

SIERRA HIKING OUTFITTERS ENTERPRISES

“S.H.O.E.”

BUSINESS AND FINANCIAL ACUMEN WORKSHOP

Featuring

S.H.O.E.

a business simulation exercise

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S.H.O.E.

Income Statement Analysis

(000's)

	2007		2007		<u>Variance</u>
	<u>Actual</u>	<u>%</u>	<u>Budget</u>	<u>%</u>	
Sales	3,688	100.00	3,800	100.00	< 112 >
Cost of Goods Sold	<u>2,168</u>	58.79	<u>2,166</u>	57.00	2
Gross Margin	1,520	41.21	1,634	43.00	< 114 >
Operating Expense	<u>1,040</u>	28.20	<u>988</u>	26.00	< 28 >
Profit Before Tax	480	13.02	646	17.00	< 142 >
Income Tax	<u>240</u>	6.51	<u>323</u>	8.50	71
Net Profit After Tax	240	6.51	323	8.50	< 71 >
Dividends Paid	<u>28</u>	.76	<u>28</u>	.74	----
Retained Earnings	212	5.75	295	7.76	< 71 >

Discussion and Analysis

1. Comment on actual performance versus the budget.
2. What should be done about the budget variances?
3. What should be the optimal balance between actual versus budget relative to personal accountability?
4. Why is there such a significant variance to bottom line performance when every other variance was so minimal?
5. Other comments and analysis?

S.H.O.E.

Balance Sheet Analysis

(000's)

	2007 <u>Actual</u>	2007 <u>Budget</u>	<u>Variance</u>
Cash	40	20	< 20 >
Inventory	<u>46</u>	<u>10</u>	< 36 >
Current Assets	86	30	< 56 >
Plant & Equipment	1,000	970	< 30 >
Other Assets	<u>0</u>	<u>0</u>	----
Total Assets	1,086	1,000	< 86 >
Loans Payable	141	5	< 136 >
Other Liabilities	<u>0</u>	<u>0</u>	----
Current Liabilities	<u>141</u>	<u>5</u>	< 136 >
Common Stock	700	700	----
Retained Earnings	<u>245</u>	<u>295</u>	< 50 >
Total Equity	945	995	< 50 >
Total Equities	1,086	1,000	< 86 >

Discussion and Analysis

1. Comment on actual performance versus the budget.
2. Retained earnings are unfavorable by \$ 71,000, yet loans payable are unfavorable by \$ 127,000. Why is that?

Comparative Analysis

Income Statement

	<u>SHOE 2006</u>	<u>SHOE 2007</u>	<u>MaCaSin 2007</u>	<u>Slip-On 2007</u>
Sales	3,319	3,688	1,800	1,500
COGS	1,892	2,168	1,170	825
Gross Margin	1,427	1,520	630	675
Operating Expense	830	1,040	540	420
Net Profit After Tax	299	240	45	128

Discussion

Prepare a comparative analysis of the performance of each, relative to the performance of the others.

Comparative Analysis

Balance Sheet

	<u>SHOE 2006</u>	<u>SHOE 2007</u>	<u>MaCaSin 2007</u>	<u>Slip-On 2007</u>
Current Assets	56	86	65	30
Total Assets	905	1,086	650	380
Total Liabilities	205	141	25	20
Stockholder Equity	700	945	625	360

Discussion

Prepare a comparative analysis of the financial strength of each firm relative to the financial strength of the others.

Component Percentage Analysis

Income Statement

	<u>SHOE 2006</u>	<u>SHOE 2007</u>	<u>MaCaSin 2007</u>	<u>Slip-On 2007</u>
Sales	100.00	100.00	100.00	100.00
COGS	57.01	58.79	65.00	55.00
Gross Margin	42.99	41.21	35.00	45.00
Operating Expense	25.01	28.20	30.00	28.00
Net Profit After Tax	9.01	6.51	2.50	8.53

Balance Sheet

Total Assets	100.00	100.00	100.00	100.00
Total Liabilities	22.65	12.50	3.87	5.26
Stockholder Equity	77.35	87.55	96.15	94.74

Discussion

Ratio Analysis

$$\text{Return on Assets} = \frac{\text{Net Income}}{\text{Total Assets}}$$

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Shareholder Equity}}$$

$$\text{Debt / Equity} = \frac{\text{Total Liabilities}}{\text{Shareholder Equity}}$$

Calculate the following ratios:

SHOE <u>2006</u>	SHOE <u>2007</u>	MaCaSin <u>2007</u>	Slip-On <u>2007</u>
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Return on Assets

Return on Equity

Debt / Equity

Discussion

RATIO ANALYSIS

	<u>Quarter "0"</u>		<u>Projected Quarter</u>	
Sales in Units	<u>23,062</u>		<u> </u>	
X Price	<u>\$40</u>		<u> </u>	
= Sales in Dollars	<u>\$922,000</u>		<u> </u>	
	\$	%	\$	%
Sales	<u>922</u>	<u>100.00</u>	<u> </u>	<u> </u>
Cost of Goods Sold	<u>542</u>	<u>58.79</u>	<u> </u>	<u> </u>
Engineering	<u>10</u>	<u>1.08</u>	<u> </u>	<u> </u>
Inventory Expense	<u>2</u>	<u>.22</u>	<u> </u>	<u> </u>
Marketing	<u>90</u>	<u>9.76</u>	<u> </u>	<u> </u>
Research & Development	<u>10</u>	<u>1.08</u>	<u> </u>	<u> </u>
Market Research	<u>5</u>	<u>.54</u>	<u> </u>	<u> </u>
Other Expense	<u>0</u>	<u>0</u>	<u> </u>	<u> </u>
Interest Expense	<u>12</u>	<u>1.30</u>	<u> </u>	<u> </u>
Overhead / Fixed	<u>100</u>	<u>10.85</u>	<u> </u>	<u> </u>
Depreciation	<u>31</u>	<u>3.36</u>	<u> </u>	<u> </u>
Total Expense	<u>802</u>	<u>86.98</u>	<u> </u>	<u> </u>
Profit Before Tax	<u>120</u>	<u>13.01</u>	<u> </u>	<u> </u>
Income Tax	<u>60</u>	<u>6.51</u>	<u> </u>	<u> </u>
Net Profit After Tax	<u>60</u>	<u>6.51</u>	<u> </u>	<u> </u>
Dividends Paid	<u>7</u>	<u>.76</u>	<u> </u>	<u> </u>
Retained Earnings	<u>53</u>	<u>5.75</u>	<u> </u>	<u> </u>

FORWARD GUIDANCE

The New York Stock Exchange has long pioneered major advances in corporate governance. The NYSE requires companies to comply with rigid listing standards. In the aftermath of the “meltdown” of significant companies due to failures of diligence, ethics, and controls, amended corporate governance and disclosure standards have recently been implemented.

One of the new requirements is that management must provide the financial community, including stockholders, a thorough explanation of the most recent quarterly financial statement. In addition, management must provide forward guidance, a forecast of sales and earnings for the upcoming four quarters.

Assignment

1. Prepare a thorough explanation of your financial results for the first two quarters. A member of your team will give an oral report of this summary to the other teams.
2. Prepare a forward guidance forecast for quarters 3, 4, 5, & 6. This information will be submitted to the workshop facilitator, but will not be shared with the other teams at this time. A comparison of forecast versus actual will be shared at the conclusion of this workshop.

	<u>Q 3</u>	<u>Q 4</u>	<u>Q 5</u>	<u>Q 6</u>	<u>Total</u>
Sales	_____	_____	_____	_____	_____
Net Profit After Tax	_____	_____	_____	_____	_____

M & A: MERGERS AND ACQUISITIONS

Engaging in due diligence when buying or selling a business is a very time consuming and complex proposition. This model is a very basic summary of how the price is often determined.

Refer to the S H. O. E. financial statement at the beginning of the game. There are two fundamental components a buyer considers when preparing an offer: the net worth as indicated on the balance sheet, and earnings as indicated on the income statement.

Balance Sheet

In quarter “0”, S.H.O.E. had total assets of \$1,086,000. The debt against these assets was \$300,000. The difference of \$786,000 is the net worth of the organization. This becomes the first part of the price determination.

Income Statement

Net profit after tax in quarter 0 was \$60,000. If this were an average quarter, the annualized earnings would be \$240,000. What is the value of this earnings stream? First, what is a reasonable return based on the level of risk we are assuming? Suppose we determine that 20% is a reasonable rate. Using a “reverse capitalization” calculation, \$240,000 divided by 20% is \$1,200,000. In other words, if we paid \$1,200,000 for this business and it yielded \$240,000 per year in earnings, this would represent a 20% return on our investment. This portion of the price formula is known as good will. It is likely that in reality, this price will be adjusted downward to reflect the additional cost of capital expense this amount of investment will require.

Summary

The purchase price of this business will be somewhere around \$2,000,000.

Net Worth	\$ 786,000
Good Will	<u>\$1,200,000</u>
Total	\$1,986,000

Exercise

Determine the value of your S.H.O.E. business using the same model.

S.H.O.E. – BUSINESS SIMULATION EXERCISE

Introduction to the S.H.O.E. Simulation Game

By now, you have read the Genesco Business Review that provided a background for this company. You were asked to prepare a mission, vision, and values statement. Now that you have developed a great theoretical plan, it's time you put this into practice. For the remainder of the day, your team will be running S.H.O.E. by way of a computerized simulation.

For the next 12 quarters, your team will be making a series of sales, marketing, manufacturing, finance, and other general business decisions. The decisions will be collected, entered into the computer, analyzed, computed, and financial results will be printed out based on your decisions, your competitors' decisions, and the general economy.

Given the relatively small market share S.H.O.E. currently has, the potential is almost limitless. In fact, the potential share of the market for each firm is a function of the relationship of its decisions to those of its competitors. All the competition in this industry is in this room right now.

Once this orientation is over, there are a few issues your team needs to consider.

1. Select a new company name – one that your team will embrace.
2. Revisit your mission, vision, and values now that you realize the intent to implement your theory. The revised mission, vision, and values must represent a solid cohesive focus of your entire team.
3. Develop tactics that will enable you to achieve the goals and objectives presented as measures to win this game.

DECISION FORM
Mini MBA Program

Company Number: _____
Quarter Number: _____

Parameters:	<u>Min</u>	<u>Max</u>		
1. Price	\$30	\$50	\$	<u>.00</u>
2. Marketing	\$0	\$300	\$	<u>____,000</u>
3. Production in Units	0	80,000		<u>____,000</u>
4. Production Engineering	\$0	\$200	\$	<u>____,000</u>
5. Research & Development	\$0	\$200	\$	<u>____,000</u>
6. Plant Addition in Dollars	\$0	\$500	\$	<u>____,000</u>
7. Dividends	\$0	\$200	\$	<u>____,000</u>
8. Other Expenses	\$0	\$200	\$	<u>____,000</u>
9. Loan Payment (-)	-\$500	\$0	\$ -	<u>____,000</u>
or Make a Bank Loan (+)	\$0	\$ 1,000	\$ +	<u>____,000</u>
10. Stock Sold in Dollars	-\$500	\$500	\$	<u>____,000</u>
11. Market Research (Automatic Charge)		\$5,000	\$	<u>____12</u>
12. Incident Decision Number				_____

Copy of Decision Form

Quarter “0”

These are the decisions made by the management of S.H.O.E. in the preceding quarter, before your team assumed complete control. Please note, the production decision was rounded up to the nearest next thousand units.

1.	Price	\$ 40.00
2.	Marketing	\$ 90,000
3.	Production Units	25,000
4.	Production Engineering	\$ 10,000
5.	Research & Development	\$ 10,000
6.	Plant Addition in Dollars	\$ 31,000
7.	Dividends	\$ 7,000
8.	Other Expenses	\$ 0
9.	Bank Loan or Repayment	\$ 0
10.	Stock Sold in Dollars	\$ 0
11.	Market Research	\$ 5,000
12.	Management Surprise Incident	0

Quarter "0" Financials (000's)
INCOME AND EXPENSE ANALYSIS

Sales	23,062 units @ \$40	\$ 922
Expenses:		
Cost of Goods Sold	542	
Production Engineering	10	
Inventory Expense	2	
Marketing	90	
Research & Development	10	
Market Research	5	
Other Expenses	0	
Interest Expense	12	
Overhead / Fixed	100	
Depreciation	31	
Total Expense	<u>802</u>	
Profit Before Tax	120	
Income Tax	<u>60</u>	
Net Profit After Tax	60	
Dividends Paid	<u>7</u>	
Retained Earnings	53	

BALANCE SHEET

Cash	\$ 40
Inventory	46
Plant & Equipment	1,000
Other Assets	0
	<u> </u>
Total Assets	\$ 1,086
Loans Payable	300
Other Liabilities	0
Common Stock	700
Retained Earnings	86
	<u> </u>
Total Equities	\$ 1,086

CASH FLOW ANALYSIS

Inflow:		Outflow:	
Sales	\$ 922	Expenses – Depreciation	\$ 771
Bank Loan	0	Taxes & Dividends	67
Stock Sold	0	Goods Into / From Inventory	46
		Bank Loan Repayment	0
		Plant Addition	<u>31</u>
Total Cash Inflow	<u>\$ 922</u>	Total Cash Outflow	\$ 915
Net Cash Flow	\$ 7		

OTHER INFORMATION

Production Cost Per Unit	\$ 23.52	Current Price of Common Stock	\$ 108
Plant Capacity Next Quarter	25,000	Total Shares of Stock Issued	7,000
Ending Inventory in Units	1,938	Total Shares Authorized	12,000
Business Index This Quarter	1.00	Business Index Next Quarter	1.01
Market Research:			

Prices: \$40, \$40, \$40
 Average Marketing Budget: \$90,000
 Average R & D Budget: \$10,000
 Average Engineering Budget: \$10,000

Goals and Objectives

The following criterion identifies how your team will be measured at the end of the game. The top performance for each of these criteria will receive 20 points; second highest 10 points; third highest 5 points.

Criteria

1. Growth: Sales Volume in Dollars
2. Improved Cost Structure: Lowest Component Percentage of Total Expense
3. Net Profit After Tax
4. Execution of Plan: Sales Minimum Amount of Variance, Quarter 3, 4, 5, & 6
5. Execution of Plan: Profit Minimum Amount of Variance, Quarter 3, 4, 5, & 6
6. ROA: Return on Assets
7. ROIC: Return on Invested Capital
8. EVC: Economic Value Created

In Case of a tie, Net Profit After Tax will be the tie breaker.

Measurements to Begin the Game

1. Growth: Sales Volume in Dollars

Sales in Dollars = \$922,000 Quarter “0”

Measurement: Total Sales Volume in Dollars, Quarter 1 through 12.

2. Improved Cost Structure: Lowest Component Percentage of Total Expense

Total Expense Quarter “0” = \$802,000

Sales in Dollars Quarter “0” = \$922,000

$$\text{Total Expense Ratio} = \frac{\$802,000}{\$922,000} = 86.98\%$$

Measurement: Cumulative Expense and Sales, Quarter 1 through 12.

3. Net Profit After Tax

Net Profit Quarter “0” = \$60,000

Measurement: Cumulative Total Quarter 1 through 12.

4. Execution of Plan: Quarters 3, 4, 5, & 6 Combined

Example:	<u>Forecast</u>	<u>Actual</u>	<u>Variance</u>
Sales	\$5,100,000	\$5,200,000	\$100,000
Profit	\$ 600,000	\$ 500,000	< \$100,000 >

Measurement: Minimum Amount of Variance in Dollars for each Category

5. Return on Assets

$$\frac{\text{Net Profit After Tax}}{\text{Assets}} = \frac{60}{1,086} = 5.52\%$$

Measurement: Highest R.O.A. Cumulative Quarter 1 Through 12.

6. Return on Invested Capital

$$\frac{\text{Net Profit After Tax}}{\text{Assets} - \text{Cash}} = \frac{60}{1,046} = 5.74\%$$

Measurement: Highest R.O.I.C. Cumulative Quarter 1 Through 12.

7. EVC: Economic Value Created

$$\text{Quarter "0" Profit} = \$60 \quad \text{Annualized} = \$240$$

$$\text{Capital Employed} = \$1,086 \quad \text{Cost of Capital Rate} = 12\% *$$

$$\begin{array}{r} \text{Annualized Profit} \quad \$ 240 \\ \text{Cost of Capital} \quad \underline{- 130} \\ \text{EVC} \quad \$ 110 \end{array}$$

Measurement: Highest EVC Cumulative Quarter 1 through 12.

* For Purposes of the Simulation, Assume a Rate of 12%

Company Name _____

Mission, Vision, and Values:

Goals and Objectives:

BUSINESS ACUMEN GLOSSARY

<u>Term</u>	<u>Definition</u>
Amortization	A time schedule reduction in value of an asset, often used with non-tangible resources.
Balance Sheet	Financial statement that lists a firm's assets, liabilities, and shareholders' equity at a particular moment in time.
Break – Even Point	The point at which net operating profit equals zero. At this level of productivity and sales volume, total operating costs equal revenues from operations.
Budget	The financial plan for the company detailing revenues and expenses expectations each month. It is a financial forecast of expected performance.
Budget Variance	The difference between projected results and actual performance. Variances are defined as either “favorable” or “unfavorable”.
Capital	Productive resources that a firm uses to produce goods and services.
Capital Budgeting	Process of selecting projects that can increase a firm's value.
Cash Flow	Funds available to the firm for productive uses. This approximates net income plus depreciation.
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIO	Chief Information Officer
COGS	Cost of Goods Sold. The purchase cost for acquiring components and raw materials to be used in the manufacture of a product. Direct labor and direct overhead are also normally included in COGS.

Component Percentage	A mathematical calculation that determines various line item costs on an income statement measured to the sales volume.
COO	Chief Operations Officer
Consolidated Operating Income	Net profit after all expenses. Taxes and dividend distribution occur after this measurement.
Continuous Improvement	An on-going initiative to analyze systems and methods in hopes of reducing costs and improving quality.
Cost of Sales	The firm's acquisition cost of finished goods, or the cost of components, labor, and overhead used in the manufacture of a finished product.
Current Assets	Cash or other assets that will be used or converted into cash within one year or within a normal operating cycle.
Current Liabilities	Liabilities that are due within one year or a normal operating cycle.
DSOH	Days' Sales on Hand. This is another way to measure inventory turnover.
Depreciation	The dollar value of a fixed asset that diminishes in conjunction with the useful life of that asset.
EVC	Economic Value Created. This is a calculation that measures the return from an income statement compared to an effort from the balance sheet. If the return exceeds the cost of capital required in the effort, economic value is created.
Forward Guidance	A statement prepared by a firm's senior management that consists of a forecast of sales and earnings for a specified upcoming period of time.
Fixed Assets	Long-term assets that will be around longer than one year.
Good Will	The amount of money one firm pays in excess of book value of assets of another firm in an acquisition.
Gross Profit	Sales minus the cost of producing the goods sold.

Income Statement	An accounting report that summarizes the revenues and expenses of an accounting period.
Internal Rate of Return	Discount rate that makes the net present value equal to zero.
Inventory Turnover	Measures how many times inventory is sold or “turned over” on an annual basis.
IT	Information Technology.
Liabilities	Obligations of the firm to provide services or transfer assets to outsiders.
Liquidity	Ability to convert an asset into cash rapidly.
M & A	Mergers and Acquisitions. This is a common phrase when a firm engages in due diligence to purchase another firm, or divest itself of one of their operations to another firm.
Net Present Value	Present value of cash inflows minus the present value of cash outflows.
Net Sales	The gross value of goods and services sold by a firm, less returns and allowances.
Net Income	Net profit after all expenses, including taxes.
Operating Expenses	Costs to a firm that are not part of the cost of goods sold.
Retained Earnings	The net profits from an operating period that are not paid out to stockholders in the form of a dividend. Retained earnings are equity, used to finance capital expansion or other new projects.
ROA	Return on Assets. Net profit per total assets.
ROC	Return on Capital. Net profit per total capital.
ROI	Return on Investment. Net profit per invested capital.
SGA	Selling, General, and Administrative expense.

Stockholders' Equity	The net worth of a firm. Total assets minus total liabilities.
Working Capital	Current assets minus current liabilities.

FINANCIAL RATIOS

Price / Earnings Ratio	$\frac{\text{Market Price Per Share}}{\text{Net Income Per Share}}$
Return on Assets	$\frac{\text{Net Income}}{\text{Total Assets}}$
Return on Invested Capital	$\frac{\text{Net Income}}{\text{Total Assets} - \text{Cash and Cash Equivalents}}$
Return on Shareholder Equity	$\frac{\text{Net Income}}{\text{Shareholder Equity}}$
Gross Margin Percentage	$\frac{\text{Gross Margin}}{\text{Net Sales}}$
Profit Margin	$\frac{\text{Net Income}}{\text{Net Sales}}$
Earnings Per Share	$\frac{\text{Net Income}}{\text{Number of Shares Outstanding}}$
Asset Turnover	$\frac{\text{Net Sales}}{\text{Total Assets}}$

Invested Capital Turnover $\frac{\text{Net Sales}}{\text{Total Assets} - \text{Cash and Cash Equivalents}}$

Equity Turnover $\frac{\text{Net Sales}}{\text{Shareholder Equity}}$

Capital Intensity $\frac{\text{Sales Revenue}}{\text{Property, Plant, Equipment}}$

Days' Cash $\frac{\text{Cash}}{\text{Cash Expenses} / 365}$

Days' Receivables;
Collection Period $\frac{\text{Accounts Receivable}}{\text{Sales} / 365}$

Days' Inventory;
Days' Sales on Hand $\frac{\text{Inventory}}{\text{Cost of Sales} / 365}$

Inventory Turnover $\frac{\text{Cost of Sales}}{\text{Inventory}}$

Working Capital
- Current Assets
- Current Liabilities

Working Capital Turnover $\frac{\text{Sales Revenue}}{\text{Working Capital}}$

Current Ratio $\frac{\text{Current Assets}}{\text{Current Liabilities}}$

Acid Test; Quick Ratio

Monetary Current Assets
Current Liabilities

Debt / Equity Ratio

Total Liabilities
Shareholder Equity

Debt / Capitalization

Long – Term Liabilities
Long – Term Liabilities + Shareholder Equity

Cash Flow / Debt

Cash Generated by Operations
Total Debt

Dividend Yield

Dividends Per Share
Market Price Per Share

Dividend Payout

Dividends
Net Income