

THE BUSINESS STRATEGY GAME



Competing in a
Global Marketplace

2019 Edition

Player's Guide

Created by

Arthur A. Thompson, Jr.

The University of Alabama

Gregory J. Stappenbeck

GLO-BUS Software, Inc.

Mark A. Reidenbach

GLO-BUS Software, Inc.

Ira F. Thrasher

GLO-BUS Software, Inc.

Christopher C. Harms

GLO-BUS Software, Inc.



The Business Strategy Game is published and marketed exclusively by McGraw-Hill Education, Inc., 1333 Burr Ridge Parkway, Burr Ridge, IL 60527

Copyright © 2019 by *GLO-BUS* Software, Inc. All rights reserved.

No part of this document may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written consent of *GLO-BUS* Software, Inc., including, but not limited to, in any network or other electronic storage or transmission, or broadcast for distance learning.



THE BUSINESS STRATEGY GAME

Competing in a Global Marketplace

This Player's Guide provides you with information about *The Business Strategy Game* and suggestions for successfully managing your athletic footwear company. Here is a quick reference to the contents:

<u>How The Business Strategy Game Works</u>	3
<u>Company Operations</u>	4
<u>The Worldwide Market for Athletic Footwear</u>	5
<u>Distribution Channels for Athletic Footwear</u>	6
<u>Raw Materials Supplies</u>	7
<u>Footwear Manufacturing</u>	8
<u>Exchange Rate Impacts</u>	9
<u>The Competitive Factors That Drive Branded Footwear Sales and Market Share</u>	10
<u>The Importance of Each Competitive Factor in Determining Sales and Market Share</u>	14
<u>Crafting a Strategy to Be Competitively Successful</u>	15
<u>Making Decisions</u>	17
<u>Workforce Compensation & Training</u>	18
<u>Branded Footwear Production</u>	20
<u>Production Facilities</u>	22
<u>Branded Distribution and Warehouse Operations</u>	24
<u>Internet Marketing</u>	26
<u>Wholesale Marketing</u>	27
<u>Private-Label Operations</u>	30
<u>Celebrity Endorsement Contracts</u>	31
<u>Corporate Social Responsibility and Citizenship (CSRC)</u>	32
<u>Finance and Cash Flow</u>	32
<u>The 3-Year Strategic Plan</u>	34
<u>Special Note on Decision-Making Procedures</u>	35
<u>Reporting the Results</u>	35
<u>What Your Board of Directors Expects: Results in 5 Key Areas</u>	36
<u>Scoring Your Company's Performance</u>	37
<u>Important Advice</u>	38
<u>What You Can Expect to Learn</u>	38

Welcome to *The Business Strategy Game*. You and your co-managers are taking over the operation of an athletic footwear company that is in a neck-and-neck race for global market leadership, competing against rival athletic footwear companies run by other class members. All footwear companies presently have the same market shares in each of the four geographic market regions— North America, Europe-Africa, Asia-Pacific, and Latin America. Your company is selling over 8 million pairs annually. In the just-completed year, your company had revenues of \$432.6 million and net earnings of \$40 million, equal to \$2.00 per share of common stock. The company is in sound financial condition, is performing well, and its brand is well-regarded. Your company's board of directors has charged you with developing a winning competitive strategy—one that capitalizes on continuing consumer interest in athletic footwear, keeps the company in the ranks of the industry leaders, and increases the company's earnings year-after-year.

Your first priority as a *BSG* participant should be to absorb the contents of this Player's Guide and get a firm grip on what the exercise involves, the character of the global athletic footwear market, and various cause-effect relationships that govern your company's operations.

How The Business Strategy Game Works

The Business Strategy Game (BSG) is an online exercise, modeled to reflect the real-world character of the globally competitive athletic footwear industry and structured so that you run a company in head-to-head competition against companies run by other class members. Company operations are patterned after those of an athletic footwear company that produces its shoes at company-operated plants rather than outsourcing production to contract manufacturers. Cause-effect relationships and revenue-cost-profit relationships are based on sound business and economic principles and closely mirror the competitive functioning of the real-world athletic footwear market. **The Business Strategy Game** enables you and your co-managers to apply what you have learned in business school and to practice making reasoned, businesslike decisions aimed at improving your company's overall performance. Everything about your company and the competitive environment in which your company operates has been made "as realistic as possible" to provide you with a close-to-real-life managerial experience where you can be businesslike and logical in deciding what to do.

Each decision period in **BSG** represents a year. The company you will be running began operations 10 years ago, and the first set of decision entries you and your co-managers will make is for Year 11. The first time you launch the Decisions/Reports Program from your Corporate Lobby, you should scroll down the menu at the left to view the Year 10 Footwear Industry Report, the Year 10 Competitive Intelligence Reports, and your company's Year 10 Company Operating Reports. These reports, along with this Player's Guide, provide you with full information on where things stand going into Year 11.

You and your co-managers will make decisions each period relating to branded and private-label footwear production (up to 11 entries for each production facility), the addition of facility space and production equipment and production improvement options (up to 8 entries for each facility), workforce compensation and training (6 entries for each facility), shipping and distribution center operations (5 entries per geographic region), footwear pricing and marketing (up to 9 entries per region), contract offers to celebrities to endorse your footwear brand (2 entries per available celebrity), corporate social responsibility and citizenship (up to 8 entries), and the financing of company operations (up to 8 entries). Plus, there are 10 entries for each region pertaining to assumptions about the actions of competitors that factor directly into the forecasts of your company's unit sales, revenues, and market share in each of the four geographic regions. In addition, there are import tariffs and annual changes in exchange rates to consider, and shareholder expectations to satisfy. **Video Tutorials for each decision entry page will help you get started. And there are Help documents for each page that provide valuable information about each decision entry, important cause-effect relationships, and decision-making tips.**

Complete results of each decision period become available **about 15 minutes** after each decision round deadline. Detailed information and feedback provided in the *Footwear Industry Report*, the *Competitive Intelligence Report*, and the Company Operating Reports provide essential information about each company's performance, assorted industry outcomes, updated forecasts of total buyer demand for athletic footwear for each geographic region, your company's competitive standing versus rivals, and other statistics that enable you to determine what actions to take to improve your company's performance in upcoming decision rounds.

The decision round schedule developed by your instructor indicates the number of decision periods for which you will be running the company. You should use the practice round(s) to become familiar with the software, digest all the information provided on the decision pages and in the reports, and get a glimpse of what to expect before actual scored rounds begin.

Your company's Corporate Lobby web page is the "gateway" to all **BSG** activities—the menu along the left side of the page provides access to everything that is available. Plus, the Corporate Lobby shows the latest interest rates, exchange rate impacts, and industry scoreboard. Take a couple of minutes to familiarize yourself with the features and information in your Corporate Lobby, all of which will come into play during the exercise.

To access the decision entry pages and available reports from your "Corporate Lobby" page, click on the Go to Decisions/Reports button to launch the Decisions/Reports program in a new tab. When you want to

save any work you have done on the decision entry pages, click the Save button at the top-right corner of the page and the decision entries will be saved to the **BSG** servers. **When the deadline for a decision round (year) passes, the decision entries most recently saved by any of the company's co-managers are the ones that will be used to generate that year's results for the company.**

Company Operations

Your company currently produces footwear at 2 plants—one in North America and one in the Asia-Pacific region. The North America plant has sufficient facility space to assemble 5 million pairs of athletic footwear annually without use of overtime, but prior management only installed enough footwear-making equipment going into Year 11 to assemble 4 million pairs (without overtime). The somewhat newer Asia-Pacific plant, while having sufficient facility space to assemble 6 million pairs, currently has only enough footwear-making equipment to assemble 4 million pairs without use of overtime. You may install additional production equipment in the two plants should you wish to bring assembly capability up to 11 million pairs, and you can construct additional facility space to accommodate more than 11 million pairs. Both plants can be operated at overtime increasing annual assembly capability by 20%, thus giving the company a current annual production capability of 9,600,000 pairs without installing additional equipment in the unused space in the North America and Asia-Pacific plants and annual capability of 13,200,000 pairs if the company buys enough production equipment to fill the available facility space in the two existing plants. Your company's worldwide sales volume in Year 10 equaled 8.15 million pairs, so you have ample time to consider whether to construct additional space at the two existing facilities or to construct new facilities in the Europe-Africa and/or Latin America regions.

At management's direction, the company's design staff can come up with more footwear models, new features, and stylish new designs to keep the product line fresh and in keeping with the latest fashion. The company markets its brand of athletic footwear to footwear retailers worldwide and to individuals buying online at the company's website. In years past, whenever the company had more assembly capacity than was needed to meet the worldwide buyer demand for its branded footwear, it entered into competitive bidding for contracts to produce footwear sold under the private-label brands of large chain retailers. In Year 10 the company sold 7.35 million pairs of branded shoes to retailers and individuals, and it bid successfully for contracts to supply 800,000 pairs of private label shoes (200,000 pairs in each of the four regions) to large multi-outlet retailers of athletic footwear.

Materials to make the company's footwear are purchased from a variety of suppliers, all of whom have the capability to make daily deliveries to the company's production facilities; the company's just-in-time supply chain eliminates the need for maintaining materials inventories at its plants. Newly produced footwear is immediately shipped to one of the company's four regional distribution centers. The North American distribution center is in Memphis, Tennessee, the one for Europe-Africa is in Milan, Italy, the one for the Asia-Pacific is in Bangkok, Thailand, and the one for Latin America is in Rio de Janeiro, Brazil. Many countries place import duties on footwear produced outside of their geographic region. Tariffs, which are payable when your company ships footwear produced in a region to distribution centers outside of that region, currently average \$4.00 per pair in North America, \$6.00 per pair in Europe-Africa, \$8.00 per pair in Asia-Pacific, and \$10.00 in Latin America. Your course instructor has the option to alter tariffs as the simulation progresses, so the current tariffs may prove temporary.

Shipping and Distribution Center Operations. Personnel at the company's distribution centers open the bulk shipments from plants, pack each incoming pair in individual boxes, store the shoe boxes in bins numbered by model and size, and retrieve the pairs/boxes from bins as needed to fill incoming orders from footwear retailers and online buyers. Arrangements are made with independent freight carriers to pick up outgoing orders at the loading docks of the distribution centers and deliver them to customers within the region (distribution centers cannot ship to any buyers outside their region). Each distribution center maintains sufficient inventory of each model and size to enable orders to be delivered within 1 to 4 weeks from the time the order is placed. You will decide whether to operate each distribution center in a manner that enables 1-week, 2-week, 3-week, or 4-week delivery to retailers.

Competitive Efforts in the Marketplace. The company can enhance its footwear with new styling and performance features on an annual basis and can also increase/decrease the number of models/styles in its product lineup. In addition, the company strives to enhance its sales volume and competitive standing against rivals via attractive pricing, advertising, mail-in rebates, contracting with celebrities to endorse its brand, building a stronger brand image and reputation with buyers, providing merchandising and

promotional support to retailers stocking its brand, good delivery times on shipments to retailers, and using search engine ads to draw online shoppers to its website.

Stock Listings and Financial Reporting. Since going public in Year 6, the company's stock price has more than tripled, closing at \$30 at the end of Year 10. There are 20 million shares of the company's stock outstanding. The company's financial statements are prepared in accord with generally accepted accounting principles and are reported in U.S. dollars. The company's financial accounting is in accordance with the rules and regulations of all securities exchanges where its stock is traded.

The Worldwide Market for Athletic Footwear

The number of companies competing in your industry is determined by your course instructor and will range from as few as 4 to as many as 12. All companies begin Year 11 in the exact same competitive market position—equal in sales volume, global and regional market share, revenues, costs, profits, footwear styling and quality, prices, and so on. In upcoming years, managers may pursue actions to alter their company's sales and market shares in all regions, opting to increase sales and share in some and decrease sales and share in others (including exiting one or more regions or market segments entirely).

Market Growth. The prospects for long-term growth in the sales of athletic footwear are excellent. Athletic shoes have become the everyday footwear of choice for children and teenagers. Adults buy athletic shoes for recreational activities as well as for leisure and casual use, attracted by greater comfort, easy-care features, and lower prices in comparison to dress shoes. Athletic footwear has proved very attractive to people who spend a lot of time on their feet and to older people with foot problems. The combined effect of these factors is reliably expected to produce 7-9% annual growth in global demand for athletic footwear for Years 11-15, slowing to about 5-7% annual growth during Years 16-20. But the projected growth rates are not the same for all four regions (as shown in the following table).

	Projected Growth in Buyer Demand				
	North America	Europe Africa	Asia-Pacific	Latin America	Worldwide
Years 11-15					
Branded	5% to 7%	5% to 7%	9% to 11%	9% to 11%	7% - 9%
Private-Label	10% to 12%	10% to 12%	12% to 14%	12% to 14%	11% to 13%
Years 16-20					
Branded	3%-5%	3%-5%	7% - 9%	7% - 9%	5% to 7%
Private-Label	8%-10%	8%-10%	10%-12%	10%-12%	9%-11%

Note: Branded footwear sales to individuals at the company's website (which were **15%** of total branded sales in each geographic region in Year 10) are projected to rise by 1 percentage point annually to **25%** of total branded sales in each region by Year 20.

Where actual growth will fall within the indicated 2 percentage-point intervals varies both by year and by region—thus branded sales might grow 5.3% in Year 11 in North America and 6.6% in Year 11 in Europe-Africa, then grow 6.2% in Year 12 in North America and 5.8% in Year 12 in Europe-Africa. Moreover, the forecasts are all based on the assumption that companies in the industry compete aggressively enough to capture the growth opportunities and do not radically alter current price levels, product quality, models, etc.

Future growth rates may turn out to be higher than forecast in the event more buyers are attracted to purchase branded athletic footwear because of significant declines in industry-wide average prices, sharp increases in the marketing and competitive efforts of rival companies, and/or significant improvements in footwear quality/performance over time. Conversely, factors that can drive away potential buyers and cause the growth in buyer demand to fall below the forecast amounts include sharply higher prices and/or eroding footwear quality/performance and/or greatly diminished marketing and competitive efforts industry-wide. In other words, the forecast growth rates in the table above are reliable only to the extent that rival companies, on the whole, do not pursue actions that result in future prices, product quality, and marketing and competitive efforts that differ significantly from the levels prevailing in Year 10.

The projected average sales volumes *per company* for Years 11-13 for the four geographic regions (based on growth rates at the midpoint of the forecast ranges) are shown below:

	Projected Unit Sales Volumes per Company				
	North America	Europe Africa	Asia-Pacific	Latin America	Worldwide
Year 11					
Branded	2,491,000	2,120,000	1,650,000	1,650,000	7,911,000
Private-Label	222,000	222,000	226,000	226,000	892,000
Totals	2,691,000	2,338,000	1,868,000	1,868,000	8,803,000
Year 12					
Branded	2,640,000	2,247,000	1,815,000	1,815,000	8,517,000
Private-Label	246,000	246,000	255,000	255,000	1,002,000
Totals	2,878,000	2,485,000	2,033,000	2,033,000	9,519,000
Year 13					
Branded	2,798,000	2,382,000	1,997,000	1,997,000	9,174,000
Private-Label	273,000	273,000	288,000	288,000	1,122,000
Totals	3,057,000	2,641,000	2,256,000	2,256,000	10,296,000

Long-range forecasts indicate that by Year 20 (1) branded footwear demand *per company* will average 3,825,000 pairs in North America, 3,256,000 pairs in Europe-Africa, 3,282,000 pairs in the Asia-Pacific, and 3,282,000 pairs in Latin America and (2) private-label demand *per company* will average 517,000 pairs in North America and Europe-Africa and 618,000 pairs in the Asia-Pacific and Latin America. This equates to total athletic footwear demand *per company* by Year 20 of 4,342,000 pairs in North America, 3,773,000 pairs in Europe-Africa, 3,900,000 pairs in the Asia-Pacific, 3,900,000 pairs in Latin America, and a global *per company* average demand in Year 20 of 16,455,000 pairs (versus average per company demand of 8,150,000 pairs in Year 10).

Ratings of Athletic Footwear Styling and Quality. The International Footwear Federation, a well-respected consumer group, rates the styling and quality of the footwear of all competitors and assigns a styling-quality or S/Q rating of 0.0 to 10.0 stars to each company's branded footwear offerings. The IFF's S/Q rating is a function of five factors: (1) current-year spending per footwear model for new features and styling, (2) the percentage of superior materials used, (3) current-year expenditures for Total Quality Management (TQM) and/or Six Sigma quality control programs, (4) cumulative expenditures for TQM/Six Sigma quality control efforts (to reflect learning and experience curve effects), and (5) current-year and cumulative expenditures to train workers in using the best practices to assemble athletic footwear. The IFF obtains the needed data annually from all footwear companies, compares the styling and quality of models and brands on the market, and rates the styling/quality of shoes produced at each plant of each company. **Based on where each facility's output is shipped, S/Q ratings are calculated for each company in each geographic region where its shoes are available for sale.** Companies thus have as many as 8 S/Q quality ratings—one each for branded and private-label pairs offered for sale in North America, Europe-Africa, Asia-Pacific, and Latin America. A company's S/Q rating in each market segment is a **weighted average** of the S/Q ratings at the production facilities from which the pairs were shipped, adjusted up or down for the S/Q ratings of unsold pairs from the prior year. **The IFF's S/Q rating formula calls for a 0.3-star reduction in the S/Q rating on all unsold branded pairs carried over in inventory to the following year** since they represent last year's styles. Ratings are updated annually.

The Federation's ratings of each company's shoe styling and quality in each market segment are often the subject of newspaper and magazine articles. Market research confirms that many consumers are well informed about the S/Q ratings and consider them in deciding which brand to buy.

Distribution Channels for Athletic Footwear

Athletic footwear makers have three distribution channels for accessing consumers of athletic footwear:

- Wholesale sales to independent footwear retailers who carry athletic footwear—department stores, retail shoe and apparel stores, discount chains, sporting goods stores, and pro shops at golf and tennis clubs. Worldwide, there are some 60,000 retail outlets for athletic footwear scattered across the world. North America and Europe-Africa each have 20,000 retail outlets selling athletic footwear, while Latin America and the Asia-Pacific each have 10,000 retail outlets for athletic footwear.
- Online sales to consumers at the company's website.
- Private-label sales to large multi-outlet retailers of athletic footwear.

All manufacturers have traditionally used independent footwear retailers as the primary distribution channel for selling branded footwear. Manufacturers have built a network of retailers to handle their brands in all geographic areas where they market. Retailers are recruited by small teams of company-employed sales representatives working out of regional offices; the role of the sales reps is to call on retailers, convince them to carry the company's brand, solicit orders, and provide assistance with merchandising and in-store displays. Typically, retailers carry 2-4 brands of athletic footwear (depending on store size and location) and usually stock only certain models/styles of the brands they do carry (since manufacturers have anywhere from 50 to 500 models/styles in their product lines). Retail markups over the wholesale prices of footwear manufacturers can run anywhere from 40% at discount chains to as high as 100% at premium retailers. Thus, a pair of shoes wholesaling for \$50 usually retails for between \$70 and \$100.

However, all footwear manufacturers operate websites to display and actively merchandise their models and styles, partly because selling online gives the company access to consumers not living close to retailers carrying the company's brand and partly because growing numbers of consumers like the convenience of shopping online. Online sales of branded footwear have been growing steadily and now account for 15% of total branded sales in each geographic region; this percentage is expected to grow by 1% annually, reaching 25% of total branded sales by Year 20. However, the management teams at all companies have the discretion to place greater/lesser emphasis on promoting online sales and thus may end up with online sales that are above/below the industry average.

The third channel—private-label sales to large chain store accounts—is attractive for two reasons:

- The private-label segment is projected to grow a healthy 12% annually during Years 11-15 and a brisk 10% during Years 16-20. The growth in private label sales is being driven largely by the practice of multi-outlet chains to use lower-priced private-label goods to attract price-conscious consumers. Chain retailers that sell athletic footwear under their own label outsource the pairs they need from manufacturers on a competitive-bid basis.
- Making private-label pairs for chain retailers allows a manufacturer to use production capability more efficiently. For example, a manufacturer selling only 9 million branded pairs but having production capability of 11 million pairs (13.2 million pairs with maximum use of overtime) can reduce overall costs per pair by utilizing some or all of its unused capability to produce private-label pairs. The added production volume from being a successful low-bidder to supply private-label pairs to chain retailers *helps spread fixed costs over more pairs* and can improve overall financial performance (provided the price received for producing the private-label pairs is above the direct costs per pair).

The Demand Side of the Market for Athletic Footwear. Consumer demand for athletic footwear is diverse in terms of price, styling, and purpose for which athletic footwear is worn. Many buyers are satisfied with no-frills, budget-priced shoes while some are quite willing to pay premium prices for top-of-the-line quality, special high-tech features, or trendy styling. The biggest market segment consists of customers who buy athletic shoes for general wear, but there are sizable buyer segments for specialty shoes designed expressly for walking, jogging, training, aerobics, basketball, tennis, golf, soccer, bowling, and so on. The diversity of buyer demand gives manufacturers room to pursue a variety of strategies—from competing across-the-board with many models and below-average prices to making a limited number of styles for buyers willing to pay premium prices for top-of-the-line quality.

Competition. The efforts of footwear companies to attract buyers and compete effectively with rival brands revolve around 11 factors: pricing, styling and product quality (as mirrored in competitors' S/Q ratings), the breadth of product selection (the number of models/styles buyers have to choose from), celebrity endorsements, advertising, brand image and reputation, the comparative sizes of the footwear retailer networks, the amount of merchandising and promotional support provided to footwear retailers, mail-in rebates, the speed at which rivals deliver orders to retailers, and sales efforts at company websites.

Raw Material Supplies

All of the materials used in producing athletic footwear are readily available on the open market. There are some 250 different suppliers worldwide who have the capability to furnish interior lining fabrics, waterproof materials for external use, rubber and plastic materials for soles, shoelaces, and high-strength thread. It is substantially cheaper for footwear manufacturers to purchase these materials from outside suppliers than it is to manufacture them internally in the relatively small volumes needed. Delivery times on all materials

are usually less than 48 hours. Suppliers have ample capacity to furnish whatever volume of materials that manufacturers need; no shortages have occurred in the past. Just recently, suppliers confirmed they would have no difficulty in accommodating increased materials demand in the event footwear-makers build additional production capacity to meet growing worldwide demand.

Suppliers offer two grades of materials: standard and superior. The qualities of superior and standard materials are the same from supplier to supplier. All suppliers charge the going market price because of the commodity nature of materials. The use of superior materials improves quality and performance, but **shoes can be manufactured with any percentage combination of standard and superior materials.**

The "base" materials prices (which are subject to change by your instructor) are currently \$6 per pair for footwear made of 100% standard materials and \$12 for footwear made of 100% superior materials. However, the prevailing base prices are adjusted up or down according to the percentage mix of standard-superior materials usage and the strength of demand for footwear materials:

- **The going market prices of standard and superior materials in any upcoming year will deviate from their respective base prices whenever the percentage mix is anything other than 60% for standard and 40% for superior materials.** The going market price of standard materials will increase by 2% above the base for each 1% that worldwide use of standard materials exceeds 60%. Simultaneously, the global market price of superior materials will decrease by 0.5% for each 1% that the global usage of superior materials falls below 40% (and vice versa). Thus, worldwide materials usage of 50% superior materials and 50% standard materials will result in a global market price for superior materials that is 20% above the prevailing \$12 base, and a global market price for standard materials that is 5% below the prevailing \$6 base. Similarly, worldwide usage of 70% standard materials and 30% superior materials will result in a global market price for standard materials that is 20% above the \$6 base and a global market price for superior materials that is 5% below the \$12 base. In other words, greater than 40% usage of superior materials widens the price gap between superior and standard materials, and greater than 60% usage of standard materials narrows the gap.
- **Materials prices fall whenever global production is below 95% of global production capability and materials prices rise when global production is above 110% of global production capability** (maximum global production capability is 120%, since the use of overtime is limited to 20% of installed capability). Should global production fall below 95% of the global production capability (not counting overtime), the market prices for **both** standard and superior materials will drop 1% for each 1% that global shoe production is below the 95% utilization level. Such price reductions reflect increased competition among materials suppliers for the available orders. On the other hand, when global production levels exceed 110% of global production capability (reflecting overtime usage averaging 10% across all companies and regions), the prices of **both** standard and superior materials will go up 1% for each 1% that global production levels exceed 110% of global production capability. Thus, once overtime production exceeds a global average of 10% of installed production capability worldwide, material suppliers can exert pricing power and command higher prices.

Footwear Manufacturing

Footwear manufacturing has evolved into a rather uncomplicated process, and the technology is well understood. No company has proprietary know-how that translates into manufacturing advantage. The production process consists of cutting fabrics and materials to size and design, stitching the various pieces of the shoe together, molding and gluing the shoe soles, binding the shoe top to the sole, and so on. Tasks are divided among production workers in such a manner that it is easy to measure individual worker output and thus create incentive compensation tied to piecework. Labor productivity is determined more by worker dexterity and effort than by machine speed. On the other hand, there is ample room for worker error and unless workers pay careful attention to detail, the quality of workmanship suffers. **Training production workers in the use of best practice procedures at each step of the manufacturing process has recently become important to minimizing the reject rates on pairs produced.**

Footwear industry observers expect company managers to look closely at the economics of where best to locate any additional footwear production facilities. While trainable labor supplies are available in all four geographic regions, base wages for Asian-Pacific and Latin America workers currently run about 35% of base wages in Europe-Africa and North America; all workers worldwide are paid 1.5 times their regular base wage for working overtime (more than 40 hours per week). However, worker productivity levels,

labor costs per pair produced, and overall production costs at plants in different geographic regions are not only a function of base wages and overtime pay scales but also by the fact that different facilities in different regions may have different fringe benefit and incentive compensation plans, spend different amounts for best practices training, use new or refurbished footwear-making equipment, and may have invested in different production improvement options at different facilities. *It is perilous to leap to the conclusion that production should be concentrated in the Latin American and/or Asia-Pacific regions simply because of lower base wages and overtime costs.*

Moreover, the costs of producing footwear in one region and exporting some of the pairs produced to supply buyer demand in another region **are substantially impacted** by import tariffs, fluctuating currency exchange rates, and the higher cost of shipping pairs to foreign distribution centers (\$2 per pair) versus the cost of shipping to the distribution center in the region where a production facility is located (\$1 per pair). Even more importantly, tariffs have to be paid on footwear exported from Asia-Pacific facilities to markets in Latin America (\$10 per pair), Europe-Africa (\$6 per pair) and North America (\$4 per pair); likewise, tariffs have to be paid on footwear exports from Latin American facilities to markets in North America (\$4 per pair), Europe-Africa (\$6 per pair) and the Asia-Pacific (\$8 per pair)—it's uncertain whether tariffs in future years will rise or fall and by how much. Also, all companies are subject to year-to-year exchange rate fluctuations in shipping footwear from one region to another (as discussed below). One strategy to escape paying import tariffs and guard against adverse changes in exchange rates is to maintain a production base in each of the four geographic regions and rely upon those plants to satisfy demand for the company's branded footwear in their respective region.

Exchange Rate Impacts

All footwear companies are subject to exchange rate adjustments at two different points in their business. The first occurs when footwear is shipped from a facility in one region to distribution warehouses in a different region (where local currencies are different from that in which the footwear was produced). The production costs of footwear made at Asia-Pacific facilities are tied to the Singapore dollar (Sing\$); the production costs of footwear made at Europe-Africa facilities are tied to the euro (€); the production costs of footwear made at Latin American facilities are tied to the Brazilian real; and the costs of footwear made in North American facilities are tied to the U.S. dollar (US\$). Thus, the production cost of footwear made at an Asia Pacific facility and shipped to Latin America is adjusted up or down for any exchange rate change between the Sing\$ and the Brazilian real that occurs between the time the goods leave the facility and the time they are sold from the distribution center in Latin America (a period of 3-6 weeks). Similarly, the manufacturing cost of footwear shipped between North America and Latin America is adjusted up or down for recent exchange rate changes between the US\$ and the Brazilian real; the manufacturing cost of pairs shipped between North America and Europe-Africa is adjusted up or down based on recent exchange rate fluctuations between the US\$ and the €; the manufacturing cost of pairs shipped between Asia-Pacific and Europe-Africa is adjusted for recent fluctuations between the Sing\$ and the €; and so on.

The second exchange rate adjustment occurs when the local currency the company receives in payment from local retailers and online buyers over the course of a year in Europe-Africa (where all sales transactions are tied to the €), Latin America (where all sales are tied to the Brazilian real), and Asia-Pacific (where all sales are tied to the Sing\$) must be converted to US\$ for financial reporting purposes—the company's financial statements are always reported in US\$. The essence of this second exchange rate adjustment calls for the net revenues the company actually receives on footwear sold to retailers and online buyers in various parts of the world to reflect year-to-year exchange rate differences as follows:

- The revenues (in €) the company receives from sales to buyers in Europe-Africa are adjusted up or down for average annual exchange rate changes between the € and the US\$.
- The revenues (in Sing\$) received from sales to Asia-Pacific buyers are adjusted up or down for average annual exchange rate changes between the Sing\$ and the US\$.
- The revenues (in Brazilian real) received from sales to Latin American buyers are adjusted up or down for average annual exchange rate changes between the Brazilian real and the US\$.

No adjustments are needed for the revenues received from sales to North American buyers because the company reports its financial results in US\$.

BSG automatically accesses all the relevant *real-world* exchange rates between decision periods, handles the calculation of both types of exchange rate adjustments, and reports the size of each year's percentage adjustments in your Corporate Lobby as well as on pertinent entry pages and in company reports. While you do not have to master the details of how the two types of exchange rate adjustments are calculated, **you definitely will need to keep a watchful eye on the sizes of the exchange rate adjustments each year and understand what you can do to mitigate the adverse impacts and take advantage of the positive impacts of shifting exchange rates.**

The sizes of the exchange rate adjustment each year are always equal to 5 times the actual period-to-period percentage change in the real-world exchange rates for US\$, €, Brazilian real, and Sing\$ (multiplying the actual % change by 5 is done so as to translate exchange rate changes over the few days between decision periods into changes that are more representative of a potential full-year change). However, because actual exchange rate fluctuations are occasionally quite volatile over a several day period, the maximum exchange rate adjustment during any one period is capped at $\pm 20\%$ (even though bigger changes over a 12-month period are fairly common in the real world).

There will be no exchange rate adjustments in Year 11. The real-world exchange rate values prevailing at the time your instructor re-starts the industry after any practice rounds and the real-world rates prevailing at the time of the decision deadline for Year 11 will serve as the base for calculating the Year 12 exchange rate adjustments. The real-world changes in the exchange rates between the Year 11 and Year 12 decision deadlines serve as the basis for exchange rate adjustments in Year 13. And so on through the exercise. This means you have the advantage of knowing in advance what the exchange rate effects will be in the upcoming year and can thus take actions to mitigate adverse exchange rate effects (this is done to help you manage the risks of exchange rate fluctuations as opposed to giving you the option to engage in currency hedging, which is pretty intricate and has risks of its own).

The Competitive Factors That Drive Branded Footwear Sales and Market Share

Competition among rival athletic footwear companies centers around 13 factors that affect each company's branded footwear sales volumes and market shares in each of the four geographic market regions. Five of the 13 factors affect both wholesale sales to footwear retailers and online sales at company websites, five of the factors affect only wholesale sales, and three of the factors affect only internet (or online) sales.

The Five Factors that Impact Both Internet Sales and Wholesale Sales of Branded Footwear

- 1. The S/Q Rating.** Footwear shoppers consider the widely-available and much-publicized annual S/Q ratings of the various brands of athletic footwear compiled by the International Footwear Federation to be a trusted measure of how a company's footwear offerings compare on styling and quality against competing brands of athletic footwear. Market research indicates that S/Q ratings are generally the second or third most important factor (along with breadth of product selection) in shaping consumers' choices of which footwear brand to purchase. A company whose S/Q rating in a region is *above* the all-company average S/Q rating, thus enjoys an important competitive advantage on the styling-quality aspect of its footwear brand, whereas a below-average S/Q rating constitutes an important competitive disadvantage. The more a company's S/Q rating in a region is *above* the all-company average, the more that footwear shoppers in the region are attracted to purchase the company's brand—*unless* the company's higher S/Q rating is undermined by (1) charging a price premium for the added styling-quality that buyers consider "too high" or "not worth the extra cost" or (2) unfavorable comparisons against rivals on other buyer-relevant features such as comparatively few models/styles for buyers to choose among, brand advertising, mail-in rebates, the appeal of celebrity endorsers, etc.
- 2. Number of Models/Styles.** The competitive value of a broader product line is that companies can then include models in their product lineups that are specifically designed for particular purposes (running, walking, cross-training, basketball, golf, tennis, and so on as well as for casual and leisure wear) and they can also have a wider selection of colors and styles for men, women, and children. In effect, the more models/styles a company has in its product line, the more reasons consumers have to consider buying multiple pairs of the company's footwear. Companies offering comparatively fewer models/styles than rivals risk losing sales and market share to competitors offering greater selection, unless they offset their narrower selection with other appealing competitive attributes (such as a lower price, higher S/Q rating, higher appeal of celebrity endorsers, and so on).

- 3. Brand Advertising.** Media advertising is used to inform the public of newly introduced models/styling and to tout the company's brand. Even though retail dealers act as an important information source for customers and actively push the brands they carry, advertising on the part of footwear producers informs people about their latest styles and models, strengthens brand awareness, helps pull buyers into retail stores carrying the company's brand, and helps drive footwear shoppers to a company's website. The competitive impact of brand advertising depends on the size of each company's current-year advertising budget in each region. A company's aggressiveness in promoting its footwear in each geographic region is judged competitively stronger when its annual brand advertising expenditures *exceed* the all-company regional average and is judged weaker the further its expenditures for brand advertising are *below* the all-company regional average. **When cross-rival differences on all the other competitive factors are, on balance, close to equal among company rivals in a region, companies with above-average current-year brand advertising expenditures will outsell companies with below-average current advertising expenditures.**
- 4. Appeal of Celebrities Endorsing the Company's Brand.** Footwear companies can contract with celebrity figures, especially those in sports, to endorse their footwear brand, appear in company ads, and be a brand ambassador. Endorsements from appealing celebrities enhance the brand image a company enjoys in the minds of athletic footwear consumers and positively affects consumer purchases. The influence of the company's celebrity endorsers is, of course, magnified by higher brand advertising and search engine advertising—it would make little sense to sign celebrities and then not run ads featuring their endorsement of the company's brand. **Companies with more influential celebrity lineups in a region enjoy an advantage in attracting buyers to purchase their brand in either retail stores or online as compared to regional rivals with less influential celebrity endorsements (or no celebrity endorsements).**
- 5. Image and Brand Reputation.** The "image rating" for each company in the industry is based on (1) its global average branded S/Q rating, (2) its global average market share of total footwear sales (which includes sales of both branded and private-label footwear across all four geographic regions), and (3) its actions to display corporate citizenship and conduct operations in a socially responsible manner over the past 4-5 years—a total of 3 factors. All companies had an overall worldwide image rating of 70 at the end of Year 10. Image ratings/brand reputations are updated at the end of each year, using that year's global average S/Q ratings, year-end global market shares of total footwear sales, and information relating to the social responsibility efforts of rival companies. Newly-released company image ratings are widely-publicized and are easily accessible to the buyers of athletic footwear.

Market research confirms that the *prior-year* company image ratings (brand reputations) of rival companies have a *moderately strong influence* on the brand choices of footwear buyers *in the upcoming twelve months*. Thus, companies with prior-year image ratings above the industry average have a meaningful edge over rivals with below-average image ratings in attracting buyers to purchase their brand and in recruiting additional retailers to stock and merchandise their footwear brand for a period of 1 year (at which time new end-of-year company image ratings are released). The importance of a strong brand reputation in attracting buyers is big enough that companies with comparatively weak reputations must exert enough extra effort on the other 12 competitively relevant factors to boost overall buyer appeal for their brand and overcome their image/reputation disadvantage. When weak image companies **significantly** improve the overall buyer appeal and competitiveness of their athletic footwear from one year to the next, they can win market share from strong image rivals despite having an image rating disadvantage. Should companies with once-weak brand reputations continue to improve their overall image ratings *over a period of several years*, they can turn the liability of a weak brand reputation into a strong brand reputation and competitive asset.

The Five Factors that Impact Only Wholesale Sales of Branded Footwear Sold to Retailers

- 1. Average Wholesale Price for Branded Footwear Sold to Retailers.** How a company's average wholesale price for branded footwear in each region compares with the wholesale prices of competing companies is an important competitive factor. Charging a *higher* price than rival companies puts a company at a price-based competitive *disadvantage* against lower-priced rivals whereas charging a *lower* price results in a price-based *advantage* over higher-priced rivals—big cross-company price differences matter more than small differences and much more than "tiny" differences. But **the more important price-related consideration affecting a company's unit sales/market share is the amount by which its wholesale selling price to footwear retailers in each region is above/below the all-company average in each geographic region.** The more a company's wholesale price to retailers in a geographic region is *above* the all-company regional average, the bigger and more

important is its price-based competitive disadvantage and the more that athletic footwear buyers in that region will be inclined to shift their purchases to lower-priced brands (since higher wholesale prices to footwear retailers translate into higher retail prices for footwear consumers). Conversely, the more a company's wholesale price to retailers is *below* the all-company regional average and the wholesale prices of higher-priced rivals, the greater is its price-based competitive advantage and the greater is the company's potential for attracting the region's footwear shoppers to purchase its lower-priced brand, unless the buyer appeal of the company's lower price is undercut by the company having an unattractively low S/Q footwear rating and/or comparatively few models/styles for buyers to choose among and/or a comparatively weak reputation/brand image, fewer retailers stocking and merchandising its brand of athletic footwear, and/or other less appealing factors that matter to footwear buyers. Low price alone won't attract droves of buyers when a company's footwear brand does not compare favorably with rival brands on other important factors that affect the preferences of footwear buyers for one brand versus another.

It is important to understand that ***the size of any company's pricing disadvantage or advantage versus rivals (and the resulting loss or gain in unit sales and market share) can be decreased or increased by its competitive standing versus rivals on the other competitive factors.*** Any company whose price exceeds the average prices of its regional rivals can narrow the sales and market share impact of its price-based competitive disadvantage when it has competitive edges on some/many other relevant buyer considerations—such as an above-average S/Q rating, more models/styles for buyers to select from, and/or bigger mail-in rebates. But the further a company's average price to retailers is above the average prices of rival companies, the harder it is for a company to use non-price enticements to overcome rising buyer resistance to the company's higher priced footwear.

Similarly, any company whose price to retailers is *below* the average prices of its regional rivals can ***widen*** its price-based advantage over rivals when it also has a competitive edge over these rivals on some or many of the other 10 competitive factors that determine a company's unit sales and market share in a region. In addition, the further a company's price is *below* the average being charged by regional rivals, the *easier* it becomes to offset any competitive disadvantages relating to a less attractive S/Q rating, fewer footwear models/styles to choose from, and other factors that govern overall buyer preferences for one brand of footwear versus another.

2. ***The Numbers of Retail Outlets Carrying the Company's Brand.*** A company's sales and market share in a geographic market are heavily influenced by the number of footwear retailers it can convince to stock its models/styles and promote its brand with shoppers. Having more retailers selling the company's brand enhances a company's competitiveness and overall brand appeal because of the added retail exposure and the added convenience to footwear buyers of being able to buy a given brand at more locations. ***The number of retailers in a region desirous of carrying a company's brand in an upcoming year is based on four factors:*** (1) the company's market share of branded footwear sales in that region, (2) its regional S/Q rating for branded footwear, (3) the number of weeks it takes for retailers in the region to receive the pairs they have ordered, and (4) the degree of merchandising support that the company provides to regional retailers stocking its brand of footwear.
3. ***The Number of Weeks It Takes to Deliver Orders to Retailers.*** Company co-managers can decide whether to install the capability to deliver the newly-received orders from retailers in 4 weeks, 3 weeks, 2 weeks, or 1 week. While retailers can easily live with a 4-week delivery time on footwear orders, manufacturers can boost the appeal of their brands and more easily convince retailers to carry their brands by cutting the delivery times on the orders of footwear retailers to 3 weeks, 2 weeks, or 1 week. ***Companies whose delivery times are in a region are shorter than the all-company average have an advantage in attracting footwear retailers to stock their brand and boosting sales because retailers are less likely to run out of particular sizes and styles.*** However, shorter delivery times require footwear companies to incur higher shipping costs and maintain higher inventories to ensure having all sizes of its various models and styles on hand in the region's distribution center.
4. ***Support Offered to Retailers in Merchandising and Promoting the Company's Brand.*** Footwear retailers are also attracted to stock the brands of those footwear manufacturers that provide them with the best merchandising and promotional support. Such support can include providing in-store displays and signage, providing helpful information about styles, models, and performance features, supplying brochures detailing shoe construction and other noteworthy features, making it easy for retailers to place orders online, and keeping retailers posted on styles or models that have been newly introduced/discontinued or are about to be introduced/discontinued. In short, footwear retailers and their store personnel want to deal with a footwear supplier that works closely with them to boost sales

and that is easy to do business with. **Companies that provide amounts of retailer support above the all-company average in a region have an advantage in attracting footwear retailers to stock their brand and thereby boosting their branded footwear sales in the region.**

- 5. Mail-in Rebates.** As an added sales inducement, footwear companies have the option of offering buyers a rebate *on each pair purchased from retailers*. Mail-in rebates, if offered, can range from as low as \$3 per pair to as much as \$15 per pair. Companies who give rebates provide retailers with rebate coupons to give buyers at the time of purchase. To obtain the rebate a customer must fill out the coupon and mail it to the company's regional distribution center, along with the receipt of purchase. The customer service staff at the distribution center handles verification, check processing, and mailing the rebate check. **When cross-rival differences on all the other factors that influence buyer brand preferences are, on balance, quite small, companies offering bigger-than-average mail-in rebates in the wholesale segment will outsell companies offering smaller-than-average mail-in rebates (or no rebates).**

The Three Competitive Factors that Impact Only Internet Sales of Branded Footwear

- 1. Average Retail Price Charged at Each Company's Regional Websites.** Charging a *higher* online price than rival companies puts a company at a price-based competitive *disadvantage* against lower-priced rivals whereas charging a *lower* price results in a price-based *advantage* over higher-priced rivals—big cross-company price differences matter more than small differences and much more than “tiny” differences. But **the more important price-related consideration affecting a company's online sales/market share in each region is the amount by which its average online selling price in each region is above/below the regional all-company average.** The more a company's regional online price is *above* the all-company average in a geographic region, the bigger and more important is its price-based competitive disadvantage and the more that online footwear shoppers in that region will be inclined to shift their purchases to lower-priced brands. Conversely, the more a company's online price is *below* the all-company regional average and the online prices of other regional rivals, the greater is its price-based competitive advantage and the greater is the company's potential for attracting greater numbers of online shoppers in the region to purchase its lower-priced brand, unless the buyer appeal of the company's lower price is undercut by the company having an unattractively low S/Q footwear rating and/or comparatively few models/styles for buyers to choose among and/or a comparatively weak reputation/brand image, and/or other unappealing factors that matter to online shoppers. Low price alone won't attract droves of buyers when a company's footwear brand does not compare favorably with rival brands on other important factors that affect the preferences of footwear buyers for one brand versus another.

Consequently, it is important to understand that **the size of any company's pricing disadvantage or advantage versus rivals (and the resulting loss/gain in unit sales and market share) can be decreased/increased by its competitive standing versus rivals on all the factors affecting the brand preferences of online shoppers.** Any company whose price exceeds the average prices of its regional rivals can **narrow** the sales and market share impact of its price-based competitive disadvantage when it has competitive edges over rivals on some/many other relevant buyer considerations—such as an above-average S/Q rating, more models/styles for buyers to select from, and/or a better company image/brand reputation. But the further a company's average price to retailers is above the average prices of rival companies, the harder it is for a company to use non-price enticements to overcome rising buyer resistance to the company's higher priced footwear.

Similarly, any company whose price to retailers is below the average prices of its regional rivals can **widen** its price-based advantage over rivals when it also has a competitive edge over these rivals on some or many of the other competitive factors that determine a company's online unit sales and online market share in a region. In addition, the further a company's price is below the average being charged by regional rivals, the easier it becomes to offset any competitive disadvantages relating to a less attractive S/Q rating, fewer footwear models/styles to choose from, and other factors that govern the preferences of online shoppers for one brand of athletic footwear versus another.

- 2. Search Engine Advertising.** Athletic footwear companies use search engine ads to help attract more footwear buyer traffic to their websites and thereby help boost online sales and market share in a region. A company's competitiveness versus rival brands in the internet segment is stronger in a region when its expenditures for search engine advertising are *above* the all-company region average and weaker when its expenditures for search engine ads are *below* the region average.

3. **Free Shipping on Online Purchases.** To make it more attractive for athletic footwear buyers to make purchases at their websites, footwear companies have the option to offer free shipping. Companies that offer free shipping to buyers in a geographic region enjoy an advantage in securing online sales versus regional rivals that choose not to offer free shipping; however, this advantage is weakened when companies offering free shipping charge considerably higher online prices (more than enough to cover the costs of free shipping) and/or their footwear carries a lower S/Q rating and/or their online selection of models/styles is more limited and/or their expenditures for search engine ads are lower than rivals and/or their standing on other factors affecting buyer brand preferences is less favorable. Likewise, rivals that choose not to offer free shipping in a region can offset some or all their shipping disadvantage in securing online sales with lower online prices and/or higher S/Q ratings and/or bigger selections of models/styles and/or greater expenditures for search engine ads and/or other factors that stimulate buyers to prefer their brand over the brands of rivals.

The Importance of Each Competitive Factor in Determining Sales and Market Share

As should be expected, the 13 competitive factors for athletic footwear have differing impacts—some carry more weight than others in determining how much cross-company differences affect the brand preferences of buyers, the number of branded pairs sold, and market shares. As a general rule, the three most important competitive factors affecting buyer brand preferences, pairs sold, and market shares are price (the average wholesale price in the case of branded pairs sold by footwear retailers and the average online price in the case of pairs purchased online), S/Q ratings, and the number of models/styles offered. The next most influential factors include the appeal of celebrities endorsing the various rival brands, brand advertising, search engine advertising, company image/brand reputation, the number of retail outlets stocking the company's brand of footwear, and free shipping. The competitive advantages/disadvantages associated with differences in the number of weeks it takes to deliver retailer orders, the sizes of mail-in rebates, and the comparative amounts of support provided to retailers in merchandising and promoting their respective brands weigh the *least heavily* in determining buyer brand preferences and each company's regional unit sales and market share.

The behind-the-scenes weights placed on the 13 competitive factors closely mirror what is believed to actually prevail in the real-world marketplace for athletic footwear. ***While knowing precisely what these weights are might seem helpful or even essential, such knowledge is not as useful as you might believe—just why is explained below.***

How Much Each Competitive Factor Matters Is Not a Fixed Amount. Both logic and common business sense instruct that price is certainly a very important factor affecting both a company's competitiveness against rivals and overall buyer appeal for one brand versus another. ***Big price differences in a region matter a lot*** in accounting for differences in branded pairs sold and market share. But as the spread between the highest-priced company and the lowest-priced company becomes smaller and smaller, *the weaker is the unit sales/market share impact of price differences* and the greater the role of differences on other competitive factors in causing the sales and market shares of some companies in the region to differ from those of other companies. Indeed, in the rare instance that all companies should happen to charge the same wholesale price to retailers in a region and the same online price at their websites, then price becomes a total competitive *nonfactor* and has ***zero impact*** on buyer appeal for one brand versus another—in such cases, 100% of the regional sales and market share differences among company rivals stem directly from differences on the other 12 competitive factors. Therefore, how much price matters in determining a company's unit sales/market share in a region ***is not a fixed amount but rather is an amount that varies*** from “big” (when price differences are also “big”) to “small” (when price differences are “small”) to “zero” (when the prices of rivals are identical).

Precisely the same reasoning holds for all the other 12 competitive factors. While it is true that some competitive factors affect the brand choices of buyers more than others, what matters most in determining sales and market shares is the sizes of the differentials on each competitive factor. Big differences on a less influential competitive factor (like the number of weeks in which orders are delivered to retailers) can end up having a bigger sales/market share impact than very small/insignificant differences on more influential competitive factors (like price, S/Q rating, and advertising).

Essential Understanding: The more that a company's brand appeal to buyers on any one competitive factor (whether it be price, S/Q rating, number of models/styles to choose from, advertising, delivery time, and so on) is above/below the all-company average in a region, the bigger is the “weighting” or impact of

that factor in accounting for why that company's regional unit sales/market share is above/below the region's all-company average. Conversely, the closer to the all-company regional average is a company's price or S/Q rating or brand reputation or number of models (and so on) the smaller is the weighting/impact of that factor in accounting for why that company's regional unit sales/market share is above/below the region's all-company unit sales/market share averages. When a company's competitive effort on each of the relevant competitive factors in the wholesale or internet market segments for branded footwear approximates the all-company averages in a region, then its resulting unit sales volume/market share in those two segments will also approximate the region's all-company sales/market share averages. Therefore, which competitive factors turn out to be most important all depends on how that company's competitive effort stacks up against the all-company average competitive effort, competitive factor by competitive factor. All unit sales and market share outcomes in all regions are thus 100% competition-based and are a function of the size of each company's competitive advantage/disadvantage against the all-company averages for all the relevant competitive factors.

Special Note: After each year's decision round, you can review a *Competitive Intelligence Report (Comparative Competitive Efforts for each geographic region)* showing each company's competitive standing against all other companies on each of the competitive factors for branded footwear. It is imperative that you review this information to determine how well your company's competitive effort stacked up against the all-company averages—on which factors did your company have a competitive edge and on which factors was your company at a competitive disadvantage? This information puts you in position to correct any important competitive disadvantages and to consider ways to further exploit any competitive advantages in the upcoming decision round. **Ignoring the information in the Competitive Intelligence Reports puts your company in the risky position of heading into the upcoming year's market contest with little or no clue as to competitors' prior-year prices, S/Q ratings, product breadth, brand reputations, and so forth and the extent to which your company was or was not out-competed by rivals.**

Crafting a Strategy to Be Competitively Successful

With so many competitive factors determining each rival company's unit sales and market shares of branded footwear in each of the world's four geographic regions and with the sales/market share impacts of these factors varying from region-to-region and year-to-year because of shifts in each company's competitive advantage/disadvantage against rivals on all these factors, **you have wide-ranging options for crafting a strategy capable of producing good overall company performance and competing successfully in the global market for athletic footwear.** For example, you can

- Employ a low-cost leadership strategy and pursue a competitive advantage keyed to operating more cost-efficiently than rivals and striving to earn attractive profits selling at prices below those of rivals.
- Employ a strategy to differentiate the attributes of your company's footwear from rival brands based on features/styling/quality, breadth of product line, endorsement contracts with more influential celebrities, and/or other competitive factors—and thereby outcompete rivals with a product offering that has greater brand appeal to buyers.
- Employ a “more value for the money” strategy (providing 7-star footwear at lower prices than other 7-star brands) where your competitive advantage is an ability to incorporate appealing attributes (styling/quality and wide selection) at a *lower cost than rivals* and thus be in position to underprice rival brands having comparable attributes and S/Q ratings.
- Focus your strategic efforts on being the clear market leader in one or more market segments—wholesale sales to footwear retailers, Internet sales, or private-label footwear sales to chain retailers.
- Focus your company's strategic efforts on being the clear market leader in one or two geographic regions as compared to the other regions (perhaps because you have highly efficient plants in one or two or maybe three regions that give you a cost advantage over rivals in those regions).
- Pursue essentially the same strategy across all four regions **or** else craft regional strategies tailored to improve the company's competitiveness region-by-region and counteract/overcome the strategic actions and competitive maneuvers of specific rivals in specific regions.

Each company's management team is at liberty to **try** to outcompete rivals (or at least compete well enough to be attractively profitable) with some version of any of the competitive approaches outlined above or some other customized strategy that company managers find appealing—and **can do so with full assurance that *The Business Strategy Game* absolutely does not have any built-in bias that favors any one strategy or competitive approach over all the others.**

But just because you and your co-managers have control over the company's strategy does not mean your company can be a "top performer" pursuing whatever strategy that you "like best." Why? Because whatever strategy and level of competitive effort your company adopts is always subject to being overpowered or thwarted by the actions and competitive efforts of rival companies.

As discussed above, unit sales and market share outcomes in all regions are 100% competition-based and are a function of the size of each company's competitive advantage or disadvantage against the all-company regional averages for all the relevant competitive factors. Thus, **no company can escape having the "competitiveness" of its strategy and the overall buyer appeal of its branded footwear "tested" against the competitiveness of the strategies employed by rivals and the overall buyer appeal of rival brands, competitive factor by competitive factor and region-by-region.** In other words, the freedom of each company's management team to pursue whatever combination of competitive efforts it wishes (as concerns prices, S/Q ratings, number of models/styles, advertising, and so on) is "limited" or "regulated" by the business necessity of competing successfully enough against rivals for the company to be attractively profitable and, ideally, profitable enough to be a top performer in the industry.

So, **the hard reality is that in every decision round you and your co-managers—like the management teams of rival companies—are challenged to devise a strategy and exert sufficient effort on the relevant competitive factors affecting online sales and wholesale sales to footwear retailers that enables your company to compete successfully enough against rivals to result in sufficiently profitable sales volumes, market shares, and revenues across the four market regions.** The point not to be forgotten here is that *The Business Strategy Game* is a competition-based exercise where your company's management team competes head-to-head against other companies in your class. Each decision round, your management team must match its strategic wits against the strategic wits of rival company managers in a globally competitive market battle. The contest is one where the power of your company's competitive approach and the overall buyer appeal of your company's footwear is pitted against the power of the competitive efforts of rival companies and the overall buyer appeal of their footwear brands. The outcome of this contest produces winners and losers. Typically, companies with competitively successful strategies in a given decision round outperform those companies with competitively weak and thus less successful competitive strategies. Each company's management team then makes whatever adjustments in their strategy and competitive effort in each region that aim at improving company performance, and the market contest resumes for the next decision round.

As long as your company's competitive efforts/actions and decision entries produce an overall buyer appeal for your footwear offering and so long as your company exerts sufficiently aggressive competitive efforts, then you can expect a satisfactory percentage of buyers to prefer purchasing your brand over rival company brands. If your company's sales volume and revenues are disappointingly low in certain regions in a given decision round, then it is management's responsibility to adjust the company's strategy and levels of competitive effort to produce better competitive outcomes. If your company's sales volume and revenues are attractively high in certain regions in a given decision round, then management may well decide to adjust the company's strategy and levels of competitive effort in ways calculated to further expand the company's competitive advantages to produce even more attractive and profitable outcomes—as a rule, it is unwise for a competitively successful company to rest on its laurels because weak performing rivals can be expected to boost their competitive efforts and try to close the performance gap.

While achieving attractive sales volumes and revenues in the world's athletic footwear marketplace is necessary, it is not sufficient to produce the best profit outcomes. For a company to rank among the industry's top-performers, its net revenues must cover costs by an amount that results in profitability. Good profitability requires not only sufficient competitive success to produce attractively large revenues but also consistent managerial success in operating the company cost-efficiently—operating inefficiencies and wasteful spending impair a company's profitability and overall performance.

Don't Waste Time Searching for Some "Magic Bullet" or "Undefeatable" Strategy. Because the sales and market share outcomes for a company are 100%-based on the competitiveness and overall buyer appeal of its brand, **it is conceptually impossible for there to be some preselected surefire**

strategy or some undefeatable combination of competitive efforts/actions that is “guaranteed” to produce sufficient unit sales, market shares and revenues to propel a company into the ranks of the top-performing companies, irrespective of the strategies and competitive actions undertaken by rival companies. How well any one particular strategy or combination of decisions and actions will fare cannot be predetermined but rather must await the instructor’s scheduled deadline for each decision round—only when each company’s “final” decisions have been saved to the **BSG** server for a given decision round is it feasible to perform the calculations needed to determine each company’s competitiveness versus rivals and translate this into unit sales, market shares, revenues, costs, profitability, and overall performance for all the various companies. **It is deeply flawed thinking to believe that some predetermined level of competitive effort could be built into The Business Strategy Game that will always turn out to be competitively powerful enough to deliver great overall company performance irrespective of the strategies, actions, and decisions of rivals.**

Be Very Wary about Following the Advice of Outside Sources. You are well-advised to be highly skeptical about following any advice and tips regarding “what to do” or “what works best” that come from prior participants in **The Business Strategy Game** exercise at your school or from sources you discover from Internet searches. While you might be tempted to view such anecdotal information as “helpful” or “important to know” or “worth considering,” just bear in mind that your company will be competing against companies *run by students in your class*—any information you run across about the experiences of companies run by other teams of students in other industries at your school or elsewhere in the near or distant past are of dubious relevance. Why? Because the specific actions and decisions that other companies in your class have previously taken and/or are likely to take in upcoming decision rounds *are certain to differ*—by perhaps a little and more likely by a lot—from those that occurred previously in other industries. To put it a bit differently, the chance that the head-to-head competition and outcomes in whatever past industries produced the tips and advice you have gotten will *closely match* the levels of competitive effort in each region that the companies in your industry have already undertaken and will undertake in the future is very small—certainly under 5% and more likely close to zero. Ask yourself two things:

1. “Do I really believe that the advice/tips I have gotten that come from experiences in past industries and are based on the competitive efforts of as few as 4 or as many as 12 rival companies in each of the four regions are actually going to closely approximate the competitive efforts on each of the relevant competitive factors undertaken in each region by the companies in my industry?”
2. “How risky (foolish?) is it for my company to base its strategy and levels of competitive effort on somebody else’s assessment of what worked for them in competing with an unknown number of rival companies (more? or less? than in my industry) pursuing strategies that I know nothing about and levels of competitive effort across the four regions that I know nothing about?”

In the view of the **BSG** author team, following such advice carries significant risk of being “off the mark” or even “dead wrong” in helping you identify what specific strategy and levels of competitive effort are needed to compete effectively against the rival companies in your class. The most accurate and dependable source of information for guiding your efforts to compete successfully is always found in the *Competitive Intelligence Report* you receive after every decision round.

Making Decisions

As indicated earlier, there are 57 different types of decision entries and 10 entries involving assumptions about the competitive actions that rivals are likely to take. In some cases, entries for the same decision type (like selling price or advertising or delivery times) are required for each of the four geographic regions of the world market. *Each of the decision pages displays the projected outcomes of your decision entries.* These projections appear as soon as an entry is made, allowing you to isolate the incremental impacts of each decision entry. On each decision page are also calculations showing *projections* of earnings per share (EPS), return on average equity (ROE), credit rating, image rating, revenues, net profit, and year-end cash balance. These projections are instantly updated each time a new entry is made, allowing you to see the probable impacts of each new decision entry on company performance. You will find these built-in decision support calculations invaluable in evaluating alternative decisions and deciding what to do. You can easily try out any number of “what if we do this” decision alternatives, review the projected outcomes, and thereby search for a combination of decision entries that appears to offer the best overall performance and meets with the consensus approval of your company’s management team.

The first time you visit a decision entry page, you should take time to explore and digest all the information. **If you feel the need for assistance or additional information while you are working on a page, click the Help button at the top-right.** The Help documents provide detailed entry-by-entry guidance, including important cause-effect relationships, explanations of all on-page calculations, and decision-making tips. From time-to-time you will likely need to come back to certain Help documents to refresh your memory on what causes what to happen and how certain numbers are calculated. **Totally ignoring the Help information is unwise.** Most likely, you will find the information valuable in making wiser decision entries and avoiding the desperation of entering “some number” in hopes that the outcome will be “good” or “okay.”

Upon visiting a decision entry page, take time to explore the page and digest all the information. The numbers you see in the entry boxes represent *either* the decisions made in the prior year *or* the latest decisions you and/or your co-managers saved while having previously worked on the current-year entries. No decision entry for the current year is considered final until the deadline (set by your instructor) for the decision round arrives. **BSG considers the last set of decision entries saved prior to the decision round deadline as “final”.** It is critical that you and your co-managers save your entries before the deadline passes.

WORKFORCE COMPENSATION AND TRAINING

There are 6 different types of entries on the first decision entry page you will encounter: (1) how much to raise/lower the base pay of workers at each production facility, (2) whether and how much to raise/lower each worker's incentive payment per pair produced, (3) the dollar size of the fringe benefits package that the company will provide to production workers at each production facility, (4) how much to spend on training workers in the use of best production practices at each facility, (5) approximately what ratio of production workers to supervisors you want to have at each facility, and (6) what percentage increase in salaries and benefits to grant to production supervisors. The dollar size of the compensation package paid to production workers (base pay, incentive pay, and fringe benefits) relative to the regional average directly affects worker productivity (the number of workers needed to produce the desired number of branded pairs) and the percentage of pairs rejected due to defects in workmanship.

Expenditures for best practices training have four highly positive benefits in all plants: (1) helping curb reject rates associated with defective workmanship, (2) helping improve S/Q ratings for both branded and private-label footwear, (3) curtailing materials waste and potentially lowering material costs at the plant by as much as 20% annually, and (4) increasing worker productivity. In Year 10, the company spent \$77.5 million on standard and superior materials, so making use of best practices training to achieve (over time) materials cost savings of even 5-10% annually (and maybe 15% to 20% annually over a period of years with all-out long-term best practices expenditures over time) is one way to achieve a sustainable cost advantage over rival companies. *Annual increases* of 1% or more in worker productivity at the North American plant where productivity is presently 5,000 pairs per worker per year and at the Asia-Pacific plant where productivity is just under 3,500 pairs per worker per year also holds potential for meaningful savings in labor costs over time. All the benefits of current-year spending for best practices training are reflected in the supporting calculations of productivity, materials costs, reject rates, and S/Q ratings each time you change a decision entry, allowing you to evaluate the immediate cost effectiveness of such expenditures.

Expenditures to achieve a comparatively low ratio of production workers per supervisor and pay supervisory personnel higher than average salaries also helps boost production worker productivity.

The Factors That Affect Worker Productivity. Annual worker productivity (that is, how many pairs each production worker, on average, produces in a given year) is influenced by nine factors:

- **Annual base pay increases**—Annual increases in base pay of 2% or more lead to higher levels of productivity, chiefly because higher pay scales help the company attract and retain workers with better skills and work habits. The maximum base pay increase in any one year is 15%. Cuts in base pay are allowed, up to a maximum of 10% in any one year, but they will tend to decrease worker productivity (unless the base pay cut is offset with increased incentive payments). A small pay cut will not cause a big drop in productivity, but cuts approaching 10% will have a sizable negative impact. (Calculations on the page show the effects of changes in base pay on worker productivity and labor costs per pair.)
- *How much emphasis is placed on **incentive compensation** (as measured by the percentage of the company's total compensation package accounted for by incentive pay)*—Prior management instituted

the practice of paying each worker an incentive “bonus” for each pair produced that passed inspection for good workmanship, the thesis being that such incentives spurred workers to curb defective workmanship. Currently, the incentive payment for shoes passing inspection is \$1.00 per pair at the North American plant and \$0.50 per pair at the Asia-Pacific plant. You will have to decide whether to continue the use of incentive pay per non-defective pair, whether to raise/lower the incentive payment, and, if so, what percentage of regular compensation (not including overtime pay) that incentive pay should represent. ***The larger the percentage of total compensation that comes from piecework incentives, the larger the gain in worker productivity.*** However, ***the incremental gains in productivity become progressively smaller and top out altogether once incentive pay reaches 25% of total compensation.*** Past 25% of regular compensation, higher incentive payments per non-defective pair cause workers to spend progressively more assembly time to eliminate defects, thus resulting in progressively larger drop-offs in worker productivity but in fewer defective pair that will not pass inspection.

- ***The total annual compensation of workers relative to industry-average compensation levels in the geographic region***—How well your company’s plant workers are being compensated relative to the compensation at rival companies with production facilities in the same region is a major factor in the company’s ability to attract and retain better-caliber, more productive employees. The best, most productive workers are inclined to leave jobs at lower-paying plants for higher-paying jobs. Likewise, job seekers with desirable work habits and attitudes are drawn to work for those footwear-makers having a better overall compensation package. Consequently, worker productivity tends to be higher at the better-paying production facilities in a geographic region.

Special Note: *The worker productivity figures shown on the page are projections (based on prior-year compensation levels), not certainties, because there is no way to know in advance how the company’s compensation package in the current year will compare to the pay packages of rivals.*

- ***The amount the company spends annually per worker on best practices training***—Apart from compensation, the productivity of workers is significantly affected by the amount the company spends annually to train workers in using the best-known footwear-making methods. You have the authority to raise/lower spending for best practices training and production methods improvement. There are potentially significant gains in worker productivity that can come from increased spending on best practices training; in Year 10, your company spent an average of \$600 per worker on training in the North American plant and \$400 per worker on training in the Asia-Pacific plant. However, the productivity benefits from spending progressively more dollars on training are subject to diminishing marginal returns—in other words, the benefits of spending a second \$500 per worker per year on best practices training are smaller than spending the first \$500 and the benefits of spending a third \$500 per worker per year on best practices training are smaller than spending the second \$500. If and when the resulting productivity gains become too small to justify spending additional sums in upcoming years, you can cut back spending on training without losing any of the previous build-up in productivity.
- ***The number of models workers must assemble at a given plant.*** Work force productivity decreases as the number of models being assembled goes up; this is because somewhat different production/assembly methods are used for different models. The greater the number of models being produced, the more different production methods there are for workers to master and the less efficient workers are in performing the different tasks associated with each model.
- ***Higher supervisor salaries relative to the regional average.*** Paying supervisors amounts above the regional average enables the company to attract higher caliber supervisors, which in turn enhances the productivity of the production workers they supervise.
- ***A smaller ratio of production workers to supervisors.*** The fewer workers that supervisory staff are assigned to supervise, the better able they are to quickly correct sloppy assembly practices and lax worker attention to detail and the more time they have to police the use of best assembly practices by production workers.
- ***The use of new equipment (as opposed to refurbished equipment even if the refurbished equipment has been recently purchased).*** New equipment has features that enhance the footwear assembly process allowing workers to produce pairs at a faster rate than with refurbished equipment.
- ***Whether Production Improvement Option D has been installed at the plant.*** This option increases worker productivity by 50%.

As of Year 10, worker productivity averaged 5,000 pairs annually at the plant in North America and 3,500 pairs annually at the Asia-Pacific plant. There is reason to believe that over the next several years worker productivity can be substantially improved at both plants if managers aggressively pursue productivity gains. Worker productivity is important because it determines the size of the workforce needed to staff plant operations. For instance, if your company elects to produce 4 million pairs of shoes at its North American plant and the annual productivity of North American workers averages 5,000 pairs annually, then it will take a workforce of 800 people to produce the 4 million pairs. But if worker productivity should later rise to an average of 6,250 pairs, then only 640 workers would be needed to produce 4 million pairs.

BRANDED FOOTWEAR PRODUCTION

There are 5 types of decision entries involved in producing branded footwear: (1) the percentage of superior materials used, (2) the number of models/styles to be produced, (3) how much to spend on enhancing the styling and features for each model/style, (4) how much to spend on the plant's ongoing TQM/Six Sigma programs, and (5) the number of branded pairs to be manufactured. These five decision categories are fairly straightforward (click Help for additional details), but bear in mind the following:

- There is some degree of uncertainty about the prices for standard and superior materials in the current year. If many companies increase superior materials usage in an effort to increase S/Q ratings, there is reason to expect that worldwide use of superior materials will exceed 40% of all materials used in making athletic footwear, thereby resulting in (1) a 2.0% increase in the price of superior materials for each 1% that the worldwide percentage use of superior materials exceeds 40% and (2) a 0.5% decline in the price of standard materials for each 1% that the global usage of standard materials falls below 60%. *Shifting prices for standard and superior materials, which are not known in advance, cause actual costs for materials to differ (up or down) from the projected materials costs shown on the page.*
- The percentage of superior materials, expenditures for enhanced styling/features, and both current-year and cumulative expenditures for TQM/Six Sigma programs, are major components of the IFF's annual calculation of the S/Q rating for branded footwear. You can immediately see the impact on your company's S/Q rating when you enter decisions for superior materials usage, expenditures for enhanced styling and features, and expenditures for TQM/Six Sigma. Some level of spending for enhanced styling/features is needed annually to keep the company's lineup of models/styles in vogue and provide a look that helps the company's brand stand apart from rivals. Spending to train plant personnel in state-of-the-art use of TQM/Six Sigma quality control and the use of best practice assembly methods has a highly positive effect on workmanship, lowers the frequency of equipment breakdowns and work stoppages, reduces materials waste, helps cut the number of pairs that fail inspection due to production defects of one kind or another, and promotes smoother overall plant operations. However, the benefits of progressively higher expenditures for styling/features and TQM/Six Sigma programs are subject to diminishing marginal returns. In other words, the *incremental* gains from increasing spending on styling/features from \$5,000 per model to \$10,000 per model will exceed the benefits from increasing spending from \$10,000 to \$15,000 per model. Likewise, boosting TQM/Six Sigma spending from \$0.50 per pair to \$1.00 per pair of capacity will have greater *incremental* benefit than boosting spending from \$1.00 to \$1.50 per pair.
- The amount of a company's *cumulative* spending for TQM/Six Sigma programs over a period of years has a bigger impact than *current-year* spending. This is because the benefits of such programs come from *an ongoing effort over a period of years*, rather than short-term or on-again/off-again efforts to squeeze out results.
- While any of several combinations of superior materials usage, styling/features expenditures, TQM/Six Sigma spending, and expenditures for best practices training can be used to achieve a desired S/Q rating, *some combinations entail lower costs per pair than others*. Thus, it is wise to experiment with different combinations and search out the lowest-cost combination to achieve the desired S/Q rating. You have the flexibility to vary the percentage of superior materials used, styling/features expenditures, and TQM/Six Sigma spending from plant to plant, thus producing branded shoes of varying S/Q ratings at different plants. This gives you the strategic option to market branded footwear with different S/Q ratings in different geographic regions.
- In deciding how many branded models/styles to include in your company's product line, you need to be alert to the costs associated with changing the production line from making one model/style to another. The equipment on the company's production line allows making only one model at a time, though it is easy to produce different sizes of the same model simultaneously. To switch production over from one

model to another takes anywhere from 2 to 5 hours of set-up time, depending on styling/features of the various models/styles, and usually is done between each day's work shifts. Annual production run set-up costs *per plant* for branded footwear are \$1 million for 50 models, \$2.0 million for 100 models, \$3.25 million for 150 models, \$4.5 million for 200 models, \$6 million for 250 models, \$7.5 million for 300 models, \$9.0 million for 350 models, \$10.75 million for 400 models, \$12.75 million for 450 models, and \$15 million for 500 models. The size of the plant does not matter in determining the total production run set-up costs, only the number of models produced at the plant. Both the North American and Asian plants produced 200 models/styles of athletic footwear in Year 10.

Broadening your company's product line with more models can have a strongly positive effect on unit sales and market share. But the sales-enhancing effect of more models also carries a potentially sizable impact on production costs *per pair*. At the North American facility, for example, producing 4 million pairs and 50 models entails production run set-up costs of \$0.25 per pair, whereas producing 4 million pairs and 500 models entails set-up costs of \$3.75 per pair. If a major element of your company's strategy is to have a broad product line, you can combat the added cost per pair associated with production run set-up by investing in Production Improvement Option B that reduces production run set-up costs by 50% and/or by expanding a production facility (for example, producing 500 models at a plant with capability of 10 million pairs results in production run set-up costs of just \$1.50 per pair).

The Factors that Determine Reject Rates. Just below the projected S/Q ratings on the Branded Footwear Production decision page you will see the reject rate (percentage of pairs rejected due to defective workmanship). The reject rate at a production facility is a function of six factors:

- *The size of the incentive payment per non-defective pair produced.* Higher piecework incentives help reduce the reject rate. This is chiefly because the company's policy of not paying an incentive for defective pairs motivates workers to pay close attention to their workmanship, observe best practice procedures, and not engage in "hurry-up" procedures to boost their incentive compensation.
- *Spending for TQM/Six Sigma quality control efforts.* In addition to the positive effect that TQM/Six Sigma programs have on S/Q ratings, greater expenditures for TQM/Six Sigma programs also act to lower the number of pairs that end up being rejected.
- *Best practices training.* Putting workers through additional best practices training helps lower reject rates because of the associated improvements in workmanship and production methods. However, just as with spending for TQM/Six Sigma, the reject rate reductions of progressively more best practices training are subject to diminishing marginal returns.
- *The number of models/styles comprising the company's product line.* The more models produced, the less skill and experience that workers have in producing each model and the more mistakes they make. However, the tendency for reject rates to rise as more models are produced can be combated by increasing incentive pay per pair and/or spending for TQM/Six Sigma programs and/or best practices training. Likewise, if a company reduces the number of models/styles in its product line, it can usually trim spending for its TQM/Six Sigma program and/or cut back best practices training and/or slightly reduce incentive pay per worker without materially hurting reject rates.
- *The use of new equipment (as opposed to refurbished equipment even if the refurbished equipment has been recently purchased).* New equipment has features that reduce the chances of human error occurring during the footwear assembly process.
- *Whether Production Improvement Option A has been installed.* This option reduces the reject rate at a production facility by 50%.

In Year 10, the branded footwear reject rates of 7% at the North American plant and 10.1% at the Asia-Pacific plant totaled 711,000 pairs and cost the company \$14.5 million; private-label reject rates of 6.9% at the North American plant and 10.0% at the Asia-Pacific plant totaled 74,000 pairs and cost the company \$2.2 million. It is company policy to donate all rejected pairs to charitable organizations. Studies indicate that it is possible to reduce plant reject rates to 1.5% or less, but it is left for company co-managers to determine what actions to take and how much to spend on driving reject rates down.

Deciding How Many Pairs to Produce at Each Plant. The final entries on the branded production page concern how many pairs of branded footwear to produce at each plant. There is a line on the page showing the approximate number of branded pairs that will need to be produced to satisfy buyer demand,

but the first time you visit the Branded Footwear Production page the number is only a *first approximation* because it is based on the *prior-year* levels of competitive effort exerted by both your company and rival companies. However, the forecast of the approximate number of pairs that need to be produced is updated each time (1) you make adjustments in your company's prices, advertising, and other levels of competitive effort to sell footwear online and to footwear retailers and (2) you make changes in the assumed levels of competitive efforts of rivals (whether rivals, on average will raise/lower prices, advertising, etc., thus presenting your company with stronger/weaker competition than in the prior year).

You will most certainly need to return to the Branded Footwear Production page one or more times to adjust the total number of pairs to be produced and to consider how best to allocate production across the plants to minimize overall costs. Not only do production costs of branded footwear vary by plant location but, there are also import tariffs, the impacts of shifting exchange rates, and shipping costs to consider in deciding how many branded pairs to produce at each plant and where to ship the output.

PRODUCTION FACILITIES

This decision page involves entries regarding whether to (1) add shoe-making capability by purchasing new or refurbished equipment, (2) sell any unneeded footwear-making equipment at one or more existing facilities, (3) invest in production improvement options at one or more existing facilities, (4) build new facilities in Latin America or Europe-Africa, and (5) construct more facility space in the North America or Asia-Pacific plants so as to accommodate the installation of additional footwear-making equipment.

Purchasing New or Refurbished Equipment. Going into Year 11, your company's North America facility has unused space available for installing enough footwear-making equipment to produce an additional 1 million pairs without the use of overtime (1.2 million pairs with maximum use of overtime); the Asia-Pacific plant has space available to accommodate an additional 2 million pairs (2.4 million pairs at maximum overtime) of footwear-making equipment. Companies have the option of installing *new* equipment at a cost of \$5 million per 250,000 pairs of production capability or *refurbished* equipment at a cost of \$3.6 million per 250,000 pairs of production capability. All equipment additions must be in increments of 250,000 pairs. Both types of equipment have a 10-year life. All equipment purchases can be made at the beginning of each year, and equipment suppliers can deliver and install new or refurbished equipment within 24-48 hours, thus making it available for full production for the entire year. Production facilities can be operated with whatever equipment desired—all new, all refurbished, and any percentage combination of the two.

Currently, the company's North America facility has 100%-new equipment, whereas the Asia-Pacific facility operates with 100%-refurbished equipment. **The 4 million pairs of new equipment in the North American facility was purchased at the beginning of Year 5 and must be replaced at the beginning of Year 15. The 4 million pairs of refurbished equipment in the Asia-Pacific facility was purchased at the beginning of Year 6 and must likewise be replaced at the beginning of Year 16.**

New equipment has three beneficial operating features not available with refurbished equipment: 1) new equipment enables better quality control, thus increasing the S/Q rating of the pairs produced by 0.5 stars; 2) new equipment operates at higher speeds, such that worker productivity is increased by 500 pairs per year; and 3) the added quality control capabilities of new equipment reduces the reject rates on the pairs produced by 20%. Since these benefits apply only to pairs produced with new equipment, the size of these three benefits is proportional to the percentage of new equipment installed at a facility. All other things being equal, a facility with 100%-new equipment will produce footwear with a full 0.5-star higher S/Q rating, workforce productivity 500 pairs per year higher, and a 20% lower reject rate than in a facility installed with 100%-refurbished equipment. If a facility is equipped with 50% new and 50% refurbished equipment, then the benefits of new equipment would be a 0.25-star increase in the S/Q rating, a 250-pair increase in worker productivity, and a 10% reduction in the reject rate.

Selling Equipment Installed at A Company Facility. You have the option at the beginning of each year to sell all or part of the footwear production equipment at a plant facility—all sales are made in increments of 250,000 pairs and occur at the beginning of the year. All such sales are made at a price equal to the current book value of the equipment, with the oldest equipment always being sold first. Upon entering the amount (in 250 thousand pair increments) of the equipment to be sold, the realized cash value of the sale will appear in the bottom section of the page/page on the line labeled "Book Value of Equipment Sold."

Production Improvement Options. You may undertake one production improvement option per year at a given plant facility, with a maximum of two production improvement options throughout

the life of the plant. The cost of a production improvement option is treated as additional investment; the improved equipment that is installed has a 10-year service life and is depreciated on a straight-line basis at the rate of 10% annually. Production improvement options take effect the year after they are initiated. Payments to the suppliers of production improvement options are made the year the option is initiated. A production improvement option can be ordered for a new facility in either Europe-Africa or Latin America the first year the new facility is available to be equipped or any year thereafter. Production improvement options for a new facility cannot be ordered in the same year that construction of the new facility is initiated.

There are four options for upgrading existing shoe-making facilities:

Nature and Benefit of the Option	Capital Investment Requirement
Option A —Purchase of special equipment to reduce the current reject rate by 50%	Capital outlay of \$625 thousand per 250,000 pairs of installed production equipment (capital costs are automatically applied to each 250,000-unit purchase of new or refurbished production equipment)
Option B —Assembly layout revisions to reduce production run setup costs by 50%	Capital outlay of \$400 thousand per 250,000 pairs of installed production equipment (capital costs are automatically applied to each 250,000-unit purchase of new or refurbished production equipment)
Option C —Purchase of special equipment to increase the S/Q rating by 1 star	Capital outlay of \$1.2 million per 250,000 pairs of installed production equipment (capital costs are automatically applied to each 250,000-unit purchase of new or refurbished production equipment)
Option D —Purchase of robots to assist assembly and boost worker productivity by 50%	Capital outlay of \$3.6 million per 250,000 pairs of installed production equipment (capital costs are automatically applied to each 250,000-unit purchase of new or refurbished production equipment)

Approximate **projections** of the annual cost savings for each option at each plant facility (based on the current amount of installed equipment) are shown on the page/page. You should take time to carefully weigh the pros and cons of each production improvement option **at each plant facility the cost-saving benefits vary quite significantly not only because of current operating differences across the plants (reject rates, models being produced, S/Q ratings, worker productivity, and labor costs per pair assembled) but also because your company's management team may wish to compete differently in different geographic regions (and thus assemble different numbers of models and have different S/Q ratings for different regions).** Also, before rushing into decisions on which options to undertake, there's merit in consulting the Help discussion regarding production improvement options.

Construction of New / Additional Facility Space. Unless prohibited by the company Board of Directors, you can expand an existing facility (such as the North America or Asia-Pacific facility), and new facility space can be constructed in Europe-Africa and Latin America in any year.. The minimum size for establishing a new production facility in Europe-Africa or Latin America is space for 1 million pairs of footwear-making equipment, and the maximum size for a **new** facility in these regions is space for 5 million pairs of footwear-making equipment—construction costs vary according to the size of the space being constructed: \$20 million for 1 million pairs of space; \$38 million for 2 million pairs of space; \$54 million for 3 million pairs of space; \$68 million for 4 million pairs of space; and \$80 million for 5 million pairs of space. Once a production facility of any size has been established in a region, it can be expanded to a maximum size of 15 million pairs of footwear-making capability; all facility space over 5 million pairs of footwear-making capability costs \$12 million per million pairs of added capability. **The construction of facility space in all regions takes 1 year to complete.** Thus, a decision to build a new facility or expand an existing facility in Year 11 means the space will be available for the installation of new or refurbished equipment at the beginning of Year 12.

Company managers have full discretion over when footwear equipment is installed at facilities with unused space—equipment can be installed at the beginning of whatever year management chooses in increments of 250,000 pairs or, if it turns out the that vacant space is not needed, the space can be left vacant indefinitely. **Once constructed, there is no way to dispose of any unwanted or unneeded facility space**—decisions to construct facility space should not be taken lightly.

All costs for added facility space—newly-constructed facilities in Europe-Africa and Latin America and expansions of existing facilities in North America and Asia-Pacific—**must be paid for in the same year as the decision to build or expand is made.** New facility space is considered to have a service life of 40 years and the capital costs are depreciated on a straight-line basis at the rate of 2.5% annually.

The company is limited to a maximum of four different plant locations (one in North America, one in Asia-Pacific, one in Europe-Africa, and one in Latin America) and a maximum facility space in any one region of 15 million pairs (18 million pairs with maximum use of overtime).

BRANDED DISTRIBUTION AND WAREHOUSE OPERATIONS

The branded distribution and warehouse operations page entails 5 entries for each region—the first four entries at the top of the page involve shipping newly produced pairs from production facilities to the four regional distribution warehouses. The decision entry in the Warehouse Operations section concerns clearance sales of left-over inventory that company managers may or may not want to undertake.

Shipping Decisions. Every pair produced must be shipped to one of the four warehouses; no finished goods are ever warehoused at production facilities. As you enter the pairs to be shipped to the company's regional warehouses, note there is information in the warehouse operations section showing how many pairs and models are in beginning inventory and, further down, the projected buyer demand, the minimum inventory required to achieve the desired delivery time, and the Projected Inventory Surplus (Shortfall) at the end of the current year. As you enter the pairs to be shipped to each regional warehouse from each plant facility, the information on the line labeled "Pairs Available for Sale in Year (current year)" will be updated along with the associated number of models and S/Q ratings of the pairs.

Inventory Clearance. If you have pairs left over from the previous year and you do not wish to sell them out of current-year inventory, some/all of those pairs can be cleared at the beginning of the year by discounting the wholesale price to footwear retailers (such sales do not reduce expected buyer demand for branded footwear in the current year). The discounted price on clearance sales varies according to (1) the number of pairs your company is clearing out and (2) the total size of left over inventories in the region. There are entries for the percentage, if any, of the unsold pairs from the previous year that you want to clear out. You can enter tentative percentages, check out the margins over direct costs, the Projected Inventory Surplus (Shortfall) at the end of the upcoming year (see the last line in the third box on this page), and then decide whether to keep the "excess" pairs in current-inventory or clear some/most out.

There are three reasons to consider clearing out leftover inventory from the prior year:

1. There is a 0.3-star penalty applied to the S/Q rating of unsold branded pairs carried over to the following year—this penalty, which is part of the IFF's S/Q rating formula, is to reflect the fact that unsold pairs are last-year's models and styles, making them less attractive to buyers. The 0.3-star penalty is already factored into the S/Q ratings shown on the line reporting "Inventory Left Over at the End of Year (previous year)." If company managers deem the left-over inventory number "too large" (because of the number of pairs showing as Projected Inventory Surplus at the end of the upcoming year), you should explore whether to clear out some/most of the inventory from the previous year (which will result in a reduction in the Beginning Inventory shown on the page).
2. Clearing out older inventory at the beginning of the year may help reduce the Projected Inventory Surplus number for the current year. This has the potential to reduce next year's inventory storage costs—inventory storage costs on carrying surplus inventory from one-year to the next is \$1.00 per pair (carrying cost of *required inventory* entails annual costs of \$0.50 per pair).
3. Getting rid of "excess" beginning inventory may prove useful in helping to keep the company's production facilities running at or near full capability (since small beginning inventories mean that most/perhaps all the pairs needed to meet projected buyer demand and required inventory minimums will have to be produced in the current year).

It is usually to be more profitable for your company to sell the leftover pairs at regular retail/wholesale prices in the current year (unless the surplus inventory is too large to make this likely). The purpose of the clearance sales option is to give you a means of disposing of *unexpectedly large* leftover inventory to avoid the impact of a 0.3-star S/Q rating reduction and incurring storage costs of \$1.00 per pair on inventory carried over into the following year. Inventory storage costs are \$0.50 per pair for the pairs in required minimum inventory and \$1.00 per pair on all additional unsold pairs carried over into the following year.

Note: Don't go overboard on inventory clearance and reduce the projected inventory surplus to near-zero. The projections of demand for branded footwear are not a guarantee of actual sales (since the actions of rivals to gain sales and market share cannot be fully anticipated and since actual market growth is not certain). There is some probability that demand in one or more regions will prove higher than the projected amount. You and your co-managers may want to maintain a Projected Inventory Surplus of some amount in each warehouse to fill orders that are higher than expected. **Without a surplus to fill any orders above the projected sales volumes, sales could be lost and buyers may take their business to rival footwear companies.**

Understanding the Required Minimum Inventory Amounts. Your company is required to keep a certain number of pairs in inventory in each regional warehouse to ensure having sufficient models and sizes on hand to fill online orders and deliver retailer orders within your selected delivery time. The line in the calculations section labeled "Required Inventory" shows each region's *projections* of the *upcoming-year* minimum inventory requirement. The size of each year's minimum inventory requirement in each region is a function of delivery times, projected annual sales volume, and the number of models/styles available for sale. The number of pairs required to be in inventory at all times in a region range from as low as 1% of projected annual sales (with 4-week delivery and model availability of 50) to as high as 15% of projected sales (with 1-week delivery and model availability of 500).

Correcting a Projected Inventory Shortfall. In no instances will you be allowed to even temporarily use some of the required pairs in inventory to fill unexpectedly large orders from retailers or individuals buying online—the inventory requirement number is an absolute minimum. **A projected inventory shortfall in a region represents potential lost sales** due to insufficient inventory to fill buyer orders. Consequently, company managers should consider correcting any projected inventory shortfalls by shipping additional pairs to the regions where shortfalls exist (this could mean returning to Branded Production to produce additional pairs at one or more plants) or reducing the size of any inventory clearances or reducing your marketing efforts in the region (like raising prices or reducing advertising, which will lower buyer demand).

The Relevance of Exchange Rate Cost Adjustments. The exchange rate cost adjustments on incoming shipments shown in the bottom section of the page merit your attention. Producing footwear in one geographic region and exporting it for sale in another region entails upward or downward adjustments in the production costs of shipments coming into a distribution center from a foreign facility. A positive number for a region represents an *adverse exchange rate adjustment* that has the effect of *raising the per pair costs* of incoming footwear shipments (which can impair profit margins on sales in that region); a negative number for a region represents a *favorable change* in the exchange rates that effectively *lowers the per pair costs* of incoming shipments (which can increase the profitability of sales in that region). It is important to understand that **any time there are large per pair cost adjustments, you should experiment with different cross-region shipping patterns to minimize the cost effects of unfavorable adjustments and maximize the cost effects of favorable adjustments.** For a more detailed discussion of exchange rate cost adjustments, see the Help document associated with the page.

Distribution and Warehouse Expenses. Details of the company's distribution and warehouse expenses are shown in the bottom section of the page. Freight costs on incoming shipments of newly-produced footwear from a plant to a warehouse in the same region currently run \$1 per pair. Freight charges on shipments to warehouses in a different region run \$2 per pair. These costs are subject to change in upcoming years. Any tariffs on pairs imported from foreign facilities are due and payable at the port of entry rather than when orders are filled and the pairs shipped to retailers and online buyers. In addition to the inventory costs of carrying unsold pairs over from the prior year (\$0.50 per pair on required inventory and \$1.00 per pair on unsold pairs in the prior-year), other warehouse expenses include:

- **Boxing and shipping fees for orders sent to footwear retailers.** These expenses amount to \$4 per pair on the first 1 million pairs shipped out annually; \$3.00 per pair on the next 2 million pairs shipped out annually, and \$2 on each pair in excess of 3 million pairs shipped annually.
- **Order processing, boxing, packaging, handling, and shipping fees of \$12.50 on each pair shipped to online customers.**
- **Annual leasing and maintenance fees of \$1 million per warehouse.** However, when warehouse volume is less than 200,000 pairs annually, leasing fees are 5 times the annual number of pairs available for sale. Should the company abandon selling footwear in a geographic region, leasing and maintenance costs in that region will fall to \$0 (and then resume if/when sales begin again).

INTERNET MARKETING

Three decision entries *in each region* are required to complete your competitive effort to market branded pairs to online buyers: the retail price at which you wish to sell to online buyers, expenditures for search engine advertising, and whether online buyers will pay for shipping (\$12.50 per pair) or get free shipping. Other competitively relevant Internet Marketing factors affecting online buyer demand in each region (S/Q rating, the number of models offered for sale, brand advertising, and celebrity appeal)—all shown at the top of the page—are derived from entries on the Branded Production, Branded Distribution, and Wholesale Marketing pages and from existing contracts for celebrity endorsements.

Retail price, search engine advertising, and free shipping decision entries will instantly produce updated projections of the “Total Branded Production Needed in Year (current year)” on the Branded Footwear Production page. ***The new projection is likely to require revisions in the number of branded pairs which will need to be produced in one or more facilities and also revised shipping entries on the Branded Distribution page***—so it will probably be necessary for you to cycle back and forth between the page for Internet Marketing and the pages for Branded Footwear Production and Branded Distribution whenever new/revised decision entries are made on the Internet Marketing page.

The online retail price you enter for each region, in effect, represents an average retail price for all the models available in the region's distribution center. ***The maximum allowed price for shoes sold online is \$200 per pair.*** In the unlikely event that you and your co-managers wish to abandon internet sales of athletic footwear in a region, then simply enter \$0.00 for the region's retail price—a zero price entry is interpreted as your decision to not offer any branded pairs for sale at the company's regional website.

It is important to avoid setting such a low internet price that you put your company in direct competition with retailers who stock your company's brand. The lower your posted internet price to online buyers, the more that your marketing efforts to attract online sales pose ***channel conflict*** with your marketing efforts to court footwear retailers and convince them to stock and merchandise your brand. ***Footwear retailers view your website price as a direct competitive threat to their business whenever it is less than 40% above the wholesale price you charge them.*** If your wholesale price to retailers is \$50, then your company's internet price should be \$70 or higher to avoid unduly squeezing the markups that retailers can charge to be price competitive with your company's internet price. The more that footwear retailers find themselves having to cut their retail prices to match or beat your internet prices, the lower the margins they earn on each pair sold and the more reason they have to shift their merchandising emphasis away from your brand and to rival brands that offer better margins. Indeed, ***the more that your internet price falls under the 40% benchmark, the bigger the percentage of footwear retailers who will elect not to even stock your company's brand next year at all.*** Hence, you should be careful not to craft an internet marketing strategy that poses undue channel conflict with your wholesale strategy and causes footwear retailers in a region to shy away from stocking and merchandising your brand.

Free shipping is very appealing to online buyers. The decision of whether to charge online buyers a shipping fee of \$12.50 per pair ordered or whether to offer free shipping will have a sizable effect on the volume of pairs sold online. It also will have a big cost impact, probably requiring an upward adjustment in the internet price to cover some or all of the \$12.50 per pair shipping fee. The \$12.50 shipping fee also includes handling costs associated with boxing, packaging, shipping labels, and so on. The calculations on the page for internet revenues, costs, operating profits, and operating profit margins allow you to weigh the pros and cons of free shipping. Shipments to online buyers are always made from the distribution warehouse serving the buyer's geographic region.

Base operating costs for each of the company's regional websites are \$350,000 annually, plus \$4,000 in website expenses incurred for each model displayed and offered for sale on each regional website. These costs appear as a marketing expense in the revenue-cost-operating profit projections for internet operations that appear on the page. Also included as internet-related marketing expenses are allocations for brand advertising and celebrity endorsement contracts. Expenditures for brand advertising in a region are allocated to the internet segment and the wholesale segment according to their respective percentages of total sales in the region. The costs of each year's celebrity endorsements contracts are allocated to the internet and wholesale segments in each region according to their respective percentages of the company's global branded sales—such contract costs are considered a marketing expense. The shipping/handling cost of \$12.50 on each pair shipped to online customers in each region are considered as a warehouse expense (since these costs are incurred while operating the distribution warehouses).

Exchange Rate Adjustments. In the revenue-cost-profit projections for internet sales, you will see an exchange rate adjustment that effectively increases or decreases the number of US\$ received from online sales in a region. These adjustments reflect gains or losses from (1) converting the euros received from internet sales to Europe-Africa buyers into US\$, given the change in the US\$ per € exchange rate over the course of the year, (2) converting the Brazilian real received from internet sales to Latin America buyers into US\$, given the change in the US\$ per real exchange rate, and (3) converting the Sing\$ received from internet sales to Asia-Pacific buyers into US\$, given the change in the US\$ per Sing\$ exchange rate. There are no exchange rate adjustments to revenues from internet sales in North America since all transactions are in US\$. *A positive number for a region represents a favorable exchange rate adjustment and raises the revenues in US\$ of footwear sold online (which increases profit margins on sales in that region); a negative number for a region represents an unfavorable exchange rate change that effectively lowers the revenues in US\$ of pairs sold online (which reduces the profitability of sales in that region).* **If the sizes of the exchange rate adjustments are large, you may be able to increase overall company profitability by trimming marketing and competitive efforts in regions where the revenue adjustments are highly unfavorable and significantly increasing marketing and competitive efforts in regions where the revenue adjustments are highly favorable.**

There are no exchange rate adjustments in Year 11. The prevailing real-world exchange rate values at the beginning of Year 11 and the real-world rates at the beginning of Year 12 will serve as the base for calculating the Year 12 exchange rate adjustments. The real-world changes in the exchange rates between the beginning of Year 12 and the beginning of Year 13 serve as the basis for exchange rate adjustments in Year 13. And so on throughout the exercise.

The Competitive Assumptions Section at the Bottom of the Page. This section contains entry fields for the all-company regional averages of the three competitive factors affecting online sales volume and market share in each region. *The first time you visit this page the entries in this section show the prior-year regional average retail price, expenditure for search engine advertising, and free shipping offers.* Unless and until you update these regional averages to take into account the competitive effort adjustments rivals on average may make in Internet Marketing in the upcoming year, then all of the on-page projections of your company's wholesale sales volumes, market shares, revenues, costs, and operating profits for the upcoming year will be based on how your company's upcoming-year regional competitive efforts in the Internet Segment compare to **last-year's** regional average competitive efforts of rivals in the internet segment rather than their forthcoming efforts—**using last year's competitive efforts to calculate the projections is likely to render them inaccurate by anywhere from a little to a lot.**

Before you “finalize” your internet marketing decision entries, it makes sense to first enter updates of the industry averages for the 3 factors in the Competitive Assumptions section. Yes, you will likely be making estimates/approximations, but sales/market share projections based on carefully-reasoned assumptions of what rivals on average *are likely to do* should prove more accurate than projections based on the regional average competitive efforts of rivals a year ago. Bear in mind, there is ample reason to expect that the competitive efforts of rivals will, on average, be stronger in some respects in the upcoming year than in the prior year, because *poorly-performing companies that were outcompeted last year in the internet segment have strong incentive to make changes aimed at increasing their competitiveness and profitability.*

Note: *The reason there are entry boxes for only 3 competitive factors on the Internet Marketing page is that assumptions regarding rivals' competitive efforts on 3 other relevant factors in the Internet Segment (S/Q rating, model availability, and brand advertising) are on the Wholesale Marketing page. These will need to be updated before the projections will take into account all of the relevant competitive factors affecting unit sales and market shares in the internet segment.*

Even if you happen to overestimate the strength of competition from rivals in the upcoming year and end up with bigger sales/market shares than were projected, your company will be able to fill the unexpected demand *provided you have sufficient surplus inventory of branded pairs to fill the unexpected orders.* It is far better to have the pleasant surprise of selling more than the projected sales volume (and enjoying the accompanying extra revenues and profits) than having the unpleasant surprise of selling less than the projected sales volume because you underestimated the strength of the competitive efforts from rivals.

One more thing. Trying different decision entries and experimenting with different assumed changes in the regional averages enables you to compare the different projected outcomes of employing different levels of competitive effort in each region and thus zero in on which combination of strategic actions seems to be the best way to counter probable changes in the competitive efforts of rivals in the internet segment.

WHOLESALE MARKETING

Wholesale marketing of branded footwear to retailers involves 5 decision entries in each region—the wholesale price charged to retailers, brand advertising, mail-in rebate offers, the number of weeks your company will take to deliver orders to retailers, and retailer support expenditures. All five affect your company's overall level of competitive effort versus rivals in the current year. *The values for S/Q rating and number of models on the top 2 lines of the page (which also affect your company's overall level of competitive effort) are derived from earlier decision entries on the Branded Production and Branded Distribution pages.* Three other competitively-relevant factors that are part of your company's overall competitive effort—the number of retail outlets stocking your company's brand, the appeal indexes of the celebrities your company has endorsement contracts with, and your company's brand image and reputation—were determined by prior-year decisions/outcomes and are fixed for the current year.

Experiment with different entries for the five marketing decisions (and also with changes to S/Q ratings and numbers of models) and try to discover a combination with the most appealing performance projections. Should the most appealing combination entail projected inventory surplus/shortfall that is not to your liking, then return to the Branded Footwear Production and Branded Distribution pages and make adjustments in production volume and/or shipping to arrive at a more desirable projected year-end inventory.

You will have little difficulty in grasping what is involved in making the 5 entries on this page, and you can always click the Help button for added information about each entry. But as your experiment with different decision entries, keep the following in mind:

- **How your company's wholesale price** of branded footwear in a given region **compares to the upcoming year's regional average wholesale price** will have a major bearing on your company's branded sales and market share in the region. You can see the projected effect of a change in wholesale price by observing the changes in the wholesale market share and wholesale demand for branded pairs when you enter a higher or lower price. While lower wholesale prices tend to increase retail sales of your company's footwear (assuming other competitive effort factors are not reduced), lower prices can narrow operating profit margins and lead to a decline in operating profit for a region (because the gain in revenue attributable to a higher unit volume is insufficient to overcome the revenue erosion associated with a lower price on all pairs sold). The revenue-cost-operating profit projections provide instant feedback on the impacts of charging higher/lower wholesale prices.
- If your company's **brand advertising** exceeds the upcoming year's all-company regional average, then your company will enjoy a competitive edge over rivals on brand advertising in that region—a condition that increases branded footwear sales and market share. If your company's expenditures for brand advertising are below the regional-average, then your company will be at a competitive disadvantage on brand advertising and will sell fewer pairs than would be the case at higher advertising levels (assuming no change in your company's competitive effort on all the other factors).
- Spending an above-average amount for **retailer support** compared to rivals not only helps enhance footwear sales per retail outlet but also has a positive effect on the number of retail outlets willing to merchandise your company's brand of footwear.
- Footwear retailers consider 4-week **delivery times** as "satisfactory." However, shorter delivery times help retailers sell more pairs (because they can quickly get fresh supplies of fast-selling models/styles/sizes) and will make some retailers more willing to carry your brand (especially those that are delivery-time conscious) because they can carry less inventory and tie up less cash. Currently, 4-week delivery costs \$0.25 per pair, 3-week delivery costs \$0.75 per pair, 2-week delivery costs \$1.50 per pair, and 1-week delivery costs \$3.00 per pair.
- Offering **mail-in rebates** to consumers who purchase athletic footwear at retail outlets is a way to differentiate your product offering from rivals and create added buyer appeal. If you elect to employ mail-in rebates, you have options ranging from as little as a \$3 per pair mail-in rebate to as much as \$15 per pair. *All rebate offers must be in round dollars.* Not using mail-in rebates is always an option. Different rebates can be used in each region. Customer response to rebates is a function of (1) the size of the rebate—rebates in the \$8 to \$10 range will draw a more than proportional number of buyers than \$3 to \$5 rebates and even bigger proportions of buyers for rebates of \$12 to \$15 and (2) the amount by which your company's rebate in a region is above/below the regional average rebate. Some buyers lose the coupon or the sales receipt and other buyers, for various reasons, fail to send in the coupon to get their money. Studies show that 15% of buyers redeem \$3 rebate coupons but 90%

of buyers redeem \$15 coupons. **Buyer failure to redeem the rebate means that the per pair cost of a rebate is below the face value of the coupon, as shown in the following table:**

<u>Rebate Offer</u>	<u>Redemption Rate</u>	<u>Cost Per Pair Sold</u>
\$ 3	15%	\$ 0.45
4	20%	0.80
5	25%	1.25
6	30%	1.80
7	35%	2.45
8	40%	3.20
9	45%	4.05
10	50%	5.00
11	55%	6.05
12	60%	7.20
13	70%	9.10
14	80%	11.20
15	90%	13.50

There is nothing you can do to immediately secure additional retailers. If you want to increase the size of your retailer network, you will have to make your brand more appealing via an attractive combination of S/Q ratings, market share penetration, retailer support levels, delivery times, and not charging an internet price that poses a competitive threat to retailers (*retailers view your internet price as a direct competitive threat to their business whenever your internet price is less than 40% above the wholesale price they must pay to buy your branded footwear*). If you are trying to recruit more retailers, you should **expect the buildup of retailers willing to handle your brand to occur over a period of several years.**

Likewise, there's nothing you can do to immediately change the celebrity appeal indices or your company's image rating/brand reputation. If you want to increase the celebrity appeal indices in upcoming years, you must be successful in securing additional celebrity endorsement contracts. If you want to improve your company's image rating/brand reputation for upcoming years, then be alert to the fact that company image ratings are updated at the end of each year based on each company's global average S/Q rating for branded footwear, year-end global market share of total footwear sales (branded plus private-label), and the strength of your actions to display good citizenship and corporate social responsibility. So, to achieve higher company image rating/brand reputation, you must make a concerted effort to improve your company's performance on one or more of these three measures.

The Seven Competitive Assumptions Entries at the Bottom of the Page. The Competitive Assumptions section contains entry fields for 7 of the competitive factors affecting wholesale sales volume and market share in each region. **The first time you visit this page the entries in this section show the prior-year regional averages of these competitive factors.** Unless and until you update these regional averages to take into account the competitive effort adjustments rivals *on average* may make in the upcoming year, then all of the on-page projections of your company's wholesale sales volumes, market shares, revenues, costs, and operating profits for the upcoming year will be based on how your company's upcoming year wholesale marketing efforts compare to **the competitive efforts exerted by rivals last year in the wholesale segment—which means these projections can be inaccurate by anywhere from a little to a lot.**

Since it is likely that rival companies will, *on average*, alter aspects of their competitive effort (as concerns S/Q rating, models offered, brand advertising, wholesale prices, and so on) in the wholesale segment in all four regions in the current year (in an effort to enhance the performance of their companies), you are well-advised to update the 7 Competitive Assumptions entries to account for whatever changes in the regional averages you anticipate are likely to occur. *You should make these updates before you "finalize" your entries for the 5 wholesale marketing decisions at the top of the page.* Yes, your updates will be estimates but taking the time to think seriously about what actions rivals are likely to take (on average) should enable you to make updates in last-year's regional averages that *result in more accurate projections of your company's upcoming year performance than the projections based on the regional average levels of competitive effort that rivals employed last year.* In making your updates, there's merit in assuming that the competitive efforts of rivals will, on average, be somewhat stronger for some/many of the competitive factors than in the prior year since companies that performed poorly last year have strong incentive to initiate actions to improve their competitive success and since ambitious rivals that performed well last year are unlikely to rest on their laurels and do nothing differently.

Bear in mind that even if you overestimate the strength of competition from rivals in the Wholesale Segment in the upcoming year (which, in turn, will lower the projected sales/market shares for a given level of wholesale marketing effort on the part of your company) and end up with bigger sales/market shares than were projected, your company will still be able to fill the unexpected wholesale orders *provided your company deliberately takes action to have a big enough surplus inventory of branded pairs in each distribution warehouse to fill any unexpected orders*. It is far better to have the pleasant surprise of selling more than the projected sales volume (and enjoying the accompanying extra revenues and profits) than having the unpleasant surprise of selling less than the projected sales volume because you underestimated the strength of the competitive efforts from rivals.

Consider taking the time to experiment with different wholesale marketing decision entries and decision entries and perhaps different “likely case” and “worst case” changes in the regional averages. Such experimentation enables your company’s management team to more wisely decide what strategic actions to take in trying to counter the competitive efforts of rivals in the Wholesale Segment of the branded footwear market.

Special Note: *Be sure to check whether your company is likely to have a competitive advantage or disadvantage based on the combined impact of the three fixed competitive factors for the upcoming year (retail outlets, celebrity appeal, and company image/brand reputation). If your company appears competitively disadvantaged on these three competitive factors, then your company’s management team should consider trying to overcome this disadvantage versus rivals by exerting greater overall effort on the remaining 7 competitive factors.*

PRIVATE-LABEL OPERATIONS

Chain retailers in each region accept offers for their annual private-label requirements at the beginning of each year. Contracts are awarded in time for contract winners to fulfill their production obligations but not in time for footwear-makers to know whether bids have been won prior to finalizing their decisions and strategy for the full year. All chain retailers worldwide have the same production specifications for private-label footwear: (1) an S/Q rating that is 1-star below the prior-year’s worldwide average S/Q rating for branded footwear (subject to a maximum S/Q requirement of 5.0 stars) and (2) 100 models (however, the number of models is subject to change by your instructor). **Production run set-up costs for private-label footwear are 50% of those for branded footwear** because chain retailers hold down costs by ordering only easy-to-produce models/styles. Other than meeting S/Q and model specifications, private-label contracts give manufacturers the leeway to make private-label footwear however they see fit.

Footwear companies interested in obtaining a private-label contract submit an offer consisting of a price per pair and the number of pairs (minimum offer of 100,000 pairs) that they are willing to supply at that price—the offer price must cover all production and shipping-related costs, any tariffs that might apply on pairs coming from a foreign plant, and any exchange rate effects, plus include an allowance for profit). Offers may be submitted to chain retailers in any or all of the four geographic regions. For reasons of simplicity, each footwear company submits only one offer per region (this limits the number of offers to a maximum of four, as opposed to submitting offers to individual chain retailers in each region). Chain retailers arrange the offers from the lowest to the highest price and award contracts, starting with the lowest price offer in each region and ascending in order of next lowest until either total private-label demand in the region is satisfied or all qualified offers have been accepted, whichever occurs first. **In the case of identical offer prices (a tie), chain store buyers will choose the supplier with the highest global image rating/brand reputation in the previous year.**

Depending on the amount chain stores are buying, the price offers, and the various quantities footwear-makers are prepared to supply, any one company may sell all of the private-label pairs it is willing to supply in a region, some of the pairs, or none. So, participating in the private-label segment has risk, particularly if a company bids to supply a large number of private-label pairs but loses out on some or all of the hoped-for production volume because being underbid by one or more rival companies. But for companies with sufficient production capacity, there’s no upper limit (short of 100% of total demand) on how many pairs of private-label shoes a company can provide to a region’s chain retailers. All a company with adequate production capability has to do to capture contracts for as many private-label pairs as it wants to sell in a given region is to simply offer a price low enough to win the orders from the region’s chain retailers—whether such low-price offers prove profitable or not depends on if the offer price is high enough to cover the production and shipping costs, tariffs, and exchange rate adjustments that are incurred.

Prior management believed it made good business sense to seek out contracts to make private-label footwear and thereby utilize production capability not needed to make branded footwear. If you want to compete for private-label contracts, the following decisions must be entered for each of the plants in which you propose to make private-label footwear, should your company be awarded contracts:

- *The percentage of superior materials to be used in making-private-label shoes*—There is merit in keeping this percentage as low as possible, subject to achieving the required S/Q rating.
- *Expenditures for enhanced styling/features*—Again, there is merit in minimizing this expense, but enough must be spent, in tandem with superior materials usage, to achieve the required S/Q rating. It is possible that it will be more economical to increase spending for TQM/Six Sigma programs (entered on the Branded Production page) to help get to the required S/Q rating than to spend more heavily for superior materials or enhanced styling features.
- *The proposed shipments from a production facility to the distribution centers in whatever regions you specify*—the proposed volumes of private-label footwear to be produced and shipped to the various regions represent firm commitments of the number of pairs you are willing to sell to chain retailers and are thus the maximum number of private-label pairs you can hope to sell. However, **actual production and shipment of private-label footwear to a region occurs only if offers are accepted and contracts awarded in the region(s) where offers are made.**

Production capability at any facility not used for branded footwear production can be allocated to private-label production. Once regular-time production capability is reached, all additional production involves overtime at the rate of 1½ times the regular base pay. Overtime production will occur only when the company wins contracts for enough pairs to require the use of overtime to produce the contracted-for number of pairs.

Once the entries are made and price offers entered, you are provided with the projected incremental revenue-cost-profit contributions associated with a contract award for all the private-label pairs offered to chain retailers in each region (which is a best-case scenario). The contribution margin over direct costs on private-label sales is not included in the projections of overall company performance on the left-side of the page unless you indicate at the bottom of the page that you want them to be included. This feature allows you to see how any private-label sales will affect company performance but still not have your company's projected overall performance be dependent on winning the private-label contract (since there's ample reason not to be confident your company will be awarded contracts for the full amount of private-label pairs offered to private-label buyers).

Important: For a company's price offer to be considered by chain retailers in a given region, it must turn out to be at least \$10.00 below the upcoming-year average wholesale price for branded footwear in that region. Offer prices that are not \$10.00 below the upcoming-year average wholesale price are automatically deemed unacceptable by chain retailers and become ineligible for a contract award. More details are available in the associated Help document.

CELEBRITY ENDORSEMENT CONTRACTS

Several celebrities from all over the world have indicated their willingness to wear a company's athletic footwear and endorse its brand in company ads if the fee they are paid is sufficiently attractive. The number of celebrities seeking endorsements contracts each year varies. All celebrity personalities solicit competitive contract offers for their endorsement and sign with the company offering them the most money for each year of the contract (subject to a required minimum contract of \$500,000 per year). The contract period for some celebrities is 2 years and for others, 3 years.

While all the celebrities are known worldwide, the extent to which consumers recognize and are influenced by them varies from region to region (according to the **regional appeal indexes** shown on the page/page). For example, a celebrity with a regional appeal index of 90 has twice the sales-boosting impact as one with a regional index of 45. The higher the sum of the consumer appeal indexes of the celebrity endorsers a company signs, the greater is the positive impact on the company's regional branded sales volume and market share. A company may sign a maximum of 3 celebrities to contracts in a given year and there is no limit on the total number of celebrities that can be signed over several years. However, *the incremental sales impact associated with signing additional celebrities diminishes rapidly once the sum of their appeal indexes in a region reaches 300 and the incremental benefits become zero (0) when a company's combined celebrity appeal index in a region rises above 350.*

Contract offers to gain the endorsements of well-known sports celebrities begin in Year 11 and continue for all remaining years. In the event of ties in the highest offer, the celebrity will sign with the company whose celebrity endorsers have the **lowest** combined consumer appeal indexes across all regions (and if the consumer appeals of the two tied companies are the same, the celebrity will sign with the company having the **lowest** overall image rating in the prior year). The preference of a celebrity to sign with companies having a weaker lineup of endorsers reflects their belief that this will give them greater overall exposure as the company's principal spokesperson. **The potential for ties signals the wisdom of odd-number contract offers.** If your company wins the services of a celebrity, the celebrity will begin endorsing the company's brand in the year following your winning offer and you will begin to pay the celebrity's annual contract cost in the year following your winning offer—no endorsement costs for celebrities are incurred in the year that offers are made.

In making offers to several celebrities in the same year, you can prioritize your offers for different celebrities and put a cap on the combined annual cost of all winning contract offers. The advantage of indicating priorities and imposing a spending cap is that once the annual cost of your company's winning contract offers reaches the cap you set, all lower-priority offers are withdrawn. This allows you to make contract offers to all available celebrities, control the costs for celebrity endorsements, and not run the risk of unwanted spending for celebrity endorsements should you unexpectedly win more contracts than desired.

Whether the incremental sales and profits contributed by a celebrity endorser are sufficient to cover the contract fees paid will depend on how much you have to offer to win the celebrity's endorsement and the sizes of the celebrity's consumer appeal index in each geographic region. There is credible market research indicating that the value of celebrity endorsements in the athletic footwear business will have a positive bottom-line payoff if the contract payments are not unreasonably high—**the maximum contract offer is \$30 million per year.** Companies may cancel the remaining years of the contract of any celebrity they sign for any reason, subject to paying the current-year contract amount plus 10% of the annual contract amount for the remaining years of the contract. Offers to obtain the endorsement of celebrities whose contracts are cancelled will be taken in the year immediately following a contract cancellation.

CORPORATE SOCIAL RESPONSIBILITY AND CITIZENSHIP (CSRC)

This decision page concerns what monies, *if any*, your company elects to spend on such things as the use of recycled boxes/packaging, energy efficiency initiatives, charitable contributions, ethics training and enforcement, improved working conditions for plant personnel, and institution of a supplier code of conduct and compliance monitoring of suppliers. The decisions on this page are straightforward, and you will find ample information and calculations on the page and in the associated Help document to guide your entries.

Spending meaningful amounts on corporate social responsibility and citizenship initiatives over a sustained period can enhance your company's image rating by as much as 20%. However, the image gains are likely to be minimal unless your company's actions are "comprehensive" (involve several, but not necessarily all, of the optional CSRC initiatives), entail more than token efforts (as indicated by how much money is being spent), and represent an ongoing effort of at least 4-5 years.

Your company is, in no way, obligated to spend money on any of the CSRC options; all such expenditures are voluntary and taken at management's discretion. Your company can most definitely achieve a good image rating/brand reputation without spending money for even one of the optional CSRC initiatives.

FINANCE AND CASH FLOW

The Finance and Cash Flow decision page involves 8 decision entries and provides projections of cash inflows and outlays for the current year, along with projections of other important year-end financial statistics. Going into Year 11, your company has a B credit rating and a reasonably strong balance sheet. At the end of Year 10, the company's total assets were financed with 39% debt and 61% equity, putting the company in good position to cover its interest and principal payments on loans outstanding to the International Bank of Commerce (IBC), with which the company does all its banking, financing, and foreign exchange transactions.

Interest Rates. Officials at the IBC, under its long-term banking agreement with your company, have agreed to lend the company additional monies should you elect to use debt to help finance growth and other needs. The interest rate on such loans is tied to the company's credit rating and the going rates of interest in world financial markets. Just as interest rates in real-world financial markets change

intermittently and unpredictably, there is no way to predict in advance what future interest rates will be. The interest rate on 1-year (short-term) loans for companies with an A+ credit rating can range from a low of 4% to a high of 7%; the interest rate on 1-year loans for companies with a C– credit rating can range from a low of 10% to a high of 13%. The IBC's present interest rate for 1-year loans carrying a B rating is 7.0%. Longer-term loans are available at somewhat higher interest rates—a 5-year loan carries a 0.50% interest rate adder and a 10-year loan carries a 1.0% interest rate adder; these adders apply to 5-year and 10-year loans granted at all credit ratings. *New interest rates for 1-year, 5-year, and 10-year loans are announced at the beginning of each year (see the interest rates in the table on the Corporate Lobby page and on this decision page).*

The company's banking arrangement with IBC calls for the company to be paid interest on any positive cash balance in the company's checking account at the beginning of each year. The current interest rate on cash balances is always reported in the bottom-left section of the decision page.

If the company overdraws its checking account, the IBC will automatically issue a 1-year "overdraft" loan in an amount sufficient to bring the ending cash balance up to zero. The interest rate charged on overdraft loans carries a 2% adder to the current interest rate on 1-year loans (i.e. 9%, if your B credit rating carries a 7.0% short-term interest rate). The potential for overdrawing your checking account is signaled by a negative number on the line labeled "Projected Cash Balance at the End of Year" and the "Ending Cash" number in the performance projections box at the left of the page. However, a very small positive projected ending cash balance risks a cash shortfall resulting in an overdraft loan, since there is always uncertainty that sales volumes, revenues, and cash inflows may be lower than projected).

Factors Determining the Company's Credit Rating. Analysts at independent credit rating agencies review the company's financial statements annually and assign the company a credit rating ranging from A+ to C–. A company's credit rating is a function of three factors: (1) the interest coverage ratio (defined as annual operating profit divided by annual interest expense), (2) the debt-to-assets ratio (defined as total liabilities divided by total assets), and (3) the default risk ratio (defined as cash flow from operations divided by the combined annual principal payments on all outstanding loans—a company's cash flow from operations is defined as net profit plus depreciation). A company with a default risk ratio below 2.0 is automatically assigned "high risk" status (because it lacks a comfortably large cash cushion to cover its upcoming principal payments). Companies with a default risk ratio between 2.0 and 4.0 are designated as "medium risk", and companies with a default ratio of 4.0 and higher are classified as "low risk" because their free cash flows are 4 or more times the size of their annual principal payments).

Your company's prior-year and projected current-year performances on these three credit rating measures are shown on the bottom-right of the Finance & Cash Flow decision page; this allows you to see when actions may be needed to improve one or more of the credit rating determinants to maintain a good credit rating. A projected credit rating for the end of the upcoming year, based on projections of your company's three credit rating determinants, is also shown in the Performance Projections box at the left of the page. Complete information about your company's credit status and financial strength is included in the reports that accompany each year's results. (See the Help document for more information about credit ratings.)

Financial Decisions Entries. This should *always* be the last page in the decision-making process. Until *all* the entries on the other decision pages have been finalized there is no way to get useful projections of cash inflows and outflows for the year to estimate the company's projected year-end cash balance. The eight finance-related decision entries revolve around the following issues:

- **Bank Loans**—*whether to borrow additional money to finance operations and, if so, whether the term of the loan should be 1 year, 5 years, 10 years, or some combination of these.* One-year loans are granted at interest rates corresponding to the company's current credit rating; 5-year loans carry an additional 0.50% interest rate adder and 10-year loans carry a 1.00% adder. In addition to a lower interest rate, a 1-year loan has the advantage of quicker debt pay-down and smaller total interest costs, but the disadvantage of having to re-finance debt next year at perhaps less favorable interest rates should cash flows not be sufficient to fully fund a 1-year loan repayment. Longer 5 or 10-year loans have the advantages of locking in what may be an attractive interest rate and lowering annual principal payments (which has the favorable effect of enhancing the default risk ratio); however, 5-year or 10-year loans, in addition to their higher interest rates, have the further disadvantage of paying out bigger sums for interest over the life of the loan (which, in turn, causes the company to have a lower interest coverage ratio than it might otherwise have achieved).

- **Stock Issues**—*whether to raise additional equity capital by issuing new shares of common stock.* New issues of common stock, of course, have the effect of diluting earnings per share and lowering ROE and should be done cautiously and infrequently. Nonetheless, from time to time, you and your co-managers may determine that the company needs to raise additional equity capital to (1) help pay down a portion of the outstanding loans (because of burdensome interest costs or because lowering debt is the best way to improve the company's credit rating) or (2) help pay for new production facilities and/or production improvement options. The company's board of directors has established a 50-million share maximum on the total number of shares outstanding. The company cannot issue new shares in the same year that it elects to repurchase outstanding shares. At the end of Year 10 the company had 20 million shares outstanding. Each time you make an entry specifying how many shares are to be issued, there are accompanying calculations showing the total amount of new equity capital raised (see the cash inflows section) and the price at which investors will agree to buy the newly-issued shares (the price declines as more shares are issued because additional shares dilute earnings per share). In deciding how many shares to issue, you can try several entries and watch the projected effects on earnings per share, return on equity, and the amount of money raised.
- **Early Bank Loan Repayment**—*whether to pay off one or two of the outstanding 5-year or 10-year loans early.* Company co-managers have the option of accelerating debt retirement (or refinancing high interest debt) by using excess cash on hand or new issues of equity capital or proceeds from new loans to pay off the outstanding principal on as many as 2 of the outstanding 5 or 10-year loans. This is accomplished by selecting which loan(s) you want to pay off (the number of each outstanding loan, the associated outstanding principal, and the associated interest rate are shown on the drop-down). All early loan repayments occur at the end of the year; thus the company will still make the current-year principal and interest payments due on these loans.
- **Dividends**—*what size annual dividend to pay shareholders.* The company paid a dividend of \$1.00 per share in Year 10. Company co-managers have the authority to declare a higher or lower dividend, subject to certain conditions. The maximum allowable dividend entry is 2 times projected earnings per share. No dividend can be paid in the event such payment results in projected shareholders' equity falling below the \$150 million minimum established by the company's board of directors and expected by credit rating agencies. Higher dividends are welcomed by shareholders and have a positive effect on the company's stock price (unless dividend payments exceed earnings per share and thus cannot be sustained at present levels).
- **Stock Repurchases**—*whether to repurchase some of the outstanding shares.* Using cash on hand to repurchase and retire outstanding shares has the advantage of increasing earnings per share, return on equity investment, and the company's stock price. While you have the authority to initiate stock repurchases, **the board of directors has reserved the right to limit the number of shares repurchased in any given year**—such limits vary from year to year and appear on the page just below the stock repurchase entry field. **The company may not repurchase any shares if the stock price at the end of the prior year is lower than \$15.00 per share.** The company must maintain a minimum of 15.0 million shares outstanding and a minimum total shareholder equity of \$150 million. The company cannot repurchase outstanding shares in the same year that it elects to issue new shares. Each time you enter a number for share repurchases, calculations are provided showing the total cost of the repurchased shares (see the cash outlays listings) and the price at which investors will agree to sell the shares you want repurchase (the repurchase price rises as more shares are repurchased because of the upward impact on earnings per share). In deciding how many shares to repurchase, you can try several entries and watch the projected effects on earnings per share, return on equity, and the amount of cash required.

The 3-Year Strategic Plan

One of the most important menu selections is the 3-Year Strategic Plan option. It calls for you and your co-managers to think ahead, come up with a strategic vision for your company, indicate your financial and strategic objectives, and articulate your company's strategy for the upcoming three years. You'll be asked to set sales and market share targets for branded and private-label footwear, make projections of branded and private-label costs per pair sold, and come up with a projected income statement for each of the next 3 years. You'll find the 3-year planning option especially valuable in figuring out what it will take in the way of sales volumes, prices, and costs to improve company performance.

As early as in Year 14, your instructor may ask you to prepare one (and later perhaps a second) 3-year strategic plans. ***Making decisions one year at a time, with little or no view towards the future and few clues as to the longer-run consequences of current-year decisions, is no way to manage a company.*** In practice, company managers put considerable effort into trying to gauge future market conditions, developing long-range strategies, and making multiyear financial projections because it enhances the quality of managerial decisions. For the same reason, you will find it worthwhile to go through the exercise of developing a three-year plan. If your instructor does not assign a 3-Year Strategic Plan exercise, the 3-year plan module will still become available and appear in Decisions/Reports Program menu at the beginning of Year 14.

Special Note on Decision-Making Procedures

It is feasible (often normal) for co-managers to log-on simultaneously and each be engaged in entering decisions. When the co-managers who are entering decisions simultaneously click the Audio Mode button in the Communication Center (lower-left of the page), they can (with either a headset or laptop with speakers and microphone) immediately enter audio chat and have an online meeting. Clicking on the Collaboration Mode button enables all team members to work together from any page simultaneously from wherever they may be located (each team member that is signed on will have their own designated mouse pointer showing on the page). You will find it highly desirable to work jointly in "audio mode" and "collaboration mode" in entering decisions, evaluating the projected outcomes displayed on the page, and coming to a consensus about what decision entries look best.

Any time a co-manager clicks the Save button in the top-right corner of the page, all the entries on all the various decision entry pages will be saved to the **BSG** servers. Any co-manager can enter and save decisions, and all entries can be changed as many times as desired. ***The last set of decision entries saved to the BSG servers at the time of the decision round deadline are the ones used to generate the results for the year.*** Coordination and consensus on all the decision entries is strongly urged (since the whole team is responsible and accountable for the outcomes) but this is a matter left for the team to work out for itself.

Reporting the Results

When the decision round deadline arrives (as scheduled by your course instructor), the decision entries of all the companies in the industry are promptly processed on the **BSG** servers. You will receive an e-mail message announcing that the results for the round are ready (usually no more than 15 minutes after the deadline for the decision round). The results are presented in the form of four reports:

- The **Footwear Industry Report (FIR)** which contains (1) a 3-page company performance scoreboard, (2) a 1-page statistical overview of the athletic footwear industry showing total production, materials prices, inventories, pairs sold, demand projections for the next three years, and production facility statistics, (3) 1 page of comparative financial statistics for all companies, (4) 2 pages of benchmarking data showing how your company's costs compare against those of rival companies, and (5) a final page showing the results of celebrity bidding and trend-line graphs of industry prices and S/Q ratings.
- The **Competitive Intelligence Report** which has highly useful three menu selections: (1) a Comparative Competitive Efforts report that shows the competitive effort exerted by each company on all 13 competitive factors for branded footwear and also the competitive factors for private-label footwear, plus unit sales and market share outcomes, for each company in each region; (2) a Regional Average Competitive Efforts report that shows the all-company regional-average levels of competitive effort in each region for all years completed to date, and (3) a Time Series Competitive Efforts report for any company of interest that enables you to easily track the competitive maneuvering of any rival company for all years completed to date.
- A set of **Company Operating Reports** that includes a facilities and equipment report, a production and workforce report, a distribution and warehouse report, a marketing and administrative expenses report, a private-label operations report, a geographic region report, an income statement, a balance sheet, and a cash flow statement.

- A single-page **Performance Highlights** report that contains a running time series of important company-specific financial, production, and operating measures. As the years of the simulation unfold your company's summary data will fill in, year by year. At the bottom of the report is a graphing feature that allows you to create a line graph of any of the 57 performance measures presented in the report. Double click the graph to save it (in JPEG format) to your local drive for insertion into a PowerPoint slide or Word document.

The Help buttons at the top of each report page offers discussions of how to use each report and how the numbers are calculated. When the results for a decision round are ready, your first step should be to review and digest the information in all four reports (but most particularly, the information in the *Footwear Industry Report* and the Comparative Competitive Efforts pages of the *Competitive Intelligence Report*). Evaluate how well your company fared on the 3-page company performance scoreboard, review the benchmarking data in the *Footwear Industry Report* to determine whether some of your company's costs are out-of-line with those of rivals, and carefully scrutinize the information in the *Competitive Intelligence Report* to discover your company's competitive advantages and disadvantages versus rivals. Only then are you ready to begin entering decisions for the next year to capitalize on your company's competitive strengths, correct any competitive disadvantages, and improve overall company performance.

What Your Board of Directors Expects: Results in 5 Key Areas

The company's board of directors has charged you with **developing a strategic direction** and **crafting a strategy** that delivers consistently good performance. Board members have set five clear-cut performance objectives for the company's management team:

1. *Grow earnings per share* from \$2.00 at the end of Year 10 to \$2.50 in Year 11, \$3.00 in Year 12, \$3.50 in Year 13, \$4.00 in Year 14, \$4.50 in Year 15, \$5.25 in Year 16, \$6.00 in Year 17, \$7.00 in Year 18, \$8.50 in Year 19, and \$10.00 in Year 20.
2. *Grow average return on equity investment (ROE)* from 20% at the end of Year 10 to 21% in Year 11, 22% in Year 12, 23% in Year 13, 24% in Year 14, 25% in Year 15, 26% in Year 16, and by an additional 1% annually in Years 17 through 20 (thus reaching 30% in Year 20). Average ROE is defined as net income divided by the average of total shareholder equity balance at the beginning of the year and the end of the year. Average ROE for each company is reported on page 2 of the *Footwear Industry Report*. The formula for calculating your company's average ROE appears in Note 11 on page 7 of the Company Operating Reports below the Balance Sheet.
3. *Achieve stock price gains* from \$30 at the end of Year 10 to \$40 in Year 11, \$50 in Year 12, \$65 in Year 13, \$80 in Year 14, \$100 in Year 15, \$125 in Year 16, \$150 in Year 17, \$180 in Year 18, \$215 in Year 19, and \$250 in Year 20. Board members agree that such stock price gains are within reach if the company meets or beats the annual EPS targets, from time to time pays a higher dividend to shareholders, and perhaps repurchases some of the common stock shares outstanding. *Your company's stock price is a function of revenue growth, earnings per share growth, ROE, credit rating, dividend per share growth, and management's ability to consistently deliver good results as measured by the percentage of the 5 performance targets that your company achieves over the course of the BSG exercise.*
4. *Achieve a credit rating of B+ or higher in Years 11-13, A- or higher in Years 14-16, and at least A in Years 17-20.* The company's credit rating was B at the end of Year 10.
5. *Achieve an "image rating" of 70 or higher in Year 11, 72 in Years 12-13, 75 in Years 14-15, 77 in Years 16-17, and 80 in Years 18-20.* The image rating is based on: (1) your company's branded S/Q ratings in each geographic region, (2) your company's global market shares for both branded and private-label footwear (as determined by their market shares in the four geographic regions), and (3) your company's actions to display corporate citizenship and conduct operations in a socially responsible manner over the past 4-5 years. Your company had an image rating of 70 at the end of Year 10.

The Board of Directors has given you the authority to pursue these 5 performance objectives, subject to two primary constraints: (1) your company may not merge with another company—the Board wishes the company to remain independent, and (2) company co-managers are expected to comply fully with all legal

and regulatory requirements and to conduct the company's business in an ethical manner. The Board has made all the performance targets publicly available to all shareholders and to the investment community; thus, investors have ample reason to expect the company is able to achieve these annual targets.

Scoring Your Company's Performance

Your instructor has weighted the relative importance of EPS, ROE, stock price, credit rating, and image rating with the sum of the weights adding to 100. Your company's performance on each measure will be evaluated from two different angles:

- 1. The Investor Expectations Standard.** The Investor Expectations standard involves calculating an *annual* "Investor Expectation Score" based on your company's success in meeting or beating each year's *expected* performance targets for EPS, ROE, stock price, credit rating, and image rating. There is also a Game-to-Date or "all-years" Investor Expectation Score that shows your company's success in achieving or exceeding the five expected performance targets over *all years* of the exercise. Meeting each expected performance target is worth some number of points based on the scoring weight your instructor selected. For example, if the scoring weight for EPS is 20% or 20 points, meeting the EPS target earns a score of 20 on the EPS performance measure. Beating a target results in an additional 0.5% for each 1% the annual target is exceeded (up to a maximum of 20%). Thus, if achieving the EPS target is worth 20 points, a company can earn a score of 24 points by beating the annual EPS target by 40% or more. Failure to achieve a target results in a score equal to a percentage of that target's point total. For instance, if your company earns \$1.33 per share of common stock at a time when the EPS target is \$2.67 and achieving the \$2.67 EPS target is worth 20 points, then your company's score on the EPS target would be 10 points (50% of the 20 points awarded for meeting the EPS target). Exactly meeting each of the 5 performance targets results in an Investor Expectation Score of 100. With potential additional points of up to 20% for exceeding each performance target, it is possible to earn a maximum Investor Expectation Score of 120.
- 2. The Best-In-Industry Standard.** The Best-In-Industry standard concerns how your company's performance compares to the industry's best performer on EPS, ROE, stock price, and image rating and to the ultimate credit rating of A+. Each decision round, company performances on EPS, ROE, Stock Price, and Image Rating are assessed from highest to lowest. The best-in-industry performer on each of these 4 measures earns a perfect score (the full number of points for that measure as determined by the weights chosen by your instructor)—provided the industry leader's performance on that measure equals or exceeds that year's performance target established by company Boards of Directors). Each remaining company earns a fraction of the points earned by the best-in-industry performer that is equal to its performance (on EPS, ROE, stock price, and image rating) divided by the performance of the industry-leading company (on EPS, ROE, stock price, and image rating). For instance, if ROE is given a weight of 20 points, an industry-leading ROE performance of 25% gets a score of 20 points and a company with a ROE of 20% (which is 80% as good as the leader's 25%) gets a score of 16 points (80% of 20 points). Likewise, if EPS is given a weight of 20 points, an industry-leading EPS performance of \$5.00 gets a score of 20 points and a company with an EPS of \$2.00 (which is 40% as good as the leader's \$5.00) gets a score of 8 points (40% of 20 points).

The procedure for assigning best-in-industry scores for credit rating is a bit different. Each credit rating from A+ to C- carries a certain number of points that scales down from the maximum number of points for an A+ credit rating to 1 point for a C- rating.

Each company's combined point total on the five performance measures is its score on the best-in-industry standard. Your company will receive an annual best-in-industry score and a best-in-industry score for all years completed. To receive a best-in-industry score of 100, a company must (1) be the best performer on EPS, ROE, stock price, and image rating, (2) achieve the annual targets for EPS, ROE, stock price and image rating, and (3) have an A+ credit rating.

After each decision round, you will be able to review every company's performance scores on both the investor expectations standard and the best-in-industry standard for each year completed, along with an overall "game-to-date" (G-T-D) score for each standard. Each company will also receive annual and game-to-date Overall Scores that are determined by combining the Investor Expectation Score and the Best-in-Industry Score into a single score using whatever weighting your instructor has chosen, often 50-50. All scores are reported on the first 3 pages of each issue of the Footwear Industry Report, and the Help sections associated these report pages explain all the details on scoring.

Important Advice

In making decisions each period, you are strongly encouraged to **manage your company in a serious, professional manner**. Running a *BSG* company entails practicing and experiencing what it takes to develop winning strategies in a globally competitive marketplace and being held fully accountable for the results of your actions—just as managers in the real-world are held accountable for the performance of the companies they run. Be wary of trying something that is highly risky, managerially irresponsible, or un-businesslike (things that might get a manager fired in a real company)—operating a *BSG* company like a daring adventurer with no regard for the dangers of “shoot-from-the hip” decision-making can end up crushing your company’s performance. The odds of success are better when you assume the role of a business professional who is trying to achieve the best possible company performance using managerially prudent and competitively astute business approaches.

Also, be alert to the dangers/risks of following the advice of friends or acquaintances (who have previously participated in the *BSG* exercise) or relying on tips from Internet sources regarding what to do and not do to “win” or get a good grade. ***The BSG exercise is very much a contest where the success of your company’s competitive efforts and overall performance depends on competing effectively against the rival companies in your industry***—whatever went on in other industries at other times and places has little bearing on the competitive circumstances of your industry. So following tips and advice recommended by outsiders carries significant risk of being “wrong” or “off the mark” when it comes to figuring out what your company needs to do to combat the specific actions and decisions that other companies in your class are taking to outcompete and outperform your company.

Stay focused on the fact that the upcoming decision rounds where you will be in charge of running your company involve a head-to-head battle between the strategies and decisions of the companies competing in your industry. While your company’s management team is crafting maneuvers to outcompete and outperform rivals in an upcoming decision round, rival company managers are scheming to outcompete and outperform your company. Consequently, it is critically important for you to (a) use the information in the *Competitive Intelligence Reports* to learn exactly how the attributes of rivals’ product offerings in the prior-year stacked up against the attributes of your company’s brand of footwear, (b) try to match wits with rivals and anticipate their next moves (to raise/lower prices, increase/decrease their S/Q ratings, and so on), and (c) then make competitive moves and decisions of your own that you believe hold good prospect for delivering good profitability and achieving other targeted outcomes. Just as in sports where it is customary for every team to scout its next opponent thoroughly and develop a game plan to defeat them, so also in *BSG* you are called upon to scout the strategies and competitive maneuvering of rivals, try to judge what competitively relevant moves they will make next, and then craft a competitive strategy of your own aimed at “defeating” their strategies and boosting your company’s overall performance.

Therefore, our recommended recipe for success in becoming one of the top-performing companies in your industry is to **stay on top of changing market and competitive conditions**, try to avoid being outmaneuvered and put into a competitive bind by the actions of rival companies, strive to price and market your company’s athletic footwear in ways that produce acceptable revenues and profits, be diligent in operating your company cost-efficiently, and observe sound financial management practices.

When the exercise is over, the only things separating the best-performing company from those with weaker performances will be the caliber of the strategies and decisions of each company’s management team. All that the *BSG* software does in processing the decision entries of rival companies is to referee the competitive contest and declare whose strategies and decisions produced the best results.

What You Can Expect to Learn

The Business Strategy Game is a hands-on, learn-by-doing exercise designed to:

- **Connect directly to the material in your textbook and give you practice in applying basic strategy concepts, using the standard tools of strategic analysis, and crafting strategies.** *BSG* provides an opportunity to put much of what you’ve been reading into play and gain some proficiency in utilizing the concepts and tools of strategic analysis. You and your co-managers will have to assess the latest industry developments, check out competitive conditions in the different market segments, chart a long-term direction for your company, set and achieve strategic and financial objectives, craft

strategies that produce good results and perhaps lead to competitive advantage, and adjust strategic plans in response to changing conditions. You'll be provided with strategic group maps, lists of competitive strengths and weaknesses for your company and for rivals, assorted benchmarking data, and competitive intelligence on what rivals are doing—all of which can be used to size up your company's situation, diagnose what rivals are up to, and anticipate what moves they are likely to make next. You'll have to match strategic wits with the managers of rival companies. You'll be thrust into "thinking strategically" about your company's competitive market position and figuring out the kinds of actions it will take to improve it. You'll be responsible for doing the strategic thinking needed to successfully lead your company in a globally competitive marketplace. Learning to do all these things and gaining an appreciation of why they matter are the heart and soul of courses in business strategy.

- *Draw together the information and lessons of prior courses, consolidate your knowledge about the different aspects of running a company, and provide a capstone for your business school education.* **The Business Strategy Game** incorporates a wealth of material covered in earlier business courses. The accounting and financial data, production operations, workforce compensation and training, sales and marketing issues, each decision period will not only give you a stronger understanding of how all the different functional pieces of a business fit together but also teach you the importance of looking at decisions from a **total-company perspective** and unifying decisions in a variety of functional areas to create a cohesive strategy. You will see why and how decisions made in one area affect outcomes in other areas of the company. **BSG** is very much a **capstone learning experience** that ties together material from other core courses and gives you a better feel for what running a business is all about.
- *Deepen your understanding of revenue-cost-profit relationships and build your confidence in utilizing the information contained in company financial statements and operating reports.* The numbers-oriented nature of **BSG**, where you repeatedly make decisions and immediately see their impacts on revenues, cost, profits, cash flow, and other important factors, and where you are confronted with all kinds of statistical information about your company and your industry, has the beneficial result of helping you gain greater familiarity with and command of "all the numbers" that surround the tasks of managing a company's operations. The power of having the computer instantaneously calculate the consequences of each decision will make you appreciate the importance of basing decisions on solid numbers instead of the quicksand of "I think", "I believe", and "Maybe it will work out okay." Moreover, because you'll have frequent occasion to review all kinds of operating statistics, identify costs that are out-of-line and take corrective action, compare the profitability of different market segments, assess your company's financial condition, and decide on what remedial and proactive approaches to take to improve your company's performance, you'll see why you cannot hope to understand a company's business and make prudent decisions without full command of the numbers—you won't have to play **BSG** very long to appreciate why shooting from the hip is a sure ticket for disaster.
- *Provide valuable decision-making practice and help you develop better business judgment.* While making all the strategic and operating decisions for your company, you and your co-managers will get all kinds of practice in deciding what to do. You'll experience the thrill of "good" decisions (good in the sense they contributed to above-average or maybe even superior company performance) and the agonizing consequences of "bad" decisions (bad in the sense that the company's performance turned out more poorly than expected). The exercise of repeatedly making decisions on the factors that make up **The Business Strategy Game** will sharpen your sense of business judgment. Amid all this decision-making practice, you will get to test your ideas about how to run a company, and there will be prompt feedback on the caliber of your decisions.

The bottom line is that being an engaged participant in **The Business Strategy Game** exercise will make you better prepared for a career in business and management. Further, we predict that **The Business Strategy Game** will make your competitive juices flow and that you will have a lot of fun.