

CASEBOOK FOR

BusSim **ENTERPRISE**

A Total Enterprise Business Simulation



Business Simulations – The Key to Understanding Business

WEB EDITION

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Outdoor Limited, Inc.

(A Total Enterprise Perspective)

CORPORATE BACKGROUND

Two budding entrepreneurs not long out of a well-known eastern business school formed Outdoor Limited, Inc. in 1990. Based on a product idea they had seen in Canada, Outdoor Limited began by producing the OutdoorPak[®], a lightweight backpack for hiking. In their first four years of operation, Outdoor Limited increased sales volume to 200,000 OutdoorPaks[®] and employed 27 workers. Like many young companies, Outdoor Limited had difficulties attracting the capital required for expansion. Late in 1994 the founding management sold their interests and left for other endeavors and a new management team took over.

The new President assembled his/her management team, which included three vice presidents, each heading up a functional area. His/her team included a VP for Marketing, a VP for Operations and a VP for Finance. Exhibit 1 displays the organization chart for this new management team.

After three years of working together this team enjoyed great success in providing the outdoor market with a quality backpack. They had increased their sales volume to almost 350,000 OutdoorPaks[®], added 15,000 sq.ft. of new production space and increased the number of employees to 45. By late 1998 the OutdoorPak[®] had captured over a fourth of the U.S. and Canadian backpack market.

In 2002 the management team began to explore the idea of expanding their backpack market to include students in college. Students were just beginning to use a backpack to carry their books to and from class. Their original product, the OutdoorPak[®], was modified for this new application. The management team produced this new product, calling it the SchoolPak[®]. An additional 15,000 sq.ft. of production space and 5,000 sq.ft. of office space were added to their main facility in Rochester, PA. Sales began early in 2003 and have grown steadily since.

In early 2006, the management team at Outdoor Limited began to consider a third product, the SportPak[®]. This flexible carrying bag was targeted for the growing fitness trade but in fact became a universal utility bag used for a variety of transporting needs. Once again space was added to accommodate their new product. Current physical facilities now include a 45,000-sq. ft. manufacturing site and an 8,000-sq ft. office area. By the end of 2006 sales volume had increased to almost one million units and the number of employees was now at 97.

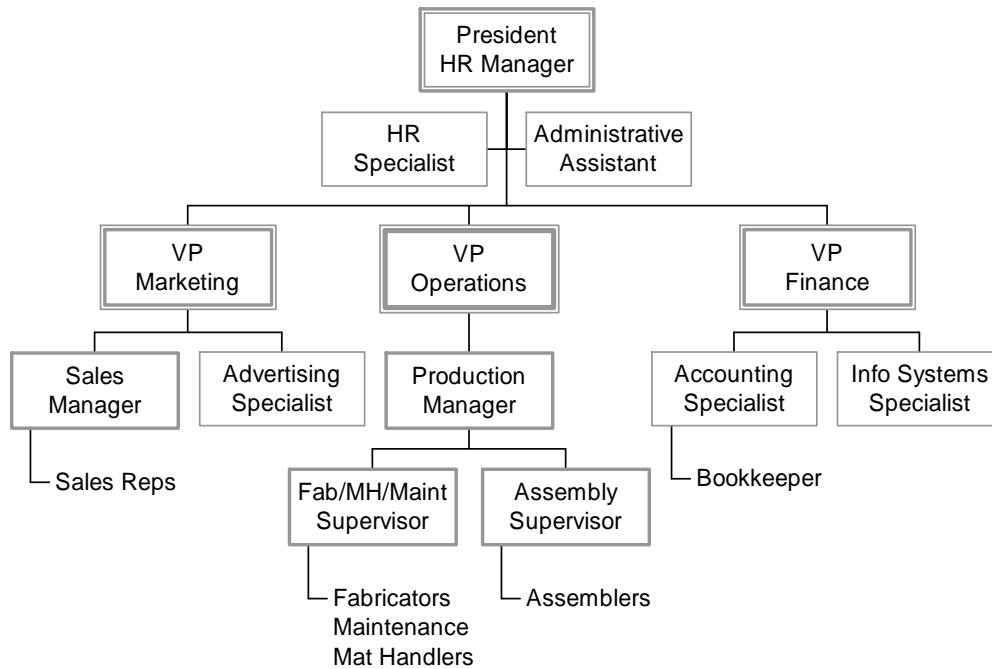
Outdoor Limited has grown from a small business with one product and a few employees to a multi-product-manufacturing firm with over 100 employees. Exhibit 1 displays the current organization structure of Outdoor Limited, Inc. They are divided into four divisions functionally; Marketing, Operations, Finance and Human Resources. Each of the four executives is responsible for a division.

The management team at Outdoor Limited has identified four possible corporate strategies that are acceptable in guiding the future of their organization. These include: 1) a profitability strategy, 2) a differentiation strategy, 3) a response strategy and 4) a low cost strategy. Corporate strategy, or an overall strategic direction, is the most important decision for

the management team. Other decisions that support the corporate strategy decision include: 1) a growth strategy, 2) a quality strategy, 3) a compensation/benefits strategy, 4) a financial risk strategy, 5) a production strategy and 6) a marketing strategy. Currently they have positioned themselves corporately with a profit strategy. All decisions at Outdoor Limited are guided by these strategic decisions.

Exhibit 1 Outdoor Limited Organization Structure

OUTDOOR LIMITED INC.



PRODUCTS AND MARKETS

The Products

The backpacks are constructed out of a variety of top quality materials for durability. The OutdoorPak® is made of a high-density nylon shell with twice-coated polyurethane stitching for strength. Industrial rivets and self-repairing zippers give the pack the ability to take the abuse of the outdoors and continue to perform. Inside the pack the 2500 cubic inches of room allows space for all your gear plus removable dividers and mesh pockets make storage a breeze. An ultra-light magnesium-alloy frame gives this pack the right amount of strength and rigidity. This pack is water repellent and lightweight. The broad straps distribute the weight allowing the wearer greater comfort and flexibility. This pack is available in navy, black, forest green, and burgundy. Exhibit 2 shows a picture of the OutdoorPak®.

Exhibit 2 The OutdoorPak®



The SchoolPak® is similar in features to the OutdoorPak® but somewhat smaller. This product is geared for the high school or college student. The storage area with 2000 cubic inches of space is loaded with dividers and mesh pockets for cards, books, keys, I.D., pens and pencils. There is also a foam-padded laptop compartment that absorbs shocks and jolts. This product is available in the cayenne red, royal blue, and brown as well as the OutdoorPak® colors. Exhibit 3 shows a picture of the SchoolPak®.

Exhibit 3 The SchoolPak®



A third product named the “SportPak®” is larger than the SchoolPak®, 2500 cubic inches, and constructed of similar materials. The pack comes in a variety of colors including olive drab, a multicolor tapestry, and black. The pack may serve as a briefcase for carrying a laptop computer, documents, files, and other items to the office. Or the pack may be used to carry athletic apparel and equipment to a variety of sporting events. The SportPak® is versatile for a variety of use occasions and offers a look that is both professional and stylish. Exhibit 4 shows a picture of the SportPak®.

Exhibit 4 The SportPak®



All backpacks are guaranteed for two years for all parts and five years for the shell (whether nylon or canvas). Any component that fails to perform during the warranty period will be replaced at no additional cost. Outdoor Limited, Inc. will cover the shipping and handling. Repair service is available through authorized agents for Outdoor Limited, Inc. as well by sending the product to the company location.

The level of investment in **quality** determines product improvement. This improvement enhances the perceived quality of the product and, ultimately, consumer demand. Quality is added to the product by incorporating superior materials in manufacturing and workmanship. In addition, quality investment money can improve stitching and components such as zippers, straps, snaps, and pulls. It is important to remember that quality is a perception issue. While investing in quality can and will improve the manufactured “quality” of your products, it is the customer who decides if there is quality in the product.

Another product related factor is **research and development (R&D)**. This research, which is different than simply improving the manufacturing process, focuses on new ways of manufacturing and new materials to use. For example, research and development may develop a fastener that is superior to a zipper or snap. R&D can improve the performance of the components such as nylon or actually develop totally new product materials. New materials or construction methods can give your product a decided advantage in the marketplace. Significant improvements in manufacturing can obviously lead to decreased unit production costs and improved productivity. Both of these developments will greatly benefit the firm.

The Market

One of the most important tasks of the marketing team is to determine who their customers are. This group then constitutes the team’s target market. A tool used to determine which customers to pursue is segmentation. By examining the heterogeneous market closely, the

team may identify which group or groups would best become the target market. Good segments are those that demonstrate some kind of common identity, are accessible, and have good market potential. Your team should make finding your target market a goal and the related segmentation strategy.

One means of better understanding the market is to examine the needs represented in the market. Obviously, the primary benefit provided by the backpack is carrying items. The most popular uses of the product are by students carrying schoolbooks and other school related paraphernalia. Outdoor nature enthusiasts use the pack for camping, bird watching, and hiking. Its sturdy construction makes it a trusted piece of equipment for those who explore the outdoors. Hunters use the pack for carrying ammunition, food, and additional clothing during hunting season. The backpack is becoming more popular with parents of small children and infants, replacing the "diaper bag." When worn on the back, the backpack frees up hands for other uses (like holding a squirming child). Younger adults who are working also use the pack. Since many of these individuals graduated from high school or college within the last five to seven years, they are accustomed to using the backpack in school. The pack is now used to carry lunches and documents, becoming a substitute for the traditional briefcase.

By late 2006, the OutdoorPak[®] accounted for two thirds of the company's sales. Overall sales have grown from 400,000 units in 1999 to over one million units in 2007. Exhibit 5 displays product sales for each product for the years 2004-2008. The VP of Marketing is predicting an increase in demand for all three products next year.

Exhibit 5 Historical Sales

OutdoorPak Sales

Quarter	2004	2005	2006	2007	2008
1	130,000	136,000	142,000	148,000	153,000
2	155,000	160,000	170,000	178,000	185,000
3	170,000	180,000	190,000	198,000	204,000
4	140,000	150,000	155,000	163,000	171,000

SchoolPak Sales

Quarter	2004	2005	2006	2007	2008
1	23,000	28,000	32,000	35,000	38,000
2	31,000	39,000	43,000	48,000	53,000
3	43,000	53,000	60,000	67,000	73,500
4	33,000	40,000	45,000	50,000	56,000

SportPak Sales

Quarter	2004	2005	2006	2007	2008
1			12,000	19,000	24,000
2			18,000	26,500	33,500
3			20,000	30,000	37,000
4			30,000	44,500	55,000

THE MARKETING DIVISION

The Marketing Division at Outdoor Limited is the responsibility of the VP of Marketing. Currently the Sales Manager and the Marketing Specialist report to the marketing vice president. The Marketing Specialist is responsible for advertising, promotion, distribution and market research. In addition, the company utilizes the services of approximately 20 independent sales representatives who carry Outdoor Limited products as well as complementary products from other manufacturers. These representatives call on various retail and wholesale accounts in their respective geographical areas, seeking orders for the company's products. They report to the Sales Manager who is also responsible for identifying potential new accounts, seeking major commitments from large retail chains and identifying new sales representatives. The Sales Manager is also responsible for the retail outlets.

Marketing decisions to be made by the firm fall into two broad categories: (1) marketing mix decisions and (2) non-marketing mix decisions. Marketing mix decisions include those items related to the marketing mix, i.e., product, price, place, and promotion. The non-marketing mix decisions include sales forecasting and marketing research studies that are deemed important to the success of the firm.

Marketing Mix Decisions (Price)

Price is the value exchanged for the product. Of all of the marketing variables, it is the most easily changed item. As such, it is vulnerable to abuse. While changing price is easy, it can have some unprofitable impacts on the product. Admittedly, changes in price will increase demand in elastic markets but those changes can confuse or modify the perception of your product. If you are attempting to create a quality image for product, rapid price fluctuations can suggest that the product is not a quality item. The price fluctuation can have the opposite effect. It may suggest the item is basically a commodity whose value changes with the whim of the market. Customers will judge and value quality in products. If the quality is seen as worth the price, then the customer will pay the price asked. Conversely, if the product does not have high-perceived quality, then customers will reject high prices. And these customers will turn to other products that are seen as having quality equal to the price.

Pricing objectives should be considered when setting the price of your products. You must determine the basis for how you will compete in the market. If you are attempting to compete on price, then you must strive to have the lowest cost structure in your industry. If, on the other hand, you are seeking to have a different product than that of your competitors, you should choose a price with relates to the perceived value of the product. Lower priced products tend to have higher demand but lower profit margins. High priced products tend to have high profit margins but lower demand. Your team should determine which **strategy** is the best for success in your industry.

Currently the OutdoorPak® retails for \$70-\$100, depending on the model and the type of retail outlet involved. The manufacturers suggested retail price (MSRP) is \$99.95. The SchoolPak® retails for \$30-\$50, with a MSRP of \$49.95. The SportPak® retails for \$30-\$45, with a MSRP of \$44.95. Outdoor Limited's current pricing policy is to set their wholesale price at ½ of MSRP. Failing to recognize a substantial mark-up opportunity for their wholesalers and retailers will cause dissatisfaction amongst these sellers and thereby affect your sales in this

channel. The wholesale channel has access to the largest number of potential customers. Pricing in the other channels is more flexible, but provides limited yet growing demand.

Place (Distribution)

Outdoor Limited, Inc. currently sells its products through two distribution channels. Some are sold to **wholesalers** who in turn sell them to retailers such as Target®, Wal-Mart®, and K-Mart®. The wholesalers purchase in larger quantities. The sales force handles sales to wholesalers and performs the ordering, invoicing, shipping schedules, and other channel issues. These wholesalers then pass the display units on to the retailers. In addition, field sales visit retail locations quarterly to inventory and advise the retailer in displaying the product. A second channel, the **Retail** Channel, sells through “factory outlet” stores. These stores are typically located in various parts of the region in shopping centers where other manufacturers sell their products directly to the public. Sales associates trained in working with individual customers handle the task of in-store selling. These sales associates are trained in both merchandising and selling techniques. They also are trained in store management.

Promotion

Promotion decisions are decisions about advertising, sales promotion, and personal selling. These decisions impact your product’s awareness in the marketplace. It is very important that your firm communicates with customers. It is important to remember, however, that your customers include both end-user consumers as well as organizational buyers. Your communication decisions should be guided by your marketing **strategy**.

Sales promotion spending will be directed toward point of purchase (POP) displays, shelf allowances, rebates, coupons, sales representative contests, and similar items. There are incentives (shelf money and promotion money) and point-of purchase display equipment provided to wholesalers carrying the product. These types of tools tend to have a direct effect in increasing purchases. The advertising specialist and the sales manager will jointly oversee this operation dividing the tasks according to which area is involved.

Advertising

The team’s primary advertising decisions concern the choice of media over which you deliver your message. The creative director of your advertising staff is one of the best in the business. He/She has consistently delivered effective messages that really connect with the market. The choice of media, however, requires serious consideration. Media choices must match the marketing **strategy** and be aligned with the target market’s preferences. Your team must decide which media type is the most effective. The choices include television, print and the Internet. Several television stations are located in the region. Some are cable while others are affiliated with a major network. These stations fill a lot of their advertising space with both local and national advertisers. Print media includes newspaper and magazine advertising. The newspaper is a daily evening paper covering national, international, and local news. Advertisements are both reasonably and competitively priced. Advertisements are placed as run-of-press (ROP) which means that the newspaper determines where the advertisements will be positioned in the paper. Several magazines are available. Many are monthly general audience publications produced with high quality color photographs and interesting articles. There are also magazines targeted to those interested in business finance, sports, cooking, hobbies and

crafts, and healthcare issues. Advertising on the Internet includes a homepage for the company and placements on the major search engine pages and cyber-malls.

Sales Management

Sales management for the company has two target customers. One is the end-user consumer who buys the product for personal use. These customers are those associated with the retail stores and direct (Internet) purchases. In wholesaling, the focus is on the service provided. That is, providing information, helps, ordering, and insights. The director of sales has worked for the company for fifteen years and handles the hiring, training, and managing of all sales. He/She is a major stockholder in the company and handles the operation very efficiently.

If your firm selects to sell your products via factory outlets, your staff will open or close stores based on your sales decisions. If your team decides to increase sales in this channel, the Sales Manager will assign sales associates to locations and schedule them for maximum efficiency. On the other hand, if your team decreases the sales, then the store locations will decrease accordingly.

There are additional selling expenses associated with the outlet/retail channel. The outlet/retail locations typically have a lease or rent cost associated with each facility. These costs will be captured in the sales expenses on the income statement. They will not be included in the administrative overhead cost because this cost is for the corporate headquarters location only.

Administrative costs will increase when the total units sold by the firm exceeds 300,000 units. There is an administrative surcharge that will be incurred to pay for the additional support required for such high level of sales.

Marketing Research Studies

Information is necessary if the firm is to be successful. Failure to acquire information essentially guarantees the firm will be operating without knowledge of its competitors. Studies are available in a variety of areas such as industry price summaries, sales summaries and customers reached summaries. These studies give the firm invaluable information concerning the market and competitive environment within which the firm operates.

THE FINANCE DIVISION

Accounting and information systems are the responsibilities of the VP of Finance. The Accounting Specialist and Information Systems Specialist both report to the vice president for finance. This section deals mostly with the financial responsibilities of this division. The Finance Division is primarily concerned with these issues:

- Acquiring the capital needed to expand production facilities. Capital can be acquired through three sources: retained earnings, common stock and long-term debt.
- Managing working capital through short-term borrowing/investing.
- Making dividend decisions.
- Investing excess capital to provide for future needs.
- Preparing budgeted financial statements.

Borrowing Money

Your company must perform some basic financial activities to conduct the operation of its business. **Short-term** financing is available to cover cash shortages you might encounter in your normal business operations. This is money you need to cover the cost of the production decisions you make. You must forecast your need for money and plan for these shortages. If a company does not forecast cash accurately and ends the quarter with a negative cash balance, the bank will automatically provide that company with an **emergency loan**. The amount added to your short-term debt is the amount necessary to bring the company up to a zero balance. The **penalty** for this service is an **additional 5% interest** on the total amount of loan needed for that quarter. The interest is charged the first day of the following quarter. You can determine that quickly because if you have had an overdraft loan issued, your cash balance will be zero! You are not required to pay off an overdraft loan as it becomes part of your current short-term debt. You can pay all, part, or none of it whenever your cash position allows.

Your company may borrow long term capital with **mortgage loans** at the annualized rate of one percent over the posted "Prime" rate (prime is currently 6%). This long-term loan is issued for 20 years. Since you may be adding to this mortgage loan from time to time, the repayment schedule is 1% per quarter of the balance of the long-term loans. This amount is automatically deducted from your bank account each quarter. The bank will lend up to your credit limit.

Your company does have an operating line-of-credit for all short-term loans at the bank. These loans carry an annualized rate of three percent over the prime rate and are subject to your credit limit. Financial transactions are carried on throughout the year based on this limit. Your current credit limit is equal to your current cash. This credit limit will increase/decrease as available cash increases/decreases.

Investing Money

Although some portion of your cash must be set aside for current expenses incurred but not yet paid (i.e., accounts payable), excess cash can be used to generate investment income. You may buy 90-day **T-Bills** that pay interest at 3% less than the prime rate. These T-Bills expire on the first day of the coming quarter and will be available as cash in that period. They are NOT available for cash during the period in which they were purchased. Thus, if you have a cash flow problem it is possible to need an overdraft loan while owning T-Bills.

The second investment tool is the **CD**. You can choose to buy CDs or sell back outstanding CDs well before the due date. Interest income based on the rate at time of purchase (2% less than the prime rate) will be added to your quarterly income statement. When sold they are sold at their face value.

Buying and Selling Stock

Your company may choose to raise capital by issuing common stock. The current market price is posted on your performance report and this is the price at which the stock will be sold. This sale will take place on the first day of the current quarter so the cash from the sale is available in the quarter in which the stock is sold. You are charged a 5% brokerage fee to **issue stock**.

If financial conditions warrant, your stock may be **repurchased** at market price. However, your corporate charter requires that you maintain a minimum of 500,000 shares of stock (the beginning number of shares in your company). Transactions take place at the current market price plus a 2% brokerage fee to repurchase the stock.

Capacity Expansion

Your company will need to consider increasing the number of units it can produce in the future. Examining predicted sales suggests that the current level of capacity, which is 260,000 units, might not be enough to support future growth. **Expansion** can be accomplished by re-engineering your current facility or by building new additions. To add capacity by re-engineering costs \$100/unit of capacity added. There is a limit of 1,000 units per quarter using this feature. To add capacity by building, costs \$150 per unit of capacity added. There is a limit of 20,000 units per quarter using this feature. The new capacity is available next quarter.

Equipment purchases for the new expansion are required to make this area productive. Typical purchases amount to about 30% of expansion costs. Financial statements for 2008 are shown in Exhibit 6.

Exhibit 6 Previous Quarter Financial Statements

<u>INCOME STATEMENT</u>	
(Quarter 4)	
REVENUE:	
Net Sales	\$12,742,000
COG SOLD:	
Begin FG Inv	\$0
COG Manufactured	7,531,000
FG Available	7,531,000
Ending FG Inv	\$0
COG Sold	7,531,000
Gross Profit	\$5,211,000
EXPENSES:	
Marketing	500,000
Product Development	500,000
Selling	1,000,000
Compensation	400,000
Human Resource	20,000
Other	30,000
Inventory Carrying	-
Depreciation	360,000
General & Admin	1,000,000
Operating Profit	\$1,401,000
Interest	252,500
Taxable Income	\$1,148,500
Tax	344,550
Net Income	\$803,950

<u>BALANCE SHEET</u>	
(Dec 31, 2008)	
<u>ASSETS</u>	
Current Assets	
Cash	\$100,000
Accounts Receivable	3,822,600
Inventory	-
Investments	\$0
Total Current Assets	\$3,922,600
Plant & Equipment	
Land	\$4,000,000
Building	16,000,000
Less Accum Dep	3,500,000
Equipment	5,000,000
Less Accum Dep	1,200,000
Total Assets	\$24,222,600
<u>LIABILITIES</u>	
Current Liabilities	
Accounts Payable	1,564,400
Short Term Loans	1,000,000
Long Term Liabilities	
Long Term Loans	10,000,000
Total Liabilities	\$12,564,400
<u>EQUITY</u>	
Common Stock	\$10,000,000
Retained Earnings	1,658,200
Total Stockholder Equity	\$11,658,200
Total Liability & Equity	\$24,222,600

THE OPERATIONS DIVISION

The company's manufacturing activities are under the direction of the VP for Operations. During this last year at Outdoor Limited, the operations division has been responsible for reduced product costs; both in terms of labor and material content, improved delivery, and upgraded quality (as determined by number of returns and waste). While they continue efforts in these areas, they see a major part of their current tasking as running the production operation to meet changing marketing requirements.

Manufacturing at Outdoor Limited is both a fabrication and an assembly operation. Some parts are made in the plant and some are purchased, but each product is assembled at Outdoor Limited. All three products require a small number of standard components, many of them requiring raw materials common to all their products. This enables the company both to maintain small inventories and have access to a number of alternative sources of supply for the various components since suppliers require no special tooling.

Reporting to the VP for Operations is the Production Manager. This department management position is responsible for all the production scheduling and the flow of material through the plant. This includes purchasing, storage, part movement and shipping/receiving. Supervisors in the assembly and fabrication shops report to this position.

Material Control

The company relies on good planning to time the arrival of materials from suppliers so as to avoid stock-outs of raw materials and yet maintain small inventories. The sales forecast provides the Operations Manager and his/her assistants with a list of expected orders for each of the next two quarters. Based on this list, purchase orders are issued to suppliers with whom Outdoor Limited have standing contracts.

Since the company was purchasing standard raw materials from suppliers, it had been possible to establish two sources for most items and to set up open contracts that specified purchases of a minimum quantity. Purchase orders were then placed one to three months in advance of requirements, depending on the lead-time required by the supplier.

In order to keep in-process inventories at a minimum, two full-time stock handlers are employed to move subassemblies and components to the appropriate operation at the end of each day. These material handlers are also responsible for supplying the workers in their assigned area with the parts they require so that there will be no waiting.

Production

The Production Department is divided into seven shops. These include cutting, framing, strapping, three assembly areas (one for each product) and support services (material handling, maintenance and janitorial). The pertinent data associated with each of these shops is shown in Exhibit 7. The station parameter in the table indicates the current assignment of stations (equipment), to that shop. The production rate relates to the number of units/hour/station that could be produced by a new machine with a trained operator. The worker data represents the current number of workers assigned to that shop. The efficiency data is a measure of that shop's

ability to perform the desired function. This value can change as a result of **training** and/or by spending more on **incentives**.

Exhibit 7 Shop Data

SHOP	PROD RATE*	EFF
Cutting Fabrication	190	0.92
Framing Fabrication	40	0.92
Strapping Fabrication	27	0.92
OutdoorPak Assembly	7	0.92
SchoolPak Assembly	10	0.92
SportPak Assembly	11	0.92
Support		0.92

* Standard Production (units/hr/worker)

The production process is divided into five main tasks: cutting, sewing, metal fabrication, subassembly, and final assembly. In the cutting operation fabric is cut into standard size pieces. In the sewing operation fabric pieces are stitched together to form the packs or cases for the various products. In metal fabrication aluminum tubing is cut to specified lengths and formed into a frame for the OutdoorPak. In strap fabrication, fabric is folded and stitched to form the straps for each product. In final assembly the hardware is added to the sewn fabric in one operation and then the straps and frames are added in the last operation. Individual workers perform these tasks at a workstation within their area.

The product determines the numbers of fabric pieces required. Strap fabrication requires one cut piece to produce the strap for the particular product. The packs for each of the products use a different number of fabric pieces. OutdoorPak's require **four** fabric pieces, SchoolPak's require **three** fabric pieces and SportPak's require only **two** fabric pieces. (See Product Structure Diagram in Appendix B.)

Once the schedules have been set for all production operations for the quarter, section supervisors take responsibility for meeting these schedules. In strapping fabrication, this requires that straps be made for the appropriate product that would be in final assembly on the following day. In metal fabrication, all bending and forming of the aluminum tubing is identical. This process is only required for the OutdoorPak. These frames are then held for the following day's final assembly when that activity includes OutdoorPaks.

In each production process, individual workers repeat sets of tasks that might take anywhere from 6 seconds to 8 minutes. Standards have been established for each task and workers are expected to work according to these standards. The time it takes each worker to fabricate a part is a function of the machine used and the worker assigned to that station. The time it takes to assemble a product is a function of the workers effort/ability alone. Exhibit 7 provides the production rate data(standards) needed for scheduling each of the plant's products.

The relevant cost data used in the budgeting process can be found in Exhibit 8. The operations division seeks to improve on these costs while continuing to produce a high quality product.

Exhibit 8 Standard Costs and Retail Price

	OutdoorPak	SchoolPak	SportPak
Labor Cost/unit	\$9.00	\$4.00	\$3.00
Material Cost/unit	\$18.00	\$8.00	\$7.00
Manu Overhead Cost/unit	\$6.00	\$6.00	\$6.00
Suggested Retail Price	\$99.95	\$49.95	\$44.95

Maintenance

The maintenance function is part of the Support Shop and reports to the Fabrication Supervisor. Currently two maintenance technicians are responsible for all routine maintenance as well as being on call to fix breakdowns. Equipment breakdowns can occur due to random events, poor **maintenance expenditures** and poor morale.

Quality Control

Quality Control is the responsibility of the Operations Division. Work in this area involves assuring that the produced parts and products conform to the design standards. Rejects require additional time and effort to correct defects. The amount spent on **quality** directly affects the number of rejects produced by the production shops.

THE HUMAN RESOURCE DIVISION

The company's human resource activities are under the direction of the President. He/She has been directly involved with this division since the current management group took over control of Outdoor Limited. The HR Specialist and Administrative Assistant have helped with the workload in this division. As the company grows, however, the President will need to depend on more professional HR staffers to carry the increased tasking.

During this last year at Outdoor Limited, the human resource division has found it difficult to keep up with the demands for training and developing their employees. As demand for their products grow; recruiting, staffing and retaining good employees must become a higher priority. Employee assistance programs have been cut back and tactical oversight of these areas is a definite problem at Outdoor Limited.

The plant's work force is made up of skilled, semi-skilled and unskilled employees. Wage rates for the hourly workers range from \$8.00 to \$16.00 per hour depending on their skill. These are considered competitive with alternative jobs available to workers in the Rochester area. Workers also participate in a wage incentive program that pays bonus money each quarter to those above production standards. The production manager has complete discretion on the assignment of workers.

Like many manufacturing operations employing low-skilled workers, Outdoor Limited suffers from light absenteeism. The HR Division has recently initiated a program of making personal calls to missing workers hoping to cut absenteeism from 7 percent to a more reasonable 3 or 4 percent. While labor was not particularly tight in the Rochester area, and while

management had observed that most workers reached full efficiency within one period of hiring, it was difficult to find good workers. Employee attrition has also been a nagging problem. Historical figures show an annual attrition rate of about 10%.

Most workers were willing to work some overtime since they were paid time and a half for anything over 40 hours per week; however, the operations manager tended to plan production operations on the basis of straight time, using overtime only to complete the subassemblies or component parts needed for the following day's operations. (Actual overtime had averaged less than two hours per week per employee over the past several months.)

SPACE AND COMPANY RESOURCES

Physical facilities include a 45,000-sq.ft. manufacturing facility and an 8,000-sq.ft. office area. These facilities provide enough space for the current level of operations. Currently there is one vacant office and 1,500-sq.ft. of manufacturing space available. More equipment and workers will be needed if demand increases. Production space may be added in increments of 1,000 units at a cost of \$100 per unit.

Simulation parameters and previous quarter outcomes are summarized in Exhibit 9.

Exhibit 9 Simulation Parameters/Previous Quarter Outcomes

Current Production Capacity	260,000 Units
Hiring Cost	\$1,500 per emp
Expansion Cost	\$150 per unit
Finished Goods Carrying Cost	\$1.00 per unit
Work-in-process Carrying Cost	\$0.20 per unit
Raw Material Carrying Cost	\$0.10 per unit
Wholesale Channel Sales Cost	\$2 per Unit Sold
Retail Channel Sales Cost	\$10 per Unit Sold
Direct Channel Sales Cost	\$5 per Unit Sold
Current Stock Price	\$20.00 per share
Current Number of Stock	500,000 shares

Previous Quarter	OutdoorPak	SchoolPak	SportPak
Production/Sales	173,000	60,000	55,500
Ending FG Inventory	0	0	0
Raw Materials	Fabric	Tubes	Hardware
On Order	1,300	180,000	260,000

REQUIREMENTS

Your management team will oversee the Outdoor Limited operations for the next three years. A necessary tool to guide operations is a business plan. This document identifies the strategy that will chart the course your company takes. In your plan, you will identify your strategy at the corporate level. This strategy will guide the actions and tactics that your management team will pursue.

The financial operations of your firm are guided by projections of revenues and costs. Your revenue projection will come from a forecast of sales. This forecast provides not only a goal for sales but also a guide for the finance and operations functions. You must develop a sales forecast for the next year, by quarter, for each product you manufacture and sell. This is a critical number since it will be used for capital and financial decisions. Inaccurate forecasts can cause serious cash flow consequences to your firm. A template to help determine appropriate decisions each quarter is shown in Appendix D and an Excel file containing this template is provided as a download with this simulation.

As 2008 comes to a close, the management team at Outdoor Limited is concerned about the success of the organization over the next three years. Your team will have to make quarterly decisions relative to production, marketing, finance and human resources. Your objectives are to increase the profitability and provide appropriate returns to the stakeholders (investors, employees, customers, etc) of the firm. You will need to develop, write, and present a company business plan for each meeting with senior management. A template for this document will be provided. Annual Senior Management meetings will monitor and report on progress of the firm. **The team's performance will be rated based on your selected strategy and the calculated performance rating.** See Appendix A for more information on the performance rating.

BusSim Enterprise Web Edition

(A Total Enterprise Simulation)

BusSim Enterprise is the final simulation in the *BusSim* series. It is intended to introduce the senior business student to the total operation of a small manufacturing firm that produces several products. The focus of this simulation is on the coordination of the functions in a manufacturing business. The user manages a single company that is part of a ten-company industry. The computer's role is to process your decision and make decisions for the other nine companies. These decisions are quickly simulated and reports are produced that show the results of these decisions. Exhibit 10 below is a display of the main screen.

Exhibit 10 Main Screen

BusSim Total Enterprise Business Simulation (Web Edition)

Budget Decisions

Advertising (\$000)

Promotion (\$000)

Quality (\$000)

R and D (\$000)

Technology (000)

Incentives (\$000)


Training (\$000)

Maintenance (\$000)

Functional Decisions

Marketing Human Resource

Finance Operations



Operating **Quarter 1** Marketing

Current Outcomes

Demand

Sales

Production

Turnover (%)

Productivity (%)

Profit

Cash

Stock Price

Simulate

ReSet

Financials

Research Reports

Production

Performance

Information

Profit Strategy

Industry Averages									
Quarter	Advertising	Promotion	Quality	RandD	Technology	Incentives	Training	Maint	Profit
1	\$298,549	\$201,576	\$198,362	\$152,147	\$157,676	\$0	\$20,111	\$30,032	\$418,628

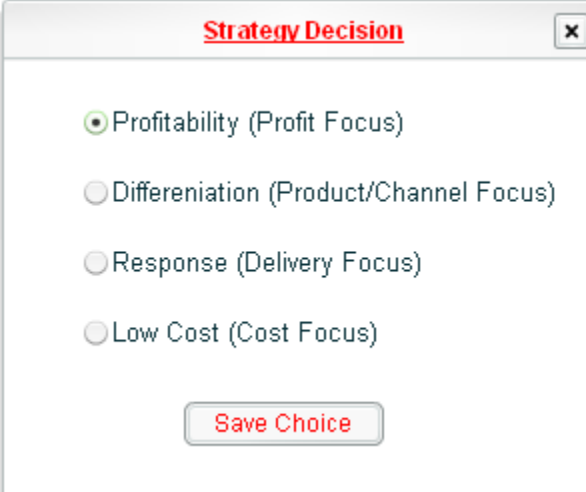
UserName: undefined Developed by: David A. Jordan (www.bussim-ed.com)

Operating Instructions

Instructions for operating the *BusSim*[®] Enterprise Web Edition application are provided in step-by-step format below.

1. After executing the Login process, the simulation presents the Strategy selection screen shown in Exhibit 11. The user should select the desired strategy to be used during the current session. Each of the four strategies and their associated performance rating calculations are explained in Appendix A. The default strategy is the Profitability Strategy.

Exhibit 11 Strategy Decision Screen



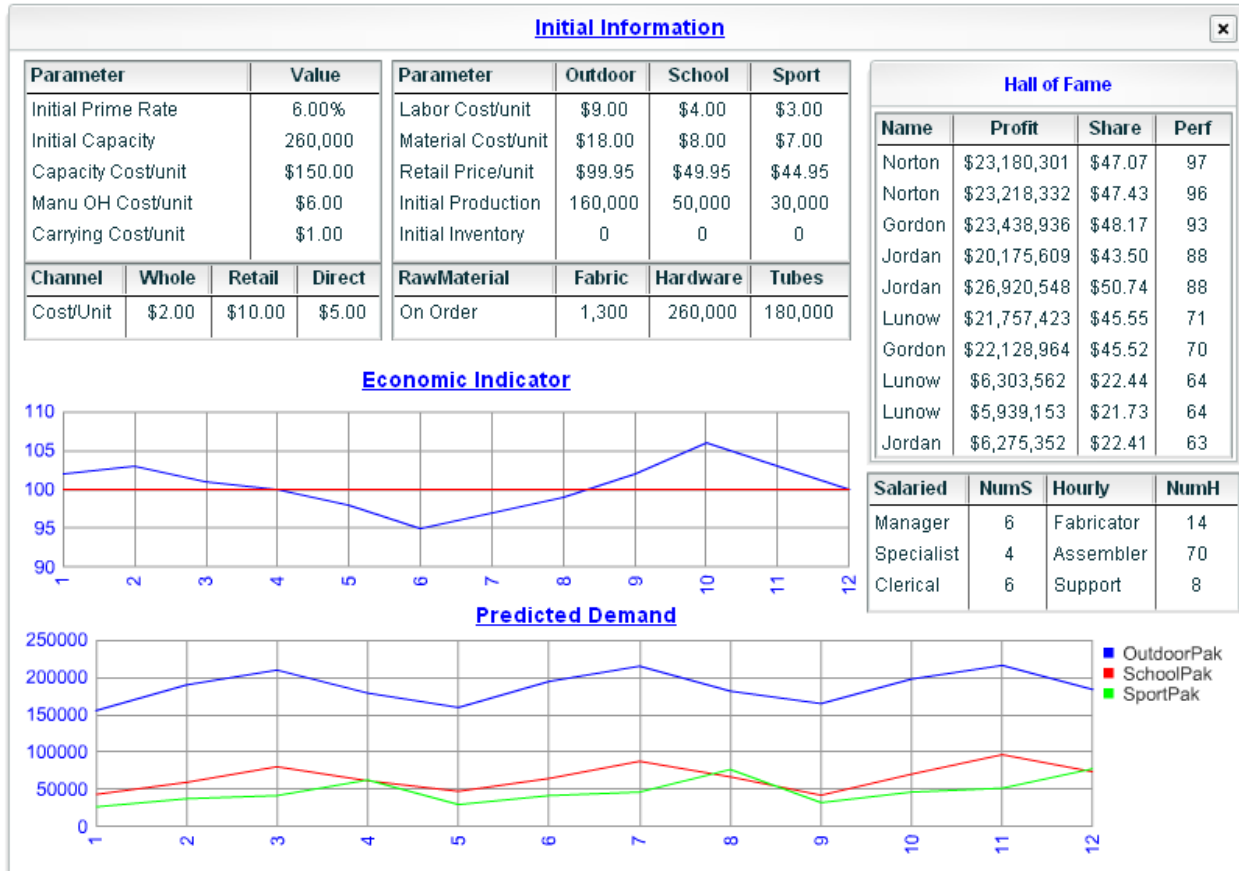
The screenshot shows a web-based dialog box titled "Strategy Decision" with a close button (X) in the top right corner. Inside the dialog, there are four radio button options for selecting a strategy:

- Profitability (Profit Focus)
- Differentiation (Product/Channel Focus)
- Response (Delivery Focus)
- Low Cost (Cost Focus)

At the bottom center of the dialog, there is a button labeled "Save Choice".

2. Before running this simulation, the user should select the **[Information]** button and review the display shown in Exhibit 12. Graphs of the economic environment and product demand for all 12 quarters are displayed. Information on the current workforce, simulation costs, simulation parameters, and Hall of Fame (Top 10) simulation results are also available. These should be helpful in planning your firm's decisions.

Exhibit 12 Initial Information Screen



3. When making a decision, the values for the decision variables in the Budget Decisions Window, (see Exhibit 13) should be changed to reflect your strategies for the next period. Enter your values for the decision variables by using the up/down arrow buttons for each decision. *Never enter decisions using the keyboard!* Each of the decision values are in thousands of dollars. A quick description of the effect of changing these decisions is presented in Exhibit 14. These descriptions are also available by moving your mouse over the 'Budget Decisions' label and pressing your left mouse button. Explanations for the **Functional Decisions** are presented in the Decision Screen Section of this manual.

Exhibit 13 Budget Decisions Window

Budget Decisions	
Advertising (\$000)	300
Promotion (\$000)	200
Quality (\$000)	200
R and D (\$000)	150
Technology (000)	150
Incentives (\$000)	0
Training (\$000)	20
Maintenance (\$000)	30

Exhibit 14 Budget Decision Variable Descriptions

Variable	Description
Advertising	Used in determining exposure and sales
Promotion	Used in determining sales. Affects convenience quality
Quality	Used in determining product quality, demand and production quality control
R & D	Used in determining product quality and demand
Technology	Used in determining production standards
Incentives	Used in determining productivity.
Training	Used in determining productivity.
Maintenance	Used in determining the likelihood of break downs

- Press the **[Simulate]** button on the Main Screen (Exhibit 10) to update the outcomes for the next period. The Current Outcomes Window (Exhibit 15) is updated and should be used to view the results for the current period. This window displays values for the current demand, sales, production, turnover, productivity, profit, cash and stock price variables. Descriptions of the outcome variables are available by moving your mouse over the ‘Current Outcomes’ label and pressing your left mouse button.

Exhibit 15 Current Outcomes Window

Current Outcomes	
Demand	231,680
Sales	228,219
Production	233,241
Turnover (%)	0.0%
Productivity (%)	89.7%
Profit	\$129,237
Cash	\$546,261
Stock Price	\$19.25

- The Industry Window (Exhibit 16) provides industry average information for each quarter. This report provides valuable information that can be used to determine how to set your decision variables in the future.

Exhibit 16 Industry Window

Industry Averages									
Quarter	Advertising	Promotion	Quality	RandD	Technology	Incentives	Training	Maint	Profit
1	\$196,564	\$149,323	\$153,696	\$102,025	\$96,973	\$0	\$19,683	\$29,589	\$860,231

- The **[Financials]** button on the Main Screen (Exhibit 10) provides a detailed summary of the financial results for a single quarter. Exhibit 17 shows an example of the Integrated Financial Statements that are displayed. Notice the label ‘COG Manu’ highlighted in red on the Income Statement when the mouse is passed over this area. Clicking on this label provides the expanded COGM Report shown in Exhibit 18.

Exhibit 17 Sample Financial Report

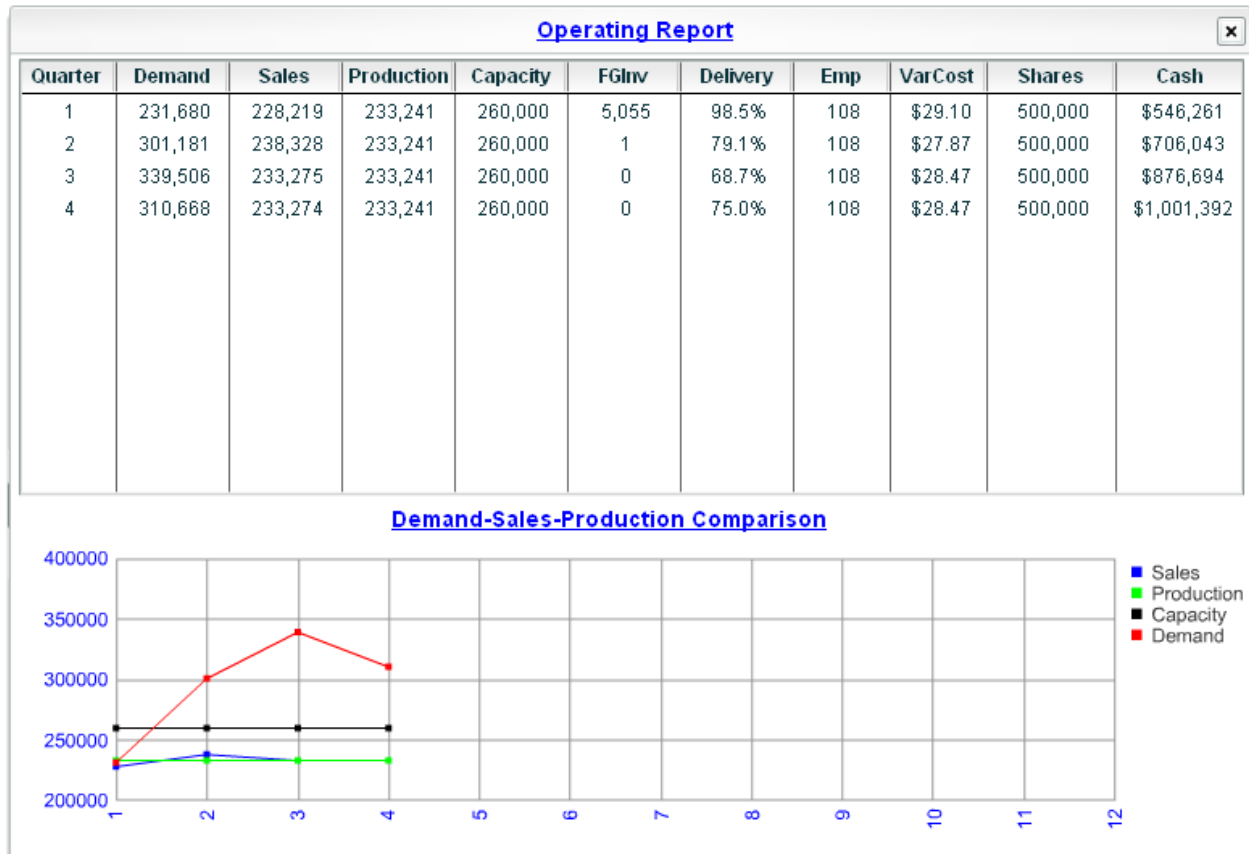
Integrated Financial Statements x						
Income	Value	Balance	Previous	Current	CashFlow	Amount
REVENUE:		ASSETS:			INDIRECT:	
Net Sales	\$11,109,686	Current Assets			Net Income	\$504,064
COG SOLD:		Cash	\$100,000	\$871,143	Bldg & Equip Dep	\$360,000
Begin FG Inv	\$0	T-Bills	\$0	\$0	(Inc)Dec in AR	\$45,094
COG Manu	\$6,641,563	Accounts Receivable	\$3,378,000	\$3,332,905	(Inc)Dec in Inv	(\$372,215)
FG Available	\$6,641,563	Inventory Value	\$0	\$372,215	Inc(Dec) in AP	\$334,200
Ending FG Inv	(\$84,504)	Total Current Assets	\$3,478,000	\$4,576,264	Cash from Op Activities	\$871,143
COG Sold	\$6,557,059	Investments	\$0	\$0	DIRECT:	
Gross Profit	\$4,552,627	Plant & Equipment			Collections from Cust	\$11,154,780
EXPENSES:		Land	\$4,000,000	\$4,000,000	Payments to Suppliers	\$3,445,800
Marketing	\$500,000	Building	\$16,000,000	\$16,000,000	Operating Expenses	\$3,149,274
Product Dev	\$500,000	Less Accum Dep	(\$3,500,000)	(\$3,660,000)	Indirect Expenses	\$3,220,035
Selling	\$794,204	Equipment	\$5,000,000	\$5,000,000	Net Interest	\$252,500
Compensation	\$366,844	Less Accum Dep	(\$1,200,000)	(\$1,400,000)	Taxes Paid	\$216,027
Human Resource	\$20,000	Total Assets	\$23,778,000	\$24,516,264	Cash from Op Activities	\$871,143
Other	\$30,000	LIABILITIES:			Investing Activities:	
Inventory Carrying	\$8,987	Current Liabilities			(Purchase)Return	\$0
Depreciation	\$360,000	Accounts Payable	\$1,177,800	\$1,512,000	Financing Activities:	
General & Admin	\$1,000,000	Short Term Loans	\$1,000,000	\$1,000,000	Borrowing(Payment)	(\$100,000)
Operating Profit	\$972,591	Long Term Liabilities			Net Inc(Dec) in Cash	\$771,143
Net Interest	\$252,500	Long Term Loans	\$10,000,000	\$9,900,000	Previous Cash	\$100,000
Taxable Income	\$720,091	Total Liabilities	\$12,177,800	\$12,412,000	Cash Balance	\$871,143
Tax	\$216,027	EQUITY:			Return-On-Sales:	4.5%
Net Income	\$504,064	Common Stock	\$10,000,000	\$10,000,000	Current Ratio	1.82
		Retained Earnings	\$1,600,200	\$2,104,264	Debt-To-Equity	102.5%
		Total Stockholder Equity	\$11,600,200	\$12,104,264		
		Total Liability & Equity	\$23,778,000	\$24,516,264		
Quarter:	1					

Exhibit 18 Sample Cost of Goods Manufactured Report

Cost of Goods Manufactured x		
Label	Costs	Balance
Direct Materials:		
Begin Raw Materials	\$0	
Raw Material Purchases	\$3,780,000	
Raw Material Available	\$3,780,000	
Ending Raw Material	(\$233,504)	
RM Used in Production		\$3,546,496
Direct Labor Cost	\$1,721,280	
Manufacturing Overhead	\$1,427,994	
Total Manufacturing Cost		\$6,695,770
Begin Work In Process	\$0	
WIP Available	\$6,695,770	
Ending Work In Process	(\$54,207)	
Cost of Goods Manufactured		\$6,641,563

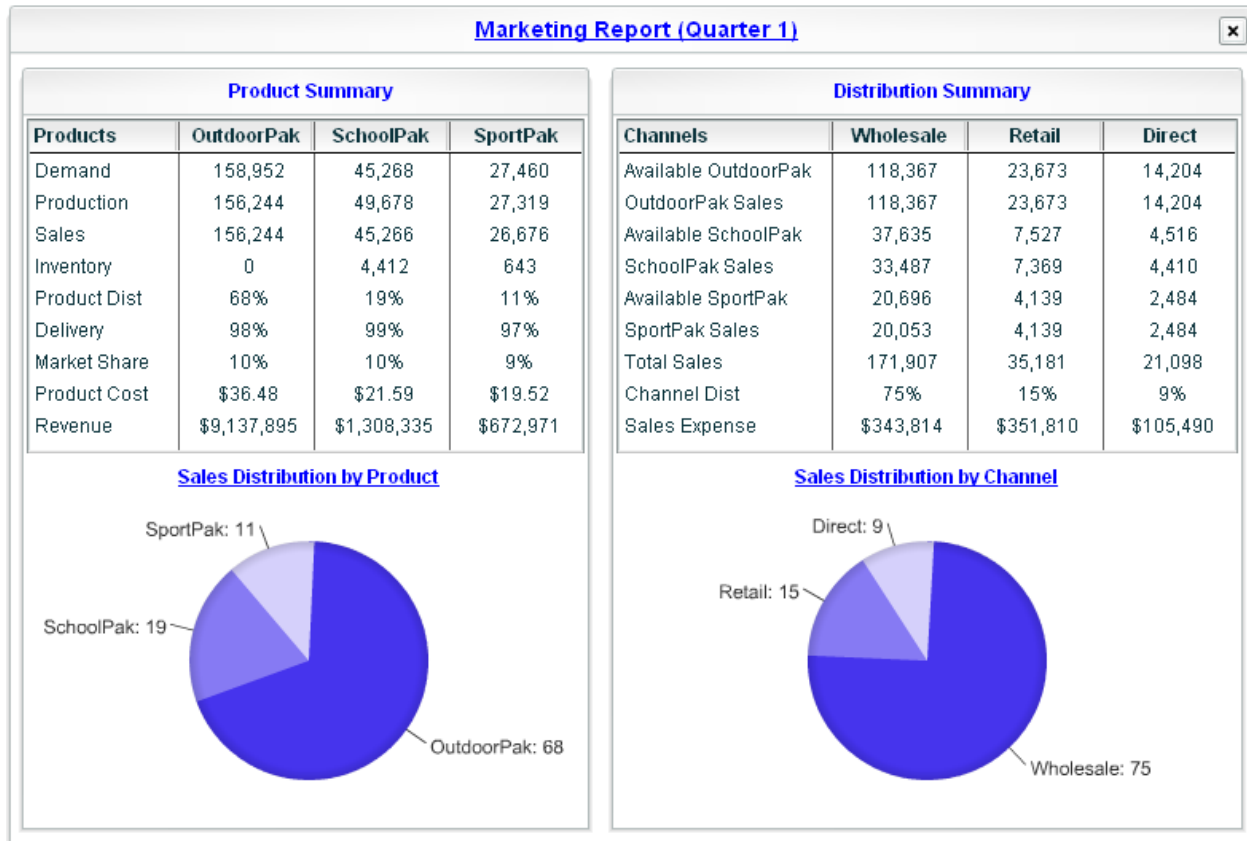
7. The [**Operating**] button on the Main Screen (Exhibit 10) is used to display the Operating Report (see Exhibit 19). This report display quarterly operating information such as units demanded, units sold, units produced, current capacity, ending finished goods inventory, current employees, current shares of stock and current cash. Two metrics are also displayed which are the delivery percentage (sales/demand) and the variable cost. Sales, production, capacity and demand are also graphed for each quarter.

Exhibit 19 Operating Report



8. The [**Marketing**] button on the Main Screen (Exhibit 10) is used to display the Marketing Report (see Exhibit 20). The Product Summary Window provides a breakdown of information by product. The Distribution Summary Window provides a breakdown of information by channel.

Exhibit 20 Marketing Report



9. The **[Production]** button on the Main Screen (Exhibit 10) is used to display the Production Report (see Exhibit 21). The Production/Inventory Summary Window provides a breakdown of information by production area. The Human Resource Summary Window provides a breakdown of information by employee type.

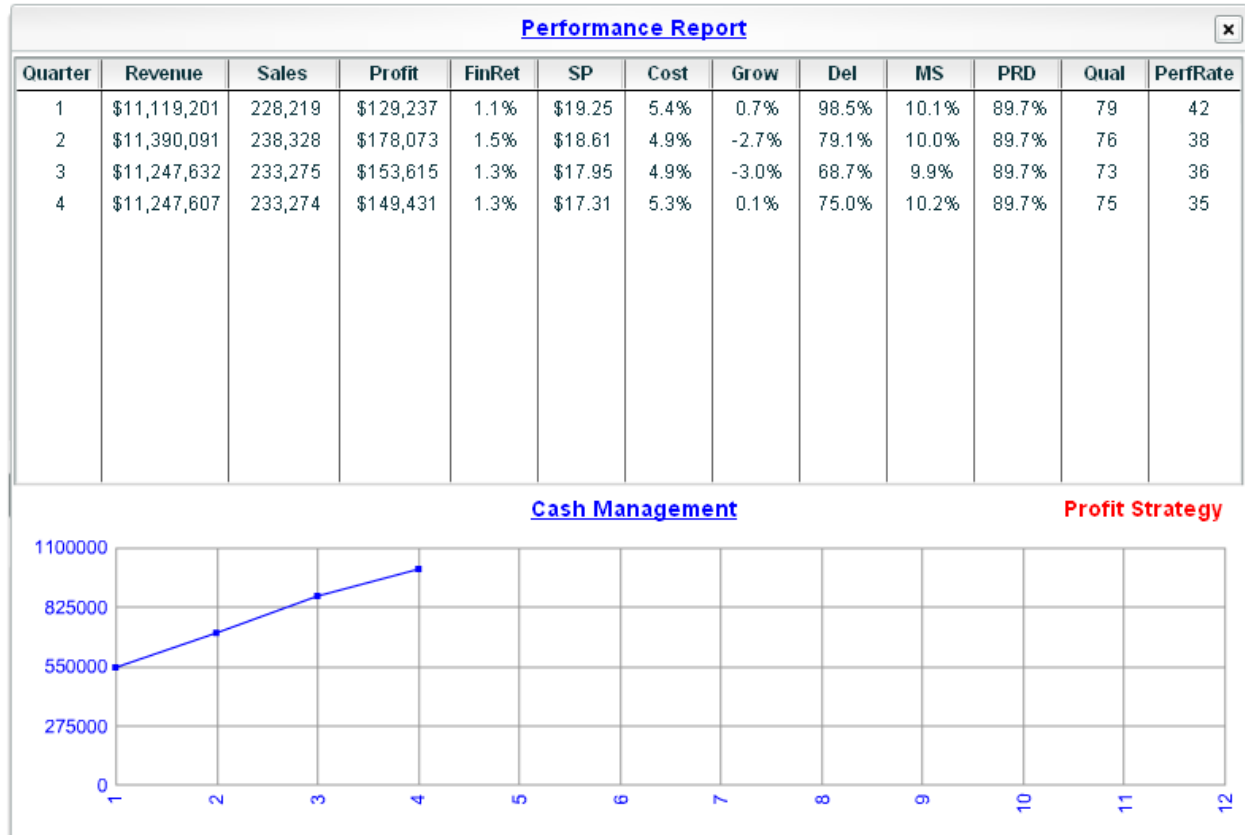
Exhibit 21 Production Report

Production Report

Shops	CutPieces	Straps	Frames	OutdoorPak	SchoolPak	SportPak	Type	Num
Production	1,174,642	246,993	166,720	159,432	50,691	27,876	Manager	6
Rejects (%)	0.9%	0.9%	0.9%	1.9%	1.9%	1.9%	Specialist	4
Hours Sched	488	488	488	360	80	40	Clerical	6
Delays (%)	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%	Fabricator	14
Inventory	40,416	4	1,253	0	4,412	643	Assembler	70
							Support	8
							Hire	0
							Turnover	0
RawMaterial	FabInv	HardInv	TubeInv	FabOrder	HardOrder	TubeOrder		
Inw/On Order	93	15,480	8,712	1,300	260,000	180,000		

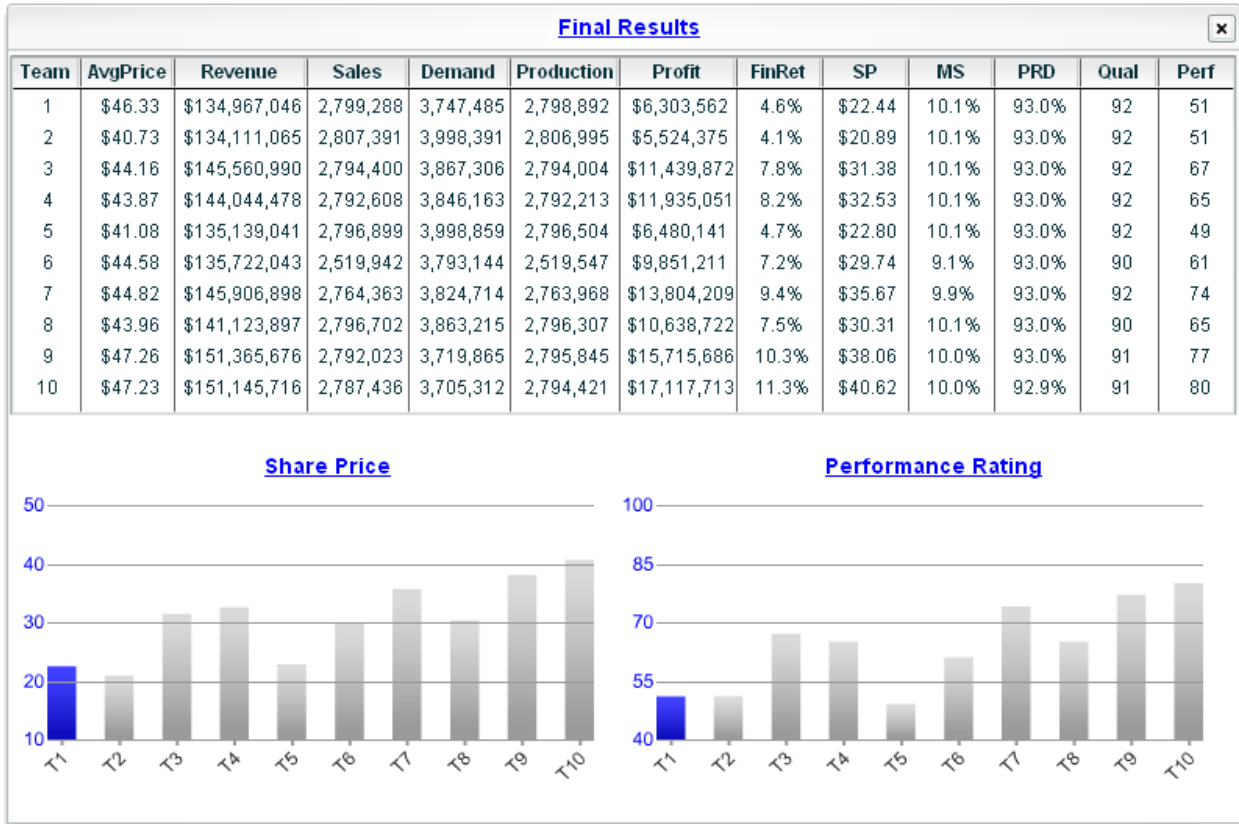
10. The **[Performance]** button on the Main Screen (Exhibit 10) provides an overview of the results for each quarter already simulated. (See Exhibit 22.) Revenue, sales, profit, financial return, stock price, financing cost change, growth, delivery, market share, productivity, quality and performance rating are shown for each quarter simulated. The *Performance Rating* outcome is the best measure of success. Also displayed on the Performance Report is a graph displaying the ending cash for each quarter. Cash management is an important skill to be learned.

Exhibit 22 Performance Report



11. The **[Research Reports]** button on the Main Screen (Exhibit 10) can be selected to display purchased Market Research Reports such as forecasts, industry sales, industry pricing and customer exposure.
12. The **[ReSet]** button on the Main Screen (Exhibit 10) can be selected to reset all the decision variables and re-start the simulation.
13. The **[Final Results]** button, which is only displayed after simulating 12 quarters, should be pressed to display the Final Results Report shown in Exhibit 23. This report provides a comparison of all 10 team's performance. Your results are displayed as Team #1.
14. The **[Exit]** button, which is only displayed after displaying the Final Results, should be pressed to end the simulation.

Exhibit 23 Sample Final Results Report



UserName: undefined

Developed by: David A. Jordan (www.bussim-ed.com)

Decision Screens

The **Functional Decisions Window** (Exhibit 24) is used to select the Functional Decision Screens where decision variables for each functional area can be made. These buttons need only be selected if there are changes to be made on any of the screens. Previous data will be used if these entries remain unselected.

Exhibit 24 Functional Decisions Window

The screenshot shows a window titled "Functional Decisions" with four buttons arranged in a 2x2 grid: Marketing, Human Resource, Finance, and Operations.

Marketing Decisions Screen

The **Marketing Decisions Screen** (Exhibit 25) is used to enter the Marketing Function's pricing, advertising, distribution and market research decisions.

Exhibit 25 Marketing Decisions Screen

The screenshot shows a window titled "Marketing Decisions" with four sub-sections: Advertising Decisions, Distribution Decisions, Pricing Decisions, and Research Decisions. Each sub-section has input fields for OutdoorPak, SchoolPak, and SportPak, and a Total (%) field.

Decision Category	Decision Variable	OutdoorPak	SchoolPak	SportPak	Total (%)
Advertising Decisions	Television (%)	10	10	10	90
	Print (%)	10	10	10	
	Internet (%)	10	10	10	
Distribution Decisions	Wholesale (%)	25	25	25	99
	Retail (max 30%)	5	5	5	
	Direct (max 20%)	3	3	3	
Pricing Decisions	Wholesale (\$)	50	25	22	
	Retail (\$)	85	40	35	
	Direct (\$)	85	40	35	
Research Decisions	<input type="checkbox"/> Sales Forecast			\$10,000	
	<input type="checkbox"/> Industry Pricing Summary			\$15,000	
	<input type="checkbox"/> Industry Sales Summary			\$20,000	
	<input type="checkbox"/> Media Exposure Summary			\$15,000	

Buttons: Network, Save Choices

A diagram of the Distribution Network may be displayed by selecting the 'Network' button on the screen display. This diagram describes how the products are distributed and is shown in Appendix C. Press the [Save Choices] button to save your decisions and exit this screen.

The **Advertising Decisions Window** should be used to assign weights to the media/product combinations. These weights must sum to 100 (see Total). These weights will be used to apportion your media spending. For example, if \$100,000 is spent on advertising and 10 is specified for television/OutdoorPak, \$10,000 will be spent for advertising the OutdoorPak on television.

The **Channel Distribution Decisions Window** should be used to assign distribution weights to the channels. The weights must sum to 100 (see Total). These weights will be used to apportion your production to the channels. For example, if 170,000 OutdoorPak's are produced, the screen display shows 25/33% of those are allocated to wholesalers. *Production can't be shifted between channels once allocated.*

The **Pricing Decisions Window** should be used to set the price for each product/channel combination. Each product/channel can have a different price. Pricing decisions should be used to influence sales and generate revenue. Pricing decisions should be determined based on your team's *Product Strategy*. (Price does not have to be set to zero when the product/channel is **not** being used.)

Remember, Outdoor Limited's current pricing policy is to set their wholesale price at ½ of MSRP. Failing to recognize a substantial mark-up opportunity for their wholesalers and retailers will cause dissatisfaction amongst these sellers and thereby affect your sales in this channel. The wholesale channel has access to the largest number of potential customers. Pricing in the other channels is more flexible, but provides limited yet growing demand. The values shown in Exhibit 23 represent Outdoor Limited's current pricing.

The **Market Research Decisions Window** is used to select a variety of market research studies. Your team will be charged the displayed amount and access to the research data will be provided after the simulation period has been executed.

Operations Decision Screen

The **Operations Decision Screen** (Exhibit 26) is used to enter raw material orders and shop scheduling decisions. A diagram of the Product Structure Tree (Bill-of-Materials) may be displayed by selecting the 'Bill of Materials' button on the screen display. This diagram describes how the products are manufactured and is shown in Appendix B. The [Inventory Report] button provides access to an expanded inventory summary of all finished goods, raw materials and work-in-process items. Press the [Save Choices] button to save your decisions and exit this screen.

Exhibit 26 Operations Decision Screen

The screenshot shows a window titled "Operations Decisions" with a close button (X) in the top right corner. The window is divided into two main sections: "Ordering Decisions" and "Scheduling Decisions".

Ordering Decisions:

- Fabric (Rolls): 1300
- Hardware (000): 260
- Tubes (000): 180

Scheduling Decisions:

- Fabrication (Hrs): 488
- Assembly (Max 600 Hrs):

 - OutdoorPak: 360
 - SchoolPak: 80
 - SportPak: 40

At the bottom of the window, there are three buttons: "Bill of Materials", "Inventory Report", and "Save Choices".

On the **Ordering Decisions Window** raw material decisions include the ordering of three different raw materials. Fabric is used to make packs and straps. Fabric arrives in rolls and can produce 1,000 cut pieces. Tubing arrives in pre-cut lengths where one tube makes one frame. Hardware comes in packets and one packet is required for **each** product. See the BOM for details.

The **Scheduling Decisions Window** should be used to schedule the hours assigned to each shop. Normally there are 520 hours available for scheduling each quarter. A maximum of 80 hrs overtime can be scheduled for each shop each quarter.

Finance Decisions Screen

The **Finance Decisions Screen** (Exhibit 27) should be used to enter investing, borrowing, and expansion decisions. Press the [Save Choices] button to save your decisions.

Exhibit 27 Finance Decisions Screen

The screenshot shows a window titled "Finance Decisions" with a close button (X) in the top right corner. The window is divided into three main sections: "Borrowing Decisions", "Investing Decisions", and "Expansion Decisions".

Borrowing Decisions:

- LOC Loan (\$000): 0
- Mortgage (\$000): 0
- Sell CD (\$000): 0
- Sell Stock (\$000): 0
- Credit Limit: \$2,129,718

Investing Decisions:

- T-Bill (\$000): 0
- Buy CD (\$000): 0
- Buy Stock (\$000): 0
- Dividend (\$000): 0
- Loan Pay (\$000): 0

Expansion Decisions:

- Re-Engineer: 0
- Build New: 0
- Equip (\$000): 0

At the bottom of the window, there are two buttons: "Definitions" and "Save Choices".

The **Borrowing Decisions Window** should be used to make decisions relative to borrowing funds. There are four source of funds choices. Line-of-Credit loans carry interest at 3% over the prime rate. They are limited by your credit limit. Your company may borrow long-term capital with Mortgage loans at the annualized rate of one percent over the posted prime rate. This long-term loan is issued for 20 years. These loans can't be paid down during the simulation. The Sell CD option allows the user to sell CDs up to the amount previously invested. The Sell Stock option allows the user to sell common stock for the amount entered. The number of shares sold is determined by the current stock price. This amount will be available as cash to spend in the current quarter.

The **Investing Decisions Window** should be used to make decisions concerning investing funds. There are five investing choices. T-bills are 90-day securities that pay interest at 3% less than the prime rate. These bills expire on the first day of the coming quarter and will be available as cash in that period. They are NOT available for cash during the period in which they are purchased. CDs are long term and pay a higher interest than the T-bill (2% less than prime). The Buy Stock option allows the user to buy back common stock for the amount entered. The number of shares purchased is determined by the current stock price. This amount will be deducted from your cash in the current quarter. There is a brokerage fee of 2% of the face amount when you buy back your stock. The Loan Payment entry specifies the amount of cash that will be used to pay down *short term loans*. Dividends can only be paid if there are sufficient retained earnings.

The **Expansion Decisions Window** should be used to enter your expansion decisions. Space can be added to your current production facility. The Re-Engineer option allows you to increase space in increments of 100 units, up to 1,000 units. The cost of this expansion is \$100 per unit. The Build New option allows you to increase space in increments of 1,000 units, up to 20,000 units per quarter. The cost of this expansion is \$150 per unit. The new capacity is available in the next quarter.

Equipment purchases for the new expansion are required to make this area productive. Typical expenditures amount to about 30% of expansion costs. *Failing to add this expenditure will reduce your production capacity.*

Human Resource Decisions Screen

The **Human Resource Decisions Screen** (Exhibit 28) should be used to enter compensation and staffing decisions. A picture of Outdoor Limited's Organization Chart is shown in Exhibit 1 of this case/manual. Press the [Save Choices] button to save your decisions and exit this screen.

The **Across-the-Board** decisions affect all employees equally. The Vacation and Holidays decisions determine the number of annual days given for time off with pay. The current settings provide for 488 hours of normal work each quarter. The **Health Plan** decision provides a choice between three plans. The Individual Plan provides basic health coverage to employees only. Outdoor Limited is currently using this plan that costs them \$450 per quarter per employee. The Couple Plan provides basic health coverage to an employee and his/her spouse at a cost of \$900 per quarter per employee. The Family Plan provides extended health coverage to an employee's family at a cost of \$1,500 per quarter per employee.

Exhibit 28 Human Resource Decisions Screen

The screenshot displays the 'Human Resource Decisions' window with the following sections and settings:

- Across-the-Board Decisions:**
 - Pay Raise (%): 1
 - Vacation Days: 10
 - Holidays: 6
- Health Plans:**
 - Plan 1 (Individual)
 - Plan 2 (Family)
 - Plan 3 (Premium)
- Incentive Plans:**
 - Profit Sharing
 - Stock Bonus
 - Dollar Bonus
 - Gainsharing
- Hiring Decisions:**
 - Manager: 0
 - Specialist: 0
 - Clerical: 0
 - Fabrication: 0
 - Assembly: 0
 - Support: 0
- Other Benefits:**
 - Pension Plan
 - Life Insurance
 - Dental Insurance
 - Eye Care
- Profit Sharing Decisions:**
 - Emp Dist (%): 0
 - Mgr Dist (%): 0
 - Wkr Dist (%): 0

A 'Save Choices' button is located at the bottom center of the window.

The **Incentive Plan** choices provide alternative ways to compensate your employees. Profit Sharing provides a means of sharing *profits* with both management and workers. The Employee Distribution decision represents the percentage of profits that will be distributed to your employees. The remainder will be added to your retained earnings. The second decision is the percentage of distributed funds that go to management and workers.

A Stock Bonus Plan provides management with preferred stock as a bonus. The amount of the Stock Bonus is a function of the manager's level and rating. The Dollar Bonus Plan provides designated dollars (see Incentives Budget decision on the main screen) to all employees equally. The Production Incentive Plan provides designated dollars to production workers for above normal *performance*.

The Gain Sharing Plan provides designated dollars to production shops. For example, each fabrication worker will receive the designated amount (\$1,000) as a bonus.

The **Other Benefits** decision provides a series of benefit choices that can be selected as desired. Only the Pension Plan is currently in force. This plan provides retirement benefits to vested employees. The current cost of this plan is \$400 per employee per quarter. The Life Insurance plan provides \$50,000 of term life for each employee at a cost of \$150 per quarter. The Dental Insurance plan provides dental coverage for each employee at a cost of \$150 per

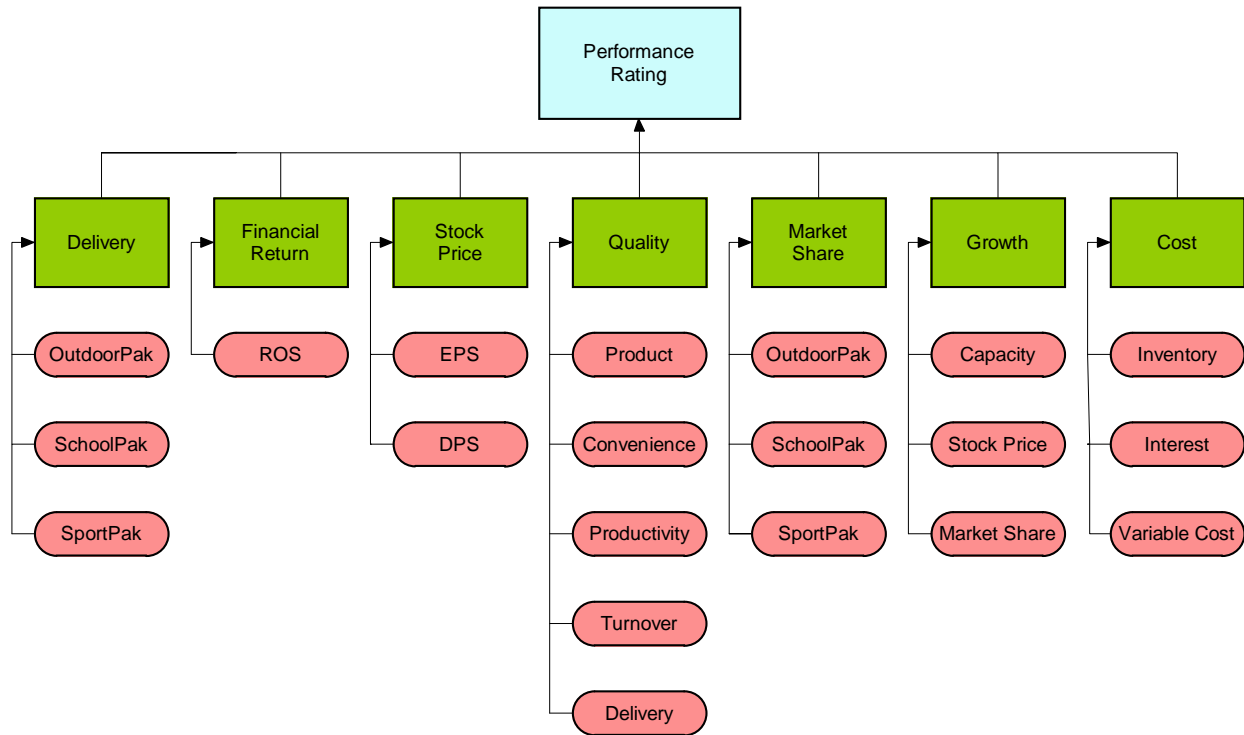
quarter. The Eye Care plan provides eye coverage for each employee at a cost of \$75 per quarter. The Day Care plan provides \$2,500 toward day care payments for employees with more than one year of seniority.

Financial Decisions

Analysis of cash flow is one of the most important tasks of the firm. Accurately identifying the sources and uses of cash will enable the firm to predict surpluses and shortages. Any surpluses obviously become opportunities for paying off loans or earning interest on investment instruments. It is in the team's best interest to develop cash flow analysis tools (generally spreadsheets) to help manage this part of the business.

APPENDIX A

Performance Rating Ingredients



Profitability

$$\text{Perf Rate} = .6 \cdot \text{ROS} + .2 \cdot \text{Quality} + .1 \cdot \text{Stock Price} + .1 \cdot \text{Cost}$$

Differentiation

$$\text{Perf Rate} = .3 \cdot \text{Product MS} + .3 \cdot \text{Product Delivery} + .2 \cdot \text{ROS} + .1 \cdot \text{Quality} + .1 \cdot \text{Cost}$$

Response

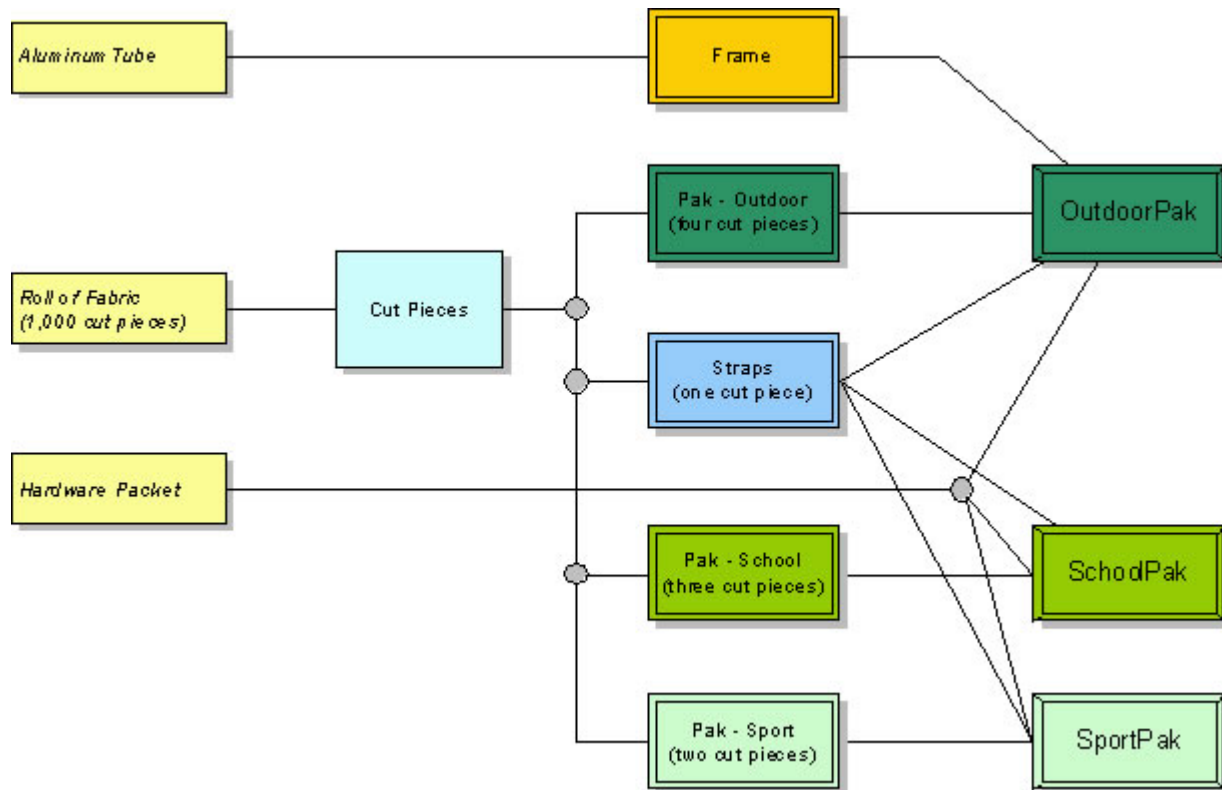
$$\text{Perf Rate} = .5 \cdot \text{Delivery} + .3 \cdot \text{ROS} + .2 \cdot \text{Quality} + .1 \cdot \text{Growth} + .1 \cdot \text{Cost}$$

Cost

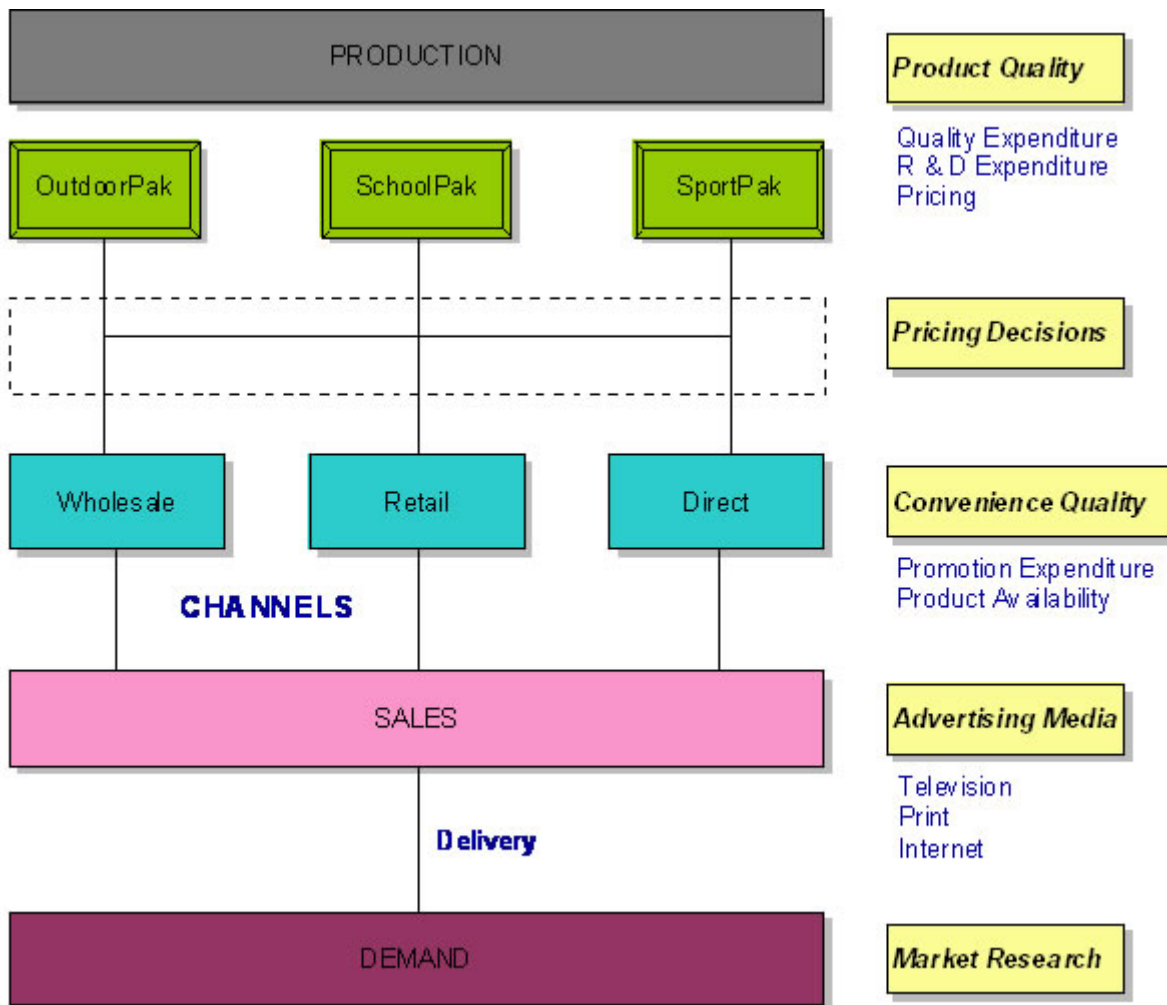
$$\text{Perf Rate} = .5 \cdot \text{Cost} + .3 \cdot \text{ROS} + .1 \cdot \text{Growth} + .1 \cdot \text{Quality}$$

APPENDIX B

Product Structure Diagram (Bill of Materials)



APPENDIX C Distribution Network



APPENDIX D

BUDGET WORKSHEET				
	<u>OutdoorPak</u>	<u>SchoolPak</u>	<u>SportPak</u>	<u>Total</u>
Std Labor	\$9.00	\$4.00	\$3.00	
Std Material	\$18.00	\$8.00	\$7.00	
Std OH	\$6.00	\$6.00	\$6.00	
Variable Cost	\$33.00	\$18.00	\$16.00	
Forecast	155,000	43,000	23,500	221,500
Wholesale Sales	77,500	21,500	11,750	110,750
Retail Sales	46,500	12,900	7,050	66,450
Direct Sales	31,000	8,600	4,700	44,300
Revenue	\$10,462,500	\$1,397,500	\$669,750	\$12,529,750
Inventory	0	0	0	
Production	155,000	43,000	23,500	221,500
Direct Labor	\$1,395,000	\$172,000	\$70,500	\$1,637,500
Direct Materials	\$2,790,000	\$344,000	\$164,500	\$3,298,500
MOH	\$930,000	\$258,000	\$141,000	\$1,329,000
Total Direct Exp				\$6,265,000
Technology				\$150,000
Maintenance				\$30,000
Inv Carrying				\$0
Total Operations				\$180,000
Wholesale(Cost/unit)				\$2.00
Retail(Cost/unit)				\$10.00
Direct(Cost/unit)				\$5.00
Wholesale	\$155,000	\$43,000	\$23,500	\$221,500
Retail	\$465,000	\$129,000	\$70,500	\$664,500
Direct	\$155,000	\$43,000	\$23,500	\$221,500
Sales Exp				\$1,107,500
Market Research				\$0
Advertising				\$300,000
Promotion				\$200,000
Quality				\$200,000
R & D				\$150,000
Total Marketing				\$1,957,500
Interest				\$20,000
Depreciation				\$360,000
Total Finance				\$380,000
Training				\$20,000
Incentives				\$0
Indirect Payroll				\$200,000
Benefits				\$200,000
Total HR				\$420,000
General & Admin				\$1,000,000
Total Indirect				\$3,937,500
Total Expenses				\$10,202,500
Tax				\$698,175
Expected Profit				\$1,629,075
Return on Sales				13.0%