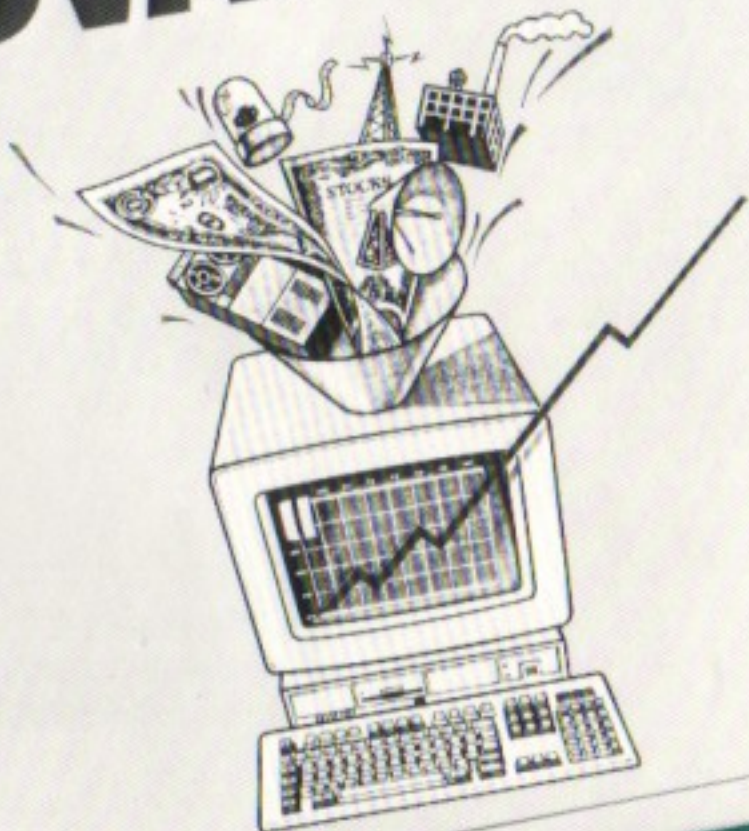


USER'S GUIDE

BusinessWeek
A MCGRAW-HILL PUBLICATION

BUSINESS ADVANTAGE



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Business Week's Business Advantagetm User's Guide

In addition, we would like to thank Richard Anderson and Tim
Chase of Business Week Magazine, and Michael Aronson,
senior lecturer at the Wharton School of Business, for their
cooperation in making the software version of Business Week
a reality... THANKS.

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WE ARE...

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Welcome

Experience the challenges faced by America's Corporate Elite.

You read *Business Week* to better understand what's happening in today's fast-paced business world... to digest the impact of decisions made at the uppermost echelons of corporate America... to get ideas on what is and isn't working. But imagine what you'd learn if you could actually wear the shoes and get into the heads of today's top decision makers. Just think what an advantage it would be to have that kind of experience under your belt as you face your own difficult business situations.

That's the edge Business Week's Business Advantage gives you. By facing the same tough decisions as America's corporate leaders, you'll gain invaluable insights into the thought processes behind today's headline-making business stories.

Business Week's Business Advantage incorporates microcomputer business simulation technology used at top corporations like, IBM and AT&T, and business schools, including Wharton and University of Chicago. Over ten years in development, the program includes over 4,000 algorithms and is based on a 400-rule expert system. Your simulated business world comprises the equivalent of 400 interrelated spreadsheet equations, making Business Week's Business Advantage the most advanced software of its kind.

ii Welcome

The Business Week's Business Advantage package includes two articles, the Business Advantage system diskettes and manual. You'll be challenged in two industries to lead real-world companies to success. Also enclosed is information on how you can subscribe to Business Week's Business Advantage and receive each month a new challenge that will improve your business knowledge and skills.

About This Guide

This guide is designed to help you learn and use Business Week's Business Advantage.

Go to

For

- | | |
|------------------------|---|
| 1 A Quick Overview | Instructions on how to start an article and save an article. A quick summary of using the product and its major features. |
| 2 Business Week | News and Information to assist in decision making . |
| 3 Your Annual Report | Sales and Inventory, Income Statement, Balance Sheet and Five-Year Performance Summary Reports. |
| 4 Decision Making | An approach to decision making and a Decisions Overview. |
| 5 Processing Decisions | An explanation of the simulation model. |
| 6 External Events | A description of External Events. |
| 7 Expert's Insights | Information on using the expert to understand your performance. |

1 A Quick Overview

This chapter introduces you to Business Week's Business Advantage. It describes how to load and save articles and reviews the major features of the product. More detailed explanations on each feature can be found in the subsequent chapters.

The major features discussed here are:

- Loading and Saving Business Week Articles
- Business Week and Your Annual Report
- Making Decisions
- Processing Decisions
- External Events
- Expert's Insight

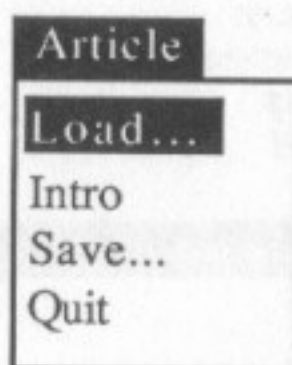
A Quick Overview



Loading and Saving Articles

The Article Menu

When you start the program your screen will display the main menu. The Article menu will be open and will look like this:



Article Menu

Loading Articles

At this point you can load a Business Week's Business Advantage Article.

To load an article choose the "Load..." command from the Article menu. A menu will appear that lists all articles to be loaded. Either select an article name from the menu or type in a new name at the cursor. After you have selected the name of the article to load, press the Enter key to load the article.

You may use the [ESC] key or activate the "Cancel" command to cancel loading an article.

Saving Articles

You can save an article at any time, leave Business Week's Business Advantage, and return to the article right where you left off.

To save an article, activate the "Save..." command from the Article menu. Indicate on which drive the Article should be saved. A menu will appear which lists existing articles.

You may use the [ESC] key or activate the "Cancel" command to cancel saving an article.

Printing

To print the main menu, activate the "Print" command from the Article menu. You can also print screens in the Decisions Worksheets, Your Annual Report or Business Week by selecting the print option from these sections of the program.

4 A Quick Overview

To Exit From The Simulation

Activate the "Quit" command from the Article menu to exit from Business Week's Business Advantage.

Business Week and Your Annual Report

Business Week and your Annual Report provide you with news and information to assist you in decision making and help you gain a more in-depth understanding of Business Week articles. To view Business Week, activate the Business Week icon on the screen. To see your Annual Report, activate the Annual Report icon.

Business Week contains the following reports:

- General Economic Information
- Industry Statistics
- Stock Report
- Corporate Bond Report
- Digest of Corporate Earnings
- Survey of Company Balance Sheets
- Corporate Scoreboard

Your Annual Report consists of:

- Sales and Inventory Reports
- Income Statement
- Balance Sheet
- Five-Year Performance Summary

Tutorials and Analysis

Tutorial and Analysis modes are available in *Business Week* and Your Annual Report to help you understand the reports provided. With the Analysis mode you can analyze your company and your competition. The Tutorial mode allows you to review hundreds of business terms and concepts.

Tutorials

The Tutorial mode is an "on-line management textbook" which explains business terms and concepts. The tutorials cover such complex topics as competitive strategy and managerial finance. Tutorials are available for you to use in the Business Week and Annual Reports sections of the product.

To use the Tutorial mode, activate the "Tutorial" command from the menu in any section of your Annual Report or Business Week. Next, select the item for which you would like to see a tutorial and press ENTER.

Analysis

The Analysis mode will help you analyze and evaluate your company and your competition. It teaches you new ways to look at financial and market data. Analysis of a report may include graphical analysis and/or detailed numerical breakdowns of your company's performance. You may use Analysis in Business Week and Annual Reports sections of News and Information.

To use the Analysis mode, activate the "Analysis" command from the menu in any section of your Annual Report or Business Week. Next, select the item for which you would like to see an analysis and press ENTER.

6 A Quick Overview

Making Decisions

The Decisions Menu

Decisions

Marketing
Production
Operations
Finance

Pro-Forma Planner

Recommended Approach

Decisions Menu

This menu allows you to enter the decisions that will guide your company through the next year of operations in the simulation. The decisions you make will be in four functional areas:

- Marketing
- Production
- Operations
- Finance

For details about the actual decisions in each of the functional areas, see the "Decision Overview" section in Chapter 4 *Decision Making*.

Pro Forma Planner

The Pro Forma Planner enables you to forecast the results of your decisions and to do a "what if" analysis. It generates Income Statements and Balance Sheet projections based on your decisions, sales assumptions, and the forecasted economy.

Consulting

Consulting is available to aid you in making decisions. Use the Consulting mode to help you focus on the key issues and to ask the right questions in marketing, finance, strategic planning, and operations. You may use the Consulting feature from any of the decision-making worksheets.

To use the Consulting mode, highlight the item you would like to get information on. Press the ["C"] key, followed by ENTER to activate the Consulting Command or select the Consulting Command on the screen.

Processing Decisions

The Process Menu

After you have made all of the necessary decisions for the current year, you must process those decisions to see how your company has stood up to the competition. Activate the "Process Decisions" command from the Process menu to do so. See "Processing Decisions," Chapter 5, for a description of the simulation model and processing decisions.

External Events

Each article contains a library of Events which depicts current issues decision makers in the article must face. While your decisions are being processed, Events will occur based on your decisions and those of your competitors. Events may also be triggered by conditions reflected in the Business Week article such as: government policies, economic tides, corporate rivalries, and market changes.

Events are situations unique to each article. Some events will require you to make a decision and some will not. The decisions you make in a specific event will affect the article, your company and the industry. See Chapter 6 Events for more information on Events.

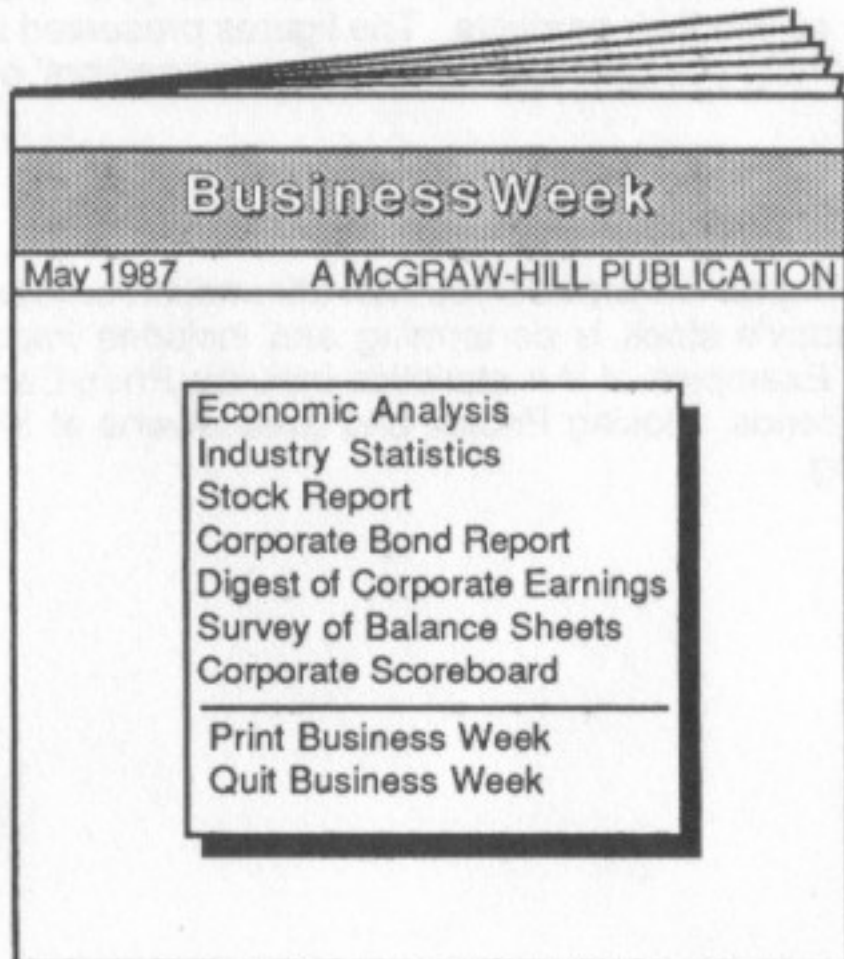
Expert's Insight

Business Week's Business Advantage has a built-in Expert that explains the interrelationships among Events, your decisions, your competitor's decisions, and your company's performance.

To use the Expert's Insight feature activate the Expert's Insight icon on the screen. For more information on Expert's Insight see Chapter 7.

2 Business Week

Business Week is updated each year as a source of information about the economy and your industry. A thorough review of reports, combined with the "Tutorial" and "Analysis" features, will provide insight into the dynamics of your marketplace and industry. For a description of the "Tutorial" and "Analysis" capabilities see "Tutorials and Analysis" in Chapter 1 *A Quick Overview*.



12 Business Week

Business Week is comprised of seven reports:

Economic Analysis

This section of Business Week presents information about economic conditions that will affect your industry. Historical trends are provided so that you may observe how these factors have been changing from year-to-year. You are also provided with two-year predictions for economic growth and inflation.

Industry Statistics

This section of Business Week provides you with information about your competitors' actions in the previous year and their success in selling their products. The figures presented in this section will help you gain insight into your competitors' overall strategies.

Stock Report

The Stock Report will provide you with information on how well your company's stock is performing and includes important statistics. Examples of the statistics include: Price/Earnings Ratio, Dividends, Closing Prices, and Breakdowns of Shares Outstanding.

Corporate Bond Report

In contrast to stocks, bonds don't convey any ownership in the entity that issues them. A bond is a loan. It pays interest to the investor and is repayable after a stipulated period. Bonds are issued by a variety of borrowers, including corporations, governments, and government agencies, such as highway authorities.

The Bond Report will provide information on outstanding bonds for all companies in the simulation.

Digest of Corporate Earnings

Each year Business Week publishes a digest of industry income statements based on public information released by the companies. The items provided for your company also appear in the detailed line-items of your Income Statement in your Annual Report.

Survey of Company Balance Sheets

This section of Business Week contains a survey of industry Balance Sheets based on public information released by the companies. The items provided for your company and your competitors match up with the detailed line items on your Balance Sheet in your Annual Report.

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Corporate Scoreboard

The Corporate Scoreboard lets you examine how well you are doing relative to your competitors using generally accepted yardsticks of management performance.

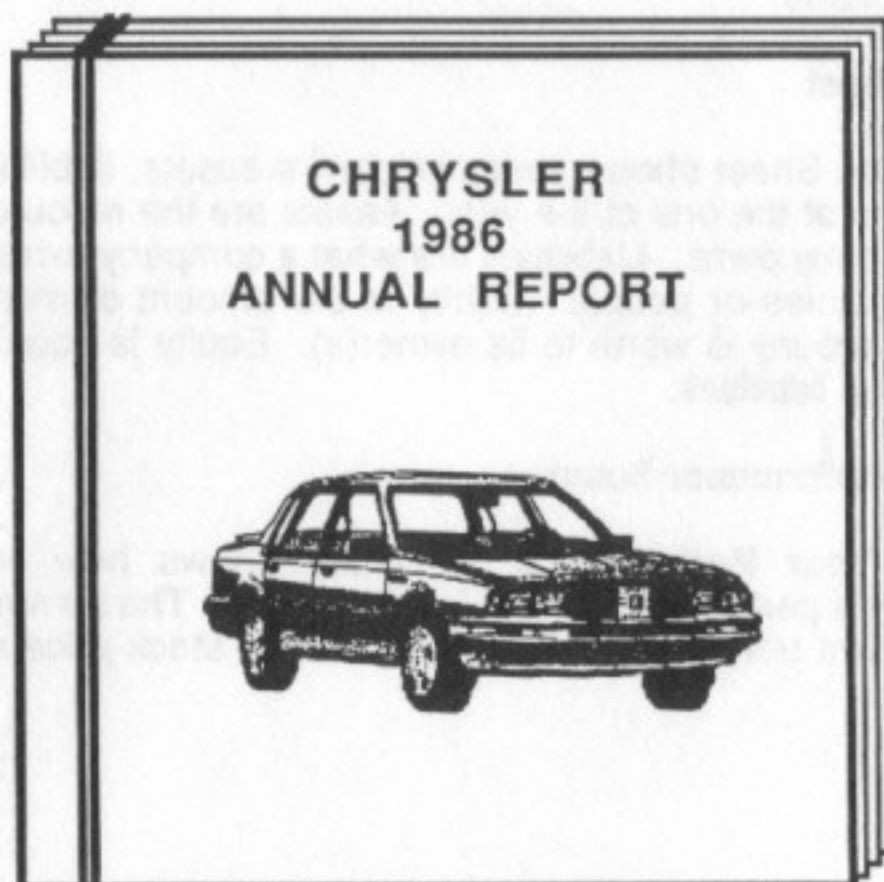
The Corporate Scoreboard looks at a series of financial returns and ratios and multiplies them together. The result is an important criterion by which investors judge corporate performance: the ratio of Market Value to Book Value.

3 Your Annual Report

Your Annual Report contains four reports:

- Sales and Inventory Report
- Income Statement
- Balance Sheet
- Five-Year Performance Summary

Each report contains information on your company for the previous year.



16 Your Annual Report

"Tutorials" and "Analysis" are available for you to use in Your Annual Report. For information on how to use "Tutorials" and "Analysis", see the section in Chapter 1 titled "Tutorials and Analysis."

Sales and Inventory Report

The Sales and Inventory Report tells you how many units you sold, how many remain in inventory, and what it costs you to buy them. You should use it to determine the number of units to produce each year and to set your unit price.

Income Statement

The Income Statement identifies the revenues generated by the sales of your products and the costs incurred to produce these revenues.

Balance Sheet

The Balance Sheet shows your company's assets, liabilities, and equities at the end of the year. Assets are the resources that a company owns. Liabilities are what a company owes to other companies or people. Equity is the amount of money that the company is worth to its owner(s). Equity is equal to assets minus liabilities.

Five-Year Performance Summary

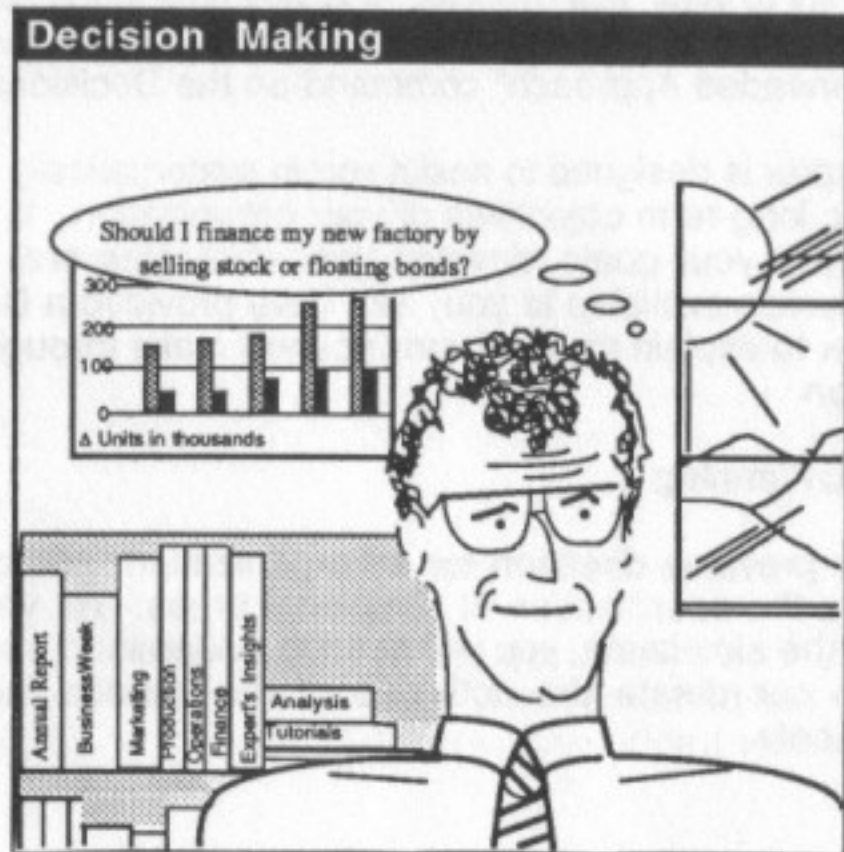
The Five-Year Performance Summary shows how your company has performed over the last five years. The summary lists important trends such as: cash balance, stock price and total assets.

4 Decision Making

This chapter is designed to assist you in systematically defining the basic long-term objectives of your organization. It will help you identify your goals, develop your strategies, and allocate the resources available to you. We have provided a Decisions Overview to explain the decisions you will make throughout the simulation.

This chapter is divided into two sections:

- An approach to Decision Making
- Decisions Overview



18 Decision Making

An Approach to Decision Making

Business Week's Business Advantage provides you with two tools for decision making that are accessed from the Decision menu:

- Recommended Decision-Making Approach
- The Pro Forma Planner

The Recommended Decision-Making Approach

The simulation provides a recommended approach to decision making. When you start a new article, you will be given the opportunity to view this process. If at any time in the simulation you would like to review this process again, activate the "Recommended Approach" command on the Decisions menu.

This chapter is designed to assist you in systematically defining the basic long-term objectives of your organization. It will help you identify your goals, develop your strategies and allocate the resources available to you. We have provided a Decisions Overview to explain the decisions you will make throughout the simulation.

Strategic Planning

Strategy provides direction for an organization, and direction improves the coordination of functional areas. As you move through the simulation, you will need to understand strategy in order to coordinate the activities of the various functional departments.

Good strategic planning is a continuous process of:

- 1 Systematically defining the basic long-term objectives of the organization.
- 2 Identifying quantifiable goals.
- 3 Developing strategies to reach the objectives and goals.
- 4 Making decisions to allocate resources to carry out the strategies.

Strategic plans begin with top management and include input from all departments. Good strategic plans consist of a Mission Statement, Objectives, Goals, and Strategies.

Mission Statements are statements that outline both the company's line and scope of business. They are typically generated by senior management and are stated in broad and general terms.

Objectives are broad statements concerning the direction of the company over the next five years.

Goals are more specific statements which relate to specific time periods. Goals are stated in terms of hard facts. Goals provide managers with numbers for which to strive. Goals allow managers to develop strategies and to make tactical decisions.

20 *Decision Making*

Strategies are the broad policies and approaches a company uses to reach its goals and objectives. Strategies outline the allocation of resources and the approach to opportunities. Once strategies have been implemented, they must be monitored. You must analyze performance results and modify your goals, objectives and strategies as necessary. To make intelligent business decisions, you must have coherent strategic plans.

Strategic plans provide a framework upon which various tactical decisions can be made. Tactical decisions focus on the allocation of resources. Based on the strategies developed in the plan, you will make the annual tactical decisions necessary to run your firm. Specifically, tactics look at consumer needs, market size, market description, human resources, financial resources, physical resources, and threats and opportunities in the environment. Your strategic plans should take these factors into account so that you may allocate resources accordingly through your tactical decisions. In the simulation, you will primarily be making tactical decisions. Of course, your tactical decisions should be based on a clear set of objectives.

One strategic plan is never best. What is important is that the strategic plan and decisions are consistent, and reflect the unique strengths and weaknesses of the firm.

Marketing Department

Your Marketing Department's natural inclination is to establish a strong market share, especially with new, fast-growing products. In the drive for market share and sales, profit sometimes takes a back seat. The Marketing Department will tend to push for low prices (low profit margin), high advertising budgets, large numbers of well-compensated salespeople, and liberal credit policies.

Marketing will also tend to encourage generous R&D budgets to maintain a steady flow of new products and will advocate healthy inventories to ensure product availability. The Marketing Department's strategy is sometimes not very conducive to profitability; however, Marketing will argue that in a new, fast-growing industry it is imperative to establish market share, even at the cost of immediate profitability. Other departments may occasionally disagree with these strategies.

Operations Department

The overriding goal of the Operations Department is to maintain the company's capacity to adequately meet its needs and to minimize the company's production costs per unit. Operations' goals are consistent with Marketing goals in that minimizing per unit cost is necessary to maintain low prices. The two departments' goals, however, might conflict if Marketing wants Operations to expand factory production too quickly, leaving the company with too much capacity or requiring the factory to operate with overtime or partial shifts, thus increasing production costs.

Finance Department

The Finance Department focuses on three areas:

- Profitability
- Cash Flow or Liquidity
- Obtaining the necessary capital to operate and to allow the company to grow

Profitability The Finance Department seeks to maintain a high level of profitability at all times in order to make the company's stocks and bonds attractive to investors. Conflicts occur with Marketing because Finance will lobby for higher profit margins (higher prices) and more conservative budgets.

Cash Flow The Finance Department also wants to maintain adequate cash balances to help fund some of the company's internal growth, as well as to provide a cushion against uncertainty in the economy and marketplace. To maintain a strong cash balance, Finance will pressure Operations to maintain low inventories and will pressure Marketing to devise profitable marketing strategies and a tight credit policy.

Obtaining Capital Finance is responsible for obtaining the capital necessary to develop and operate the business at the lowest possible cost (i.e., minimizing interest rate, and percent of equity), while still maintaining the financial health of the firm. Three sources of funds are available for financing a new marketing campaign, an R&D program, or a factory expansion: internally generated cash (from net income and non-cash expenses, i.e., depreciation); equity markets (i.e., common stock); and the debt markets (i.e., corporate bonds and short-term loans).

In deciding how to supply the capital needs of the company, Finance must determine the risks and advantages of debt and equity in the capital markets. There are inherent trade-offs between the two sources of funds. Listed below are the pros and cons of Debt Markets and Equity Markets.

Debt Markets

Pros: provides capital for the business without diluting the ownership of the stockholders.

Cons: decreases the profitability and increases the financial risk of the firm by creating additional interest expenses that must eventually be paid every year, in good times and bad. The loans must be paid off in full eventually.

Equity Markets

Pros: provides capital for the business without creating the additional risk of fixed interest expenses and debt repayments. Reduces risk because the existing debt is supported by a larger equity base.

Cons: dilutes the holdings of the existing shareholders (including you), giving everyone a smaller piece of the pie.

Finance will push for slow, steady, and profitable growth, and will attempt to fund most of the company's needs with internally generated cash. Faced with Marketing's aggressive growth goals, this policy will need to be balanced with the use of debt and equity markets.

24 *Decision Making*

The Pro Forma Planner

The decisions you make and the factors you need to consider are complex. The Pro Forma Planner enables you to forecast the results of your decisions and to do a "What If" analysis. It generates Income Statements and Balance Sheet projections based on your decisions, sales assumptions, and forecasted economic indices.

Consulting is available for you to use in all of the decision worksheets. See Chapter 1 - *A Quick Overview* for more information on "Consulting."

The Pro Forma Planner uses your decisions for the upcoming year and asks you to make unit sales projections based on the decisions. From your decisions and sales projections, a Pro Forma Income Statement and a Pro Forma Balance Sheet are generated. You can do a "What If" analysis by changing your decisions or sales assumptions and generating a new Pro Forma Income Statement and Balance Sheet.

Whenever you make a decision or sales projection, the spreadsheet automatically updates the Pro Forma Income Statement and Balance Sheet. As your business grows, the Pro Forma Planner will also be updated to reflect your company's new needs.

Decisions Overview

The Decisions Overview supplements the on-line instructions to help you make decisions. It includes a "consulting" feature for each decision you will have to make in the areas of:

- Marketing
- Production
- Operations
- Finance

Marketing

- **Price** (in dollars)

This figure represents the wholesale price you are charging for your product.

- **Advertising** (in thousands of dollars)

This figure represents the budget you establish for the coming year. It will be spent on trade advertising, promotional campaigns, regional media, and annual product shows.

In general, a dollar spent for advertising by one company is equivalent to a dollar spent by another. After a certain amount of advertising dollars are spent, however, advertising begins to lose its effectiveness. Advertising expenditures lead to increased industry market demand. They also improve each company's individual brand image which is carried over from year to year.

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- **Dealer Size** (number of dealerships)

This figure represents the number of dealerships you wish to carry in the coming year.

Sales will be influenced by your dealer size. If you have too few dealers, you might not be adequately servicing your customers or have enough market presence to keep orders flowing. If you have too many dealers, the individual dealers' dissatisfaction with the limited number of customers may lead to a high degree of internal competition for new business. This could be quite costly to your company.

- **Dealer Co-op** (percent of sales)

This figure represents the percentage of dealer sales that you match with co-op advertising dollars. These monies will be utilized by your dealers to fund advertising and promotional efforts for your products.

Each of your dealerships will cost your company money in overhead per year plus any co-op advertising dollars the dealer receives. This overhead will rise with inflation. You must decide how much additional money in co-op advertising dollars each dealer should receive through your co-op advertising decision. As a rule the higher the co-op advertising budget (as a percentage of sales) the more successful your dealers will be in moving your products. A point exists, however, at which additional co-op dollars will not help dealer sales.

- **Percent Sales on Credit** (percent)

This figure represents the percentage of sales you will allow for credit rather than for cash.

Your credit policy determines the percentage of your accounts on credit. For example, a policy of 50% sales on credit means that 50% of your sales are purchased on credit. Normal terms are net 30 days; however, when interest rates are high, customers may take longer to pay their bills. Overall, a higher credit policy will translate into higher sales, but at the expense of higher accounts receivable and higher credit administration expenses. Remember that credit is most valuable to your customers in times of high interest rates and poor economic conditions, precisely when it costs you the most to extend it.

You will be required to make a complete set of marketing decisions for each new territory as you continue to expand your markets.

Production

- **Factory Production** (in thousands of units)

This figure represents the number of units you want to produce during the coming year.

Because you own your own factory, you have control over your production costs. Four costs figure into the manufacturing cost:

- Material costs
- Depreciation
- Fixed costs
- Labor costs

Depreciation and Fixed costs are allocated to each unit you produce; therefore, you should maximize your total production and run as close to 3 shifts as possible to minimize the cost per unit.

28 *Decision Making*

Suppose your depreciation and fixed costs total \$1,000,000.00. If you produce 50,000 units, \$20.00 is the per unit cost of depreciation and fixed costs. If you produce 100,000 units, \$10.00 is the per unit cost of depreciation and fixed costs. The more product you produce, the more cost effective you will be.

Labor costs are allocated to each unit according to the number of shifts your factory runs. Due to the shift differential in your union contract, workers on the second shift are paid more than workers on the first shift. Workers also receive "time and a half" for any overtime production.

Workers can work up to 50% overtime at the end of the first or second shift. The union contract does not permit more than one shift of workers to be in the factory at the same time. Therefore, no first shift overtime is possible if you operate two shifts and no overtime is possible if you operate all three shifts.

Operating a shift at less than full capacity will cost you the same as operating that shift at full capacity. For instance, when operating 1.9 shifts of production, the second shift will only produce at 90% of rated capacity, but it will still get paid for a full 40-hour week, increasing your production costs per unit.

Neither overtime nor undertime is a cost-effective long-run production strategy. Both increase unit costs and impair worker productivity; however, either might be viable in the short-run to eliminate large inventories, to meet unexpected demand, or to avoid hiring and layoff expenses.

The Pro Forma Planner worksheet allows you to enter various production decisions and to see how the decisions affect labor costs, shifts worked, and units available for sale.

✓✓ **Remember:**

Factory production should be based on your sales projections for the upcoming year.

✓✓ **Remember:**

Minimize depreciation and fixed costs per unit and run your factory as close to 3 shifts as possible, utilize as little overtime and undertime as possible.

Operations

- **Research & Development** (in thousands of dollars)

This figure represents the dollar amount you want to spend on the research and development of your products.

You will make three R&D budget decisions. The Research & Development budget is used for product line expansion, product improvements, product differentiation, and product testing.

- **Factory Expansion** (in thousands of units per shift)

This figure represents the number of units by which you want to expand the capacity of your factory.

Factory capacity is stated in terms of units per shift:

1 unit = 1 Product

1 shift = 1 year of 8 hour production turns

30 *Decision Making*

You may run your factory up to 3 shifts. If you have 100,000 units of capacity and work 3 shifts, you will produce 300,000 units during the year. Your factory capacity can be increased by constructing additional facilities.

A fixed cost is charged to cover an environmental impact statement, architectural plans, and site preparation.

New construction takes one year to complete. Depreciation occurs over the ten years estimated useful life of the equipment and begins when the plant is put into service.

✓✓ **Remember:**

Construction costs will rise with inflation.

✓✓ **Remember:**

Factory expansion is in thousands of units of capacity per 8 hour shift. Because your plant can be utilized up to 24 hours per day (3 shifts), an expansion of 100,000 units will increase total production capacity by 300,000 units.

Finance

• **Long-Term Debt Sold** (in thousands of dollars)

This figure represents the dollar amount of corporate bonds you want to issue over the coming year.

You may issue 10-year corporate bonds to fund capital expenditures (i.e., factory expansion) or general company obligations. Bonds sold at par value yield the 10-year bond rate quoted for your company in Business Week. A 5%

underwriting fee is added to your S,G & A expenses. You may repurchase these debentures on the open market at the last quoted closing price as noted in Business Week. Debt retirement is done by entering a negative amount on the worksheet where you are asked for the amount of Long-Term Debt Sold. If the bonds you repurchase are trading at a discount from, or premium over face value (100), you will have a taxable gain or loss on debt retirement.

• **Common Stock Issued**

This figure represents the dollar amount of common stock you want to offer in the year ahead.

Your company may now authorize a public offering of common stock at the closing market price as quoted in Business Week. The proceeds will be credited to the Common Stock account on your balance sheet. If you decide to issue stock, your investment bankers will notify you of the maximum amount they feel they can sell for you. Alternatively, you may decide to repurchase some of your stock on the open market at the latest quoted price. You do this by entering a negative amount on the worksheet where you are asked for the amount of Common Stock Issued. You are restricted to a maximum of 5% buy back in any one year.

• **One Year Loan (in thousands of dollars)**

This figure represents the dollar amount you want to receive from short-term loans.

Banks are willing to loan you funds on a year-to-year basis. Loans will be at your short-term rate based on the financial

32 *Decision Making*

health of your company, and should be used to fund working capital extension (i.e., expanding Current Assets). The loans are automatically repaid at the beginning of each year. If you wish to "roll over" these funds, you must re-enter this decision each year.

- **Supplier Payment Period** (in days)

This figure represents the number of days in which you will pay your suppliers for goods purchased on credit.

You can now decide how quickly you wish to pay bills from your suppliers. The current terms are net 30 days with no discount for prompt payment. Continually paying your bills late may upset your suppliers and may damage your credit rating. Late payments, however, will increase your company's cash position as accounts payable increase.

- **Common Dividend Per Share** (in dollars per share)

This figure represents the dollar amount per share that you wish to pay your stockholders.

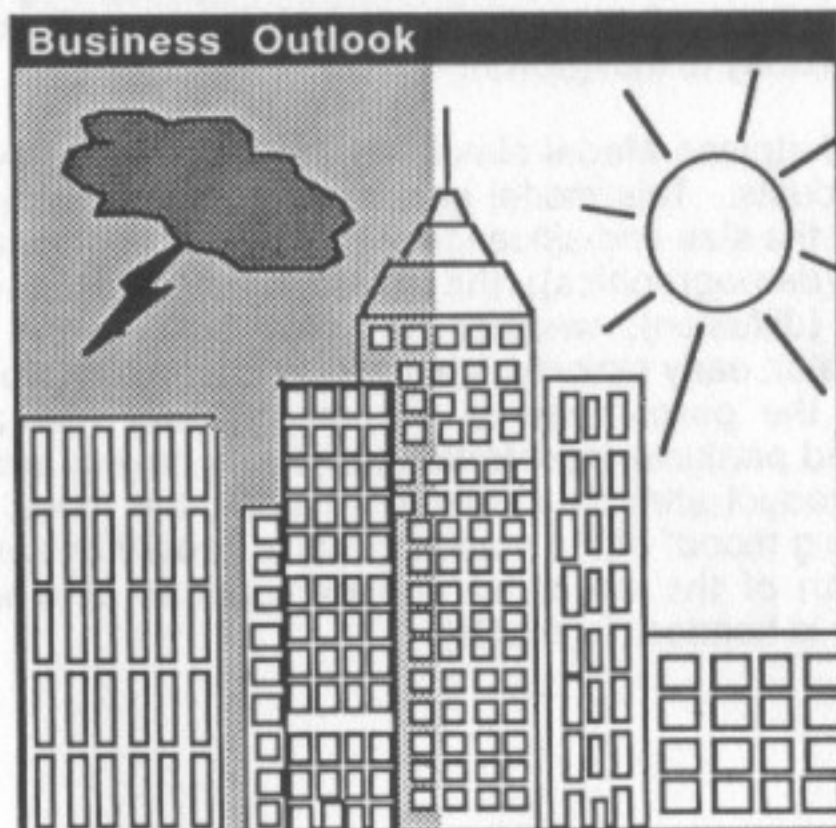
You must decide on a dividend policy. You may wish to pay out a certain percentage of your earnings or cash flow as dividends to common stockholders. Alternatively, you may wish to forego a dividend and retain funds for growth, thereby encouraging capital appreciation of your stock. If your dividends are too low, your stock may appear unattractive when compared to your competitors' stock. On the other hand, high dividends will impair the future growth potential of your company and may depress your stock price.

5 Processing Decisions - The Simulation Model

The simulation model has been used for over six years. The model is based on concepts from a wide range of literature on various business topics. For a complete list of references see the bibliography in Appendix B. Over 40,000 people, students, executive education candidates and Fortune 500 seminar attendees, have run simulated firms using the model. This experience has honed the simulation into what it is today.

The simulation model uses an intricate set of equations and rules to define the relationships between companies competing within an industry. This model can be broken down into four components:

- The Economy and Marketplace
- Competitor Profiles and Decisions
- Capital Markets
- Financial Statement Generator



The Economy and Marketplace

The Economy and Marketplace component generates the underlying fabric of the economy and marketplace within which your company operates. This component consists of:

- an Econometric Model
- a Marketplace Model
- a Market Share Model

The Econometric Model drives the underlying economy's growth, inflation, and interest rates and also establishes the bullishness or bearishness of the capital markets (stock and bond markets). The econometric model consists of a series of trend equations that generate an economy from current *Business Week* econometric forecasts.

The "health" of the economy has serious implications on a company's strategy. High inflation implies costs will be difficult to control. Low growth means market demand may be soft. Bullish capital markets make it relatively easy and inexpensive to raise money to fuel growth.

The Marketplace Model simulates the buyers that purchase your products. This model generates a market profile which includes: the size and affluence of the various segments of the market (demographics); the average awareness of your products (diffusion); whether the typical buyer at this point is an innovator, early majority, late majority or laggard (product life cycle); the percentage of the market that has actually purchased products (penetration); and why buyers are buying (buyer/product attribute studies). Finally, the model judges the "buying mood" of the market. This is heavily influenced by the health of the economy and perceptions of where the economy is headed (forecasts).

What this all finally produces is a set of buyers that are planning to buy this year with a profile of the type of products in which they are interested.

The Market Share Module matches a company's products to the marketplace/buyer profiles and determines how many units the company will sell this year. A number of factors play important roles when a buyer is choosing among various product offerings. What a user has purchased before is important (brand loyalty). Buyers also look closely at a product's features (price, perceived quality, and credit terms). Buyers differentiate products through advertising and motivated distribution channel.

It is important to note that the relative importance of each of these factors varies depending on the industry and time period of the article.

Competitor Profiles and Decisions

The Competitor Profiles and Decisions Component models the decision-making function of the computer-guided companies. Each competitor has a profile database which consists of hundreds of pieces of data representing 10 years of financial, marketing, operations and strategic data as well as a Strategy Profile which outlines the Company's long-term goals in the industry.

36 *Processing Decisions*

The Strategy Profile is the core of this component and is based on concepts from a wide range of literature on strategic thinking including Michael Porter's work on "Competitive Strategy" and "Competitive Advantage". The Strategy Profile defines the structure of an industry using the current state of the five industry forces and the trends of these forces: threat of entry, competitive rivalry, threat of substitution, the power of suppliers, and the power of buyers. (For a more detailed explanation of these five forces and industry structure see Michael Porter's books, *Competitive Strategy* and *Competitive Advantage*.) The Strategy Profile also includes detailed industry cost structures. Finally, the Strategy Profile defines a company's current position within the industry structure and the position towards which the company is striving (company goals).

Each decision period, the Competitor Profiles and Decisions component takes each company through the same process you, as a user, should take when making decisions. The component looks at a company's current performance and that of competitors, compares it to internal goals and generates a set of decisions which it thinks will move the company closer towards its goals.

Each company has a list of goals. The goals are prioritized by the Personality Attributes assigned to each company. The Personality Attributes, for example, dictate that one goal is more important than another. When two goals conflict in making a business decision, the company will select the more important goal and then make the decision that best serves this objective.

Capital Markets

The Capital Markets component represents an objective group of simulated financial analysts who evaluate the attractiveness of industry stocks, drive stock prices, and establish credit ratings for the five industry firms.

Analysts ask five major questions when evaluating a company's stock:

- What are earnings today?
- What will happen to earnings in the future?
- What level of risk is appropriate for the firm?
- Will the share holders' eventual return be in the form of capital gains or annual income?
- Does this company have value which is not reflected by the earnings situation?

Analysts take into account four factors when evaluating a company's reported earnings per share. First, large increases in net income are often "smoothed". Gains must be maintained over several years before the market accepts them as real, sustainable income. Second, declines in profitability are reflected immediately. Third, non-recurring gains or losses are not evaluated by the market. Finally, "one-shot" events like losses on the repurchase of debt are not included in the earnings calculation.

The market is looking for consistent, predictable earnings growth. Analysts don't like surprises, especially bad ones.

Analysts also look at current expenditures on R&D expenses and new market expansion that might decrease accounting income, but enhance the stock market's perception of the quality of a firm's earnings.

38 *Processing Decisions*

The P/E ratio is derived from a base market P/E that is representative of real world companies, and which varies according to the activity of the stock market as a whole and to specific characteristics of the individual firm. The base P/E is generated from the Dow Jones Industrial Average (DJIA) average P/E for industrial companies. The DJIA P/E is based on industry profit levels, interest rates, and earnings growth. The base P/E is adjusted to reflect the individual firm's growth opportunities such as entering new markets, introducing new products, and having enough factory capacity to meet demand. Finally, the base P/E is further adjusted to reflect sound management practices such as above-average profitability or below-average leverage.

High dividends tend to increase stock price because investors will pay for an income stream. High dividends can also depress the stock price. If a payout ratio is very high it sends a signal to the market that the firm no longer has growth opportunities in which to invest its money. The market will then only pay for the income stream of the dividends and not for the expectation of capital appreciation. Also, if analysts do not believe the dividend is sustainable given the market's expectation of future earnings, the stock will be less valued.

Finally, if the stock price falls below the liquidation value of the company the threat of a takeover may loom. The liquidation value is the market value of the firm's assets, minus its liabilities, divided by the number of shares outstanding.

A firm's one year and ten year interest rates are set at a given percentage above the prime or long term lending rate, based on the firm's credit worthiness (measured by its bond rating). This spread is based on actual historical yield curves from the U.S. economy.

A firm's bond rating varies directly with its current ratio and interest coverage, and varies inversely with its leverage. Bond ratings tend to rise slowly and fall quickly. A firm must show stable and dependable performance to increase its bond rating.

Financial Statement Generator

The Financial Statement Generator component brings together all the equations and rules in the simulation and generates for each company a set of financial data based on generally accepted accounting principles. This data includes: income statements, balance sheets, cash flow reports (analysis of cash), financial scoreboards, and performance summaries, as well as most of the analyses contained in the reports. These reports are your window into what is going on in the simulation as they allow you to evaluate performance and make intelligent decisions.

Running a company is a very complex activity. It requires a person to make decisions across a broad spectrum, and seemingly unrelated range, of areas. One moment a person may be deciding on a marketing strategy for one product, the next moment approving a research budget for a second product, and the next lining up financing to build a factory for a third product. Add to this a further complication of what decisions your competitors are making at the same moment to counteract your strategies and further their own.

The complexity of this human activity raises some very serious questions. "How do we objectively evaluate the performance of one company against another in an industry?", and furthermore "How do we discern between the investment attractiveness of companies in very different industries?"

40 *Processing Decisions*

To answer these questions, the accounting profession developed a series of standard accounting practices that every company must use to report results. These practices are reflected in the standard reports you receive at the end of each year of processing. With these practices standardized it is now not only relatively easy to compare companies in the same industry but it is also now possible to compare and contrast performance of companies in very different industries.

Creating Articles

As stated previously, the simulation model contains equations and rules which represent a set of relationships between key variables that define an industry and the economy. We refer to this model as an engine. To drive this engine we need fuel and the fuel we use is an article. Articles takes the form of databases. These databases are adapted from information featured in Business Week Magazine.

As you could probably guess, creating an article requires an enormous amount of background research. Our in-house research staff relies on an extensive range of McGraw-Hill databases including: Standard & Poor, Compustat, Data Resources Inc. and Datext. In addition, we utilize industry experts to make the articles as accurate as possible and to identify the key issues facing the industry over the next five years.

Economic data is derived from Wharton Econometrics as well as leading economists from The Wharton School of Business. Ten year detailed company financials, information on industry structure and major trends currently affecting the industry are gathered from McGraw-Hill databases and interviews with industry leaders.

Company history, market position and strengths, goals, product descriptions, profitability, R&D emphasis, strategic horizons--i.e. long-term versus short-term decision making--and maximizing return to shareholders, are just some of the issues addressed and modeled in each Article.

Important issues and trends that affect the industry structure and individual company performance are manifested through a library of Events which appear at different points in the simulation. Events introduce you to many of the key issues faced by decision makers in the industry (see Chapter 6 Events for more information).

Our Article authors strive to give you the feeling of being in the "cockpit" of a company, dealing with the same strategic decisions the real-life decision maker is facing. Our goal is to impart to you a deep sense of the opportunities, problems and competitive threats facing these real-life decision makers today and, in so doing, pass along some of their wisdom and experience as you face the same issues.

Company history, the position and strategic goals of the company, the company's products and services, the company's financial performance, the company's market position, the company's competitive advantage, the company's future prospects, and the company's contact information.

Important factors and events that affect the company's performance and financial position are presented through a variety of factors which appear in different forms in the simulation. Factors include the company's financial position, the company's market position, the company's competitive advantage, the company's future prospects, and the company's contact information.

Our Article and our other articles give you the feeling of being in the "cockpit" of a company, sharing with the same strategic decisions the way the world of business is changing. Our goal is to provide you a clear view of the company's financial position and competitive advantage. We hope you will find the company's financial position and competitive advantage in our articles and our other articles.

6 Events

Business Week articles deal with the important issues facing corporate decision makers today. For every article these issues may vary widely or have different priorities. For example, in the auto industry, decision makers must face increased foreign competition, fluctuations in the price of oil, and possible union strikes. In the computer industry, decision makers must face rapid product obsolescence, plunging costs and prices, and Big Blue's overwhelming market dominance.

International

**THE DOLLAR CONTINUES TO FALL
IN OVERSEAS TRADING:
U.S. AUTOMAKERS CAN FINALLY
CATCH UP**



44 Events

Events generate situations unique to an article and require quick and decisive reaction. Events will affect company performance and could possibly change the structure of the entire industry.

How Events are Structured

An event contains a news story which describes the event. Some Events will require you to make a decision specific to your company, and others will be news headlines that affect the entire industry.

For Events where you must make a decision, your response will not only impact your companies performance, but may also influence the industry as a whole. Events cover such topics as: Finance, International Business, Government, Labor and much more, much like the events featured in *Business Week Magazine*.



Examples

What follows are two examples of Events. In the first Event, you are required to make a decision. The second Event requires no decision.

Marketing**DETROIT ADOPTS SALES INCENTIVES**

GM started them, Ford soon followed suit. Will Chrysler? In order to trim their bulging inventories, GM has begun offering rebates of up to \$500 on all its models. Not to be outdone, Ford slashed its prices by 5%. Industry experts predict GM's and Ford's actions will boost auto sales by 13%. More gloomy prognoses claim sales incentives will have little impact on a flabby market.

Sales incentives without increased demand will hurt profits. Can Chrysler afford the risk of slashing profits in a market that is increasingly being overwhelmed by "better-quality" imports.

You Can:

Adopt sales incentives of your own.

Price your cars ignoring sales incentives

"Example Event"

Top of The News

OPEC RAISES THE PRICE OF OIL

OPEC oil ministers meeting in Geneva today have just announced an increase in the price of oil to \$29 a barrel.

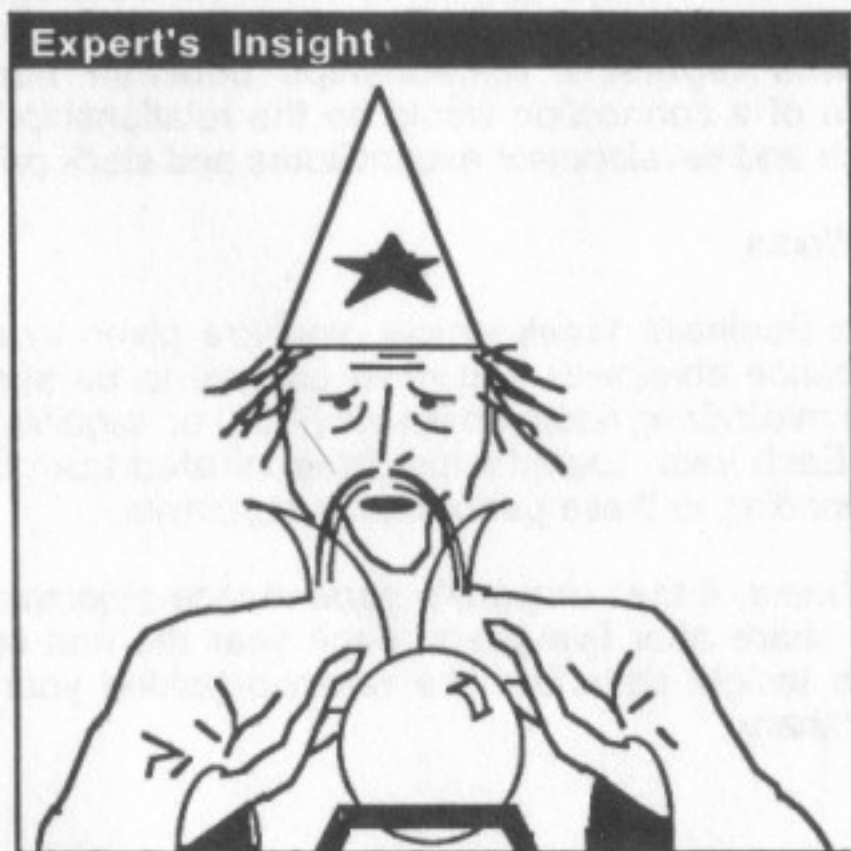
Charley Maxwell, oil expert working for The Wall Street Firm of Digg, Doughn & Burne, speculates the increased revenues will be used to finance the aggressions currently underway in the Middle East. Economists of all nations are rushing to assess the impact increased oil prices will have on their economies. Consumers and industries across the board will be affected.

Perhaps most affected will be the U.S. automobile industry, whose traditional strength has been the manufacture and marketing of full-size vehicles.

"Example Event"

7 Expert's Insight

Expert's Insight is a 400 rule expert system that provides you with an in-depth analysis of how well you are doing and why. Expert's Insight explains the interrelationships among Events, your decisions, your competitor's decisions and your company's performance. To select Expert's Insight activate the Expert's Insight icon on the screen.



48 *Expert's Insight*

How Expert's Insight is Structured

The Expert's Insight component is structured as a "knowledge network." This network contains all of the relationships between variables in the simulation.

The best way to understand the structure of the knowledge network is to think of it as a road map. Each town on the map represents a node in the network containing information about the simulation. A node may contain the current state of market share or the latest stock price. The roads connecting the towns represent relationships between nodes. An example of a connection would be the relationship between research and development expenditures and stock price.

How it Works

In each Business Week article, you are given one or two performance objectives you must achieve to be successful, such as maximizing return on assets (ROA) or regaining market share. Each year, Expert's Insight is initiated from the node corresponding to these performance objectives.

For example, if the company's performance objective is 20% market share after five years, each year the first screen of Expert's Insight describes the reasons behind your current market share.

You are free to navigate around the Expert's Insight Knowledge Net from this starting point and find out what else is happening in the Article. Expert's Insight provides four options for you to move around the knowledge net:

- *Why A?*
- *Why B?*
- *What Else?*
- *Objective.*

By moving from node to node in the knowledge net, you construct a story which explains the reasons behind your results and also describes other effects those results had on your performance. For example, suppose you were wondering why your Net Income fell 20% last year. By using Expert's Insight, you could not only learn the reasons behind the fall in Net Income but also that the fall in Net Income caused Return on Equity to fall 25% which lowered your stock price.

The Expert's Insight screen presents feedback for three nodes at a time. The first node is the Lead Node and presents a statement about performance. The other two nodes, Causal Nodes, represent the two major reasons behind the performance result presented in the first node and are printed as bullets "A." and "B." underneath the performance statement. (See the figure accompanying this section titled Expert's Insight Knowledge Net).

50 *Expert's Insight*

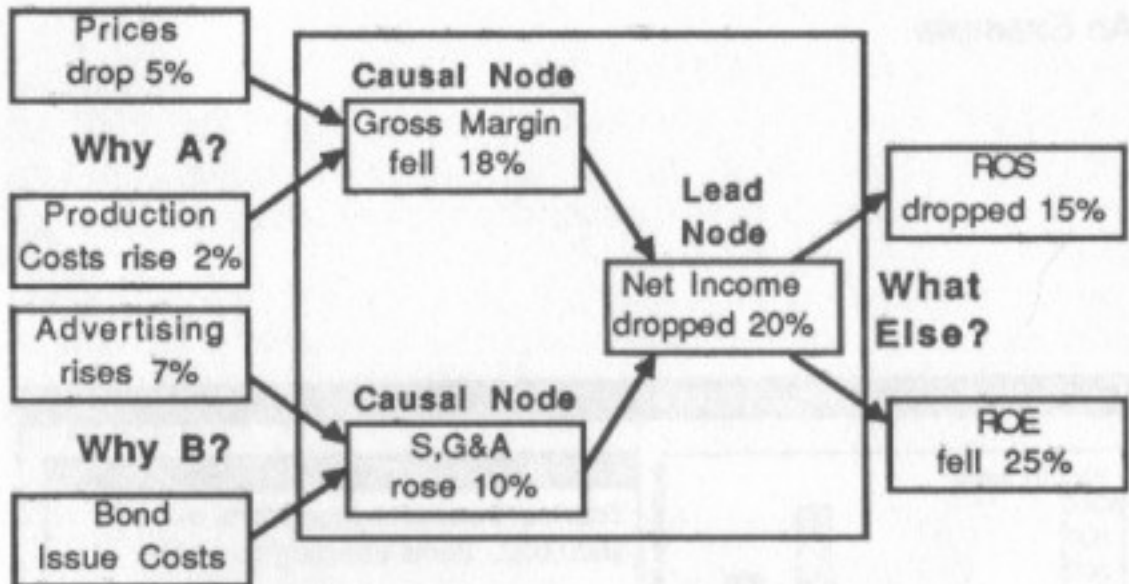
"Why A?" and "Why B?" allows you to turn one of the Causal Nodes into a Lead Node to delve deeper into the simulation. In the example below, by selecting Why B?, Expert's Insight would explain that S,G & A expenses rose because you raised

your advertising budgets and you issued corporate bonds this year which raised financing costs. Selecting Why A? would explain why Gross Margin dropped. You can continue to select Why? until you get to root causes.

"What Else?" turns a Lead Node into a Causal Node and presents the Lead Nodes connected to this new Causal Node. What this in effect does is show the impact a performance result has on related measures of performance. In the example below, selecting What Else? might show that falling Net Income caused Return on Sales to drop 15% and Return on Equity to drop 25%. In other cases, What Else? may show that even though you were successful at meeting the performance objective other company issues are being jeopardized.

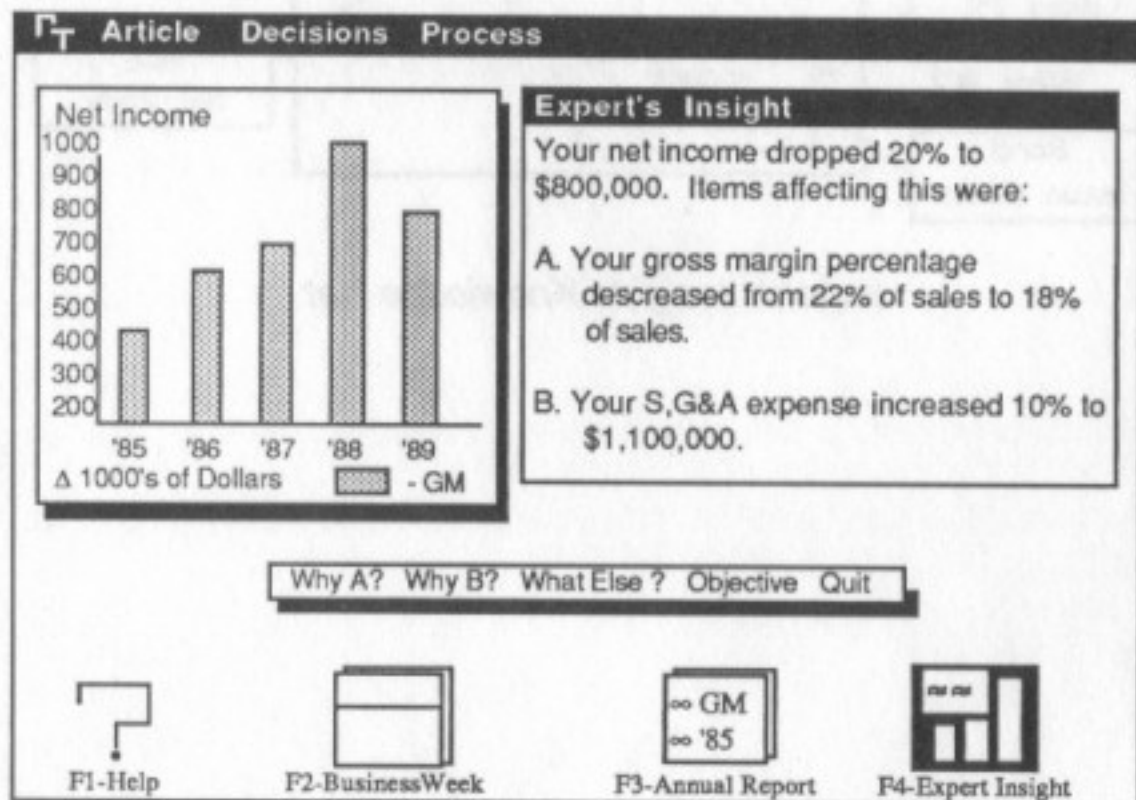
Objective? returns you back to your original starting point, the performance objective, from anywhere in Expert's Insight. For instance, if market share was your objective, choosing ***Objective?*** would always take you back to the point where market share is explained.

Quit takes you back to the main screen.



Expert's Insights Knowledge Net

An Example



Appendix A: Glossary of Terms

Accounts Payable: Money you owe to suppliers for purchases made on credit.

Accounts Receivable: Money owed by customers for goods or services they have purchased on credit.

Advertising Costs: Money spent on advertising.

After Tax: An analysis which focuses on what is left after income tax is paid.

Assets: Total resources of a corporation, such as cash, fixtures, real estate, etc.

Asset Turnover: Ratio of net sales to average assets

Balance Sheet: The statement of financial position that shows total assets equal to total liabilities plus owners' equity.

Bank Loans: Money borrowed from the bank, usually of a short-term nature.

Bond: A certificate to show evidence of debt where a trustee represents the lenders.

Book Value: The value of an asset after accumulated depreciation has been subtracted. Also may refer to stockholders' equity.

Breakeven Analysis: Analysis of the level (volume) of sales at which a project's revenues equal its expenses.

54 Appendix A

Breakeven Point: Activity or volume level at which net income equals zero. Volume level at which a corporation covers its fixed costs.

Breakeven Volume: Sales volume at which a corporation reaches its breakeven point. This is measured by the total fixed costs divided by the contribution margin per unit.

Capital: Permanent money invested in a business. The long-term assets of a business.

Capitalization: A term used by investment analysts to indicate stockholders' equity plus bonds outstanding.

Cash Flow: The amount of cash that flows into or out of a project.

Cash Inflow: Cash coming into the company as the result of a previous investment.

Cash Outflow: Cash invested in a project.

C.E.O.: Chief Executive Officer. The C.E.O. is responsible for the overall activities of the company.

Common Size Analysis: Analysis which expresses each expense on the income statement as a percentage of total revenues, and each asset, liability, or equity account on the balance sheet as a percentage of total assets.

Common Shares: Represents the common stock equity ownership shares of the company.

Common Stock: Stock held by those owners having residual claims on the assets and earnings of a corporation after all debt and preferred stockholders' claims have been met.

Contribution Margin Per Unit: Equals revenue per unit minus variable costs per unit.

Cost of Goods Sold: The cost of producing the goods that are sold. These costs include labor, materials, depreciation, and fixed factory overhead.

Current Ratio: Current assets divided by current liabilities. Measures liquidity.

Debt: Short, informal term for liabilities.

Debt Financing: A method of financing whereby funds are borrowed. Interest expense is associated with this method.

Debt/Equity Ratio: Total liabilities divided by total equity.

Depreciable Life: The expected useful life assigned to a given depreciable asset.

Depreciation: 1) Reduction in the book or market value of an asset; 2) Portion of an investment that can be deducted from taxable income.

Dividend: Payment by a company to its stockholders.

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Dividend Payout Ratio: Common stock dividend divided by net income. It is a measure of the percentage of income paid out as dividends.

Dividends Payable: Money owed to stockholders.

Earnings Per Share: Net Income divided by the number of shares outstanding.

Equity: 1) Common stock and preferred stock, often used to refer to common stock only; 2) Net Worth.

Equity Investors: Investors who are owners of the business.

Financial Leverage: Use of debt to increase the expected return on equity, measured by the ratio of assets to equity.

Financial Ratio Analysis: A method of analysis that uses ratios of key variables from a company's financial statements. (See Financial Scoreboard Tutorials Levels III-V).

Financial Statements: The balance sheet, income statement, statement of changes in financial position, statement of changes in owners' equity accounts, and notes.

Fixed Production Cost: Production expense that does not vary with volume.

Funds: Generally, working capital or current assets less current liabilities. Sometimes used to refer to cash or to cash and marketable securities.

Gross Margin: Gross profit as a percentage of sales.

Gross Profit: Net sales minus the cost of goods sold.

Income Statement: The statement of revenues, expenses, gains and losses for the period ending with the net income for the period.

Income Taxes: Only thing as sure as death.

Interest: The charge or cost for using money, expressed as a rate per period, usually one year, called the interest rate.

Interest Coverage: Earnings before interest and taxes divided by interest expense.

Inventory: The amount of money already spent to purchase goods held on stock for future use.

Inventory Months: Number of months of inventory on hand. It is inventory turnover ratio divided into the number of days in the period.

Inventory Turnover: Number of times the average inventory has been sold during a period, measured by the cost of goods sold for a period divided by the average inventory for the period.

Invested Capital: The money invested by the long-term investors in the business. It is equal to long-term liabilities plus owners' equity.

Leverage: See Operating Leverage and Financial Leverage.

Leverage Ratios: See Solvency Ratios.

58 Appendix A

Lines of Credit: Credit granted to the company by banks, suppliers or anyone else.

Liability: Total value of financial claims on a firm's assets equal to: 1) current liabilities plus long-term liabilities; or 2) total assets minus stockholders' equity

Liquidity (short-term): Having sufficient cash to meet short-term claims.

Liquidity Ratios: Measures the firm's ability to meet maturing short-term obligations. Includes current ratio and quick ratio.

Long Range Planning: Planning the fundamental strategic and financial aspects of a company's long-term future.

Long-Term Debt: Debt that is borrowed for a period greater than one year.

Loss Carry Forward: A loss a company carries from a previous year to the present year in order to reduce tax liability.

Marginal Revenue: Revenue generated from selling each additional unit.

Marketable Securities: Stocks and bonds of other companies held that can be readily sold on stock exchanges or over-the-counter markets. Classified as current assets and as part of working capital if the company plans to sell for cash as needed. Classified as long-term if it represents a permanent investment.

Market/Book Ratio: Equal to the return on equity multiplied by the price/earnings ratio. It is the relationship between the value the stock market has placed on the company relative to the money invested by stockholders (stockholders' equity).

Market Value: Total value of a company, based on total shares outstanding multiplied by stock price.

Net Assets: See Net Worth.

Net Income: The bottom line on the income statement or the profit a company earns during its fiscal year.

Net Working Capital: Current assets minus current liabilities.

Net Worth: Book value of a company's common stock, surplus, and retained earnings. The same as stockholders' equity and Net Assets.

Notes Payable: Money owed to lenders. Can be short or long-term.

Offering: Refers to a company offering shares of its stock or bonds to the public for sale.

Operating Expenses: Costs incurred from operations.

Operating Leverage: Fixed operating costs, so called because they accentuate variations in profits. Expressed as fixed costs as a percentage of total costs at breakeven volume.

60 *Appendix A*

Operating Margin: Operating profit (before interest and taxes) divided by sales.

Overhead: Costs incurred in the normal course of carrying out productive activities, but which are not directly associated with identifiable units of product.

Owners' Equity: Stockholders' equity; assets minus liabilities; contributed capital plus retained earnings of a corporation. See Net Worth.

Payables: Money owed by a company. Money is typically owed to trade suppliers, employees, the government, and banks.

Payout Ratio: See Dividend Payout Ratio.

Percent Change Analysis: An analysis which focuses on the differences in year-to-year results. Allows a firm to track changes in key income statement or balance sheet accounts from one reporting period to the next. Useful in diagnosing key problem areas relative to specific balance sheet and income statement accounts.

Pretax: An analysis which focuses on operating results before income taxes have been deducted.

Price/Earnings Ratio: At a given time, the market value of a company's common stock, per share, divided by the earnings per common share for the past year.

Production Costs: Expenses incurred by production. Includes both fixed and variable costs of production.

Productivity: The process by which a greater amount of output is generated from a given amount of input. Measured as sales volume per employee or sales dollar per employee wage dollar.

Profitability: The extent to which a company earns the highest return possible for resources used or capital employed, consistent with the desire and ability to assume risk.

Profit Margin: Net income as a percentage of sales or the ratio of sales minus all expenses divided by sales.

Pro Forma Statements: Represent financial projections of future company performance. In the simulation these are generated by the Pro Forma Planner.

Quick Ratio: Liquid assets divided by current liabilities. Liquid assets include cash, short-term marketable securities, and accounts receivable.

Ratio: A number resulting when one number is divided by another. Used to assess aspects of profitability, solvency, liquidity, and efficiency. Commonly used financial ratios are essentially of two kinds: 1) Those that summarize some aspect of operations for a period; 2) Those that summarize some aspect of financial position at a given moment.

Ratio Analysis: Utilizes the data from all four financial statements and provides a broader perspective of the firm's financial condition. Can ascertain the profitability of a firm, its

62 *Appendix A*

ability to meet short-term obligations, the extent to which the company is financed by debt, and whether the management is utilizing its assets effectively.

Receivables: Any money owed to the corporation, whether or not currently due. Long-term receivables appear as a long-term asset.

Receivables Turnover: An activity ratio measured by the ratio of credit sales to accounts receivable.

Replacement Decisions: A class of capital budgeting decisions involving replacement of equipment.

Research and Development: Research is an activity aimed at discovering new knowledge in hopes that such activity will be useful in creating a new product, process, or service or improving a present product, process, or service. Development is the translation of research findings or other knowledge into a new or improved product, process, or service.

Resource Allocation: The decision process involving the allocation of money to a specific project or business unit.

Retained Earnings: The cumulative amount of income earned and kept (not paid out in dividends) by the firm.

Return on Assets: A profitability ratio measured by net income divided by assets. This is equivalent to return on sales multiplied by turnover.

Return on Capital: A profitability ratio measured by net income divided by assets. This is equivalent to return on sales multiplied by capital turnover.

Return on Equity: A profitability ratio measured as net income divided by equity. This is equivalent to return on assets multiplied by leverage (the ratio of assets to equity).

Return on Sales: A profitability ratio measured by net profit relative to revenues. Also identified as profit margin.

Revenues: The price of a product multiplied by the number of units sold. In plain English, sales.

Risk: 1) Business risk includes technological obsolescence, foreign competition, price competition, substitute products, as well as fluctuation and change in the economy. 2) Catastrophic risks include fire, earthquakes, flood, etc. 3) Operating risk or operating leverage. 4) Financial risk or financial leverage.

Selling, General, and Administrative Expenses (SG&A): Costs not specifically identifiable with nor assigned to production. These include marketing, selling, R&D, pension, and administrative expenses.

Shareholder Equity: Same as Equity and equals total assets minus total liabilities.

Solvency (Long-Term): Having sufficient cash and cash sources at times when long-term obligations and claims (bonds, pensions) become due.

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Specialized Assets: Assets which can only be used in a specific industry. The value of the asset depends upon the financial health of the industry.

Spreadsheet Model: Program made up of equations that mimic the way something behaves. In the simulation, the model mimics your business. Though most models are far from perfect, they can provide valuable insights if used effectively.

Statement of Changes in Financial Position: Examines sources of funds and uses of funds during a period of operations.

Statement of Changes in Owners' Equity: Links the income statement to the balance sheet; compares the beginning and ending balances for contributed capital and retained earnings while focusing on the changes that occurred during the year.

Statement of Changes in Retained Earnings: A statement that reconciles the beginning-of-period and end-of-period balances in the retained earnings account. It shows the effects of earnings, dividend declarations, and prior period adjustments.

Stock Option: The right to purchase a specific number of shares of stock for a specified price at specified times, usually granted to key employees.

Supply: The amount of inventory on hand, or available for use.

Tax Credits: These are deductions that are subtracted from actual taxes.

Turnover: The number of times that assets, such as inventory or accounts receivable, are replaced on average during the period.

Variable Selling Costs: Selling expenses that change as activity levels change.

Wages Payable: Money owed to employees.

Working Capital: Equals current assets minus current liabilities.

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