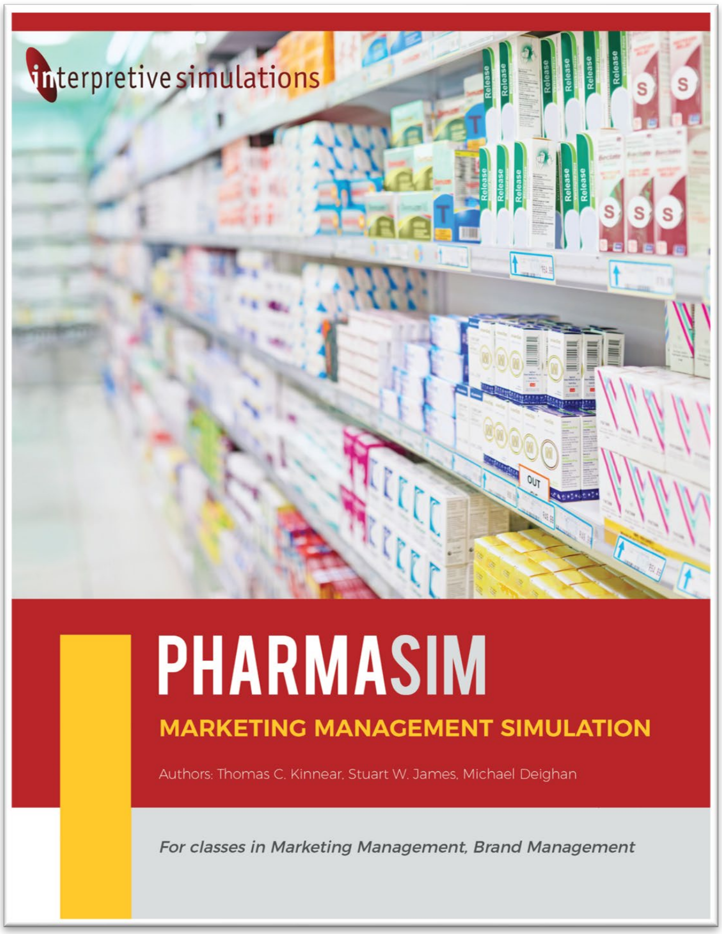

PharmaSim

The Marketing Management Simulation

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Charlottesville, Virginia, USA

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He has previously held a faculty appointment at the University of Western Ontario and visiting appointments at Harvard University, Stanford University, and the European Management Institute (INSEAD) at Fontainebleau, France. His teaching and research interests are in the areas of entrepreneurial studies, strategic marketing planning, marketing and public policy, and market-based management. His Ph.D. dissertation examined the economic concept of "market failure" as it relates to ecological issues, especially pollution externalities. His research activity has resulted in publications in numerous scholarly journals including: the *Journal of Marketing*, the *Journal of Marketing Research*, the *Journal of Consumer Research*, the *Journal of Public Policy and Marketing*, and the *Journal of Business Research*. He is former editor of the *Journal of Marketing* and former founding editor of the *Journal of Public Policy and Marketing*. This latter journal publishes scholarly articles related to public policy and the marketplace, including issues of FTC and FDA regulations and environmental dynamics of consumption.

He is coauthor of several books including: *Modern Marketing Research* (Thomson), *Principles of Marketing* (Harper Collins), *Marketing Research: An Applied Approach* (McGraw-Hill), *Promotional Strategy* (Richard D. Irwin, Inc.), and *Cases in Marketing Management* (Richard D. Irwin, Inc.).

Professor Kinnear has worked in marketing management, marketing research, and marketing education consulting. His clients have included Aetna; American Electronics Association; AT&T; Alcatel (France); Chrysler; Domino's Pizza, Inc.; Eli Lilly, Inc.; Federal Trade Commission; General Motors; General Electric; Helmac Products; Kodak; L' Air Liquide (France); Machine Vision International; TI Group (UK); and Travelers.

He is CEO and chair of the Board of Directors of the Venture Michigan Corporation, a $200 million venture capital fund of funds. He is a director and past-chair of the Board of the American Marketing Association and former chair of the Board of the American Marketing Association Foundation. He has previously served as an Academic Trustee of the Marketing Science Institute, as a director of the Association for Consumer Research, and as the Vice President for Academics and Vice President for Publication at the American Marketing Association. He also has served or is serving as a member of the Board of Directors or Corporate Advisory Boards for several companies and community organizations: Accuri Cytometers, Inc.; Ann Arbor Angels; Avail Networks, Inc.; Bard Manufacturing, Inc.; BlueGill Technologies, Inc.; Center for Learning Through Community Service; Domino's Pizza, Inc.; Greenhills School; Helmac Products, Inc.; Ecliptic Systems, Inc.; Interpretive Software, Inc.; Janeeva, Inc.; Mobius Microsystems, Inc.; Nanocerox, Inc.; National Patent Development Corporation; Venture Michigan Fund; Network Express, Inc.; Pennaflex Educational Resources, Inc.; and the University Musical Society.

He is active in the entrepreneurial community as a co-founder, advisor, angel investor, and board member of start-up companies: Network Express, BlueGill Technologies, Accuri Cytometers, Avail Networks, Avidimer Therapeutics, Mobius Microsystems, Janeeva, Nanocerox, and NanoBio. He is also a limited partner in Apjohn Ventures, Arbor Partner Ventures, Arboretum Ventures, EDF Ventures, and RPMVentures. He is a member of the investment committee for EDF Ventures and serves as a special limited partner for Arboretum Ventures.

Stu James is the founder of Interpretive Simulations, one of the leading publishers and developers of business simulations worldwide. Interpretive's simulations are an integral part of the curriculum at many of the world's top business schools in the areas of marketing, strategy, management, and international business. To date, over 400,000 people have experienced one of Interpretive's simulations, and many rave about how the simulation was one of the best learning tools they have ever used.

On the academic front, Stu is currently Visiting Lecturer at the University of Michigan (EMBA), and at the Colgate-Darden Graduate School of Business at the University of Virginia (MBA Core Marketing and Custom Executive Programs). In addition, Stu has served at the Allen Center for Executive Education at the Kellogg School of Business, the China Europe International Business School (CEIBS), and the Cheung Kong Graduate School of Business (CKGSB).

Along with his academic work at the above business schools, Stu has also worked with American Honda, CIGNA, The Davidson Institute, General Electric, Genworth Financial, Harvard Business School, Navy Federal Credit Union, Pearson Prentice Hall, and McKinsey & Company. He is co-author of a number of leading simulation products including StratSimManagement, StratSimMarketing, StratSimChina, CountryManager, PharmaSim, HRSimSelection, MarketShare, BizCafe, and ServiceSim, all used at leading universities worldwide. Stu has extensive experience in facilitating simulation events, having directly worked with thousands of executive and MBA participants over the past 25 years.

Currently, Stu's primary focus is running Management by the Numbers, Inc. (MBTN), a new venture that he co-founded with Paul Farris of the Darden School of Business. MBTN provides a self-paced, on-line environment where students and executives can master the numbers side of marketing and business metrics.

Stu and his family reside in Afton, Virginia at the foot of the Blue Ridge Mountains. In his spare time, Stu enjoys playing and teaching Irish traditional music and competing in triathlons.

Michael Deighan is a coauthor on the web-based editions of Airline, Corporation, Entrepreneur, and HRManagement. His expertise, insight, and creativity proved invaluable and made it possible to convert these models to their current web-based versions. Michael joined Interpretive Simulations in 1989 as lead software developer and has served as manager of technology and content development.

He is coauthor on a number of Interpretive simulations: PharmaSim, BizCafe, StratSimMarketing, StratSimManagement, StratSimChina, CountryManager, and MarketShare. In addition to developing software, he has been teaching computer programming classes at Piedmont Virginia Community College in Charlottesville, Virginia, since 1990. Michael received his B.A. in German and Economics from Washington and Lee University, and an M.A. in German from the University of Virginia.

Acknowledgements

A moment of appreciation...

The authors wish to thank many people for their support in the development of this simulation. Mary Juraco and Kathleen Simroth of Interpretive Simulations were a great help with the editing process for the initial version of this manual. Melissa Rosati, Jim Boyd, and Jim Sitlington at Scott, Foresman and Company all played an important role in getting PharmaSim off the ground. Steve and Kathleen Simroth and Karen James collected data in retail outlets long before the first line of code was written. We also are grateful to the many students who tested all the versions of PharmaSim over its development. A special thanks is due to Eric Anderson, Craig Ehrnst, Matt Hausmann, Nadine Lindley, Jim Pack, Louise Bedard, and Joanne Novak at the University of Michigan Business School for their help in the alpha and beta test phases of PharmaSim.

Over the years, a number of people contributed to improvements in the manual and software. We especially appreciate the contributions of Julie Koh, Gabriel Buddenbrock, Susan Christmas, Marjorie Adams, Del Kolberg, Erin Simpson, Clayton Shumate, Tony Naidu, and Anne Louque of Interpretive Simulations; Anne Smith of HarperCollins; and Melissa Sabella and Melissa Pellerano of Pearson Education. We also owe a huge debt of gratitude to faculty who have worked with us, including Jose Rosa, Gene Anderson, Harlan Spotts, Ann Root, Marian Moore, Lori Feldman and Hugh Daubek. We also appreciate being invited into the classrooms and meetings by the first-year marketing faculty at the Harvard and Darden Business Schools.

The latest release of PharmaSim incorporates the feedback of the 200,000+ users of the simulation since its initial release. We want to acknowledge the hard work and dedication of a number of Interpretive employees—especially Clayton Shumate, Patrick Neeley, Matt Travis, Steve Messing, Laura Chappell Arnold, Erin Simpson, Caleb Sancken, Rachel Hill, Tim Melson, Tim Sams, and David Luzader.

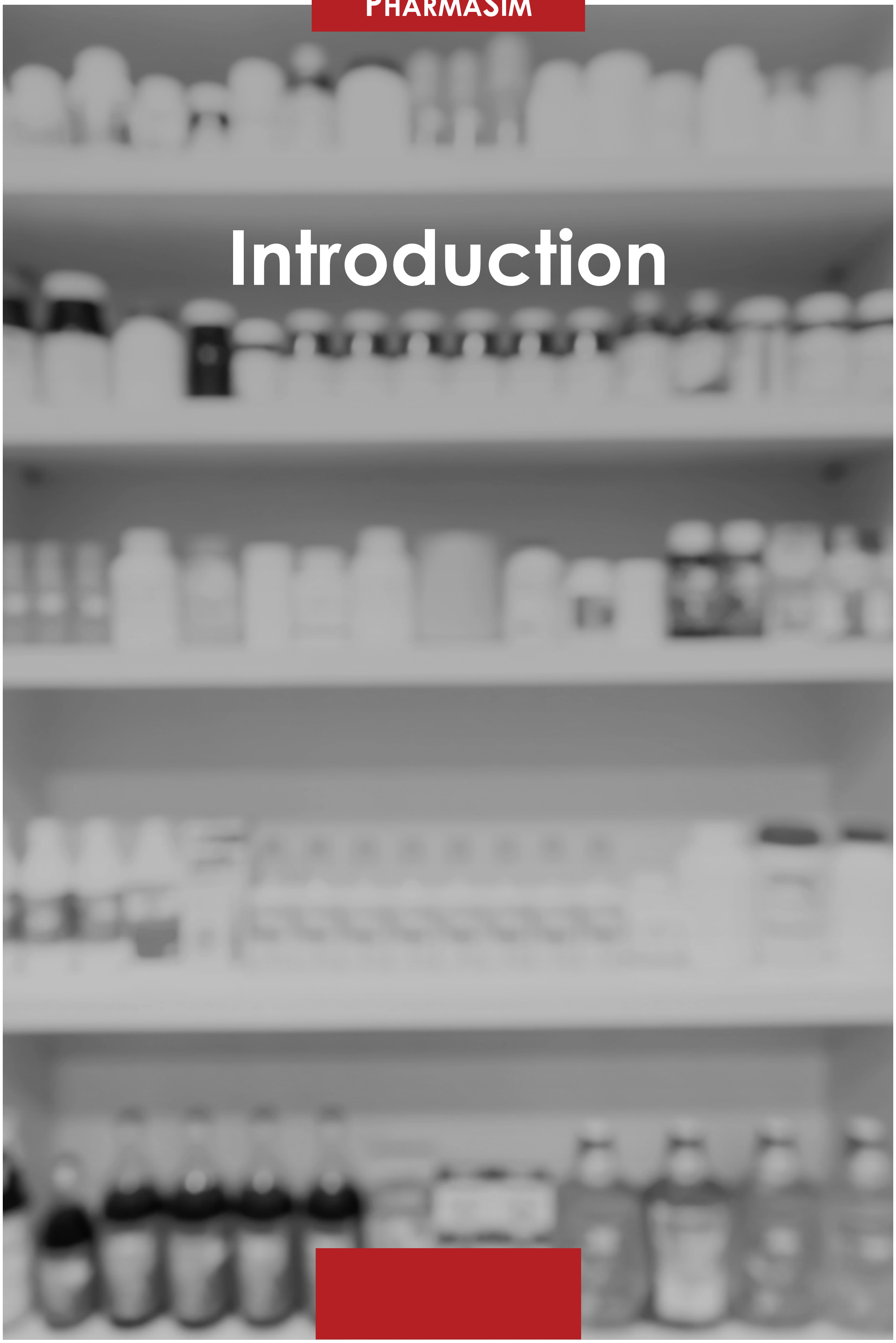
Thomas C. Kinnear
Stuart W. James
Michael Deighan

This simulation is dedicated to Connie, Maggie, and Jamie;
Karen and Katherine;
Mary, Justin, Mikaela, Kathleen, and Sean.

Contents

Printed June 18, 2020

Introduction



PharmaSim is a marketing management simulation based on the over-the-counter cold medicine industry. While it focuses on brand management, the issues raised apply to marketers in any industry. In PharmaSim you will learn the importance of understanding customer needs, creating awareness for your products, finding the best distribution model, and deriving an appropriate pricing structure.

As a member of a marketing management team, you will make decisions regarding product mix, pricing, distribution, advertising, and promotion for Allstar Brands, one of five firms in the market. The four computer-simulated competitors will respond to your decisions and execute their own strategies. All the teams in your section compete within the same environment, allowing your instructor to compare results. PharmaSim covers a timespan of up to 10 simulated years, so you can observe both the short-term and long-term effects of your decisions.

PharmaSim offers three playing levels with varying degrees of complexity. “Brand Assistant” has the fewest decisions and least number of reports available. “Assistant Brand Manager” is moderately complex. “Brand Manager” is the most complex, offering the greatest detail in the decisions and reports. Your instructor may choose to use one or more of the levels. In addition, you may have to respond to special decisions that arise from incidents, and you may be asked to complete supplemental assignments chosen by your instructor.

Competing in the PharmaSim marketplace will require complex analysis and decision-making. Therefore, take some time to familiarize yourself with the case before beginning the simulation. While working through your decisions you will find it helpful to refer to the manual for information and strategy tips.

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

PharmaSim Quick Start Guide

1. Read the Case
- Industry background
- Company starting situation

2. Start-up
- Access simulation from the course website.

3. Period Decisions
- Sales Force
- Pricing (for *each* product)
- Advertising (for *each* product)
- Promotion (for *each* product)
- Special

4. Decision Analysis
- Budget Allocation
- What If…
- Pricing Analysis

Go back to Step 10 until satisfied with decisions

5. Team Leader Advances Simulation
- Check schedule for times
- Complete decisions *before* deadline

If the simulation is over, skip to Step 14

6. Evaluate Results
- Company reports
- Market research
- Survey

Go back to Step 10

7. Simulation Ends
- Evaluate team performance
- Review what you have learned

Your instructor may require incident decisions and additional assignments during the simulation. Check the schedule and messages on your course website for details.

PharmaSim Manual

The remainder of this manual is divided into the sections described below. **Your understanding and success in PharmaSim will be greatly enhanced by reading this manual *before you begin the simulation.*** The manual will answer most of the questions students typically have during the simulation experience, and reading it has the added benefit of improving your competitiveness. Contextual help within the simulation interface and Frequently Asked Questions, “FAQs,” on your course site provide more information.

The **Case** contains background on the over-the-counter (OTC) cold and allergy remedy market, and it describes the current situation of your firm, Allstar Brands. It also provides an overview of the decisions you will make and information on the reports and research available. A timeline of the product decisions you will face is also included.

Marketing Management Process presents a general discussion of marketing management: situation analysis, the 5 C’s, SWOT analysis, marketing strategy, and the 4 P’s. It serves as a guide in developing and executing your marketing plan.

The **Appendix** provides supplemental materials to help you with the simulation experience. There are tips on using the simulation as part of a group. A description of the market segments and distribution channels in the PharmaSim environment may help guide you in segmenting the market and positioning your products. The glossary contains marketing terms that are used in the simulation. An index concludes the appendix.

PharmaSim

Case

The management team at the Over-the-counter Cold Medicine (OCM) Group of Allstar Brands just completed its third presentation in the past month to the Pharmaceuticals Division manager regarding the status of the Allround cold medication. It is apparent, from all the attention the team has received, that the Allround brand it manages is of strategic importance to the company. Unfortunately for the team and the company, the fourth quarter performance reports for Allround were not as positive as management expected. Therefore, the OCM team has been under the intense scrutiny of senior management.

Allstar Brands' Allround product is a market leader in the over-the-counter (OTC) cold and allergy remedy market. The consistent success of the brand in terms of profitability and sales has made it a critical component of the Pharmaceuticals Division's long-term strategic plan. The division anticipates that the brand's cash flow in the coming years will allow the company to pursue new opportunities in emerging markets. However, the division manager responsible for Allround has become concerned with the competitive nature of the OTC cold remedy market. In the past three years, the industry has seen several product introductions as well as major increases in promotional and advertising expenditures. There is concern among senior management that this competitive activity will lead to declining market share and profitability for Allround. The brand has lost one full share point in the last year. Senior management expects that skillful marketing will prove pivotal to the long-term success of Allstar Brands.

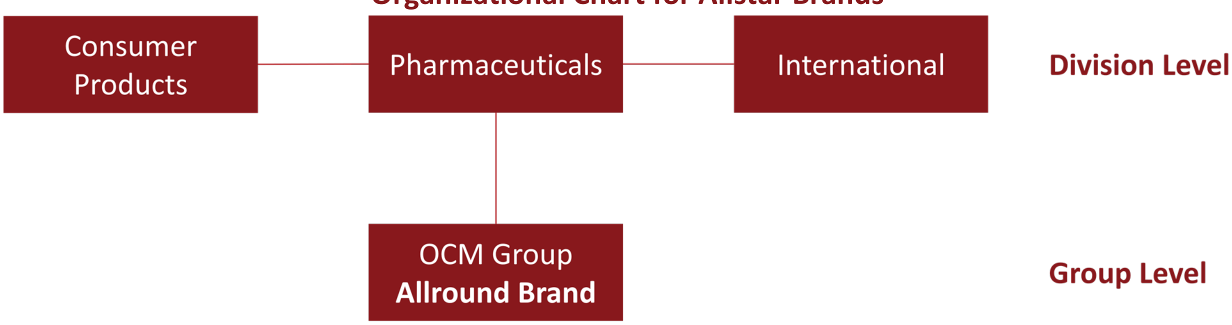
The Company

Allstar Brands Corporation is one of the leading manufacturers of packaged goods in the world. Since its founding in 1924, the company has acquired or merged with a number of smaller packaged goods companies.

The company consists of three divisions: Consumer Products, International, and Pharmaceuticals. The Consumer Products Division handles a number of packaged goods, such as laundry detergent, shampoo, and bar soap. The International Division distributes Allstar products on a global basis and has a large presence in the European market. The Pharmaceuticals Division is responsible for the marketing and production of ethical and OTC medications. Ethical drugs are available through pharmacies with a physician's prescription, whereas OTC remedies are widely distributed without the need for a prescription.

The management of Allstar's Pharmaceuticals Division consists of a number of market related groups, one of these being the OCM Group. This group is concerned primarily with the marketing activities of the Allround brand and any line extensions or new product introductions that might fall under the same category. An overview of the corporate structure of Allstar Brands is presented in the following figure.

Organizational Chart for Allstar Brands



The Brand Management Group at OCM

The marketing management group responsible for Allround consists of a brand manager, an assistant brand manager, and a brand assistant who is a recent business school graduate. They work together as a team on all the marketing decisions related to the OTC cold and allergy remedy market. The three managers are concerned with developing the Allround marketing mix strategy each year, including any reformulation or line extension options. In addition, if Allstar's research department develops any promising new product ideas for the cold medicine market, this team will be responsible for the new product launch. Although all product and marketing decisions are made as a group, each member of the brand management group has a different role.

The **brand assistant** has major input on decisions related to retail price, promotional allowances, consumer and trade promotional expenditures, advertising expenditures, and the number of direct and indirect sales force personnel committed to the Allround brand. The brand manager thought it would be best for the brand assistant to gain experience by understanding the basic marketing variables before becoming more involved in the detailed implementation of the marketing plan.

The **assistant brand manager** has input on the aforementioned issues but is also required to make more in-depth marketing decisions. For example, the assistant brand manager makes recommendations concerning the allocation of the sales force to retailers and across direct and indirect channels. This person is also concerned with the development of the pricing discount structure, as well as more of the specifics of promotional programs, including the advertising message, advertising agency, and trade and consumer promotions.

The **brand manager** is responsible for all aspects of the marketing decisions for the Allround brand. In addition to the decision areas above, the brand manager is responsible for more detailed aspects of the advertising message, including which competitor to position against, the choice of target segments, and the details of how promotional allowances and promotions are allocated across various distribution channels.

In general, the brand management group is responsible for making effective marketing decisions in all marketing mix areas to maximize the long-term profitability of Allstar Brands’ OTC cold and allergy remedy group.

The OTC Medicine Industry

Allstar Brands competes with four other firms in the OTC cold and allergy market. As shown in the table below, these five firms offer a total of 10 brands in five different product categories (cold liquid, cough liquid, allergy capsule, cold capsule, and nasal spray).

Company and Brand Summary

Company Name	Manufacturer Sales (M$)	Brands on the Market
Allstar Brands	$355	***Allround:*** 4-hr multi-symptom cold liquid
B&B Health Care	$286	***Believe:*** 4-hr allergy capsule, ***Besthelp:*** 4-hr cold capsule
Curall Pharmaceuticals	$199	***Coughcure:*** 4-hr cough liquid
Driscol Corporation	$255	***Defogg:*** 4-hr allergy capsule, ***Dripstop:*** nasal cold spray, ***Dryup:*** 4-hr multi-symptom cold capsule
Ethik Incorporated	$396	***Effective:*** nasal cold spray, ***End:*** 4-hr cough liquid, ***Extra:*** 12-hr cold capsule

Cold Remedy Market

Cold remedies are designed to address five basic symptoms: aches and fever, nasal congestion, chest congestion, runny nose, and cough. Although the cause is different, allergies share many of the same symptoms and are therefore often grouped with cold remedies. However, products formulated specifically for allergy relief symptoms are available, and it is common in the industry to consider relief from allergy symptoms as a separate consumer need from cold and flu related illnesses. Chronic allergy sufferers tend to have different usage patterns and more concerns about side effects because of the duration of the symptoms.

Brand Formulations

Products vary in the ingredients they contain, their form, and the duration of relief. In general, various combinations of six basic types of ingredients are used to formulate OTC brands. Each ingredient targets one of the five basic symptoms or is used as a base for the other ingredients. The ingredients are

- **Analgesics:** Provide relief for aches and fever. Common analgesics are aspirin, ibuprofen, and acetaminophen.
- **Antihistamines:** Reduce the secretions that cause runny nose and watery eyes.
- **Decongestants:** Reduce nasal congestion by shrinking the blood vessels in the nose lining to clear the passages and restore free breathing.

- **Cough suppressants:** Reduce the cough reflex.
- **Expectorants:** Provide relief from chest congestion by loosening the phlegm, thereby making each cough more efficient.
- **Alcohol:** Provides a base for the other ingredients in some products and helps the patient rest. (Some consumers view alcohol as a negative attribute.)

A brand can be made available in one of three forms: liquid, capsule, or spray. A consumer's choice with regard to form is usually based on personal preference, but some general differences are apparent. Nasal sprays contain only a topical nasal decongestant that provides faster relief from sinus congestion than other forms. Capsule and liquid cold medications might contain any combination of ingredients, although cough medicine is usually found in liquid form to help soothe throat irritation. According to a recent survey, most consumers find that capsule form is somewhat more convenient than liquid.

Two other basic considerations are duration of the product and possible side effects. Product duration is typically either 4-hour or 12-hour. The government regulates the amount of medication for various periods of relief, including the maximum for a 24-hour period without a prescription. For safety reasons, the maximum dosage used in 4-hour formulations cannot be taken more than four times each day. Twelve-hour formulations can contain twice the dosage as 4-hour formulations, or half the daily maximum medication. Nasal sprays are considered instant relief products because they act much faster than standard cold medicines, but their effectiveness wears off faster.

OTC side effects have become a greater consideration in recent times because of the emphasis on healthier lifestyles and concerns about performance under medication. Drowsiness caused by antihistamines or alcohol is the most often mentioned negative side effect, especially when these products are used during the day. Other considerations include upset stomach, long-term effects of nasal spray, and excessive medication.

As can be seen in the table below, the Allround brand is a 4-hour liquid cold medicine that provides multi-symptom relief. It contains an analgesic, an antihistamine, a decongestant, a cough suppressant, and alcohol. Most consumers use this product for nighttime relief because of the strength of the medication and because the alcohol and antihistamine help the patient rest. Allround is viewed as one of the most effective brands on the market at reducing multiple cold symptoms. However, consumer groups and some physicians have attacked the multi-symptom shotgun approach as providing excessive medication in many circumstances.

Current Brand Formulations

	Analgesic	Antihistamine	Decongestant	Cough Suppressant	Expectorant	Alcohol	Description
Max Allowed	1,000	4	60	30	200	20	(mg per 4-hr dose)
Allround	1,000	4	60	30	0	20	4-hr multi liquid
Believe	0	4	0	0	0	0	4-hr allergy capsule
Besthelp	0	4	60	0	0	0	4-hr cold capsule
Coughcure	0	0	30	30	0	10	4-hr cough liquid
Defogg	0	4	0	0	0	0	4-hr allergy capsule
Dripstop	0	0	60	0	0	0	1-hr cold spray
Dryup	1,000	4	60	0	0	0	4-hr multi capsule
Effective	0	0	60	0	0	0	1-hr cold spray
End	0	0	0	0	200	10	4-hr cough liquid
Extra	0	0	120	0	0	0	12-hr cold capsule

Market Segmentation

The trade typically segments the OTC cold and allergy market based on how the brands are labeled. The four standard product categories in the OTC market are cold, cough, allergy, and nasal spray. The brand management group often uses the information presented in the table below as a basis for determining the brand's direct competition but also realizes that the report fails to account for the cross-usage of brands (e.g., using a cold medicine to relieve allergy symptoms).

Market Share by Product Category

	Cold	Cough	Allergy	Nasal	Total
Mfr. Sales (M$)	$879.7	$366.4	$126.1	$119.1	$1,491.2
Growth	6.6%	3.2%	5.9%	4.5%	5.6%
Allround	40.4%	0.0%	0.0%	0.0%	23.8%
Believe	0.0%	0.0%	50.7%	0.0%	4.3%
Besthelp	25.2%	0.0%	0.0%	0.0%	14.9%
Coughcure	0.0%	54.3%	0.0%	0.0%	13.3%
Defogg	0.0%	0.0%	49.3%	0.0%	4.2%
Dripstop	0.0%	0.0%	0.0%	52.0%	4.2%
Dryup	14.9%	0.0%	0.0%	0.0%	8.8%
Effective	0.0%	0.0%	0.0%	48.0%	3.8%
End	0.0%	45.7%	0.0%	0.0%	11.2%
Extra	19.5%	0.0%	0.0%	0.0%	11.5%

A major marketing research firm offers a nationwide survey of OTC cold and allergy consumers. The market research firm claims that this survey provides a great deal more information on how consumers perceive and use cold and allergy products. The firm also suggests that demographic segmentation could reveal important information about the market. Survey data are provided with two segmentation options: illness (cold, cough, and allergy) and demographics (young singles, young families, mature families, empty nesters, and retired). The marketing research firm conducts this survey every year. A “Sample Market Survey Questionnaire” concludes the case.

Curious about possible new market insights, the OCM Group obtained results of the market survey for $100,000. If the group finds the data informative, it plans to continue purchasing the survey. The Brand Manager and Assistant Brand Manager can analyze the OTC cold and allergy market based on any or all combinations of illness and demographics that the OCM Group desires, but survey cross-sections are not available to the Brand Assistant.

Survey Data

The consumer survey consists of the following reports: (1) market share based on consumer brand purchases; (2) purchase decision-making criteria used by consumers; (3) brand awareness, trial, and repurchase percentages; (4) brand satisfaction; (5) intended purchases compared to actual purchases; (6) a comparison of brands based on consumers’ perceptions of their ability to relieve symptoms; and (7) the trade-off that consumers perceive between symptom relief and price. The sample data for awareness, trial, and repurchase are presented in the table below.

The survey results on Brands Purchased, Purchase Intentions, and Satisfaction are based on units sold. Brand Awareness, Decision Criteria, Brand Perception, and Trade-offs are based on survey population. This distinction reflects multiple purchases from one survey respondent (usage rates).

Market Survey—Awareness, Trials, Repurchase

Brand	Brand Awareness	Brand Trials	Most Frequently Purchased	Conversion Ratio	Retention Ratio
Allround	74.1%	47.1%	21.8%	63.6%	46.3%
Believe	18.9%	9.2%	3.8%	48.5%	41.9%
Besthelp	56.6%	30.0%	13.0%	53.1%	43.2%
Coughcure	49.0%	29.0%	18.4%	59.1%	63.6%
Defogg	24.1%	13.0%	4.1%	53.9%	31.8%
Dripstop	20.2%	11.3%	3.6%	56.1%	31.4%
Dryup	23.2%	10.9%	7.2%	47.0%	65.6%
Effective	22.0%	12.0%	3.1%	54.5%	26.2%
End	46.9%	30.6%	15.6%	65.3%	50.8%
Extra	60.1%	31.8%	9.5%	52.8%	29.9%

The OCM Group found the data insightful. They were pleased that Allround had very high awareness. The survey measures the percent of those queried who mentioned the Allround brand without prompting, which is considered "unaided awareness." In addition, the Allround brand had the highest trial level and was the brand most frequently purchased. Allround's conversion ratio (the percentage of those aware of a brand who have tried it) is also high. The brand manager noted that the retention ratio (the percentage of those who have tried the brand who now purchase it most often) for Allround was lower than that for several other brands. The OCM Group wondered if this might be a signal of future problems, but the brand assistant recalled that new brands and brands that fill very specific needs often have higher retention rates than brands that are mature or not highly targeted.

Other Marketing Research

In addition to the survey data, other information about the market is available. Market trade publications are free to the OCM Group and provide data for industry outlook on population, market growth rate, inflation, wholesale/direct distribution, symptoms reported by consumers, and manufacturer sales for each brand. Other data concerning competition and distribution are available for a fee. These include a comparison of relevant operating statistics for each company; competitive estimates of sales force allocation, advertising expenditures and message, and promotional programs; as well as studies of distribution regarding share of channel sales, pricing, consumer shopping habits, average shelf space, and physician and pharmacist recommendations. Assistant Brand Manager and above can also conduct test markets which allow you to experiment with different combinations of price, advertising, and promotion. In some cases, Brand Managers may be able to use a new conjoint study to help with product decisions.

The OCM Group has purchased all marketing research this year. They have found the information useful, but in subsequent years they will need to decide whether the value of the information the studies provide for decision-making is at least as great as the cost to purchase them. They also need to recognize that all marketing research studies have some error in them.

OTC Medicine Marketing

Pricing and Promotional Allowances

It is industry practice for manufacturers to suggest retail prices to retailers, although retailers ultimately set the price to consumers. Manufacturers commonly offer volume discounts of 15–40% of the manufacturer's suggested retail price plus an additional promotional allowance of 10–20%. Allowances are necessary to gain retail distribution, obtain desired shelf facings in retail outlets, and gain retailer support for a brand in advertisements and promotions undertaken by the retailer. Allowances are usually discussed with retailers in conjunction with price levels but are also considered to be a type of promotional expense. Thus, allowances appear on the income statement as a separate variable cost line item. The table below displays the current pricing policies for the Allround brand.

Volume Discount Schedule for Allround

Order Size/Type	Volume Discount	Price to Channel	Units Sold (M)	Dollars Sold ($M)	% of Total Sales
<250 units direct	25%	$3.97	10.5	$41.8	11.8%
250–2499 units direct	30%	$3.70	35.4	$131.2	36.9%
2500+ units direct	35%	$3.44	15.1	$51.9	14.6%
Indirect/Wholesale	40%	$3.17	41.1	$130.3	36.7%

The preceding discount schedule is not available at the Brand Assistant level in the simulation.

The manufacturer's suggested retail price (MSRP) for Allround is relatively high with volume discounts ranging from 25% to 40%, not including promotional allowances. However, the OCM Group believes that Allround's sales have not suffered because of the higher price. In fact, the brand's effectiveness, high recognition, and level of loyalty have allowed it to maintain a price leadership role in the market. The following table provides the MSRPs for all brands in the market.

Manufacturer's Suggested Retail Prices

Brand	Price	Brand	Price
Allround	$5.29	**Dripstop**	$4.29
Believe	$4.39	**Dryup**	$5.09
Besthelp	$4.89	**Effective**	$4.39
Coughcure	$5.49	**End**	$5.29
Defogg	$4.29	**Extra**	$4.49

A market research report showing average retail price by channel costs $20,000 at the start of the simulation.

Advertising

Advertising plays a major role in establishing brand awareness among consumers and in helping to shape consumers' perceptions of products. The OCM Group must make three basic advertising decisions each year: the amount of dollars allocated to the advertising budget, the content of the advertising message, and the choice of an advertising agency.

Last year Allstar spent $20 million on Allround's advertising campaign, primarily for commercials aired on network television. Competitive advertising budgets for last year ranged from $1 million for the Effective brand to $16 million for Coughcure.

There are four basic advertising message types that the OCM Group considers potentially useful for Allround: a primary demand stimulation to focus the advertising message on increasing overall demand for OTC remedies while increasing Allround's unaided awareness; a benefits approach that states the symptomatic relief properties of Allround; a comparison approach that positions Allround against another brand; and a reminder advertising message to maintain consumer awareness and stimulate the repurchase of Allround. The advertising message used in any year can be a combination of these types and Allround used all of them to some extent last year in their campaigns. The advertising message can also target product use (cold, cough, and/or allergy) and demographics (young singles, young families, mature families, empty nesters, and/or retired). This targeting provides guidance to the advertising agency for creative aspects of the ad design and selection of specific media placements.

The OCM Group is considering the selection of a new advertising agency. Allround's current agency is Brewster, Maxwell, and Wheeler (BMW). This agency is known for its high-quality work but charges a 15% commission on media placements. There is some concern that BMW costs too much and is having an adverse impact on Allround's profits. The OCM Group has received solicitation from two other advertising agencies. Sully & Rodgers (S&R) has a reputation of providing medium-quality work but charges only 10% on media placements. Lester Loebol & Company (LLC) charges only 5% on media placements, one-third as much as BMW, but its advertising campaigns are of significantly lower quality. It could be argued that, since the Allround name is well established, a decrease in the quality of advertising might not hurt the brand significantly. Potential cost savings could result in an increase in profits, but the group is concerned that lower quality advertising might cause irreparable damage to Allround's brand image.

There is a debate on your management team about the best way to use digital marketing for your company. Currently you have a website with product information, and marketing uses microblogging and social networking applications to announce company news. However, there's very little positive feedback from buyers or customers, and the social media accounts are not being monitored. Your website and all your social media are run by two people in the Marketing department, neither of whom have web programming experience; so, they rely on "free time" of

IT employees in the department. Marketing recently commissioned a consultant to review your social media campaigns and found that you receive below average responses.

You may have an opportunity to budget specifically for digital marketing to improve it. There currently isn't good information on how much money to allocate, so start with a small amount and adjust up in subsequent years, always keeping an eye on your results to see how the spending affects your performance.

Your ad agency uses the money you allocate to digital marketing in several digital marketing channels. The ad agency can create display ads targeting websites that are connected with health issues, especially treatment for cold and cough symptoms. Also, they can work on search marketing by improving the website so it will score higher in searches for cold and cough medicines (search engine optimization), and they can pay to list your products in relevant search results (pay-per-click). Finally, your ad agency can monitor your social media accounts better and enhance the coordination of social media efforts with advertising and promotion. As part of monitoring social media, the ad agency will produce a report of common sentiments and the frequency of each.

Promotion

Trade promotions include promotional allowances and cooperative advertising. Promotional allowances, also discussed in the pricing section, are an additional discount to the channel. Co-op advertising provides incentives to the channel to feature a specific brand in their own advertising. Money is made available to retailers to pay for a portion of the retailer's advertising when the relevant brand is promoted.

Consumer promotions include distribution of free trial-size packages, coupons, and point-of-purchase displays. Trial sizes come in smaller packages and allow consumers to try a product before buying. Allround did not use trial-size packaging last year but may consider this option in the future. As the name implies, trial-size packaging usually contains a smaller dosage of medicine and is provided to potential consumers free of charge. This promotion can be used to attract potential consumers to the Allround brand.

Coupons offer additional discounts off the retail price when redeemed at the time of purchase. Coupons can be distributed in print through direct mailings and with periodicals; at the cash register based on your purchases; and through a variety of digital means. Last year a part of Allround's consumer promotion budget was spent on coupon support. This included money spent on printing, distribution, and redemption.

Point-of-purchase vehicles are special displays, such as retail sale racks, on-shelf advertisements, or end-of-aisle displays that promote a brand to the consumer in the retail store. The OCM Group believes that these displays promote brand switching when the consumer is purchasing OTC products. Point-of-purchase money is paid to the retailer, but the promotion targets the end consumer. The brand manager may allocate these funds across retail channels depending on such factors as shopping habits and channel needs. The table below is a summary of last year's promotional activity for the Allround brand.

Promotional Activity for the Allround Brand

Measure	Value
Promotional Allowances	$60.4M (17.0%)
Co-op Advertising	$1.4M
Point of Purchase	$1.4M
Trial Size	$0
Coupons	$4.2M ($0.50 each)

Sales Force

The support of a manufacturer's sales force is critical to the success of a brand in the OTC cold and allergy market. Part of the sales force sells directly to retail outlets. This direct sales force is responsible for maintaining relationships with current retailers and for developing new retail accounts. The direct sales force also presents trade promotions, allowances, and new product introductions to retailers.

Wholesalers sell OTC brands to smaller, independent retailers that are not reached by the direct sales force of the manufacturer. Merchandisers provide special support to retailers for their in-store activities, such as shelf location, pricing, and compliance with special promotions. Detailers contact doctors and pharmacists to provide information about their brand, introduce new products, and encourage doctors or pharmacists to recommend their brand to consumers.

The OCM Group determines the total size of the sales force, including the proportion of direct and indirect support. The brand manager allocates the direct sales force to each type of retail outlet and the indirect sales force to its three components (wholesalers, merchandisers, and detailers). The group must also be concerned with sales force hiring with and training costs. The latter is critical to the pharmaceuticals business, even in OTC drugs.

OCM Sales Force Allocation

Sales Force Type	Count	Sales Force Type	Count
Independent Drugstores	6	Wholesalers	15
Chain Drugstores	28	Merchandisers	8
Grocery Stores	43	Detailers	10
Convenience Stores	3	**Subtotal (Indirect)**	**33**
Mass Merchandisers	14		
Subtotal (Direct)	**94**	***Total***	***127***

Channel Choices

As noted above, Allround uses both direct and indirect channels of distribution. Generally, direct sales target larger urban and suburban stores as well as chain retail accounts. Wholesalers typically serve smaller retail outlets and more rural areas, where the revenues generated for Allround do not support the cost of maintaining a salesperson. Wholesalers carry many product lines and therefore have a broader revenue base for supporting the cost of their sales force.

Gaining the support of the channel is an important part of a brand's success, and shelf space allocation and placement can have a significant effect on brand sales. The OCM Group paid for a study of average shelf space in retail channels and found that Allround did not receive the best placement in all channels. The group wondered why Allround did not consistently receive the best placement, since the brand typically generated higher volume than any other OTC medication. Because of this concern, they asked their sales force to query retailers about shelf space allocation among brands. The results from this informal survey showed that retailers considered four basic factors regarding shelf space allocation: product turnover (number of units sold in a given period), promotional allowances, sales force support, and co-op advertising allowances. In general, large grocery stores, mass merchandisers, and chain drugstores were more apt to focus on turnover and allowances, whereas independent drugstores paid greater attention to sales force support. The OCM Group hoped that this information might prove useful in determining how to allocate their resources across distribution channels.

Internal Product Development

The OCM Group has important product development and management decisions to make over the next decade and must work closely with the product research and development (R&D) area within Allstar Brands. R&D can provide three major types of product development for the Allround brand group: reformulation of the ingredients in Allround; line extensions of the basic Allround brand; and development of a new brand. New brand options may include ingredients currently available only by prescription should government regulations change. These proprietary, prescription-only medications may offer Allstar Brands competitive advantages in the OTC market.

After lengthy discussion, the OCM Group and R&D agreed that the following schedule would frame the group's product development decisions. The product alternatives will not be available to the OCM Group outside the given times because R&D will be busy with other projects. No product decisions are available at the start (Year 0).

Product Development Schedule

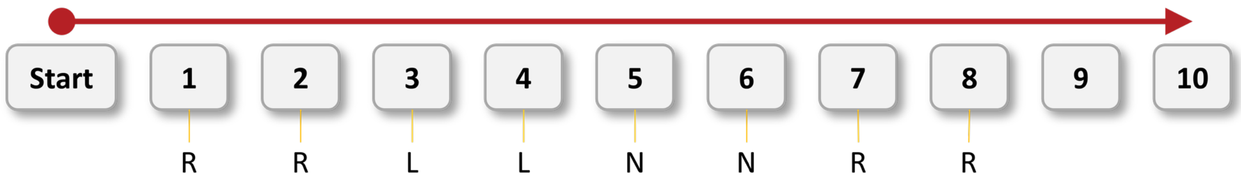
Two **reformulations** of the Allround brand will be available from R&D in Year 1 or 2. The two options under consideration are dropping the alcohol or replacing the cough suppressant with an expectorant. If used, the reformulation would replace the current product configuration. The OCM Group must decide by the end of Year 1 or 2 between these two reformulations (for introduction in the market the following year). The opportunity to decide to reformulate will not be available to the OCM Group after Year 2.

Three potential **line extensions** will be available from R&D in Year 3 or 4. The three options under consideration are a 4-hour cold liquid for children, a 12-hour multi-symptom capsule, or a 4-hour cough liquid. If introduced, the line extension will provide a new stock-keeping unit (SKU) in addition to Allround but also take advantage of Allround's awareness. The OCM Group must decide by the end of Year 3 or 4 from among these three choices (for introduction in the market the following year). The opportunity to decide on a line extension will not be available to the OCM Group after Year 4.

Three **new product** formulations will be available from R&D in Year 5 or 6. The three options under consideration are a 4-hour allergy capsule, a cold spray, or one of the line extensions not previously chosen (to be determined by R&D). The allergy medication is based on a unique, non-drowsy product that is currently available by prescription only. However, the company is planning to submit the product for government approval. The OCM Group must decide by the end of Year 5 or 6 from among these three new product choices (for introduction in the market the following year). The opportunity to launch a new product line will not be available to the OCM Group after Year 6.

R&D will be available in Years 7 and 8 to **reformulate** Allround. The OCM Group must decide by the end of Year 7 and/or by the end of Year 8 whether or not to reformulate Allround (for introduction into the market the following year).

Allstar OCM Product Development Timeline



R = Allround Reformulation Decision
L = Line Extension Decision
N = New Product Introduction Decision
= Progress from Year 0 to Year 10

The numbers in the above timeline indicate the period when product development decisions can be made. Any product changes go into effect the following period, after the simulation is advanced.

Financial Situation for the OCM Group

An income statement is presented below. Allround is a successful and profitable brand with sales of $355.3 million at the manufacturer's level last period. The gross margin was $172.3 million, and the margin after advertising and promotional expenses was $145.3 million. The margin after all marketing expenditures, including sales force and administrative costs, was $129.5 million. The Allround brand also carries its share of fixed costs, including the plant where Allround is produced and a share of corporate overhead charges. The OCM Group knew that if demand warranted, the plant would be expanded, and fixed costs would increase based on the increase in capacity. These fixed cost charges were $62.4 million last period, leaving a net income of $67.2 million. Senior management of Allstar Brands expects the OCM Group to make even greater contributions in the future.

The OCM Group has received a budget to make marketing decisions for the Allround brand. The marketing budget must cover all sales force, advertising, and consumer and trade promotion expenditures. In addition, any marketing research purchased is a budget expense. Promotion allowance, however, is treated as a price discount and is not charged against the budget. Each year, the marketing budget is adjusted up or down based on sales and net contribution performance. If a line extension or new product is introduced, the group will receive additional budget funds to help with the launch. ***Unused budget will not be carried forward to the next year, and budget deficits are not permitted.*** The brand management group must determine the best way to allocate the available funds and can use the marketing efficiency index (ratio of net income divided by marketing expenditures) to track performance.

OCM Group Income Statement

Item	Value (millions of dollars)	% of Manufacturer Sales
Manufacturer Sales	$355.3	100.0%
Promotional Allowance	$60.4	17.0%
Cost of Goods Sold	$122.6	34.5%
Gross Margin	$172.3	48.5%
Consumer & Trade Promotions	$7.0	2.0%
Advertising	$20.0	5.6%
Sales Force	$6.0	1.7%
Administrative	$9.8	2.7%
Total Market Expenses	$42.8	12.0%
Contribution After Marketing	$129.5	36.5%
Fixed Costs	$62.4	17.6%
Net Income	**$67.2**	**18.9%**

The Marketing Task

The task of the Allround brand management team is to maintain long-term profitability and market share in an increasingly competitive and changing environment. With great enthusiasm, the OCM Group sets out to do the job. Each member has separate assignments, but all are concerned with the performance of the Allround brand and any new brands that might be forthcoming. It will be necessary to use marketing research studies to assess Allround's situation. After completing its analysis of the situation, the group will then make decisions in the areas of product choice, distribution, promotion, and pricing. The group must keep in mind that all decisions are interrelated and must be considered in context. It will repeat this process over the coming 10 years as it attempts to establish AllStar Brands as the leader in both profitability and market share in OTC cold medication.

Sample Market Survey Questionnaire

This market survey questionnaire was designed to be given to consumers at the point of purchase (drugstore, grocery store, convenience store). The survey is given only to those who are currently suffering from cold, cough, or allergy symptoms.

Market Survey Questionnaire

Purchase Information

1. Did you purchase any cold medicine? Yes No

—If you answered "No" above, go to question 5—

2. Which brand of cold medicine did you purchase? ___________________
3. Which brand of cold medicine did you intend to buy? ___________________

Satisfaction

4. Overall, are you satisfied with the product you just purchased? Yes No
5. Which brands of cold medicine have you heard of?

Allround	Besthelp	Believe
Coldcure	Coughcure	Dripstop
Defogg	Effective	Extra
End	Other	

6. Which brands of cold medicine have you tried?

Allround	Besthelp	Believe
Coldcure	Coughcure	Dripstop
Defogg	Effective	Extra
End	Other	

7. Which brand of cold medicine do you purchase most frequently?

Allround	Besthelp	Believe
Coldcure	Coughcure	Dripstop
Defogg	Effective	Extra
End	Other	

(Continued on next page…)

(…Continued from previous page)

Decision Criteria

8. Please rank the following product attributes in order of importance in your decision to purchase cold medicine:
   ___ Product Effectiveness
   ___ Side Effects
   ___ Price
   ___ Form
   ___ Duration

Brand Perceptions / Trade-offs

9. Of the brands you mentioned having heard of (from question 5), how effective would you rate the ___________________ brand of cold medicine in relieving the following symptoms:

Symptom	**Effectiveness Rating** 1=Not at All Effective, 5=Extremely Effective				
Aches	1	2	3	4	5
Nasal Congestion	1	2	3	4	5
Chest Congestion	1	2	3	4	5
Runny Nose	1	2	3	4	5
Cough	1	2	3	4	5
Allergy	1	2	3	4	5

10. What is your perception of the price of ___________________ brand?
    1=Inexpensive, 5=Expensive
    1 2 3 4 5

Segment Information

11. Age: _______
12. Household size: _____
13. Children under 12: _____
14. Children Aged 12–20: _____
15. What illness are you (or your child) suffering from? Cold Cough Allergy


PharmaSim
Marketing
Management Process

PharmaSim is designed to be a challenging and realistic learning experience. One goal of the simulation is to provide you with the opportunity to apply your marketing knowledge in a dynamic environment over multiple years. It is in this setting—where customers, competitors, and the environment are constantly changing—that managers are challenged. Even with the constraints of limited decisions and time, you will find PharmaSim an excellent environment to experience these fluctuations.

A secondary goal of using PharmaSim is to gain decision-making experience in an ambiguous environment. This is very different than a multiple-choice exam where there is one right answer. In a simulation there is no single correct answer and all "answers" (i.e., decisions) are interrelated. Remember, there is no ultimate solution for PharmaSim. Many different strategies, if implemented well and followed consistently, can be profitable.

Another learning goal is to experience making decisions in a group environment where you and your teammates will likely have different opinions on what your firm should do. If this is your first time experiencing a group decision-making process, you will likely find it challenging. That is part of the learning experience. However, be assured most marketing managers grapple with this environment daily.

This section of the manual is designed to help you think through your decision-making process as a team. You may be using a textbook that also offers some advice, and your instructor will have important insights to share as well. However, providing a simple framework for decision-making will help you think through the process.

Let's start with some typical questions that can help you frame your group's discussion. The questions below are grouped into three categories. We'll address what these categories mean in marketing terms soon enough, but spend a few moments now thinking about these questions. Discussing these questions within your group will provide the strategic direction for your firm.

Where Are We Now?

- *Who are our customers? What do they value?*
- *Who are our competitors? What are their strategies?*
- *What are our goals and capabilities?*

Where Do We Want to Be?

- *What value should we provide?*
- *To whom?*
- *Can we do it better than the competition?*

How Should We Get There?

- *How should value be created for the customer?*
- *From what products? Through what channels?*
- *With what communication? At what price?*

You will want to discuss these questions in the first few periods of the simulation. Coming to a common understanding in these areas will be important for your group decision-making process.

If your group can agree on this analysis, then you will have a common perspective for decision-making. You will also want to review this periodically, as customers, competition, and your experience will change with time.

Let's translate these questions into terms that are commonly used in marketing management. So, the question, "Where are we now?" becomes situation analysis. The question, "Where do we want to be?" becomes your team's marketing strategy. And the question, "How should we get there?" becomes your team's marketing mix decisions. In effect, the situation analysis drives your marketing strategy, and your marketing strategy drives your marketing mix decisions. This process is graphically displayed below.

SITUATION ANALYSIS	*5 C's: Context, Competitors, Customers, Collaborators, and Company (internal and external analysis)*
MARKETING STRATEGY	*STP: Segmentation, Targeting, and Positioning (determine the value proposition)*
MARKETING MIX	*4 P's: Product, Place, Price, Promotion (determine how to deliver value)*

Many of us tend to jump right into the marketing mix decisions without first going through the situation analysis and marketing strategy stages. This is not surprising. The marketing mix decisions are the hard and fast deadlines and decisions that we must make on a daily basis, whereas the first two stages are more preparatory in nature. However, without the framework of situation analysis and marketing strategy in place, we make decisions in a vacuum, leading to reactive rather than proactive choices. It is essential that your firm does your preparatory work first. So, let's spend a little time defining situation analysis and marketing strategy before diving into the marketing mix decisions.

Situation Analysis

Situation Analysis

5 C's: Context, Competitors, Customers, Collaborators, and Company (internal and external analysis)

When marketers discuss situation analysis, they often use the term "5 C's." The 5 C's refers to completing an internal and external analysis of the circumstances of the firm or business unit—specifically, the context (environment), competition (current and potential), customers (needs, buying process, etc.), collaborators (distributors, suppliers, alliances), and company (current products, image, resources, goals, etc.). The 5 C's analysis is where it all begins. Without a good understanding of the 5 C's, it is impossible to craft a successful strategy or make informed marketing mix decisions. Let's discuss each of the 5 C's in more detail. For a more complete discussion, please refer to your marketing textbook.

Context

The business environment (context) can have an enormous impact on marketing programs. Health concerns, waste disposal, energy shortages, and changes in commodities prices are some examples of environmental factors that have altered industries and marketing programs. A good example relating to cold medicine was the 2008 announcement from the government regarding the use of OTC cough and cold products for young children. An excerpt from the transcript is provided below.

> *We strongly recommend that over-the-counter cough and cold products should not be used in infants and young children under two years of age because serious and potentially life-threatening side effects can occur from use of these products.*

Obviously, an announcement such as this will have a significant impact on demand for families with young children. But it also may have an impact on other people's purchasing and use decisions. Think about how a manager might respond to this news.

In PharmaSim there are multiple environmental factors that your firm should monitor. The demand for cold medicine is very much dependent on the number of people reporting various illnesses, as well as seasonal influences (e.g., increased occurrence of influenza or high pollen count). There may be some underlying changes in health concerns that may be monitored by tracking physician recommendations or the purchasing decisions of consumers. You should also consider the effects of inflation on costs and pricing.

Competitors

Understanding the dynamics of competition is critical to the success of any marketing plan. Are you able to discern your competitors' strategies? How do you expect them to react to your actions? By reviewing and tracking your competitors' marketing mix decisions, performance, and resources, one can develop an understanding of their competitive intent.

In addition to helping you understand your competitors, analyzing competitive marketing data can also often help you gain insight into what may be a more effective use of marketing resources. For instance, you might be tracking advertising expenditures and messages and notice that your competitor has a new program in place. Furthermore, that competitor also had a jump in market share. Perhaps the change in market share was caused, in part, by the change in the advertising decisions. Now your team can discuss the pros and cons of potentially making a similar change and whether that is appropriate for your situation and strategy.

The most difficult facet of the dynamics of competition is anticipating the retaliatory moves of your competitors and deciding whether they might neutralize your marketing programs. One should consider the effects of changes in a competitor's price, sales force, promotion, or advertising approach on the success of your strategy. Before you make a decision that is likely to cause a retaliatory reaction, think through whether it is in your long-term best interest to begin this process. Sometimes the short-term gain is more than offset by a long-term chain of negative events that is difficult to reverse.

Customers

The customer dimension of the 5 C's can be broadly partitioned into two areas for analysis. The first is the nature of demand. This includes understanding what benefits customers are seeking, how they learn about products, what their motivation is for purchasing, where they buy the product, what they consider when choosing a product, and the like. The study of these types of issues is often called consumer behavior. The second analysis is the extent of demand. This includes market size and growth, purchase quantities and usage rates, etc. A more in-depth description of these two areas is provided below.

Understanding the nature of demand involves answering the question, "How do consumers make their purchasing decisions?" To understand this process, one should describe the purchasing behaviors and attitudes of the consumer. You may use your own experiences to some degree, but do not impose your personal purchasing preferences on your target consumers. Try to find out what makes their decisions different from yours. Marketing research can be of great assistance in analyzing these behavioral patterns. One framework that you may find useful is the five-stage model of the buying process as shown below.

Stage	Description
Problem Recognition	Someone in my household has a cough, cold, or allergy. I'm out of medicine. I've seen advertisements and/or promotions.
Information Search	I've used the product before. A doctor or pharmacist recommended one. I've seen an advertisement. I've looked in the store.
Evaluation of Alternatives	What brands offer good relief of my symptoms? What else is important to me? What is the price compared to the benefit?
Purchase Decision	What do I intend to purchase? What happens at the point of purchase? Special promotions? Location on shelf? Actual retail price?
Post-Purchase Behavior	Did it relieve my symptoms? Do I continue to use it the next time I have a cold? Was I satisfied with the product?

In the above model the final stage is post-purchase behavior. This is especially important with a consumer packaged-good because satisfaction and repurchase behavior are major drivers of future sales. Satisfaction is particularly important for customers who tend to repurchase frequently—for example, allergy sufferers during the spring.

Let's consider the drivers of satisfaction and repurchase in more detail. Consumers will typically have some expectations about product performance based on advertising, word-of-mouth, etc. They will also likely have some expectation of the value received for that particular set of perceived benefits. How well the product actually delivers those benefits at the actual price paid relative to the perceived value will be a driver of customer satisfaction and, ultimately, of repeat purchase. It may be helpful to think of this as depicted in the graphic below.

Drivers of Satisfaction and Repurchase in PharmaSim

Once you have a general idea of how consumers make decisions, try to group consumers with similar decision-making paradigms, seeing whether the market can be segmented based on what consumers want and how they buy. One reason for doing this is to target your marketing resources at consumers with common needs and purchasing patterns. In most cases this will lead to a more efficient use of your limited resources.

Some useful variables to consider for segmentation include age, stage in the family life cycle, geographic location, and product usage. Attitude-based segmentation and consumer psychographics are other, perhaps more insightful, segmentation methods. In PharmaSim one has the ability to segment based on illness (product usage) and demographics (age and family life cycle). For job levels higher than Brand Assistant, the Survey reports may be viewed based on any segmentation scheme. When viewing these reports, one should ask whether the information is significantly different using different segmentation schemes. Do all segments view your product in the same way? If not, why? Again, this should provide more insight into the purchasing process of targeted consumers.

Finally, keep track of how the nature of demand changes over time. Consumers do not necessarily draw the same conclusion every time they make a purchase decision. Their needs may change, their information level may change, and the environment may change. It is important to anticipate how these dynamics evolve over time and how this may affect marketing decisions.

The **extent of demand** is the current and future size of the market in units and dollars. This information is important to assess what market opportunities offer the greatest potential. How one measures or assesses potential is a fundamental question. Some primary measures would include market size in units and dollars, market growth rates, and profit potential. Often one will have to look at several dimensions and consider them in tandem. For example, a smaller, high-growth market may offer more long-term advantages than a larger, stagnant market.

When evaluating extent of demand, there are three additional issues to consider, especially in PharmaSim: market penetration (which is often related to stage in the product life cycle), usage rates, and segments.

Market penetration compares actual sales with potential sales. For example, it is unlikely that 100% of the people suffering from colds are buying cold medicine. Some people may choose to just suffer through the symptoms or use home remedies instead of cold medicine. Therefore, the actual percent of people suffering from colds who choose to use cold medicine might be only 60%. This value of 60% would be considered current market penetration. If market penetration increased from 60% to 80%, actual sales would climb significantly (33%). If the current sales are 511 million units, increasing market penetration to 80% would increase sales to 681 million units.

Average usage also can have a significant impact on your extent of demand analysis. If the average usage in the current market is 2.7 (i.e., each person who buys cold medicine uses an average of 2.7 bottles per year) what happens if usage increases to 3.0? Sales would climb 11%.

Therefore, one should go beyond the basics of unit sales to consider market penetration and usage when estimating market demand.

Finally, you may want to analyze markets on both an aggregate basis (i.e., the total market for OTC cold medications) as well as a segmented basis (e.g., the market for children's cold medicine). Often the values for the total market are readily available, but segmented estimates are more difficult to calculate. The Manufacturer Sales option on the Market menu provides an estimate of cold, cough, allergy, and nasal spray sales in manufacturer dollars. However, you may prefer segmentation based on usage or demographics. Also, remember that in the Manufacturer Sales report these “segments” are defined by what label the manufacturer puts on the brand rather than consumers’ actual use. For example, you may have a brand labeled as “cold” which is often used for allergies.

Considering all the factors discussed above, how might unit sales in a particular segment, such as older cold sufferers, be estimated? In the simulation interface, go to the Consumer Survey menu, and select the Brand Purchased page. If it is available to you, change the illness segment to “cold” and the demographic segments to “retired.” Identify the percentage of the total unit sales this segment represents. Select one of the brands to see the total unit sales, and multiply by the percent. For example, suppose the segment is 8.7% of unit sales and total unit sales is 511 million, then sales to the segment would be 44 million units per year (0.087 × 511 = 44).

Collaborators

The distribution structure of an industry plays an important role in marketing decisions. In some industries manufacturers sell directly to the consumer, whereas in other industries there are multiple levels of distribution (brokers, wholesalers, retailers, etc.). It is important to understand the roles, strengths, and needs of each channel member. Typically, as more intermediaries come between the manufacturer and the consumer, the amount of control the manufacturer has in the marketplace decreases. In addition, the manufacturer may not receive important market feedback directly from the consumer, thus underscoring the need for marketing research.

It is important to understand how to motivate the channel in terms of discounts, allowances, support, and turnover, all of which play a role in whether or not to stock your brand as well as a brand’s visual placement on retail shelves.

Much of the information regarding channel policies (markup, use of wholesalers, needs, etc.) is found in the case at the beginning of this manual. Remember to consider where your target customers are likely to purchase your medication. Finally, think about the role of the sales force in motivating the channel to carry your product.

Another group of people who influence your customers’ decisions are doctors and pharmacists. They are more concerned with using the proper medication for the symptoms and situation and are less likely to be swayed by advertising. However, these influencers still need to be aware of a brand to recommend it, and if two brands offer similar relief, they may be more likely to recommend one brand over another if they are more familiar with it. So, advertising and sales force—especially the detailers (salespeople whose primary task is to inform clients about new products)—do influence doctors and pharmacists.

In summary, think about the buying behavior of your collaborators, just as you do with your customers. Of course, collaborators' motivations are quite different from those of the end user, but they are equally important to understand.

Company

Now we arrive at the final C—the company. Most people begin situation analysis with the company because internal functions are more easily known than external issues. However, we have purposely left the company last because situation analysis, especially from a marketing perspective, should have an external focus.

For company analysis, consider your current and future products and brands. Are they successful? Are they growing? Are margins good? Are they unique? Do they meet customer needs? Related to the product, think about your overall position and image in the marketplace with both customers and collaborators. Are you well known? Are you able to charge a premium price? Do you have strength in your distribution channels?

You'll also want to think about the resources available to your brands. In PharmaSim this is your budget. Your budget is based on your overall performance on sales and profitability. Is your budget more or less than your competitors? Are you spending your budget wisely?

Finally, consider your actual team in the simulation. Do you work together well? Do you share a common vision for your firm and brands? How will you analyze information and come to decisions as a group? Is there trust within the team? Often this aspect of the simulation is overlooked, but it is typically one of the more important determinants of success. This also mirrors the real world. An effective management team and workforce is one of your most important assets.

SWOT Analysis

It is fairly common to group all the 5 C's information into four categories: Strengths, Weaknesses, Opportunities, and Threats (SWOT). Strengths and weaknesses are internal (company) factors while opportunities and threats are external factors. A brief description of each is provided below.

Category	Description
STRENGTHS	*Superior resources and/or skills that can be drawn on to exploit opportunities and diminish threats.*
WEAKNESSES	*Deficiencies in resources and/or skills that inhibit the firm's ability to capture opportunities or that must be overcome to avoid failure or underperformance.*
OPPORTUNITIES	*Environmental (consumer, competitors, channels, economy, technology, deregulation, etc.) states of being or trends with positive consequences. They provide a potential new basis for competitive advantage and provide a possibility of improved performance if pursued.*
THREATS	*Environmental states of being or trends with negative consequences. They may impede the implementation of strategy, increase the risks of strategy, increase the resources required, or reduce performance expectations.*

Marketing Strategy

Marketing Strategy

STP: Segmentation, Targeting, and Positioning (determine the value proposition)

Defining your marketing strategy consists of choosing a segmentation approach, target markets, and positioning objective. This is known as segmentation, targeting, and positioning—or STP for short. STP provides the overall strategic direction for your company—who you will serve, how you will serve them, and on what basis you intend to compete. As an example, if you are selling automobiles, a simple STP statement might be, "We intend to serve the high-income market in Canada through high-performance, all-wheel drive vehicles."

Your marketing strategy should be based on your 5 C's analysis you did in phase one (or a variation of that such as SWOT analysis). It is important to build upon previous analysis as you proceed through each phase. Failing to do so is easy; we often like to jump right into decisions or strategy without referencing the underlying assumptions. However, if we fail to properly build on the 5 C's analysis, our strategy will have flaws, and we will only have ourselves to blame. Statements such as, "The strategy is perfect except for the possible exception of X, but let's put that aside for now," reveal potential flaws that need to be addressed. Is "X" something that is essential to the success of the strategy? If so, don't ignore it or "X" will haunt you as you move forward. Address it up front. Make sure you have analyzed it, and if it still makes sense to proceed, do so knowing that you have done everything you can to account for the impact of "X."

Often, one of Michael Porter's three generic strategies will be the underpinning of your marketing strategy. They provide a good starting point for discussing strategy and formulating a marketing plan. They are

- **Overall Cost Leadership.** Here, the goal of the business is to achieve the lowest possible system cost (production, distribution, supply chain). Generally, a business that pursues this strategy will have the lowest prices and attempt to have the highest market share. This strategy works best for markets where price is the primary consideration in the purchase process. However, it is dependent on your firm being able to achieve the lowest cost position in the industry. If the industry is prone to technological advances that impact cost, it is difficult to achieve a sustainable advantage.
- **Differentiation.** For a differentiation strategy, the goal for the business is to establish superior performance in one or more areas that are of importance to the customer and typically charge a higher price for that superior performance. This strategy is effective in industries where price is not the primary driver and customers are willing to pay more for a product/service that provides superior benefits.

- **Focus.** Here the goal of the business is to leverage the customer relationship. By focusing on a narrower range of consumer segments, a business can tailor products and services to best meet customer needs. This might be providing low costs or differentiation; whichever is appropriate for the target segment selected.

After your team has agreed on an overall strategy for your business, the next step is creating a marketing plan. You may be asked by your professor to provide this for PharmaSim after a period or two. There are many ways to write a marketing plan, so make sure to follow the directions provided by your instructor. The marketing plan assignment that may be available on your PharmaSim course website essentially asks you to go through the 5 C's and STP analysis and then put your strategy into writing. Most marketing plans will also include financial projections (sales forecasts, expense forecasts, product contribution) and variables that can be monitored to track the progress against the plan.

Monitoring Results Against Plan

What are the marketing metrics you will use in PharmaSim to track your progress? Net income and market share are good overall benchmarks of performance against other players. However, to determine if your marketing plan is working, you will need to use intermediate measures such as awareness, shelf space, recommendations, etc.

One reason to track intermediate measures is to help distinguish between a symptom and a root cause of a problem. A symptom is an obvious result of a specific problem. For example, you may see that sales or profits are down. You have identified a symptom. Now you need to determine the underlying problem that caused this symptom. Keep asking "why" until you find the root cause of the situation. The following is a fictional conversation between teammates illustrating the process of finding the underlying problem given a symptom.

In many cases, more than one problem can cause a general symptom like "profits are down." In the example above, it might also be that total market sales are down, which would only compound the problem of a competitor's product launch.

Marketing Mix

Marketing Mix | *4 P's: Product, Place, Price, Promotion (determine how to deliver value)*

The marketing mix is the implementation of your marketing strategy. Often these marketing mix variables are referred to as the 4 P's of marketing—product, place (distribution), price, and promotion. In PharmaSim the 4 P's represent all of the decisions you make each simulated year. This consists of multiple decisions in each area. For example, the primary pricing decision is the MSRP, but there are many other factors to consider, such as volume discounts, promotional allowances, coupons, etc., which ultimately influence the final price paid by the consumer. Let's look at each of the 4 P's in a little more detail.

Product

Recall the product development timelines discussed in the case. Every two simulated years, your firm will have the option to change the existing product or introduce a new product through reformulation, line extension, or new product launch. These are important decision points for your firm. In light of your strategy, your team must decide which product development decision is the best option. In addition, your team must decide the best way to implement its product decisions (for example, how best to minimize cannibalization with a line extension).

Allstar OCM Product Development Timeline

Start	1	2	3	4	5	6	7	8	9	10
	R	R	L	L	N	N	R	R		

R = Allround Reformulation Decision
L = Line Extension Decision
N = New Product Introduction Decision
= Progress from Year 0 to Year 10

There are several tools that you may want to use to supplement your analysis. Understanding customer needs is a good place to start—here, the Decision Criteria report in the Consumer Survey and, if available, the Conjoint Analysis are both helpful tools. Knowing the competitors' products and their success is also important. Competitive formulations are provided in the Brand Formulations report. Also remember to take into consideration the potential margin which would include the likely selling price for, and cost structure of, the product.

Place (Distribution)

Understanding the needs of your distribution channels is essential to any well-thought-out marketing plan. For example, when trying to gain prime shelf space in grocery stores, it is necessary to find out what is most important to those retail outlets. Refer to the case to find out what factors influence the allocation of shelf space among brands. Typically, retailers will consider stock turnover rates (brand sales volume), profitability (unit margin), promotional allowances, sales support (sales force), and trade promotion (e.g., cooperative advertising). If shelf space for your brand is low in the target channels, sales will suffer. Because brand decisions for cold medicines are often made in the store, brands that are at eye level or have special point-of-purchase displays usually have an advantage over those brands found on the bottom shelf.

In general, when considering distribution in PharmaSim, remember:

- Successful brands will gain prime shelf space.
- Retailers have different needs/considerations.
- Shelf space is essential to reach non-loyal buyers who make purchase decisions in store.
- Shelf space in PharmaSim includes both breadth (% stocking) and depth (in-store attractiveness).

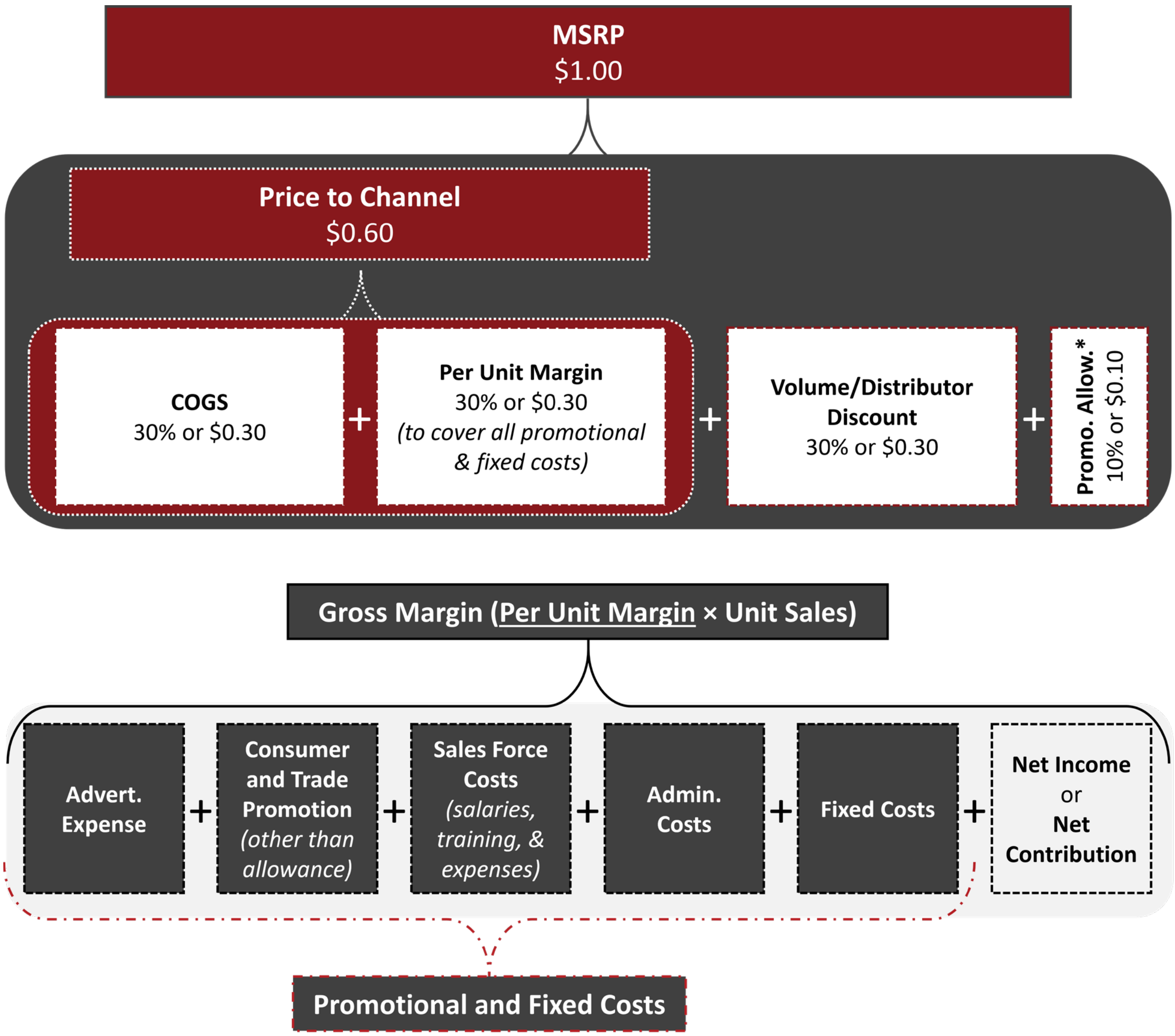
Pricing

When deciding on a price, many external as well as internal factors must be considered. Your price should reflect the strategy you have chosen, while taking into consideration competitors' pricing and the importance your target customers place on price. The most important price decision is the manufacturer's suggested retail price (MSRP). However, in setting that, remember that there are many more dimensions (and decisions) that drive the ultimate price that the consumer pays. Before those factors are incorporated, it is imperative that you review and understand the "marketing arithmetic" of prices.

- **Manufacturer's Suggested Retail Price (MSRP):** The MSRP is a "reference price" used by the manufacturer and the channel alike to set expectations in the mind of the consumer. It is the value the manufacturer believes the product to have. The MSRP is also the starting point for calculating all discounts in PharmaSim. The volume discount is the percent off MSRP used to calculate the discounted price to the channel. Promotional allowance is then calculated as a percent of the discounted price.
- **Volume Discount:** This discount is a percentage (15%–45%) of the MSRP, which is subtracted from the MSRP to determine the selling price to the retailer. It depends on the volume of product a retailer purchases (higher discounts for higher volumes). The retailer then sets the actual selling price to the customer. Out of the difference between the actual retail price and the price paid to the manufacturer, the retailer must pay all of its promotional and fixed costs (and hopefully have a small profit left over).

- **Promotional Allowance:** Promotional allowances, sometimes called slotting allowances, are additional discounts offered to the retailer beyond the volume discounts, with the goal of obtaining shelf space for a product. They are particularly important when trying to establish distribution channels for new products. In PharmaSim promotional allowances range between 10%–20%. You can see what allowances your competitors are offering by looking at the Promotion report, which provides all of the major promotional decisions by brand.
- **Price to the Channel:** This is the actual revenue that your firm receives for a sale of your product. The price to the channel is the MSRP less volume discounts. The channel will then mark the product up from this price before reselling it (in the case of a wholesaler) or selling it to the consumer (in the case of the retailer). This markup plus promotional allowances must cover their costs of selling the product.
- **Cost of Goods Sold:** Cost of Goods Sold is the variable cost of producing each unit. This amount includes all materials, labor, and production costs for the product.
- **Per Unit Margin:** This is the manufacturer's margin on each product. Like the retailer's margin, the manufacturer must pay all of its remaining costs (advertising, administrative costs, etc.) from this amount. A company's gross margin is the aggregate of all the per unit margins (each per unit margin multiplied by units sold).

The chart shown below breaks down the elements discussed above for a product whose MSRP is $1.00. These amounts shown are for illustrative purposes only. It is helpful to do an analysis similar to this for your products as you determine their MSRPs.



** The allowance is shown here as a percent of MSRP. This is not the same as the promotional allowance entered in the PharmaSim marketing decision, which is a percent of the discounted price.*

Companies are often tempted to cut prices in response to a downturn in sales. Why is this? First, customers normally prefer a lower price; thus, there is always the perceived “fix” that lowering your price will improve sales. It is also an easy change in the marketing mix to implement. However, there are many risks with using a lower price to spur sales. Consider the impact and potential responses by competitors if Allround, the leading brand, initiates a price cut. Philip Kotler and Kevin Keller cite four possible traps of price-cutting: (1) customers assume quality is low; (2) a low price buys market share but not loyalty because the same customers will shift to any lower-price firm; (3) higher-priced competitors match the lower prices but have longer staying power; and (4) a price war may be triggered.

Promotion

Advertising is important in establishing brand awareness and in shaping consumers' perceptions of products. In managing Allround, you will need to decide how much to spend on advertising and what the message should be for your target group(s).

When targeting specific demographic or product user groups, it is important to have a marketing plan that is consistent with the needs of the target group. This is especially important for line extensions and new product introductions because these are more likely to be marketed to a specific group. The advertising message should appeal to the target group and promote the benefits that are most important to them. When comparing with another brand, target the current leader in that segment. This will create an advertising campaign that communicates why your brand is superior to the competing brand. The promotional strategy should be consistent with the overall brand strategy.

Promotional levers available in PharmaSim can be broadly divided into trade promotion and consumer promotion. The purpose of *trade promotion* is to motivate your channel partners to (1) carry your brand and (2) provide your brand with good shelf space. In PharmaSim trade promotion includes promotional allowances and co-op advertising. As discussed previously regarding pricing, promotional allowances are an additional discount to target channels. Co-op advertising provides incentives to the channel to feature a specific brand in their own advertising.

The purpose of *consumer promotion* is to motivate the consumer directly. Consumer promotion in PharmaSim includes coupons, trial-size packages, and point-of-purchase displays. A coupon offers a discount off the retail price when redeemed at the time of purchase. Trial-size medication comes in smaller packages and is provided directly to consumers at a lower price or for free. Point-of-purchase vehicles are special displays, such as retail sale racks, on-shelf advertisements, or end-of-aisle displays that promote a brand to the consumer in the retail store.

Push/Pull Implementation Strategies

PharmaSim is an excellent environment to test push and pull strategies. You will likely use both push and pull elements, but you may decide that for your product category and circumstances, one strategy makes more sense for you to emphasize.

To implement a push strategy, you will probably focus on trade promotions as the primary elements of your marketing mix. This would include higher-than-average promotional allowances and volume discounts, more emphasis on sales force support (especially merchandisers and your direct sales force), and some use of co-op advertising and point-of-purchase displays. All these elements will help increase your shelf space and make your product more appealing to consumers at the point of purchase.

For a pull strategy, you will spend more of your budget on consumer promotion and advertising. The idea is to build your brand strength through greater awareness and knowledge of the benefits of using your brand. Thus, when consumers purchase a product, they will look for your brand. In a pull strategy, it is likely that more of your budget will go toward advertising, trial size, coupons, and detailers. Point-of-purchase displays and co-op advertising can also help to build brand equity.

It is important to note that these two strategies are not mutually exclusive. A strong brand will be more appealing to channel partners. They will want to carry your brand to help bring customers into their retail outlet. Also, strong brand equity can also work to your advantage for customers who are making their product choice at the point of purchase.

How Best to Allocate a Limited Budget Across Brands

In the example below, a division has four brands on the market. Sales, brand contribution, current market share, market share of the largest competitor, and market growth are listed for each brand. The division has a marketing budget of $20 million. Based on this information, how would you allocate the division’s budget?

Example Data from a Division with Four Brands on the Market

	Last Yr. Budget	Sales	Contribution	Market Share	Competitor Share	Market Growth	New Budget
Brand A	$10.0	$75.2	$15.6	18.3%	16.5%	2.1%	?
Brand B	$0.5	$12.1	$1.1	2.0%	22.3%	4.5%	?
Brand C	$8.0	$172.5	$3.7	27.3%	14.9%	16.2%	?
Brand D	$1.5	$45.8	$4.8	6.3%	12.5%	18.5%	?
Total	**$20.0**	**$305.6**	**$25.2**	**n/a**	**n/a**	**n/a**	**$20.0**

The information presented here is limited, but you probably have some initial thoughts on an approach you might take. You might choose to keep the budget the same as last period. Budgets are often based on last period’s budget. You also might want to consider some other options, such as sales or contribution. Brands that have the highest sales or contribution will receive the highest budget. Some straightforward methods of allocating the budget can lead to surprising range of values, as shown in the following table.

Various Methods of Allocating a $20 Million Budget Based on the Previous Table’s Data

Basis for Allocation	Brand A	Brand B	Brand C	Brand D
Last Period’s Budget	$10.0	$0.5	$8.0	$1.5
Sales	$4.9	$0.8	$11.3	$3.0
Contribution	$12.4	$0.9	$2.9	$3.8
Return on Expenditures	$4.2	$6.0	$1.2	$8.6
Market Size	$3.5	$5.1	$5.3	$6.1
Market Growth	$1.0	$2.2	$7.8	$9.0
Market Share	$6.8	$0.7	$10.1	$2.3
Relative Market Share (ratio of your share to largest competitor’s)	$6.3	$0.5	$10.4	$2.9
Range	**$1.0–$12.4**	**$0.5–$6.0**	**$1.2–$11.3**	**$1.5–$9.0**

Example calculation for budget allocation based on sales:
Brand A represents 24.6% of the division's sales (75.2 ÷ 305.6). If the budget were allocated based on sales, the brand would receive 24.6% of $20 million, or $4.9 million.

Each one of the example budget allocation approaches has some merit. It is important to note the wide range of outcomes possible based on simple allocation approaches. It is the job of the division manager to sort out priorities, potential, and risks to arrive at an allocation decision. This is not an easy process, but it is one of the essential parts of marketing management. Make use of the tools and market research available in PharmaSim to help you sort out options and priorities. There is no one right answer, only a good answer based on sound analysis. Accepting that level of ambiguity while making a decision takes courage and is a big part of being a manager. Use PharmaSim as an opportunity to become more comfortable in that role.

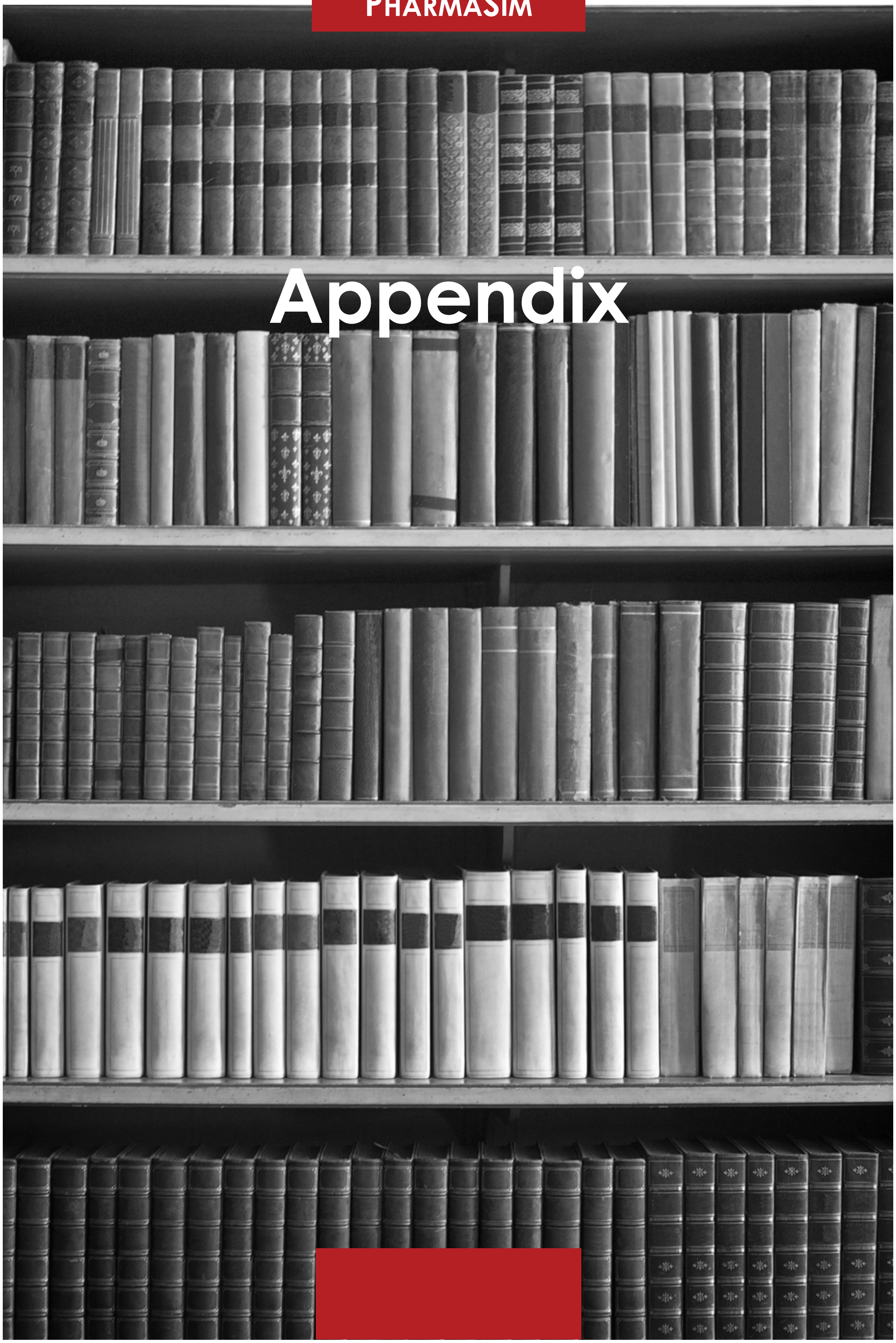
Conclusion

PharmaSim rewards those players who perform a thorough market and competitive analysis and develop marketing plans that are

- Customer-focused
- Reasonable in both the short- and long-term
- Consistent and integrated
- Financially sound
- Responsive to competitive strategies

If you follow these guidelines, your firm will likely prosper. Enjoy your tenure as a member of the Allstar Brands management team.

PharmaSim



Appendix

Using PharmaSim in a Group

If you are using PharmaSim in a classroom setting, you may be asked by your instructor to work in groups. Each group will pool its skills and resources to manage collectively as a brand manager, assistant brand manager, or brand assistant for over-the-counter cold medicines. Thus, your group will make specific decisions depending on the management position you are assigned.

One of the most frequent complaints with group work is the amount of time wasted in trying to get organized and make decisions. There are also complaints that members are not "pulling their weight." To reduce these problems, your group should answer the following questions in their first meeting:

1. When, where, and how often should we meet?
2. How should we efficiently and effectively conduct our meetings?
3. Should we choose a general manager?
4. What authority should this person have?
5. How should we divide the marketing tasks among group members?
6. How do we resolve marketing issues and make final decisions?
7. How do we encourage and maintain a high quality of contribution?
8. How will we deal with personal conflicts among group members?

Over time the group should assess whether it is functioning efficiently and effectively. As your product portfolio changes, new competitive situations arise, and more information becomes available, the group may have to reorganize to best meet the current needs of the business.

Team Leader

When playing PharmaSim as a team, one member will be designated as "team leader." The team leader is ultimately responsible for advancing the simulation after making sure the decisions are entered correctly and within budget. The team leader also may "lock" decisions to block other team members from changing them before the simulation is advanced to the next period. Thus, it is important that a team chooses a capable leader that is accessible to all team members and the instructor. Additionally, if your instructor has allowed the replay or restart options, your team leader is the person who will implement these options.

The replay option erases any decisions you have made in the current period and moves you back one period. You can only replay to the immediately preceding period, so you can't, for example, replay from Year 5 to Year 3, but you may be able to replay from Year 5 to Year 4 and then from Year 4 to Year 3. Restart will erase everything you've done in the simulation for all periods, placing you back at the beginning. Note that replaying and restarting is different than using the period selector to view previous years. The period selector is for viewing your history, while the replay and restart options are for changing previous periods' decisions.

Market Segment Descriptions

In the over-the-counter cold and allergy market, segments are typically based on how products are labeled. This segmentation approach, however, fails to account for cross-usage of products. For example, a cold medicine might be used to relieve allergy symptoms. In PharmaSim the customer survey allows you to view the market using two additional segmentation options: illness and demographics. This section describes each of the segments in the simulation.

Product Segments

The trade segments the market based on product labels. This is the segmentation approach used on the Manufacturer Sales report for calculating market shares in each category. View the Brand Formulations report to see how each brand is labeled.

Cold

Cold products are designed to relieve one or more cold symptoms. They tend to have a decongestant for nasal congestion, with an antihistamine for runny nose. Some will have an analgesic to relieve aches and fever, and some might add a cough suppressant or expectorant to relieve both cough and cold symptoms. All products labeled for colds, except nasal sprays, are included in this category on the report. You could broaden the cold category by including the sprays or narrow it by breaking out the multi-symptom products (such as Allround) and children's cold medicines.

Cough

Cough medicines contain a cough suppressant or an expectorant to relieve cough symptoms. Cough suppressants work by inhibiting the cough reflex. Expectorants help improve the effectiveness of a cough by loosening phlegm in the throat. All brands labeled as cough medicine are included in this category.

Allergy

Allergy products contain an antihistamine to relieve sneezing, itchy eyes, and runny nose. Although some cold medicines may contain an antihistamine, only products labeled for allergy use are included in this category.

Nasal Spray

This category is based on the delivery method, rather than the symptoms it is intended to relieve. Nasal sprays contain a decongestant to reduce swelling in the nose from increased production of fluid and mucous. They provide quick relief compared to a capsule decongestant but should not be used for extended periods of time.

Illness Segments

Segmenting consumers based on illness, or how they want to use the product, is useful for identifying groups of customers who have similar needs and shopping habits. When the survey data is collected, users are asked what illness they are suffering from, and results can be viewed for each category or combination of categories.

Cold

Colds have a wide range of symptoms, including sore throat, cough, runny nose, sneezing, and nasal congestion. A slight fever and some aching or tiredness are also possible. Cold sufferers use a wide range of products for relief, including products not labeled for colds. They may take medication for specific symptoms—for example, an antihistamine for runny nose or a pain reliever for aches—or they may take a cold medicine that relieves a full range of symptoms. Users seek cold products in capsule, liquid, or spray form, depending on the symptoms and how they are used. For example, capsules are easily carried around and are most convenient for use away from home, while liquids might be fine for home use. Adult formulas are not recommended for children, but some parents may give them a reduced dose of a liquid cold medicine if a children's product is not available. Some cold suffers may use home remedies, while others may just put up with the symptoms until they get over the cold.

Cough

A cough can occur with a cold or other infectious disease, or it may be in response to environmental conditions. Sufferers may take a cough medicine by itself or along with a cold product. Some may prefer a multi-symptom product to relieve cough and cold symptoms. For a dry cough, users may prefer a cough suppressant. If a cough is accompanied by a buildup of mucous, users may prefer an expectorant to help relieve the congestion. Expectorants may also be preferable for children for a more productive cough and reduced risk of side effects.

Allergy

Allergies are caused by a wide range of environmental factors, including foods, pets, and pollens. Symptoms include sneezing, runny nose, and itchy, watery eyes. Symptoms may also include congestion. Most sufferers look for an antihistamine, though it may cause drowsiness, which is an issue for use when working or driving. There may be some cross-usage of cold medicines, especially if allergy medicines are priced high and lower-priced cold medicines with similar formulas are available.

Demographic Segments

Demographic characteristics are useful for identifying potential users of your product. In PharmaSim the demographic segments are based on family life cycle and age. Consumers in each of the segments will tend to be looking for a different mix of OTC cold and allergy medicines.

Young Singles

Consumers in this segment are young adults living on their own and without families to care for. About half the purchases made by young singles are to help them get through the day at work, when convenience and minimizing side effects are important. When using a product at home, they usually just want something to relieve their symptoms and help them rest. Young singles connect with friends and family through social media to get advice about treating illnesses.

Young Family

Young families are made up of adults with small children, where most are younger than 12 years of age. These consumers buy products for a variety of users: children, working adults, and adults staying home to recover from illness. Most parents prefer liquid medicines with appropriate dosage for their children and are concerned about side effects. Convenience and effectiveness may be more important for adult users. Parents of young children seek guidance about medicine from other parents they know and trusted websites.

Mature Family

Most of the children in mature families are 12 years of age or older. There is a smaller need for children's products compared to the Young Family segment, since older children will be using adult formulas. For working adults, convenience and minimizing side effects will be important. This category tends to have many at-home users, since older children will likely stay home from school if they are sick. Parents of older children go to health-related websites for information on how to relieve cold and allergy symptoms.

Empty Nester

The empty nest is made up of older adults with no children at home. Usage is split between products for use at work, and products for getting rest at home. For work, convenience and minimal side effects are important. On the other hand, taking a product at home that makes the user drowsy can be a plus. Empty nesters search for information online to learn about new medicines they've heard about.

Retired

Consumers in this segment are older, retired adults. Retired users have a higher preference for liquid medicines compared to other adults and price can be an important factor in their decision. They tend to be brand loyal in their purchase of OTC cold medicines. When they have health-related questions, retirees will often start their search for answers on the internet.

Distribution Channel Descriptions

Getting your product to where your target customers shop is important to the success of your brand in PharmaSim. To allocate marketing resources efficiently, you will need to understand your collaborators in the channel.

Independent Drug Stores

These retail stores consist of small pharmacies selling prescription and OTC medicines, as well as other household items. They tend to order from the manufacturer in smaller volumes or buy product through a wholesaler. Markups are high. Co-op advertising can be important for independent drug stores because their marketing budgets are limited.

Chain Drug Stores

Chain drug stores are pharmacies that have a single owner with some central management and a shared distribution system. Smaller chains buy through a wholesaler or in small volumes from the manufacturer. Most larger chains will buy direct. Sales force support and promotion allowances tend to be important for these retailers. Markups are in the mid-range for retailers.

Grocery Stores

Grocery stores primarily sell food to consumers but may also sell medicine and household items. Some smaller grocery stores will buy through wholesalers, but most will buy direct in medium to high volumes. Like chain drug stores, sales force support and promotion allowances are important factors in their decision to carry a brand. Markups are in the mid-range for retailers.

Convenience Store

These stores are small retailers that stock a range of items; they have long hours and locations that are convenient to their customers. Shelf space is limited, so turnover is important when deciding on the brands to carry. Some stores may buy direct, but most will buy through a wholesaler. Markups are high.

Mass Merchandisers

Mass merchandisers are large retail outlets that generally offer discount prices on items and have a high level of sales. Most buy product direct from the manufacturer in medium to high volumes. Mass merchandisers attract customers with low prices, and turnover is important when allocating shelf space.

Wholesalers

Wholesalers do not sell to the end consumer; they buy product from different manufacturers and resell it to retailers. They serve smaller retail outlets and more rural areas, providing their own sales force to sell the many product lines they carry. High volume discounts and promotion allowances are important to wholesalers.

Glossary

Term	Definition
Administrative Costs	Expenditures arising from the administration of a product, including some fixed overhead costs, some variable expenses, and some expenses related to the number of orders placed.
Advertising	Any paid form of non-personal presentation and promotion of ideas, products, or services by an identified sponsor.
Advertising Message	The point that an advertisement is trying to make, whether to stimulate overall demand for a product group, stress the benefits of the product, compare with other brands, or maintain awareness.
Average Retail Price	The average price for a product charged by retailers, including both those stores with higher prices because of increased personal service, exclusive merchandise lines, attractive store atmosphere, special promotions, convenient location, and/or special services as well as those stores that offer a no-frills, low-price approach.
BCG Growth-Share Matrix	A model developed by the Boston Consulting Group in the 1960s that summarizes a company's market position. The matrix displays strategic business units (SBUs) on a two-dimensional grid. The horizontal axis gives market share relative to the industry's largest competitor, whereas the vertical axis represents the growth rate of the market. The placement of an SBU on the grid indicates its cash flow position: Cash Cow, Dog, Question Mark, or Star.
Brand Awareness	The level of consumer familiarity with a product, brand, or promotional vehicle.
Brand Formulation	The physical structure or ingredients of a product or service.
Brand Image	The meaning consumers give to a product, based on the perceived benefits that the product provides.
Brand Loyalty	A favorable attitude toward, and exclusive purchase of, a brand over time.
Break-Even Analysis	An attempt to determine the volume of sales necessary (at various prices) for the manufacturer or merchant to cover costs or to make revenue equal costs. Break-even analysis is useful to help set prices, estimate profit or loss potentials, and determine the discretionary costs that should be incurred.
Cannibalization	Sales of a new product that decrease sales of another product in the product line.

Term	Definition
Capacity Utilization	The extent to which the physical production ability of a plant facility is being used. Normally described as a percentage of total capacity (e.g., 50 percent of capacity).
Channel of Distribution	Any firm or individual participating in the flow of products and services as they move from producer to user (consumer or industrial).
Checkout Coupon	A coupon printed at the cash register based on your purchases. These coupons are sometimes called “catalinas” after a company that distributes them.
Cooperative (Co-op) Advertising	An agreement in which a manufacturer pays a portion of a retailer’s local advertising costs.
Consumer Promotion	Promotional activities aimed at the consumer, including trial sizes of products, coupons, and point-of-purchase displays.
Conversion Ratio	Of those consumers aware of a brand, the percentage that have tried the brand (i.e., % trials / % aware).
Contribution After Marketing	The dollar amount remaining after subtracting total marketing expenditures from the gross margin.
Cost of Goods Sold	The total variable manufacturing cost of producing a product.
Coupons	A promotional technique designed to convince consumers to purchase a product by offering an individualized discount on the price of the item.
Demand	The desire of consumers for a certain product.
Demography	The study of people in the aggregate, including population size, age, income, occupation, and gender.
Detailers	Part of the indirect sales force that calls on doctors and pharmacists to provide information about their brand and to introduce new products to consumers.
Digital Coupon	A coupon that is distributed electronically. Some types can be printed.
Digital Marketing	Advertising and promotion done through the internet.
Direct Channel	The distribution flow of a product directly from manufacturer to retail outlet.
Direct Sales Force	The portion of a sales force selling directly to retail outlets. The direct sales force maintains relationships with current retail accounts, develops new retail accounts, presents trade promotions and allowances, and introduces new products to retailers.
Display Advertising	Internet-distributed advertising that incorporates images. An example is a banner ad.

Term	Definition
Experience Curve Pricing	A price-setting method using a markup on the forecasted average total cost, which accounts for cost trends as sales volume accumulates.
Fixed Costs	The unchanged financial obligations of a firm regardless of the number of units of a product that are produced and marketed, including amortization charges for any capital equipment and plants as well as such charges as rent, executive salaries, property taxes, and insurance.
Geo-demographics	The neighborhood clustering of people with similar economic and cultural backgrounds and perspectives.
Gross Margin	Revenue less the cost of products sold. (Price − Unit Cost) × Units Sold
Income Statement	A report of a firm's overall results for a period, including a breakdown of major expenditures and a calculated value of the net income.
Indirect Channel	A distribution channel from manufacturer to retail outlet by way of a wholesaler, merchandiser, or detailer.
Inflation	A general rise in the prices that people must pay for products and services.
Keyword	In digital marketing, words or phrases related to a company's message and/or target consumer. Keywords are used to place advertising or promotions in a relevant context (e.g., a sponsored search result).
Line Extensions	The introduction of new flavors, sizes, or models to an existing brand within an existing product category.
Manufacturer Sales	Receipts from all sales, both direct and indirect, net of volume discounts.
Margin	The difference between the price of a product and its per-unit cost.
Market	People or businesses with the potential interest, purchasing power, and willingness to buy a product or service that satisfies a need.
Market Penetration	The percentage of actual sales of a product category in relation to the total sales possible in a market.
Market Share	The percentage of sales of a product in a market in relation to other products in that market (i.e., Brand X sales ÷ total sales in market).
Marketing	The process of planning and executing the conception, pricing, promotion, and distribution of ideas, products, and services to create exchanges that satisfy individual and organizational needs or wants.

Term	Definition
Marketing Efficiency Index	The ratio of net income divided by marketing expenditures (budget spent on advertising, promotion, and sales force). This does not include promotional allowances because it is viewed as a discount to the channel.
Marketing Research	The systematic and objective approach to the development and provision of information for marketing decision-making.
Markup Pricing	A price-setting method common in wholesaling and retailing that adds a markup to average total or variable cost.
Mass Merchandisers	Very large retail outlets that generally offer discount prices on items and have a high level of sales.
Media Type	The distinction between broad classes of media, such as internet, newspapers, magazines, television, radio, etc.
Merchandisers	Part of the indirect sales force that provides special support to retailers for in-store activities, such as shelf location, pricing, and compliance with special programs.
Net Contribution	The contribution after marketing less fixed costs.
Net Income	The profit remaining after all costs are subtracted from revenues.
Over-the-Counter (OTC) Medicine	A drug a consumer can legally acquire without a prescription from a physician. This is in contrast to an ethical drug, which requires a prescription.
Point-of-Purchase Promotion (POP)	A special display, rack, sign, banner, or exhibit placed in a retail store to support the sales of a brand.
Portfolio Analysis	A way of classifying businesses or products, normally using the dimensions of market attractiveness (e.g., growth) and business position (e.g., relative market share).
Price	The amount of money a seller requires to provide products or services to a customer.
Price Structure	The use of discounts, allowances, and freight cost absorption in determining price.
Primary Demand Stimulation	Advertising intended to affect demand for a product category and not a specific brand.
Product Life Cycle	The stages that a product goes through during its time on the market, including introduction, growth, maturity, and decline.
Product Mix	All the products available from an organization.
Promotion	The communication mechanism of marketing designed to inform and persuade consumers to purchase.
Promotional Allowance	Reduction in the actual price paid by a channel member resulting from an agreement to participate in promotional activity. In PharmaSim promotional allowance is entered as a percent of the discounted price.

Term	Definition
Purchase Intentions	A product or brand consumers intend to purchase before they actually enter the retail outlet to make a purchase.
Quality	All features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.
Reformulations	Changes in the physical formulation of a brand to make the product more desirable to the consumer.
Reminder Advertising	An advertising message designed to maintain awareness and stimulate repurchase of an already-established brand.
Research and Development	A portion of a firm designated to research, analyze, and design products to meet consumer and market needs.
Retailer	A merchant whose main business is selling directly to consumers for personal, non-business use.
Retention Ratio	The proportion of consumers who have tried a brand and repurchase the product.
Return on Marketing	The ratio of net income divided by marketing expenditures (as a percent). Marketing expenditures are budget spent on advertising, promotion, and sales force.
Return on Sales	The ratio of net income divided by manufacturer sales (expressed as a percent).
Sales Force	Employees hired to promote and sell a manufacturer's product through direct or indirect channels.
Search Engine Marketing	Methods used to direct people doing web searches to your content. The methods are adjusting your content to get it higher in search results (Search Engine Optimization, or SEO) and paying for prominent position in the results (Pay Per Click, or PPC).
Segmentation	The process of dividing large heterogeneous markets into smaller homogeneous segments of people or businesses with similar needs and/or responses to marketing mix offerings.
Sensitivity Analysis	Calculating and comparing the financial effect of various sales and cost scenarios. In PharmaSim this can be done using the "What If.." tool.
Share of Channel Sales	Market share segmented by the type of retail outlet.
Shelf Space	The amount of space allocated to a product for display on retail store shelves. Shelf space often depends on the sales and profit potential of the product as well as special arrangements between the store and manufacturer.
Shopping Habits	Consumer shopping preferences, including product and retail preferences.

Term	Definition
Social Media	Internet-based services that allow people to share content (text, images, video, etc.) and connect that content with other people and content on the service.
Strategic Business Unit (SBU)	A unit within an organization that includes a distinct set of customers and competitors, has separate costs, and has the ability to undertake a separate strategy.
Trade Publications	Publications that target a particular industry. Often these are generated by trade associations and contain articles of interest to the industry as well as general market research and competitive information.
Trade Rating	A summarized result from a survey of retailers and wholesalers on trade support and practices offered by your company. The trade rating value is scaled from 1 to 10, where 10 is best.
Unit Sales	The total volume of units sold by a manufacturer in a market.
Usage Rates	How often a product is used/purchased per period.
Variable Costs	Costs tied directly to production, including direct labor and raw materials charges.
Volume Discount	Reduction of list price based on the quantity a buyer purchases. May be based on a specific purchase (non-cumulative) or on total purchases over a period (cumulative).
Wholesale Price	A special discount price offered to wholesalers to encourage them to purchase and sell merchandise in large quantities.
Wholesaler	A business unit that buys and resells merchandise to retailers, other merchants, and/or industrial, institutional, and commercial consumers.

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Index

O

P

R

S

T

U