# 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	
	Actual %	Budget %	<u>Variance</u>
Sales	3,688 100.00	3,800 100.00	< 112 >
Cost of Goods Sold	2,168 58.79	2,166 57.00	2
Gross Margin	<del>1,520</del> 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>	Variance
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	0	0	
Total Assets	1,086	1,000	< 86>
Loans Payable	141	5	< 136 >
Other Liabilities	0	0	
Current Liabilities	<u>141</u>	5	< 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?

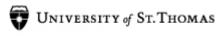
# **Comparative Analysis**

# **Income Statement**

	SHOE 2006	SHOE 2007	MaCaSin <u>2007</u>	Slip-On 2007
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**

	SHOE 2006	SHOE 2007	MaCaSin <u>2007</u>	Slip-On 2007
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**

	SHOE 2006	SHOE 2007	MaCaSin <u>2007</u>	Slip-On 2007
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
	Ва	lance 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

Return on Assets	=	Net Income

**Total Assets** 

Return on Equity = <u>Net Income</u>

Shareholder Equity

Debt / Equity = <u>Total Liabilities</u>

Shareholder Equity

Calculate the following ratios:

 SHOE
 SHOE
 MaCaSin
 Slip-On

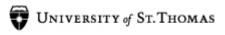
 2006
 2007
 2007
 2007

Return on Assets

Return on Equity

Debt / Equity

# **Discussion**



# **RATIO ANALYSIS**

	Quarter "0"		Projected Qua	arter_
Sales in Units	23,062			
X Price	\$40			
= Sales in Dollars	\$922,000			
	\$	%	\$	%
Sales	922	100.00		
Cost of Goods Sold	_542_	58.79		
Engineering	10	1.08		
Inventory Expense	2	.22		
Marketing	90	9.76		
Research & Development	10	1.08		
Market Research	5	54		
Other Expense	0	0		
Interest Expense	12	1.30		
Overhead / Fixed	100	10.85		
Depreciation	31	3.36		
Total Expense	802	86.98		
Profit Before Tax	120	13.01_		
Income Tax	60	6.51		
Net Profit After Tax	60	6.51		
Dividends Paid	7	76		
Retained Earnings	53	5.75		



#### 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 \$1,200,000 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**

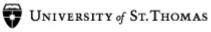
By now, you have read the Genesco Business Review that provided a background for this company. You were asked to prepare a mission, vision, and values statement. Now that you have developed a great theoretical plan, it's time you put this into practice. For the remainder of the day, your team will be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



DEC	ISION	1 FORM
Mini	MBA	Program

Company Number: \_\_\_\_\_ Quarter Number: \_\_\_\_\_

Parameters:	Min	Max		
1. Price	\$30	\$50	<u>\$</u>	<u>.00</u>
2. Marketing	\$0	\$300	<u>\$</u>	,000
3. Production in Units	0	80,000		,000
4. Production Engineering	\$0	\$200	<u>\$</u>	,000
5. Research & Development	\$0	\$200	<u>\$</u>	,000
6. Plant Addition in Dollars	\$0	\$500	<u>\$</u>	,000
7. Dividends	\$0	\$200	<u>\$</u>	,000
8. Other Expenses	\$0	\$200	<u>\$</u>	000,
9. Loan Payment ( - ) or Make a Bank Loan (+)	-\$500 \$0	\$0 \$ 1,000	<u>\$</u> <u>\$</u>	- <u>,000</u> + <u>,000</u>
10. Stock Sold in Dollars	-\$500	\$500	<u>\$</u>	,000
11. Market Research (Automatic Charge)		\$5,000	<u>\$</u>	12
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			BALANCE SHEET		
Sales	23,062 units @ \$40	\$ 922	Cash \$ 40		
Expenses:			Inventory 46		
	Cost of Goods Sold	542	Plant & Equipment 1,000		
	<b>Production Engineering</b>	10	Other Assets 0		
	Inventory Expense	2			
	Marketing	90			
	Research & Development	10	Total Assets \$ 1,086		
	Market Research	5			
	Other Expenses	0			
	Interest Expense	12			
	Overhead / Fixed	100	Loans Payable 300		
	Depreciation	31	Other Liabilities 0		
			Common Stock 700		
Total l	Expense	<u>802</u>	Retained Earnings 86		
Profit	Before Tax	120			
Incom	e Tax	60			
Net Pr	ofit After Tax	60	Total Equities \$ 1,086		
Dividends Paid		7			
Retain	ed Earnings	53			

# **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	31
Total Cash Inflow	\$ 922	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
<b>Business Index This Quarter</b>	1.00	<b>Business Index Next Quarter</b>	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. <u>Improved Cost Structure: Lowest Component Percentage of Total Expense</u>

Total Expense Quarter "0" = \$802,000 Sales in Dollars Quarter "0" = \$922,000

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 Actual 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. <u>Return on Assets</u>

Net Profit After Tax 60

Assets 1,086 = 5.52%

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



# 6. <u>Return on Invested Capital</u>

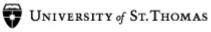
Assets – Cash 
$$1,046 = 5.74\%$$

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

# 7. <u>EVC: Economic Value Created</u>

Measurement: Highest EVC Cumulative Quarter 1 through 12.

<sup>\*</sup> For Purposes of the Simulation, Assume a Rate of 12%



<b>Company Name</b>			
Mission, Vision, and	Values:		

**Goals and Objectives:** 

**Term** 

#### **BUSINESS ACUMEN GLOSSARY**

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.

**Definition** 

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.



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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.



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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

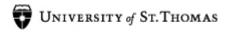
expansion or other new projects.

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.

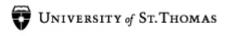


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Stockholders' Equity The net worth of a firm. Total assets minus total

liabilities.

Working Capital Current assets minus current liabilities.



# FINANCIAL RATIOS

Price / Earnings Ratio <u>Market Price Per Share</u>

Net Income Per Share

Return on Assets <u>Net Income</u>

**Total Assets** 

Return on Invested Capital Net Income

Total Assets – Cash and Cash Equivalents

Return on Shareholder Equity Net Income

Shareholder Equity

Gross Margin Percentage Gross Margin

Net Sales

Profit Margin <u>Net Income</u>

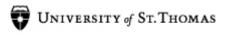
Net Sales

Earnings Per Share Net Income

Number of Shares Outstanding

Asset Turnover Net Sales

**Total Assets** 



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Invested Capital Turnover Net Sales

Total Assets – Cash and Cash Equivalents

Equity Turnover Net Sales

Shareholder Equity

Capital Intensity <u>Sales Revenue</u>

Property, Plant, Equipment

Days' Cash <u>Cash</u>

Cash Expenses / 365

Days' Receivables; <u>Accounts Receivable</u>

Collection Period Sales / 365

Days' Inventory; <u>Inventory</u>

Days' Sales on Hand Cost of Sales / 365

Inventory Turnover <u>Cost of Sales</u>

Inventory

Working Capital Current Assets

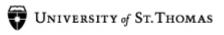
- Current Liabilities

Working Capital Turnover Sales Revenue

Working Capital

Current Ratio <u>Current Assets</u>

**Current Liabilities** 



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Acid Test; Quick Ratio <u>Monetary Current Assets</u>

**Current Liabilities** 

Debt / Equity Ratio <u>Total Liabilities</u>

Shareholder Equity

Debt / Capitalization <u>Long – Term Liabilities</u>

Long – Term Liabilities + Shareholder Equity

Cash Flow / Debt Cash Generated by Operations

Total Debt

Dividend Yield <u>Dividends Per Share</u>

Market Price Per Share

Dividend Payout <u>Dividends</u>

Net Income