 |

At first glance, it looks like the best price is $\$ 70$, since that results in the largest quantity sold. But we are interested in revenue, not units, so we need to calculate total revenue, or price multiplied by units sold:

## Revenue = Price x Units Sold

Performing the calculations for each price and quantity gives us revenues of $\$ 8.4, \$ 9.0$, and $\$ 8.8$ million, showing that the $\$ 90$ price yields the most revenue in this case. Different markets will respond differently to price changes, and a given market may respond differently to price as tastes change over time, so it is important to continually monitor the effects of price changes.

## Promotion

Price is not the only factor affecting the sales of a product. Sales promotion is the activity of a company to stimulate demand for a product, or to improve the availability of a product in the market. That is, promotion can be aimed at distributors to encourage them to "push" a company's product, or at potential customers to increase demand and "pull" product through the channel.

```
Channel promotion
encourages
distributors to
    "push" your
    product in the
    channel.
```

Promotion aimed at distributors is called channel promotion. Examples are personal selling and dealer sales promotion. In personal selling, a representative of the company contacts distributors directly to facilitate sales. The salesperson provides information about the product, pricing, and promotions. Dealer promotions include special discounts, in-store displays, demonstrations at trade shows, and cooperative advertising. Entering a new market typically involves spending enough on channel promotion to gain access to distribution channels. It does not help that consumers want your product if it is unavailable in the stores they shop. Once a product is well established in a channel, the emphasis shifts from incentives to carry the product to supporting the product and increasing sales.

## Potential <br> customers respond <br> to consumer <br> promotion by <br> seeking out your <br> product, and <br> "pulling" it through <br> the channel.

Consumer promotion includes advertising and sales promotions. Consumer advertising is designed to create awareness among potential buyers, and convince them that the product is right for their needs, or encourage them to buy more of the product. Various media can be used for advertising: print, radio and television, as well as social media. Advertising is most effective when the message stands out from the competition, reaches the target buyer, and is repeated enough to be remembered. Consumer sales promotions include cents-off coupons, rebates, sweepstakes, and customer loyalty programs. It is most effective where customers need to be motivated to buy, and price is an important consideration in the purchase decision.

## Place

In marketing, place refers to all the ways a company gets a product to its target customer. It is a critical decision in the marketing of a product. The process starts with the decision to enter a specific market. After that, the marketer must identify channels of distribution for the product. When targeting the consumer market, a firm will likely need to establish a relationship with retailers who carry the kinds of goods the company produces. In NewShoes, the process involves choosing a market to enter, hiring salespeople, and spending on dealer promotion to establish and support distribution in the channels.

Some companies may sell directly to another business. In this case, product placement is more direct, but will involve some negotiating over the terms of the purchase. In NewShoes, this business-to-business relationship is captured by the process of competitive bidding on a contract with a large retailer, who will rebrand the shoes and sell them as a store brand.

In NewShoes, a region can be considered as both the target market and as the place component of the marketing mix. The same product is sold in all markets, but you must make separate pricing and promotion decisions for each region you enter. There is no formula for the best mix of price and promotion to use in a particular market. Understanding the market you are in will help get you started, but you will need to experiment to find which decisions provide the best return on your marketing expenditures.

## Marketing Strategy

Before delving into the day-to-day decisions, it is important for marketers to consider a strategic plan. The term strategy has its origin in the Greek term "strategia" which means the "art of the general." Generals operate at the level of large-scale military operations. Thus, at the strategic planning level, a business decision-maker deals with the broad picture, or, from the general's
point of view, the "grand battle plan." At the other end of the planning spectrum are tactics, which can be described as the day-to-day maneuvers in a military context, or from a business perspective, the day-to-day use of resources already committed by the strategy.


The first step in the strategic planning process is to develop a mission statement. For example, the mission of your NewShoes company might be to be first in cumulative profit among all the competing teams. Or your mission might say something about providing the market with the most advanced product possible, which indicates a research and development emphasis. Because of its broad generic nature, your team's mission should not have to be changed during the competition. Next, identify your objectives and goals. These will help your company identify where it is going, which actually is the initial step in deciding how to get there. Objectives and goals are the specific items that need to be accomplished in order to achieve your mission. They are benchmarks against which you can evaluate the activities of your firm. Goals and objectives can include comments about such things as profit, return on sales, market share, unit cost of goods, and so forth.

The specifics of the strategy that you adopt should directly aid in attaining the objectives and goals your team has set. Determining your target market may involve comments regarding the markets available in NewShoes, such as the regions in which you will compete, those you plan to dominate, timing of entry into these market regions, and so forth. In this section of your strategic plan, you may also want to say something about which price/quality end of the consumer market you might be pursuing. For example, you could say your company is going to pursue the low end of the market, where people want inexpensive shoes, or the high end of the market, where people want more expensive, prestigious shoes.

$$
\begin{aligned}
& \text { Choosing the } \\
& \text { markets to } \\
& \text { enter, marketing } \\
& \text { mix, and product } \\
& \text { development are } \\
& \text { all part of your } \\
& \text { strategic plan to } \\
& \text { meet your } \\
& \text { objectives. }
\end{aligned}
$$

Another component of the strategy your team adopts is to determine what you plan to do with regard to each element of the marketing mix (price, place, promotion, and product). Considering what your team anticipates doing in each region regarding these variables is an important part of your NewShoes strategy and should be specified as early as possible in the competition.

It is essential to create this strategic framework before making the more detailed decisions, as tactical choices should flow from the strategy, rather than being a disjointed set of reactions to the market and what your competitors are doing. Continue to evaluate the strategic plan your team has laid out as the competition progresses. If you are not attaining the established objectives and goals, the specifics of your plan might need to be reworked.

## The Decision-Making Process

Making a decision is not just a single act that occurs at a point in time, but is a process of steps as depicted next.


These are the steps that decision-makers go through, whether they are consumers trying to decide on what to buy for dinner or businesspeople trying to set a price for a product.

STEP 1 of the process is problem identification. You know you have a problem when the actual state of affairs does not equal the ideal state of affairs. For example, you would like sales to increase (ideal) but they are dropping (actual).

STEP 2 is to search for information. This search can be both internal, within the mind of the decision-maker, and external, from sources outside the person. For example, a manager might search his/her memory for past experiences in setting a price on a product (internal search) and might also do some market research to aid in setting the price (external search).

STEP 3 and STEP 4 in the decision process are interrelated. The search for information can develop alternatives (various possible solutions to the problem) that must then be evaluated. Thus, the businessperson might develop several price alternatives and then evaluate those options. An important consideration in NewShoes, and business decision-making in general, is to put together complete alternatives. The point here is to include all the NewShoes decisions that need to be made as a decision alternative package. This alternative package should work within the strategic plan discussed earlier.

The evaluation step is very important in the decision-making process. To complete this evaluation, the decision-maker will need a set of criteria on which to evaluate each of the developed alternatives. These criteria differ from problem to problem. For example, the criteria used by a consumer when trying to decide what to buy for dinner might include things like speed of preparation, ingredients, expected taste, cost, and so forth. The criteria used by the businessperson trying to evaluate different price alternatives for a product might include profit potential, psychological effect of the price, and the price elasticity of demand. As you can see, different criteria must be considered, depending on the problem being solved. The decisionmakers must identify the important criteria for solving their particular problem.

STEP 5 in the process is to make a choice. Based on the alternative evaluation stage, a particular alternative must be selected as the choice for solving the problem. In the discussion above regarding the criteria used to evaluate alternatives, the orientation was that of a rational, analytical decision process. In actuality, the final choice is likely to be affected by intuition and
emotion along with the analytical aspects of the human mind. Consider the effects of intuition and creativity when making your NewShoes decisions. Creativity may be most applicable in the alternative generation phase of the decision process.

STEP 6 (the last step) in the decision process is the evaluation of the results of your choice. This provides a feedback mechanism. The results of your decisions are evaluated to assess the effectiveness of your choices. This feedback will hopefully make similar decisions in the future easier and faster to make and result in better decisions. Regarding the pricing example used above, the business decision-maker could, for example, see how sales, profit, and other factors responded to the chosen price and use this as feedback to aid in future decision-making.

The evaluation of results of decisions will more than likely be considered during an internal search for information when making similar decisions in the future. However, besides the internal, perhaps more intuitive, use of this feedback information, a useful activity to enhance NewShoes decision-making would be to keep written records of decisions. These records could include the details of the alternatives generated and their evaluation, including criteria for the evaluation. The results that follow from the alternative chosen in the decision can then be recorded. Results can be in the form of profit, market share, contract bid results, new versions of the product available for sale, and so forth. Monitoring decisions, their rationale, and their results can be a basis for improvement of NewShoes decision-making.

## Models as Decision Aids

Models are common tools we use every day to help us interact with the world in which we live. You have an internal model of how to get from the school you attend to the place where you live. You have a model in mind of how to get the grade you would like from the courses in which you are enrolled. A model is a set of variables and their interrelationships that represents reality.

Models are useful tools to aid in business decision-making and can be useful in making your decisions in NewShoes. Models can be part of the information search in the decision process, as described earlier, as well as an aid in the generation and evaluation of decision alternatives.

As a NewShoes decision-maker, you will want to consider three primary types of models: verbal, graphical, and mathematical models. You have encountered these various types of models in different courses you have taken. Many models are encountered in the study of marketing.

Verbal models are verbal descriptions of a phenomenon. A statement such as "In some markets, as price is increased, consumers will make a price-quality link with an accompanying increase in demand to a certain point, beyond which increases in price will result in a decrease in demand," is an example of a verbal model. Note that most graphical and mathematical models can be expressed as verbal models. These and other verbal models can be developed for the variables
and their interrelationships in NewShoes. If the model is applicable to the situation at hand, it can provide "items to consider" when making decisions. It is important to remember that models provide "items to consider" when making decisions, but they do not provide answers. Thus, the best way to view models and other decision aids is as tools that provide advice but not necessarily answers. Models also usually do not capture much, if any, of the intuitive or emotional aspects of decision-making mentioned in the previous section.


Examples of graphical models mentioned in most basic marketing textbooks are the Product Life Cycle (PLC) and the market growth/market share matrix, sometimes designated as the Boston Consulting Group (BCG) growth/share matrix. The assessed position of a product on the PLC graph provides "items to consider" when facing a marketing decision. For example, classification of a product as being in the maturity phase of the PLC may indicate a highly competitive business environment, reduced profits, and more price dealing. "Star" classification in the BCG growth/share matrix indicates, for example, low or negative profits and a high demand on resources. These and other graphical models in your marketing courses or textbooks should be considered when making decisions in NewShoes. Remember that these models give you "items to consider" and not answers. You must generate the answers as a NewShoes management team.

The final type of model is the mathematical model. As noted earlier, a model can be represented in more than one format. For example, mathematical models often can also be represented as a verbal and/or graphical model. Typical mathematical models presented in marketing courses and textbooks include the Break-Even analysis in price setting, the effect of Learning/Experience Curves on costs, and Economic Order Quantities. All of these models, and other mathematical models, can be represented in equation form.

The Learning/Experience Curve effect is an example of a mathematical model that is considered in the NewShoes simulation. The idea that cost of goods produced decreases by 25 percent with each doubling of cumulative production can be put into equation form. In NewShoes, you will need to consider experience effects on unit costs when setting price in each market and when bidding on a contract. Again, as with verbal and graphical models, mathematical models give you "items to consider" in your decision-making but do not generate answers to decisions. The final choice in the decision-making process is up to your NewShoes management team.

## Forecasting

Forecasting is predicting your total unit sales for the next period as well as the unit sales for each region. This can be helpful in determining your potential profits as well as an aid in determining any contract bids your team wishes to submit.

There are a variety of methods available to forecast sales. A variety of forecasting approaches are likely to be presented in your textbook and/or lectures. The simplest forecasting approach is to compute a moving average, which is an average of a specified number of prior periods' sales. For example, assume your unit sales for the last three periods are 100 thousand, 200 thousand, and 225 thousand. To get a rough sales forecast, simply take the average of the three periods:

## Sales Forecast $=(100+200+225) / 3$

(Example: Sales Forecast $=175$ thousand) You will want to adjust this figure upward or downward, considering the following items:

TREND: This is the general direction sales seem to be moving. In the example above, the overall direction of change in sales is upward, so you may want to adjust the sales forecast upward.

ENTERING OR LEAVING A REGION: If you enter the foreign market, for example, sales will increase. Leaving a region will have the opposite effect.

PRICE: Changing the selling price in a region will affect sales. A response function relating unit sales to price can help in making this adjustment.

OTHER MARKET MIX VARIABLES: Changing the amount spent on consumer advertising, and other variables, will have an effect on next period sales. Again, consider the shape of the response function for each of these variables, for each region.

REGION FORECASTS: For example, a market predicted to grow would be likely to display an increase in sales. Consider the effect of the sales forecast for each region.

> Forecasting can be important decision-making tool. If your forecasted unit sales are low, you might determine unit cost of goods. Take your total unit sales to date and add your forecasted unit sales and any contract bid sales you expect to obtain. This will give you your predicted total cumulative unit sales volume. Then consult the Learning/Experience Curve graph to determine your anticipated unit cost of goods for the next period.

## Types of Decisions and Response Functions

There are two broad categories of decision alternatives that business decision-makers face and that you will face in making decisions for your NewShoes company team. They are "COURSE OF ACTION" decisions and "HOW MUCH" decisions.


The category of decisions termed "course of action" (or discrete) decisions includes such marketing decisions as type of promotions to use (a decision in NewShoes), which medium to use for an advertising campaign, which markets to enter (also a decision in NewShoes), whether or not to bid on a contract or invest in product development (two other NewShoes decisions), and which segments to pursue. These are all decisions that involve selecting an alternative.

In addition to the earlier discussion regarding the generation and evaluation of alternatives in the decision process, a few other points should be noted when making "course of action" decisions. First, be aware of the possibility that the best alternative may not yet have been generated. Alternative generation involves creativity and may require a fair portion of the intuitive or emotional aspects of decision-making discussed earlier. Second, the alternatives that are generated need not necessarily be such that adopting one eliminates adopting another alternative. It may be possible and advisable to adopt multiple alternatives at the same time to solve the problem. Third, decision processes involving marketing problems should be based on the strategic plan discussed earlier in this section. This will result in complete alternatives that deal with the target market and the entire marketing mix, not just the specific variable that seems to be the primary problem. Finally, remember that there are intuitive or emotional aspects to the generation and evaluation of alternatives as well as rational, analytical aspects.


The category of decisions termed "how much" (or continuous) decisions includes all the marketing and NewShoes decisions that involve setting a level for a decision variable. In NewShoes, all the pricing decisions, including the amount of the bid price, are "how much" type decisions. The amount your team decides to spend on any of the NewShoes promotion variables (consumer advertising, dealer sales promotion, etc.) and the number of salespeople to employ are all "how much" decisions, as is the amount of investment in product development.

By way of comparing the two types of decisions that have been presented here, the decision of whether or not to bid on a contract is a "course of action" type decision. Once you decide to bid on the contract, the price that your NewShoes team decides to bid is a "how much" type decision. This example illustrates the interrelationship between the two types of decisions.

An important step in setting levels for "how much" type of decisions is to estimate the sales response function for the variable for which the decision must be made. A sales response function for marketing variables, such as those in NewShoes, is the relationship between the level of that variable and the unit sales of your product. To visualize the relationship here, picture trying to determine the slope, direction of slope, and shape of a line on a graph of unit sales (the vertical axis) as changes occur in the level of a marketing variable (the horizontal axis). Unit sales (the vertical, Y , axis) are "responding" to changes in the level set (how much) for a particular marketing variable (the horizontal, X , axis), such as selling price, consumer advertising, and so forth. A decision-maker would like an idea of how the market might respond to different levels of these "how much" type marketing variables. That is a response function. See Figure 2.2.

## Figure 2.2: Cons. Advertising and Price Response Function Graphs



For "how much" type decisions, which are the dominant type of decisions in NewShoes, estimating this relationship is an important decision-making step. Estimating sales response functions accurately is possibly the most difficult task in marketing decision-making. For "how much" decisions (such as expenditure levels) marketing decision-makers have no choice but to make these estimates. Again, there may be both intuitive and analytical aspects and approaches to making these estimates. Some decision-makers may have been in a particular business long enough to be able to estimate on an intuitive level what will happen to unit sales as a marketing decision variable moves from one level to another.

When considering estimating sales response functions from an analytical approach, one can see why this is a difficult process. To produce an accurate estimate of a response function for a particular variable, such as advertising expenditures, one would have to conduct business with several different levels of the variable in actual use in different geographic areas or at different times. While using these different advertising expenditure levels, the decision-maker would have to keep all other marketing variables stable because changing them will also affect the unit sales you are measuring. In addition to these difficulties, any actions your competitors take in the market place will affect your results. Also, a change in the general business climate will affect any response function estimate. Thus, response function estimation is a difficult, albeit necessary, task for a marketing manager.

## Measuring Results

Once you have made your decisions for a period and the simulation is advanced, considerable data is available from internal company reports, industry reports, and market research. You will need to interpret the results of these reports in order to monitor the effectiveness of your decisions, and to change tactics as necessary to meet your objectives.

The company dashboard is a good place to start in tracking general performance measures, such as revenue and return on sales. But you must also learn to read the income statement in order to identify areas of the company that need attention. Calculating and comparing the return on sales in the different regions in which you compete allows you focus on those markets that need more attention, while comparing market shares across regions helps identify strengths and weaknesses relative to the competition. Purchasing market research on your competitors' activities and customer satisfaction with products in the industry will help you in your analysis and lead to better decisions going forward.


The Income Statement, also called a statement of Profit \& Loss, provides a summary of your team's revenue and expenses so that you can determine how well your company performed in a particular period. It shows the revenues received for your product, the cost of producing the product, as well as marketing and other expenses. To make a profit, a company needs to generate enough total revenue, while keeping expenditures at an effective but low level, and cost of goods as low as possible.

The income statement allows you to see the sources of your profit or loss. You can determine the effects of your revenue, cost of goods sold, and expenditures on your overall profit. You can also use the income statement to evaluate the effects of the selling prices, position on the experience curve, and amounts spent on various sales promotion activities.

Provided next is a sample income statement:

Figure 2.3: Sample Income Statement

| INCOME STATEMENT |  |  |
| :---: | :---: | :---: |
| Revenue | \$10,000,000 |  |
| Cost of Goods Sold | \$ 4,000,000 |  |
| Gross Margin |  | \$ 6,000,000 |
| Expenses |  |  |
| Advertising | \$ 1,000,000 |  |
| Consumer Promotions | \$ 2,000,000 |  |
| Personal Selling | \$ 400,000 |  |
| Dealer Promotions | \$ 1,000,000 |  |
| Product Development | \$ 800,000 |  |
| Total Expenses |  | \$ 5,200,000 |
| Net Profit |  | \$ 800,000 |

Let's review the basic profit equation to aid in reading the report:

## Profit (or Loss) = Revenue - Cost of Goods Sold - Total Expenses

This formula presents an income statement in its most rudimentary form and brings competition in NewShoes down to its fundamental level. Total revenue is the number of units sold times the selling price of a unit. In Figure 2.3, the top line of the income statement shows revenue of $\$ 10.0$ million. By monitoring the top line, you can determine if sales are meeting objectives.

Expenses that are directly connected with the sale of each unit are called the cost of goods sold (COGS). Cost of goods sold varies with the number of units sold, and is calculated by multiplying units sold by the average unit cost. The revenue and COGS are typically included in the top section of the income statement, with the difference shown as gross profit, or gross margin. In the example, a COGS of $\$ 4.0$ million yields a gross margin of $\$ 6.0$ million (10.0-4.0 = 6.0).

## COGS = Units Sold x Unit Cost

> Gross Margin = Revenue - COGS

Other expenses will be the same in a period regardless of the number of units sold. Marketing expenses and product development are examples of these. The middle section of the income statement lists all these expenses, then shows the total. In Figure 2.3, marketing and product development expenditures total $\$ 5.2$ million. Note that in NewShoes, you will not find some expenses that you might normally expect on an income statement. The report has been simplified
by omitting expenses such as administrative overhead, rent, depreciation, interest expense, and taxes.

The last section, the bottom line, shows the net profit or loss. This is the number that management and shareholders will be watching most closely, and tells you how effectively you are executing your marketing plan. For our example, the bottom line is $\$ 0.8$ million. Or, going back to our profit/loss formula:

## Profit (or Loss) = \$10.0-\$4.0-\$5.2

## (Example: Profit = \$0.8 million)

In addition to an income statement showing all sales activities, you can use reports by region to tell you the profitability of each market in which your company is operating. This enables you to make strategic decisions about whether to continue to market in a particular region. It also enables you to see when the marketing mix variables need to be adjusted in a particular region. It is a good idea to view the regional income statement every period for each region in which you sell your product.

Another way to utilize the income statement is to compute the ratio of a line item to revenue. For example, dividing gross margin by revenue gives gross margin as a percentage. You can also calculate each expenditure item (consumer advertising, personal selling, etc.) as a percent of revenue. Using these percentages (or ratios) allows you to track changes as the course of the NewShoes competition proceeds. One application of examining these ratios would be to identify expenses that may be increasing too rapidly. Means of controlling these expenses can then be considered.

Other ratios can also be examined. For example, you can determine whether a high consumer advertising to personal selling expenditure ratio results in higher profits. You can then use this information to decide whether to increase or decrease your spending on a certain marketing variable.


Return on Sales (ROS) is an important but simple measure of profitability. It tells you what percentage profit is of total revenue, providing an idea of how effective and efficient a company is in managing its resources. Again using the income statement in Figure 2.3, we can calculate ROS:

## ROS = Net Profit/ Revenue

(Example: ROS = 0.08 = 8\%)
Because the ROS measure readily coverts to a percent, comparisons can be made across regions, across teams, and over time.

Tracking return on sales may influence your decision-making for the next period of play. For example, if you have very poor return on sales for a particular region, depending on your strategy, you might choose to invest more in marketing for that region in order to boost sales, or you might decide to cut your losses and exit that regional market altogether.

## ROS $=\$ 0.8 / \$ 10.0$



Market share tells you how your unit sales, in total and by region, compare with the other competing teams. To compute it, simply divide your company's unit sales by the industry unit sales. Note that market share does not necessarily have to relate directly to profit. For example, a company can set a very low price on its product, relative to its competitors, and "buy" market share. The company's market share may be very high, but they may be operating at a loss because of the low price they are charging.

Market share is important to profits in the long run. Above-average market share means aboveaverage unit sales. In an environment such as NewShoes where the company is operating on a $75 \%$ experience curve, higher share tells you that your costs are decreasing faster than the competition. You may thus want to sacrifice short-term profits for a high market share because your costs may be lower than your competitors' and thus your profits higher in the long run.

Besides using market share to compare your firm with others in the industry, you can also use it to compare your results in the different regions. High profits and market share in one region shows a strong position. Good profits but relatively low market share in a region should make the company wary of possible dominance that may be developing on the part of one of its competitors.


Market research can help you make better decisions. NewShoes research provides you with the average amount spent, for all competitors, in each region for the five NewShoes marketing decision variables. Customer satisfaction with the products in a region is also available, as are company expenditures on product development and the average version of the products on the market. As the simulation progresses, more data may become available, such as the range of results for a variable in the industry (high and low values), and a detail report showing results for each competitor.

One way to make use of the NewShoes market research is to relate your market research information to your market share. First determine whether your expenditure on a given decision
variable is above or below the industry average. For example, if the amount your team spent on advertising is $\$ 1,500,000$ in a region and the average amount for all competitors is $\$ 1,000,000$, you are spending above average. Next, examine your market share. If your market share is 15 percent for the region and there are, for example, ten teams in the region (indicating an average market share of 10 percent) you have an above average market share.

Determining if your team is above, below, or at the average regarding both regional marketing expenditures and market share and then comparing these two items can be an aid in decision making. The following inferences can be made by making the comparisons just described:


## Summary

NewShoes takes you beyond descriptive knowledge of marketing concepts. You will need to work as a team to gather information from a dynamic environment, use various analysis tools, and make decisions in response to changing consumer preferences and competition. Successful teams will start with a well-thought-out plan, consider all options for implementing the plan, and constantly monitor the effects of team decisions. Along the way, you will gain a better understanding of the role marketing plays in organizations and society.


## Regional Market Descriptions

## Thanks to Ted Mitchell of the University

of Nevada-Reno for suggesting this addition to the student manual, as well as providing the original write-up. Professor Mitchell developed this as an add-on for the courses he teaches.

In marketing management, a market is a group of final customers who respond in a similar way to a marketing mix. If two customers are defined as being in different markets, then by definition they respond differently to different levels of advertising, sales promotion, price, etc. For instance, the optimal price and levels of promotion expense will be different in different markets.

When groups of customers with similar response patterns and with sufficient purchasing power are identified, they are given identifying labels such as Home Region or Foreign Region. Sometimes these labels reflect the customer needs or benefits sought and sometimes they reflect the products they tend to buy or where they buy them. The labels used to identify markets may be misleading as to the reasons why customers buy a product. For example, automobile marketers find popular labels such as the "sports car" or "SUV" market carry very little explanatory power. Marketers can design better strategies when they focus on the kinds of "holes" that customers want, rather than on the kinds of "drills" the engineers have asked them to sell. These "holes" can be thought of as the entire marketing mix and all the "benefits" a customer desires from a product.

The Wall Street Journal is full of examples of marketers using popular labels to describe complex business strategies to non-marketers. Sometimes these labels are just a shorthand designation. Such is the case in NewShoes. The three labels used in the simulation to identify the three markets do not carry much explanatory power. However, each market has different needs, seeks different benefits, and responds differently to different levels of marketing effort in the marketing mix.


This was the first market the NewShoes firm entered. It is characterized as a group of customers who want a high performance shoe such as those used by sports professionals. Market research shows that product performance is the most important element in the customer's satisfaction. Firms that fail to maintain a competitive level of product development are doomed in this market, and in the other two NewShoes regions for that matter. The fact that the signature shoes are used by professionals and have a distinctive style gives the wearer a mark of prestige and reflects the wearer's commitment to his or her sport. Design
gimmicks such as embedding wood chips in the heels of basketball shoes do not work in the Home Region. Advertising "registers" with these consumers and ad copy used in this market links the shoe's performance to the superior performance of a super star(s). The market prefers a moderately elite product with a price point that reflects this position. Customers in the Home Region expect to pay for the performance and quality they demand. Customers in this regional market tend to shop for athletic shoes as specialty goods. Retailers who specialize in high performance equipment seek out your firm's brand. In that this was the first market the firm entered, the channels of distribution are fairly well established.


The success of the firm in providing high performance shoes for professional athletes also indicated a strong national demand for high quality shoes with a distinctive 'professional' style. The Domestic Region market has a stronger need for demonstrated value and a lesser need for extreme performance than the Home Region. The customers in the Domestic Region are broader demographically than the Home Region. The Domestic Region wants a high quality shoe but shops for bargains and is sensitive to special deals and sales promotion. Advertising copy used in this region focuses on the shoe's superior performance and highlights specific features such as better fit and more cushioning. However, this region is dubious, and fairly hesitant in responding, to advertising claims. It is more difficult to get adequate distribution in the Domestic Region than in the Home Region because there are many suppliers of high-quality marquee footwear. Generally speaking, the Domestic Region falls between the Home and the Foreign Region in its responsiveness to some marketing mix variables.


Inexpensive running shoes and sandals are manufactured all over the world. For most people in foreign countries, buying an imported American running shoe would be seen as an extreme luxury or a waste of money. However, there is a need for athletic shoes with professional performance. There is also the need to be seen as wearing the type of shoes that only a successful professional would wear. These needs are felt by a significant number of affluent people in foreign markets and wearing an American-made signature shoe provides special prestige to customers in what the NewShoes firm calls its Foreign Region. The firm presents an elite product in this regional market with an "If you have to ask, you can't afford it" type of appeal. Advertising coverage and consumer promotion is spotty, inconsistent, and generates weak response in the Foreign Region. Research shows that customers in the Foreign Region have a very strong correlation between price and performance. However, the problems in getting distribution to the Foreign Region are considerable. The firm's salespeople make many repeat-calls and sales promotion is used to convince retailers that expensive American-made athletic shoes offer high potential profits. Selling the shoe's extreme performance is a difficult sales presentation to traditional distributors who see shoes as a basic commodity.

## Glossary

| Term | Definition |
| :---: | :---: |
| Administrative Costs | Expenditures arising from the administration of a product, including some fixed overhead costs, some variable expenses, and some expenses related to the number of orders placed. |
| Advertising | Any paid form of non-personal presentation and promotion of ideas, products, or services by an identified sponsor. |
| Break-even Analysis | An attempt to determine the volume of sales necessary (at various prices) for the manufacturer or merchant to cover costs or to make revenue equal costs. Break-even analysis is useful to help set prices, estimate profit or loss potentials, and help determine limits on discretionary expenses. |
| Channel of Distribution | Any firm or individual participating in the flow of products as they move from producer to user (consumer or industrial). |
| Channel Promotion | See Dealer Promotion. |
| Consumer Promotion | Promotional activities aimed at the consumer or end-user of a product. These include consumer advertising and sales promotion. |
| Consumer Sales Promotion | Promotional activities aimed at the consumer, including trial sizes of brands, coupons, and point-of-purchase displays. |
| Cost of Goods | The total variable manufacturing cost of producing a product. |
| Customer Satisfaction | The extent to which those who purchase a product are happy with their overall experience with the product. In NewShoes, satisfaction is a function of the quality of the product (version) and the price charged relative to the customer's expected price, compared to the price and quality of the competition |
| Dealer Promotion | Promotional activities aimed at resellers of a product. These activities by a manufacturer are meant to encourage a distributor to carry a product, or to increase sales within a channel. They include personal selling and dealer sales promotions. |
| Dealer Sales Promotion | Promotional activities other than personal selling directed at wholesalers and retailers. These activities include sales assistance and training, contests, promotional allowances, co-op advertising, and free displays. |
| Demand | The quantity of a product desired by consumers. |
| Demography | The study of people in the aggregate, including population size, age, income, occupation, gender, etc. The analysis and categorizing of human populations. |
| Direct Costs | See: Variable Costs. |
| Distribution Channel | See: Channel of Distribution. |


| Term | Definition |
| :---: | :---: |
| Experience Curve | The relationship between a company's experience producing a product and its unit cost. In general, unit costs will fall as a company learns to produce a product more efficiently. An $80 \%$ experience curve means that unit cost will decrease by $20 \%$ each time production doubles. |
| Experience Curve Pricing | An aggressive strategy of setting price below current market prices based on a manufacturer's greater experience in production, or in anticipation of lower costs as sales volume accumulates. |
| Fixed Costs | The unchanged financial obligations of a firm regardless of the number of units of a product that are produced and marketed, including amortization charges for capital equipment and plant, as well as such charges as rent, executive salaries, property taxes, insurance, etc. |
| Gross Margin | Gross margin is a measure of profitability based on sales and variable costs. It is calculated as revenue less the cost of goods sold on the income statement. It can also be calculated as the difference between price and unit cost multiplied by the number of units sold. |
| Income Statement | A report of a firm's overall results for a period, including sales, cost of goods sold, a breakdown of major expenditures, and a calculated value of the net income. |
| Learning Curve | See: Experience Curve. |
| Margin | The difference between the price of a product and its per unit cost. |
| Market | People or businesses with the potential interest, purchasing power, and willingness to buy a product that satisfies a need. |
| Market-based Pricing | Setting prices based on research done in the target market. Marketbased pricing takes into consideration company goals, prices set by competitors, and response to prices by consumers. See also: Markup Pricing. |
| Marketing | The process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational needs or wants. |
| Marketing Research | The systematic and objective approach to the development and provision of information for marketing decision-making. |
| Marketing Strategy | A general framework for making marketing decisions. Developing a strategy involves identifying the company mission, setting specific goals and objectives, and making marketing decisions to attain those goals. |
| Market Share | The percentage of sales of a product in a market in relation to other products in that market (i.e. Brand X / Total sales in market). |
| Markup Pricing | A price-setting method common in wholesaling and retailing that adds a markup to average total or variable cost. See also: Marketbased Pricing. |


| Term | Definition |
| :---: | :---: |
| Net Income | The profit remaining after all costs are subtracted from revenues. |
| Personal Selling | See: Salespeople. |
| Place | In the 4Ps, place refers to getting a product through a distribution channel to the consumer. |
| Point-of-Purchase Promotion (POP) | Special displays, racks, signs, banners, and exhibits placed in a retail store to support the sales of a brand. |
| Price | The amount of money a seller requires in order to provide a product to a customer. |
| Product | A good or service offered by a producer to a consumer. |
| Product Development | Product development is the creation of new products, or the improvement of existing products, to meet customer needs. |
| Product Life Cycle | The stages that a product goes through during its time on the market, including introduction, growth, maturity, and decline. |
| Promotion | The communication mechanism of marketing designed to inform and persuade consumers to purchase. |
| Pull Marketing | A promotional strategy which attempts to persuade potential customers to try a product or repurchase it. The basic idea is to "pull" the product down the channel through the buildup in demand. Examples in NewShoes are advertising and consumer promotion. |
| Push Marketing | A promotional strategy which targets a channel, making it attractive for distributors to move a product, encouraging them to push the product down the channel of distribution. Examples of push marketing in NewShoes are personal selling and dealer promotions. |
| Response Function | A response function shows the relationship between levels of a marketing variable and unit sales of a product. |
| Retailer | A merchant whose main business is to buy products from manufacturers or distributors and sell them to consumers for a profit. |
| Return on Sales | A measure of profitability calculated by dividing revenue into net income. |
| Revenue | Total sales of the company, calculated as unit sold times selling price per unit |
| Salespeople | Employees hired to promote and sell a manufacturer's product through direct or indirect channels. See: Personal Selling. |
| Segmentation | The process of dividing large heterogeneous markets into smaller homogeneous segments of people or businesses with similar needs and/or responses to marketing mix offerings. |
| Trade Promotions | See: Dealer Promotions. |
| Unit Cost | The direct cost of producing a unit of a product. On the income statement, it is calculated as the cost of goods sold divided by the quantity of units sold. |
| Unit Sales | The total volume of units sold by a manufacturer in a market. |


| Term | Definition |
| :--- | :--- |
| Variable Costs | Costs tied directly to production, including direct labor and raw <br> materials charges. |
| Wholesaler | A business that buys from manufacturers and resells merchandise to <br> retailers, other merchants, and/or industrial, institutional, and <br> commercial consumers. |

## Index

## A

administrative costs ..... 33
administrative costs, definition ..... 40
advertising ..... 10
advertising, definition ..... 40
analysis tools ..... 15
B
brand image ..... 16
break-even analysis, definition ..... 40
break-even price ..... 15
C
channel of distribution, definition ..... 40
channel promotion ..... 22
channel promotion, definition ..... 40
bidding ..... 23
competitor information ..... 15
consumer advertising ..... 12, 23
consumer promotion ..... 12, 23
consumer promotion, definition ..... 40
consumer sales promotion ..... 12
consumer sales promotion, definition ..... 40
contract bid ..... 10, 11
contract bidding ..... 27
cooperative ..... 22
cost of goods sold formula ..... 32
cost of goods, definition ..... 40
create awareness ..... 23
cumulative production ..... 14
customer satisfaction, definition ..... 40
D
dealer promotion ..... 12
dealer promotions ..... 10
dealer sales promotion ..... 13, 22
dealer sales promotion, definition. ..... 40
decision evaluation ..... 26
decision-making process ..... 25
decisions
course of action ..... 29
how much ..... 29
demand, definition ..... 40
demography, definition ..... 40
distribution ..... 10
domestic region
description ..... 39

## E

enter new market ..... 10
evaluating results ..... 31
experience curve pricing, definition ..... 41
experience curve, definition ..... 41
F
fixed costs, definition ..... 41
forecast sales ..... 15
forecasting. ..... 28
foreign region description ..... 39
formula
cost of goods sold ..... 32
gross margin. ..... 32
profit or loss ..... 32
return on sales ..... 33
revenue ..... 22
sales forecast ..... 28
G
gross margin, definition ..... 41
H
home region
description ..... 38
I
income statement ..... 31
income statement, definition ..... 41
industry in NewShoes ..... 8
L
learning/experience curve ..... 14, 27
M
margin, definition ..... 41
market ..... 10
leaving a market ..... 10
market research ..... 15, 34
market response ..... 22
market share ..... 34
market share, definition ..... 41
market, definition. ..... 41
market-based pricing, definition ..... 41
marketing a product ..... 23
marketing function ..... 20
marketing mix ..... $9,10,16,21,23,24$
marketing research, definition ..... 41
marketing strategy, definition ..... 41
marketing, definition ..... 41
markup pricing, definition ..... 41
maximizing revenue ..... 21
maximizing sales ..... 21
mission statement ..... 24
models. marketing
graphical ..... 27
mathematical. ..... 27
verbal ..... 26
N
net income, definition ..... 42
0
objectives and goals. ..... 24
P
personal selling ..... 12, 22
personal selling, definition ..... 42
place, definition ..... 42
point of purchase promotion (POP) , definition ..... 42
price. ..... 10, 11
price and quality ..... 21
price, definition ..... 42
product ..... 42
product demand ..... 13, 21
product development ..... 9, 21
product development, definition ..... 42
product differentiation ..... 21
product life cycle, definition ..... 42
profit or loss formula ..... 32
promotion, definition ..... 42
pull marketing, definition ..... 42
push marketing ..... 8
push marketing, definition ..... 42
push versus pull ..... 22
R
response function, definition ..... 42
response functions ..... 29, 30
retailer, definition ..... 42
return on sales formula ..... 33
return on sales, definition ..... 42
revenue formula ..... 22
revenue, definition ..... 42

## S

sales forecast formula ..... 28
sales promotion ..... 22
salespeople, definition ..... 42
salesperson salary/cost ..... 13
segmentation, definition ..... 42
stimulate demand ..... 22
strategic plan. ..... 23
U
unit cost. ..... 14
unit cost, definition ..... 42
unit sales, definition ..... 42
V
variable costs, definition ..... 43
W
wholesaler, definition ..... 43


[^0]:    Your instructor may require additional assignments during the simulation. Check the schedule and messages on your course website for details.

