

# Know Your Numbers: Five Keys to Using Financial Statements

*A workshop to help existing business owners  
improve financial planning*

## Program Workbook

*Program Presented by:*



*Program Sponsored by:*



## Small Business Development Center



### Know Your Numbers: Five Keys to Using Financial Statements

U.S. DEPARTMENT OF COMMERCE  
U.S. SMALL BUSINESS ADMINISTRATION



*Accounting Coach - Cam*

## Welcome

- Know Your Numbers: Five Keys to Using Financial Statements
- Facilitator
- Logistics
- Format
- [SBDCMichigan.org](http://SBDCMichigan.org)



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## Objectives

- Introduce Know Your Numbers:  
Five Keys to Using Financial Statements
- Provide tools to apply the keys to your business
- Practice using the tools that will improve efficiency



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## Agenda

- Introductions
- Sponsor
- The Five Keys
  - Financial Statements
  - Break Even Analysis
  - Ratio Analysis and Benchmarking
  - Financial Gap Analysis
  - Banking Relationships



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## Introductions



- Introduce yourself
- Describe business
- What do you hope to learn from this seminar?



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Fifth Third Bank



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## Current Banking Environment

- Yes, banks are lending
- Credit standards are tighter
- More important to be prepared
- Makes this class even more important
- More on this at the end



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## Financial Statements

- Income Statement
- Balance Sheet



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## Financial Statements

- Financial Statements provide summary information about the state of the business
- The two primary statements used by businesses are:
  - Income Statement (or Profit and Loss Statement)
  - Balance Sheet (or Statement of Financial Condition)
- A Cash Flow budget is also extremely useful



See template in Appendix of Workbook

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## Income Statement

- Reports the activity during a specific period of time
  - No more than a year (Calendar or Fiscal)
- Includes the following broad categories
  - Revenues
  - Cost of Good Sold
  - Gross Profit
  - Operating Expenses
  - Operating Profit
  - Net Profit
  - Other Income and Expenses



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**Wholesale/Distributor Sample File**  
**Profit & Loss**  
January through December

	Jan - Dec	
<b>Ordinary Income/Expense</b>		
Income		
Revenue	823,619.06	
Total Income	823,619.06	100.0%
Cost of Goods Sold		
Direct Labor	44,410.00	5.4%
Freight In	3,620.00	0.4%
Purchases (Cost of Goods)	359,923.50	43.7%
Total COGS	407,953.50	49.5%
Gross Profit	415,665.56	50.5%
Expense		
Advertising Expense	4,000.00	0.5%
Business Licenses & Fees	1,420.46	0.2%
Car/Truck Expense	22,699.74	2.8%
Conferences and Seminars	9,400.00	1.1%
Contributions	5,000.00	0.6%
Depreciation Expense	1,845.08	0.2%
Dues and Subscriptions	3,800.00	0.5%
Insurance	33,378.16	4.1%
Maintenance/Janitorial	5,683.90	0.7%
Marketing Expense	14,984.00	1.8%
Meals and Entertainment	2,752.70	0.3%
Office Equipment	2,200.00	0.3%
Packaging Materials	3,505.00	0.4%
Postage and Delivery	2,196.00	0.3%
Professional Fees	9,346.48	1.1%
Promotional Expense	4,042.00	0.5%
Rent	19,010.00	2.3%
Repairs	780.00	0.1%
Sales Commission (outside reps)	7,981.60	1.0%
Supplies	12,396.72	1.5%
Telephone	8,006.88	1.0%
Travel	6,904.46	0.8%
Utilities	1,003.18	0.1%
Wages	196,349.06	23.8%
Total Expense	378,688.42	46.0%
Net Operating Income	36,997.14	4.5%
Other Income/Expense		
Other Expense		
Interest Expense	4,592.90	0.6%
Total Other Expense	4,592.90	0.6%
Net Other Income	-4,592.90	-0.6%
Net Income	32,404.24	3.9%



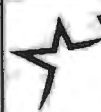
## Balance Sheet

- Reports the cumulative record of business activity since the business opened



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## Balance Sheet

### Assets

- Current Assets
  - Use within one year
- Fixed Assets
  - Cost less any depreciation
- Total Assets

### Liabilities and Net Worth

- Current Liabilities
  - Payable within one year
- Long Term Liabilities
- Net Worth
  - Owners capital
  - Retained earnings
- Total Liabilities and Net Worth

Equal



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**Wholesale/Distributor Sample File**  
**Balance Sheet**  
As of December 31

		<u>Dec 31, 11</u>		
<b>ASSETS</b>			<b>LIABILITIES &amp; EQUITY</b>	
<b>Current Assets</b>			<b>Liabilities</b>	
<b>Checking/Savings</b>			<b>Current Liabilities</b>	
Company Checking Account		30,154.32	Accounts Payable	
Company Savings Account		10,000.00	Accounts Payable	71,697.90
Petty Cash Account		530.00	Total Accounts Payable	71,697.90
Total Checking/Savings		40,654.32	Credit Cards	
<b>Accounts Receivable</b>			QuickBooks Credit Card	1,249.12
Accounts Receivable		57,333.08	Total Credit Cards	1,249.12
Total Accounts Receivable		57,333.08	Other Current Liabilities	
<b>Other Current Assets</b>			Customer Deposits	500.00
Inventory Asset		116,921.08	Line of Credit	135,610.90
Prepaids		830.00	Payroll Liabilities	2,923.72
Security Deposits		1,230.00	Total Other Current Liabilities	139,044.62
Total Other Current Assets		118,981.08	Total Current Liabilities	211,968.22
Total Current Assets		206,938.48	Total Liabilities	211,968.22
<b>Fixed Assets</b>			<b>Equity</b>	
Automobiles & Trucks		45,632.00	Paid in Capital	24,324.00
Computer & Office Equipment		19,453.00	Retained Earnings	103,316.18
Machinery & Equipment		50,953.00	Net Income	32,404.34
Accumulated Depreciation		-923.04	Total Equity	160,044.52
Total Fixed Assets		115,124.96		
<b>TOTAL ASSETS</b>		<u><b>322,063.44</b></u>	<b>TOTAL LIABILITIES &amp; EQUITY</b>	<u><b>322,063.44</b></u>



## Financial Operating Cycle

- Balance Sheet and Income Statement work together to show the state of the business
- Business activity flows from one statement to the other on a continuous basis as long as the business exists

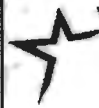


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## Financial Operating Cycle


$\text{Assets} = \text{Liabilities} + \text{Net Worth}$

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## Financial Operating Cycle


Revenues ← Assets = Liabilities + Net Worth

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## Financial Operating Cycle

Revenues ← Assets = Liabilities + Net Worth

↓

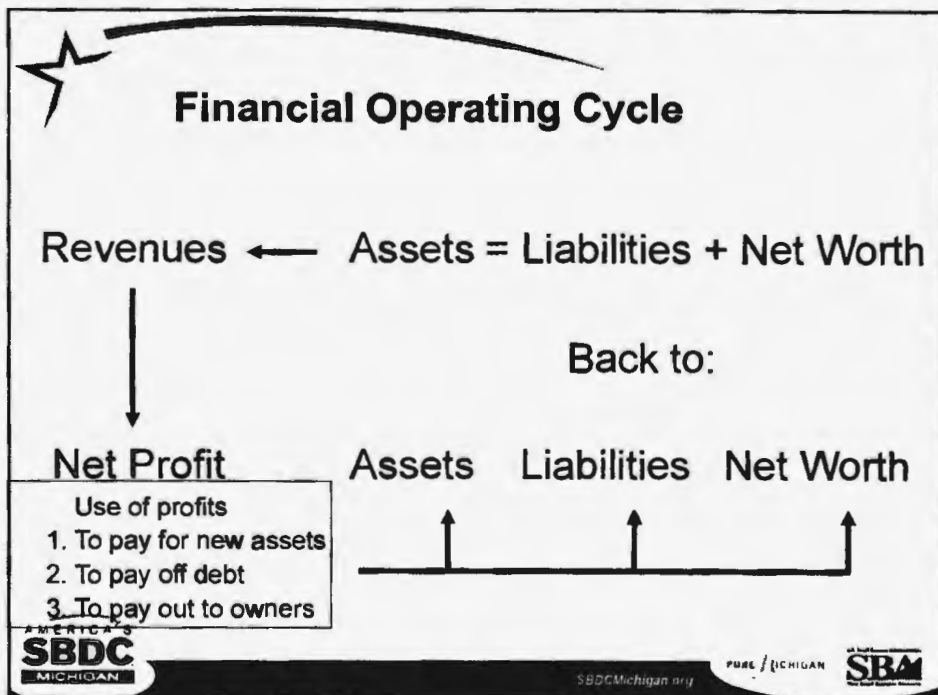
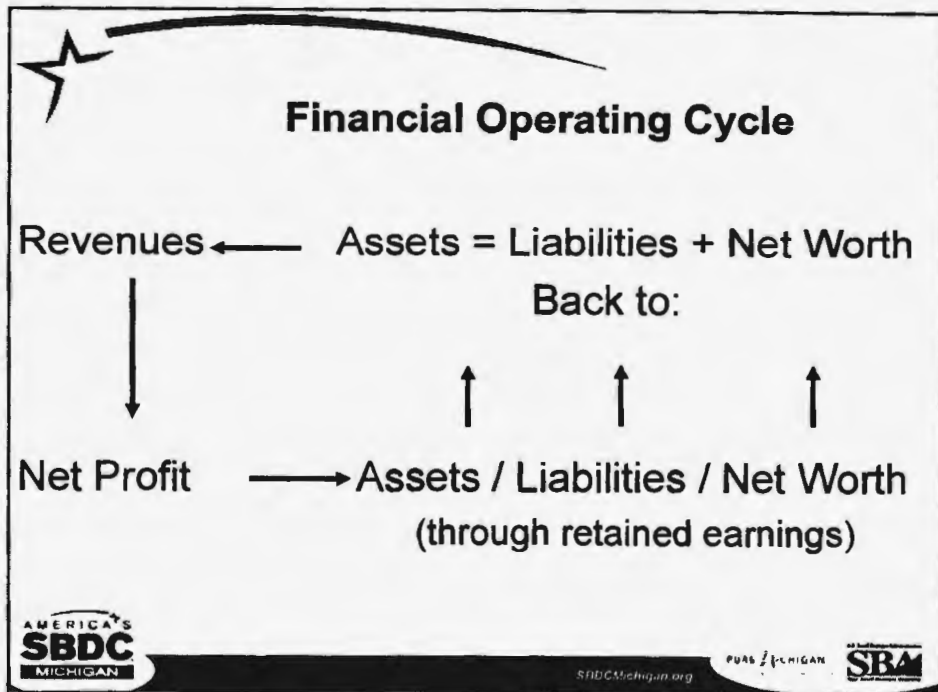
Net Profit

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## Working Capital

- Working Capital is Current Assets
- Net Working Capital is Current Assets minus Current Liabilities
- Like the Financial Cycle, Working Capital can be thought of as operating in a cycle



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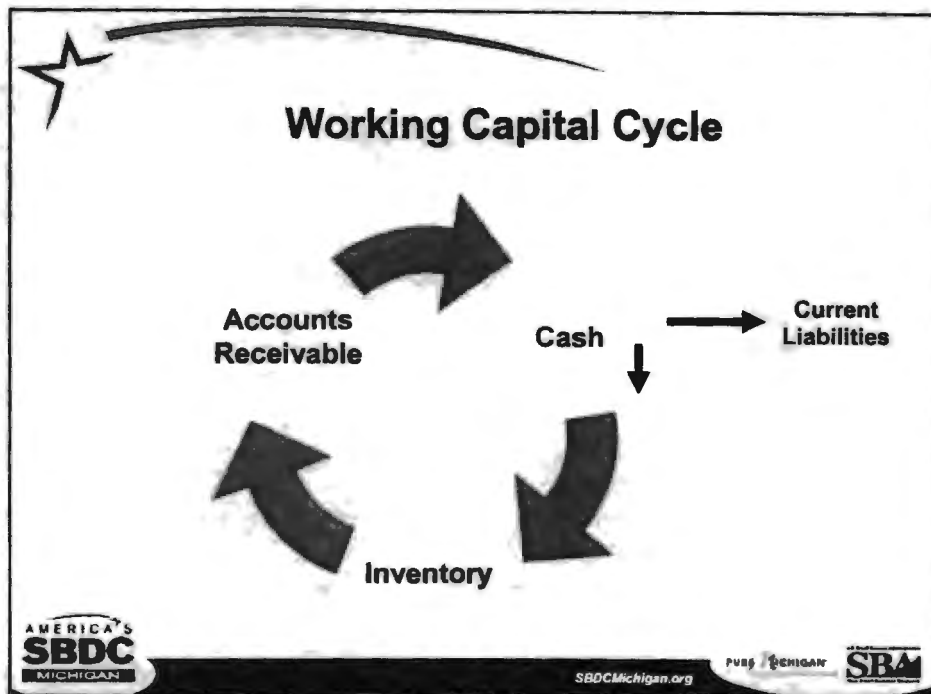
## Working Capital Cycle



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**Know Your Numbers:  
Five Keys to Using Financial Statements**

- We'll use the statements to analyze the health of the business and chart a course for success
- But first...

A small black and white photograph showing two people standing in front of a storefront with large windows.

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## A Note on Accounting Systems

- Your success in financial management depends greatly on having high quality accounting of your business
- We encourage you to pay close attention to financial recordkeeping and find a quality accountant to support your business



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## Breakeven Analysis

- Am I Really Making Money?



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## Breakeven Analysis

- Defines the sales level you need to achieve to start making a profit
  - Revenues are equal to Costs
- Useful for answering questions like:
  - If my costs go up, what sales will I need to maintain profit?
  - If I raise prices, what loss of sales can I afford to have and still make more money?
  - If I increase my marketing budget, what sales increase would I need to cover it?
  - And others...



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## Calculating Breakeven

- To find your breakeven you need to calculate the following:
  - Variable Cost
    - Costs that change in proportion to sales
  - Fixed Cost
    - Costs that do not change with sales
  - Contribution margin
    - What's left from sales revenue after variable costs are removed (shown as a percentage of total sales)



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## Fixed vs. Variable Cost

### Fixed Cost

- Salaries
- Payroll taxes
- Advertising
- Insurance
- Depreciation
- Vehicle Expense
- Accounting fees
- Travel/Entertainment
- Office Supplies
- Utilities

### Variable Cost

- Cost of Goods Sold
- Contract Labor
- Commission
- Bad Debts
- Operating Supplies



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## Breakeven Worksheet

1. Classify Costs
  - Total Sales
  - Total Variable Costs
  - Total Fixed Costs
2. Calculate Variable Cost Percent
  - For every \$1.00 of sales, what percent goes away to variable cost (Variable Cost / Sales)
3. Calculate Contribution Margin
  - For every \$1.00 of sales (after paying variable costs) what percent is left to cover fixed cost... plus any targeted profit
4. Calculate Breakeven Sales
  - $BE\ Sales = \text{Fixed Costs } (\$) / \text{Contribution Margin } (\%)$



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# Wholesale - Distributor Breakeven Analysis

	Jan - Dec		Variable Cost	Fixed Cost	Notes
<b>Ordinary Income/Expense</b>					
Income					
Revenue	823,619.08				
Total Income	823,619.08	100.0%			
Cost of Goods Sold					
Direct Labor	44,410.00	5.4%	44,410		
Freight In	3,620.00	0.4%	3,620		
Purchases (Cost of Goods)	359,923.50	43.7%	359,924		
Total COGS	407,953.50	49.5%			
Gross Profit	415,665.58	50.5%			
Expense					
Advertising Expense	4,000.00	0.5%		4,000	
Business License & Fees	1,420.46	0.2%		1,420	
Car/Truck Expense	22,699.74	2.8%	22,700		
Conferences and Seminars	9,400.00	1.1%		9,400	
Contributions	5,000.00	0.6%		5,000	
Depreciation Expense	1,846.08	0.2%			Non-cash
Dues and Subscriptions	3,800.00	0.5%		3,800	
Insurance	33,378.16	4.1%		33,378	
Maintenance/Janitorial	5,683.90	0.7%		5,684	
Marketing Expense	14,964.00	1.8%		14,964	
Meals and Entertainment	2,752.70	0.3%		2,753	
Office Equipment	2,200.00	0.3%		2,200	
Packaging Materials	3,505.00	0.4%	3,505		
Postage and Delivery	2,196.00	0.3%	2,196		
Professional Fees	9,346.48	1.1%		9,346	
Promotional Expense	4,042.00	0.5%		4,042	
Rent	19,010.00	2.3%		19,010	
Repairs	780.00	0.1%		780	
Sales Commission (outside reps)	7,981.60	1.0%	7,982		
Supplies	12,398.72	1.5%	12,399		
Telephone	8,006.88	1.0%		8,007	
Travel	6,904.46	0.8%		6,904	
Utilities	1,003.18	0.1%		1,003	
Wages	196,349.08	23.8%		196,349	
Total Expense	378,668.42	46.0%			
Net Ordinary Income	36,997.14	4.5%			
Other Income/Expense					
Other Expense					
Other Expense	4,592.90	0.6%		12,000	Principal & Interest
Total Other Expense	4,592.90	0.6%			
Net Other Income	-4,592.90				
Net Income	32,404.24	3.9%			

## TOTALS

456,735 340,041

Variable Exp / Sales  
456,738 / 823,619 = .555)

55.5%

Contribution Margin  
100% - (Var Exp / Sales)

44.5%

Break-even  
Fixed Exp (\$) / Cont. Margin (%)

340,041 = 763,359  
44.5%

## Wholesale - Distributor Contribution Margin Calculation

	\$	%	\$1.00
<b>Sales</b>	823,619	100.0%	\$1.00
<b>COGS</b>	<u>407,954</u>	49.5%	
<b>Gross Profit</b>	415,665	50.5%	
<b>Other Variable Expenses</b>			
<b>Car/Truck Expense</b>	22,700	2.8%	
<b>Packaging Materials</b>	3,505	0.4%	
<b>Postage and Delivery</b>	2,196	0.3%	
<b>Sales Commission (outside reps)</b>	7,982	1.0%	
<b>Supplies</b>	<u>12,399</u>	1.5%	
<b>Total Other Variable Exp.</b>	48,782	5.9%	
<b>Total Variable Expense</b>	456,736	<u>55.5%</u>	<u>\$0.55</u>
<b>Contribution Margin</b>	366,883	44.5%	\$0.45

## Breakeven Analysis Examples

1. If my costs go up, what sales will I need to maintain profit?

Example: You hire a new employee for \$40,000.

Salary	40,000	
Payroll Tax (10%)	4,000	
Total	<u>\$ 44,000</u>	
Cost Increase/Contribution Margin =		
44,000/.445 =		\$98,876

2. If I raise prices, what loss of sales can I afford to have and still make money?

Example: You raise prices by 10%.

<b>Raise Prices by 10%:</b>		
Total Revenue	823,619	
Increase (10%)	1.10	
New Total Revenue	<u>\$ 905,981</u>	
<b>New Contribution Margin:</b>		
100%-(Var Exp/Sales) = 1-(456,735/,905,981) =		49.6%
<b>New Breakeven:</b>		
Fixed Costs/ New Contribution Margin=340,041/.496=		\$ 685,566
<b>Difference in Breakeven:</b>		
Old Breakeven	763,359	
New Breakeven	685,566	
Difference	<u>\$ 77,793</u>	

3. If I increase my owners draw, what sales increase would I need to cover it?

Example: You increase owners draw by \$10,000.

Amount Owners Draw Increases/Contribution Margin= $10,000 / .445=$	\$ 22,472
--	-----------

4. I hire a salesperson with a salary of \$40,000 per year, employee taxes are 10%, and provide a car allowance of \$500/month. The salesperson will be paid a commission of 10.0% on all new customer orders.

Salary	40,000	
Car Allowance (12 * \$500 = \$6,000)	6,000	
Payroll Tax (10%)	4,000	
Total	<u>\$50,000</u>	
New Contribution Margin (44.5% - 10.0% = 34.5%)		34.5%
Cost Increase/New Contribution Margin = $50,000 / .345 =$		\$144,928

Note: This example ignores the effect of employer taxes on earned commissions.



## **Breakeven/Contribution Margin Homework**

Refer to work book and utilize your  
own financials to determine your  
Breakeven



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# Income Statement

ABC Retail Gift Store

Income Statement

1/1/2004 - 12/31/04

<b>Revenue:</b>		
Gross Sales	\$311,300.00	100.0%
Less: Sales Returns and Allowances	<u>\$0.00</u>	0.0%
Net Sales	\$311,300.00	100.0%
<b>Cost of Goods Sold:</b>		
Beginning Inventory	\$132,868.00	
Add: Purchases	\$184,717.00	59.3%
Freight-in	\$2,900.00	0.9%
Direct Labor		0.0%
Indirect Expenses		0.0%
	<u>\$320,485.00</u>	103.0%
Less: Ending Inventory	<u>\$152,668.00</u>	49.0%
Cost of Goods Sold	<u>\$167,817.00</u>	53.9%
Gross Profit (Loss)	\$143,483.00	46.1%
<b>Expenses:</b>		
Advertising	\$9,163.00	2.9%
Amortization	\$0.00	0.0%
Bad Debts	\$0.00	0.0%
Bank Charges	\$25.00	0.0%
Charitable Contributions		0.0%
Commissions	\$6,125.00	2.0%
Contract Labor	\$1,742.00	0.6%
Credit Card Fees	\$1,673.00	0.5%
Delivery Expenses	\$843.00	0.3%
Depreciation	\$168.00	0.1%
Dues and Subscriptions	\$705.00	0.2%
Insurance	\$3,108.00	1.0%
Interest*	\$146.00	0.0%
Maintenance	\$75.00	0.0%
Miscellaneous	\$676.00	0.2%
Office Expenses	\$273.00	0.1%
Operating Supplies	\$2,270.00	0.7%
Payroll Taxes	\$6,240.00	2.0%
Permits and Licenses	\$100.00	0.0%
Postage		0.0%
Professional Fees	\$1,500.00	0.5%
Property Taxes		0.0%
Rent	\$18,000.00	5.8%
Repairs	\$45.00	0.0%
Sales Tax	\$14,633.00	4.7%
Telephone	\$1,360.00	0.4%
Travel	\$3,096.00	1.0%
Utilities	\$3,420.00	1.1%
Vehicle Expenses	\$1,284.00	0.4%
Wages**	<u>\$71,930.00</u>	23.1%
Total Expenses	<u>\$148,600.00</u>	47.7%
Net Operating Income	-\$5,117.00	-1.6%
<b>Other Income:</b>		
Gain (Loss) on Sale of Assets	\$0.00	0.0%
Interest Income		0.0%
Total Other Income	<u>\$0.00</u>	0.0%
Net Income (Loss)	<u>-\$5,117.00</u>	-1.6%

\*Owner has \$19,477 on credit cards and wants it amortized @ 9.0% over three years = \$619.33/month or \$7,432/year.

\*\*Doesn't include owner's compensation. Owner wants to be paid \$50,000/ year, all self employment taxes included.

# Worksheet

Original P & L

Variable Expenses

Fixed Expenses

COGS	\$ 167,817.00			
Advertising	\$9,163.00			
Amortization	\$0.00			
Bad Debts	\$0.00			
Bank Charges	\$25.00			
Charitable Contributions				
Commissions	\$6,125.00			
Contract Labor	\$1,742.00			
Credit Card Fees	\$1,673.00			
Delivery Expenses	\$843.00			
Depreciation	\$168.00			
Dues and Subscriptions	\$705.00			
Insurance	\$3,108.00			
Interest	\$146.00			
Maintenance	\$75.00			
Miscellaneous	\$676.00			
Office Expenses	\$273.00			
Operating Supplies	\$2,270.00			
Payroll Taxes	\$6,240.00			
Permits and Licenses	\$100.00			
Postage				
Professional Fees	\$1,500.00			
Property Taxes				
Rent	\$18,000.00			
Repairs	\$45.00			
Sales Tax	\$14,633.00			
Telephone	\$1,360.00			
Travel	\$3,096.00			
Utilities	\$3,420.00			
Vehicle Expenses	\$1,284.00			
Wages	\$71,930.00			
P & I (\$19,477 @ 9.0%, 3 yrs)				
Owner's Draw				
<b>TOTALS</b>		\$ -		\$ -
Sales		\$ 311,300.00		
Contribution Margin				



# Answer Sheet

	Original P & L	Variable Expenses	Fixed Expenses
COGS	\$ 167,817.00	\$ 167,817.00	
Advertising	\$9,163.00		\$ 9,163.00
Amortization	\$0.00		
Bad Debts	\$0.00		
Bank Charges	\$25.00		\$ 25.00
Charitable Contributions			
Commissions	\$6,125.00	\$ 6,125.00	
Contract Labor	\$1,742.00	\$ 1,742.00	
Credit Card Fees	\$1,673.00	\$ 1,673.00	
Delivery Expenses	\$843.00	\$ 843.00	
Depreciation	\$168.00		
Dues and Subscriptions	\$705.00		\$ 705.00
Insurance	\$3,108.00		\$ 3,108.00
Interest	\$146.00		
Maintenance	\$75.00		\$ 75.00
Miscellaneous	\$676.00		\$ 676.00
Office Expenses	\$273.00		\$ 273.00
Operating Supplies	\$2,270.00	\$ 2,270.00	
Payroll Taxes	\$6,240.00		\$ 6,240.00
Permits and Licenses	\$100.00		\$ 100.00
Postage			
Professional Fees	\$1,500.00		\$ 1,500.00
Property Taxes			
Rent	\$18,000.00		\$ 18,000.00
Repairs	\$45.00		\$ 45.00
Sales Tax	\$14,633.00	\$ 14,633.00	
Telephone	\$1,360.00		\$ 1,360.00
Travel	\$3,096.00		\$ 3,096.00
Utilities	\$3,420.00		\$ 3,420.00
Vehicle Expenses	\$1,284.00		\$ 1,284.00
Wages	\$71,930.00		\$ 71,930.00
P & I (\$19,477 @ 9.0%, 3 yrs)			\$ 7,432.00
Owner's Draw			\$ 50,000.00
TOTALS		\$ 195,103.00	\$ 178,432.00
Sales		\$ 311,300.00	
Contribution Margin	37.3%		

Breakeven

Fixed costs/Contr Marg (%)

\$178,432 / 37.3%

\$478,370



## Ratio Analysis and Benchmarking

How do I Squeeze Cash out of my Financials?



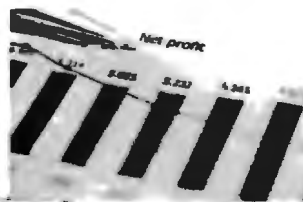
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## Roadblocks to Profitability

- Hipereon, Inc. has developed a "Roadblocks to Profitability" diagram that can help you to visualize the causes of profit and cash flow problems.
- It highlights the causes of Reduced Profitability and a Low Cash position



- High expense levels
- High Hidden Costs
- Low Sales Volume
- High Interest Expense
- Low Gross Profit

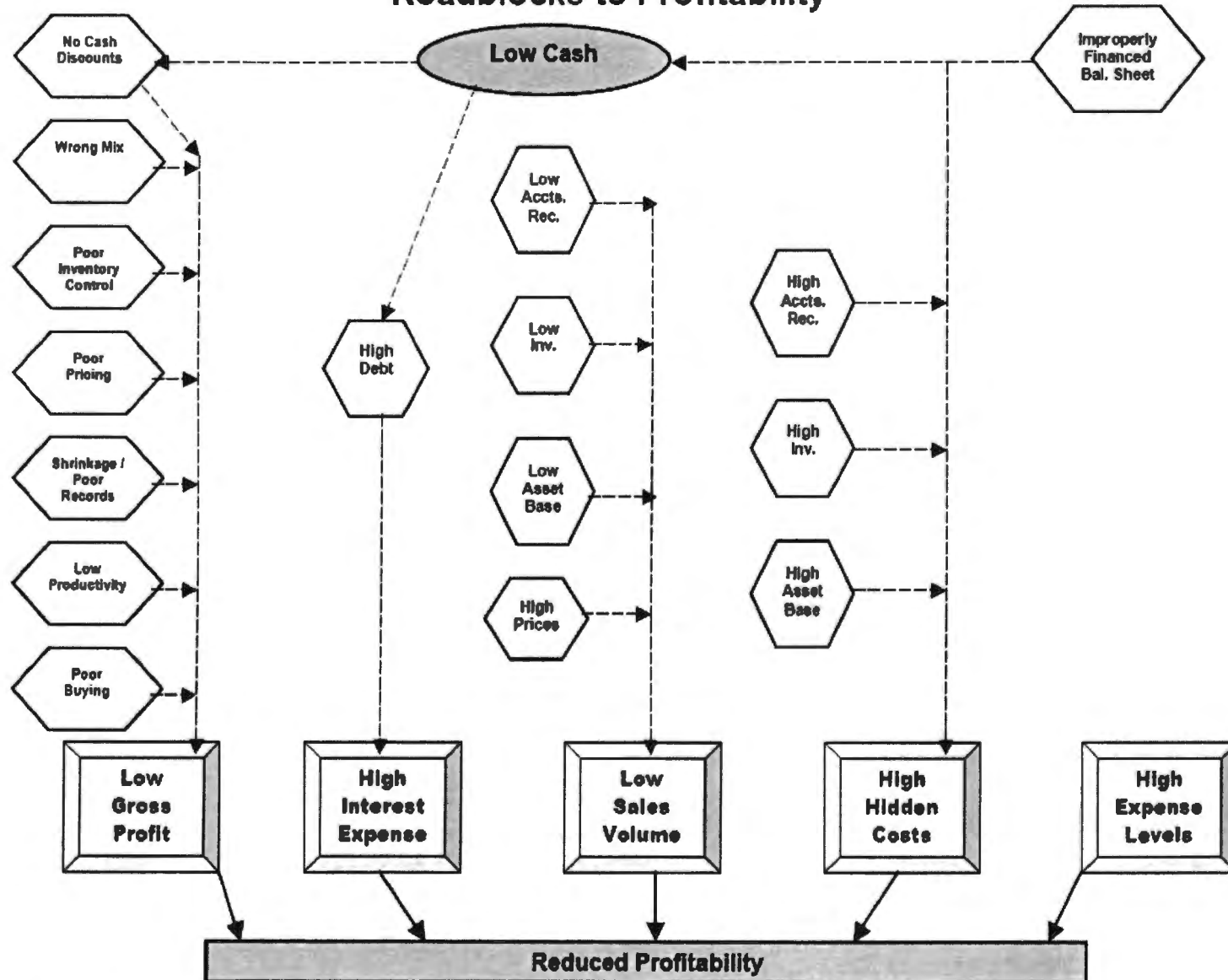


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## Roadblocks to Profitability





## Ratios

- Analysis of business issues can often be done by looking at a few key metrics that quickly summarize an aspect of the business
- Breakeven sales and Contribution Margin are examples of key metrics
- Comparing this year's vs. last year's revenues and costs are others
- Typically, metrics are presented as ratios that allow you to quickly compare important measures



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## Ratios

- Choosing which numbers to compare can be a challenge
  - Depends on the question
  - Depends on the type of business
- Some ratios are used quite frequently to assess the health of a business



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## Frequently Used Ratios

### Balance Sheet

- Current Ratio = Current Assets / Current Liabilities
  - Assesses the ability of the business to generate the cash needed to run the operation (liquidity)
- Quick Ratio = Cash + Accts. Rec. / Current Liabilities
  - A more conservative liquidity measure
- Debt to Worth = Total Liabilities / Net Worth
  - Compares the assets provided by the owners and the assets provided by creditors.



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## Frequently Used Ratios

### Asset Management Ratios

- Inventory Turnover = COGS / Inventory
  - Measures how quickly inventory is turned to sales
  - Days on hand calculation:  $360 \div \text{Inventory Turnover}$
- Accts. Rec. Turnover = Sales / Accts. Rec.
  - Measures how quickly sales are collected and turned to cash
  - Days outstanding calculation:  $360 \div \text{A/R Turnover}$



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## Frequently Used Ratios

### Income Statement Ratios

- Gross Margin = Gross Profit / Sales
  - Percent of sales remaining after costs to make or provide service are removed
  - Difficult to control all the variables yet changes can dramatically affect breakeven and overall profitability
- Net Margin = Net Profit before tax / Sales
  - The “Bottom Line”
  - Useful in trend and benchmark analysis



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## Analysis of Ratios

- Use ratios to assess your business in two ways
  - Trends – increasing or decreasing ratios should be examined for causes and possible fixes
  - Compared to Industry – most types of businesses have comparable business data that can help you benchmark your performance
    - RMA data
    - Industry association studies



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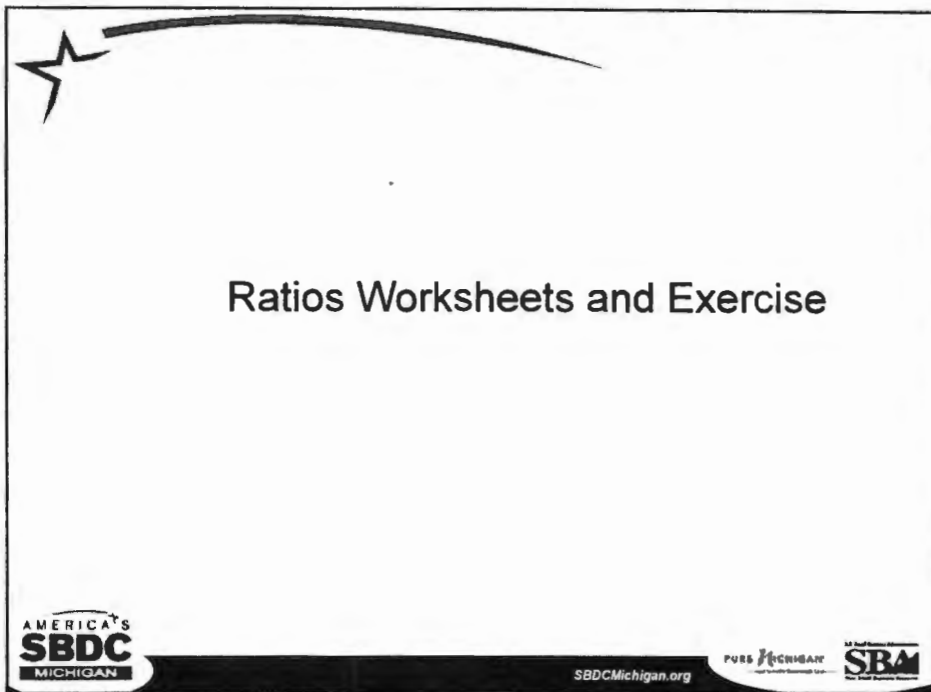
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## Wholesale - Distributor Ratio Analysis vs. RMA

	RMA	Subject	Subject	
	%	\$ Values	%	
<b>INCOME DATA</b>				
Net Sales	100.0%	823,619	100.0%	
Gross Profit	51.0%	415,665	50.5%	
Profit Before Taxes	4.2%	32,404	3.9%	
<b>LIQUIDITY RATIOS</b>				
Current	1.85	1.21	—	Divide total current assets by total current liabilities. Rough indication of the firm's ability to service current obligations
Quick	0.9	0.65	—	Add cash and equivalents to trade receivables. Then, divide by total current liabilities. Values less than "1" imply a dependency on inventory to service current obligations.
<b>Turnover Ratios</b>				
Sales / Receivables	30 11.2	8.46	—	Measures the number of times receivable turn over in a year. The higher the turnover the shorter the time between sale and cash collection
Cost of Sales / Inventory	76 4.8	3.40	—	Measures the number of times inventory turns over in a year.
<b>LEVERAGE RATIOS</b>				
Debt / Worth	5.1	1.32	—	Expresses the relationship between capital contributed by creditor and that contributed by owners. The higher the ratio the greater the risk being assumed by creditors.

\* Data from firms with sales between \$1 - \$3 million





## Accounts Receivable Management Exercise

- What is the effect on cash if Accounts Receivable are collected faster
  - Accounts Receivable Turnover Ratio:  $(\text{Sales} / \text{Accounts Receivable})$   
 $\$823,619 / \$97,333 = 8.46$
  - Ratio Wholesales Distributor \_\_\_\_ 8.46    Turn-days:  $360 \text{ days} / 8.46 = 43 \text{ days}$
  - Ratio Industry \_\_\_\_\_ 11.2    Turn-days:  $360 \text{ days} / 11.2 = 32 \text{ days}$
  - Balance Sheet A/R (43 days) \$97,333
  - Collect Accounts Receivable faster - 32 days (Sales:  $\$823,619 / 11.2$ ) = \$73,537
  - Compute increase in Cash Flow \$ \_\_\_\_\_
- What recommendations would you make to improve a company's management of its Accounts Receivable?

## Inventory Management Exercise

- What does the information tell you about how efficiently Wholesale Distributor manages its Inventory?
- What is the effect on cash if Inventory is turned faster?
  - Inventory Turnover Ratio: (Cost of Goods Sold / Inventory)  
 $\$407,954 / \$116,921 = 3.49$
  - Ratio Wholesale Distributor .....3.49 Turn-days: 360 days / 3.49 = 103 days
  - Ratio Industry.....4.80 Turn-days: 360 days / 4.80 = 76 days
  - Balance Sheet Inventory \$116,921
  - Turn Inventory faster - 76 days      (C/G/S:  $\$407,954 / 4.8$ ) =    \$ 84,990
  - Compute increase in Cash Flow \$ \_\_\_\_\_
- What recommendations would you make to improve a company's management of its Inventory?

## Debt Structure Exercise

- What does the information tell you about Wholesale Distributor's current liabilities, and short term debt / long term debt structure?
- What recommendations would you make to restructure Wholesale Distributor's liabilities and debt?
- What is the effect on cash if debt is restructured to use long term debt to purchase long term assets?
  - Total Fixed Assets on Balance Sheet \$115,125
  - Line of Credit on Balance Sheet \$139,618
  - Finance 80% Fixed Assets with long Term Debt ( $\$115,125 \times 80\%$ ) =  
\$ 92,100
  - What is the increase in Cash Flow? \$ \_\_\_\_\_
- What is the effect on the Liquidity Ratios?
  - Current:  $\text{Current Assets} / \text{Current Liabilities}$
  - Quick:  $\text{Cash} + \text{Accounts Receivable} / \text{Current Liabilities}$



## Financial Gap Analysis

What is the cost of growing my business?



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## Financial Gap Analysis

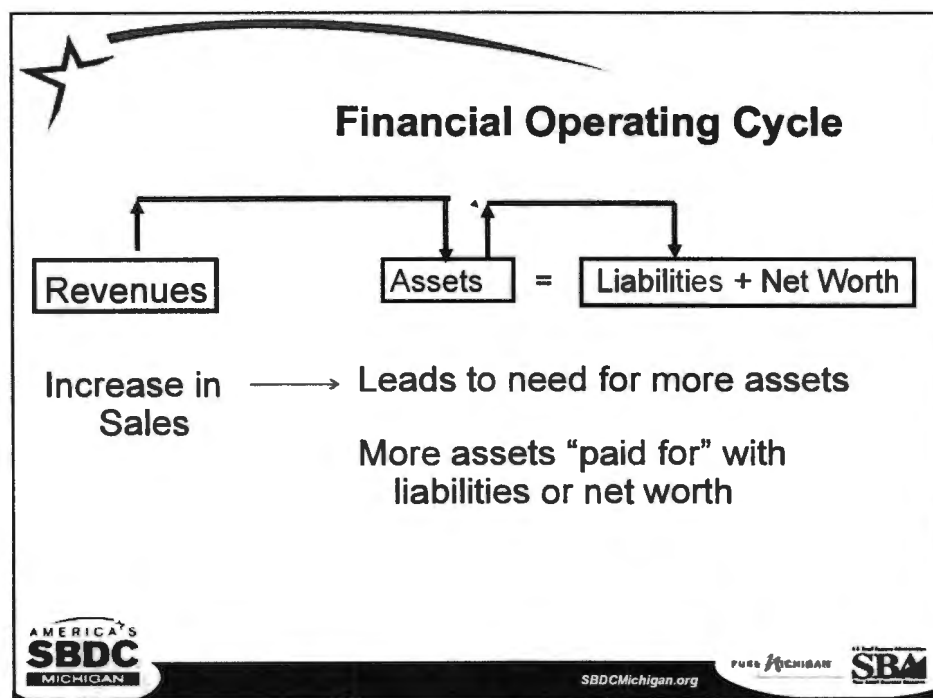
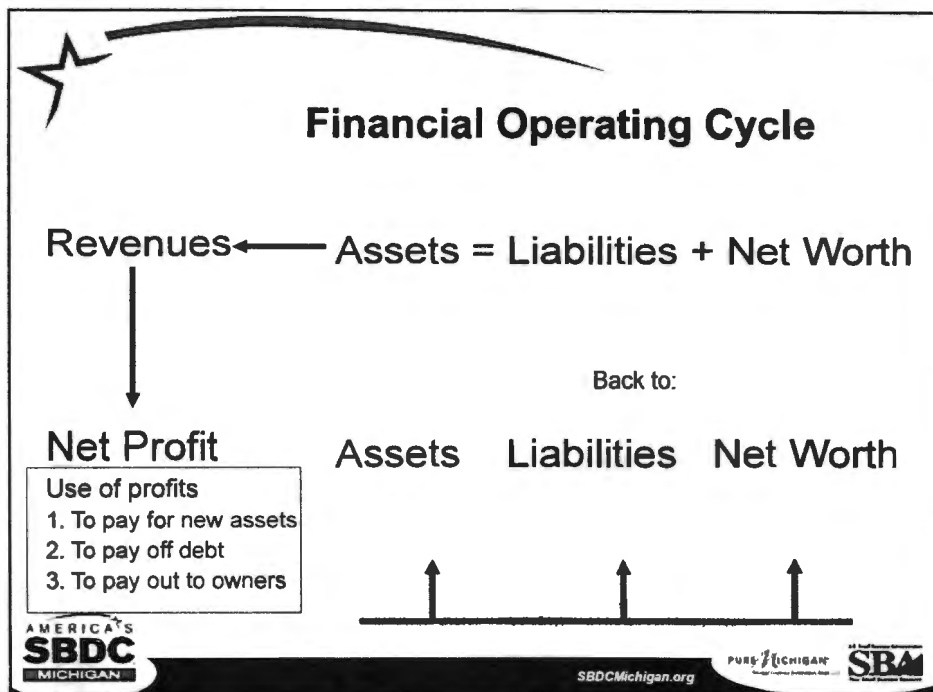
- Sales growth leads to the need for more Assets to support the new level of business activity
  - More cash
  - More Inventory
  - More Accounts Receivable
  - More Equipment and Facility, perhaps
- New Assets must be “paid for” with new liabilities or net worth.



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## Financial Gap Analysis

- Asset needs from rapid sales growth often cannot be funded through profits and internal cash flow
- “Financial Gap Analysis” helps to demonstrate this idea and it marks a path for fixing the problem



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## Calculating the “Gap”


A starting point to estimate capital and asset needs takes four steps:

- Determine which balance sheet items change with sales and calculate those line items as a % of sales
- Calculate the new balance sheet items at the same % of sales using the new sales level
- Calculate the “gap” in capital that is required




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## Gap Analysis Example



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**Wholesale/Distributor Sample File**  
**Balance Sheet**  
**As of December 31 Current Year**

ASSETS		Percent of Sales*	LIABILITIES & EQUITY		Percent of Sales*
Current Assets			Current Liabilities		
Cash	40,654	4.9%	Note Payable		Financial Gap 0
Accounts Receivable	97,333	11.8%	Accounts Payable	71,897	8.7%
Inventory	118,921	14.2%	Other Current Liabilities	<u>140,291</u>	17.0%
Other Current Assets	2,000				
Total Current Assets	<u>258,908</u>		Total Current Liabilities	<u>211,988</u>	
			Total Liabilities	211,988	
Fixed Assets			Equity		
Automobiles & Trucks	45,632	5.5%	Paid in	24,325	
Equipment	69,493	8.4%	Ret earnings	103,316	
Total Fixed Assets	115,125		Net Income	<u>32,404</u>	3.9%
			Total Net Worth	160,045	
TOTAL ASSETS	<u>372,033</u>		TOTAL LIABILITIES & Net Worth	<u>372,033</u>	

**NOTES:**

Sales This year = 823,619

Assets that are assumed to grow in proportion with significant sales are shown with current percentages:

Liabilities that are assumed to grow in proportion with significant sales are shown with current percentages:

There is no "gap" as indicated by Total Assets = Total Liabilities and Net Worth



**Wholesale/Distributor Sample File  
Balance Sheet  
As of December 31 Next Year Projected**

ASSETS		Percent of Sales*	LIABILITIES & EQUITY	Percent of Sales*	
Current Assets			Current Liabilities		
Cash	78,976	4.0%	Note Payable		Financial Gap 84,031
Accounts Receivable	189,084	11.8%	Accounts Payable	139,282	9%
Inventory	227,136	14.2%	Other Current Liabilities	<u>272,536</u>	17%
Other Current Assets	0				
Total Current Assets	<u>495,196</u>		Total Current Liabilities	<u>411,818</u>	
			Total Liabilities	411,818	
Fixed Assets			Equity		
Automobiles & Trucks	88,647	5.5%			
Equipment	135,000	8.4%	Paid in	24,325	
Total Fixed Assets	223,647		Ret earnings	135,720	
			Net Income	<u>62,949</u>	3.9%
			Total Net Worth	222,994	
TOTAL ASSETS	<u>718,843</u>		TOTAL LIABILITIES & Net Worth	<u>634,812</u>	

**NOTES:**

Sales next year = 1,600,000.00

Assets are assumed to grow to previous percentage of total sales


Liabilities are assumed to grow to previous percentage of total sales

Profits are assumed to stay at previous percentage of sales

The financial gap is indicated by the lack of balance between Assets and Liabilities and Net worth

Projected profit based on prior year experience (3.9% of sales)


Retained earnings calculated from previous year's balance sheet



## Banking Relationships

A Discussion on:

**"Questions You Should Ask Your Banker"**



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**SBA**



## The Michigan SBDC

The Michigan SBDC is funded through a cooperative agreement with the U.S. Small Business Administration (SBA), the Michigan Economic Development Corporation (MEDC) and matching funds from Local Network partners in each region.

**Michigan SBDC State Headquarters**  
**Grand Valley State University**  
**Seidman College of Business**

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## Michigan SBDC Services

**Four core services are provided by the SBDC:**

- No cost 1:1 consulting
- Business education
- Information based planning through (secondary) market research
- Technology commercialization



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## Know Your Numbers: Five Keys to Using Financial Statements

Thank You!

Please complete the  
Program Feedback



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## **Appendix A**

### **Cash Flow Budget Template**

**Available online at:**

**[www.sbdcmichigan.org](http://www.sbdcmichigan.org)**

**Then Click:**

**First Visit**

**Cash Flow Spreadsheets**

MONTHLY CASH FLOW PROJECTION																
Company:	Pre-Start-up	Month:	Month:	Month:	Month:	Month:	Month:	Month:	Month:	Month:	Month:	Month:	Month:	Month:	TOTAL	% of Sales
Position	1	2	3	4	5	6	7	8	9	10	11	12				
1.) CASH ON HAND (BEGIN. OF MO.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2.) CASH RECEIPTS																
a. Cash Sales / Receipts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
b. Collections from Credit Accounts															0	#DIV/0!
c. Loan or Other Cash Injection															0	
d. Loan or Other Cash Injection															0	
e. Loan or Other Cash Injection															0	
f.															0	
3.) TOTAL CASH RECEIPTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4.) TOTAL CASH AVAILABLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5.) CASH PAID OUT																
a. Cost of Goods Sold / Materials															0	#DIV/0!
b. Advertising															0	#DIV/0!
c. Bad Debts															0	#DIV/0!
d. Car / Delivery															0	#DIV/0!
Commissions																
Freight																
Taxes / Licenses															0	#DIV/0!
Travel and Entertainment															0	#DIV/0!
e. Subtotal Variable Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!
f. Bank Service Charges															0	#DIV/0!
g. Amortization of Intangibles															0	#DIV/0!
h. Depreciation/Depletion															0	#DIV/0!
i. Dues & Publications															0	#DIV/0!
j. Employee Benefit Program															0	#DIV/0!
k. Insurance-W/C, PROP, MISC.															0	#DIV/0!
l. Laundry & Cleaning															0	#DIV/0!
m. Leased Equipment															0	#DIV/0!
n. Legal / Professional															0	#DIV/0!
o. Office Expense															0	#DIV/0!
p. Outside Labor															0	#DIV/0!
q. Pension/P.S./Payroll Taxes															0	#DIV/0!
r. Rent															0	#DIV/0!
s. Repairs & Maintenance															0	#DIV/0!
t. Supplies, Operating															0	#DIV/0!
u. Utilities															0	#DIV/0!
v. Salaries-Officers															0	#DIV/0!
w. Payroll		0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!
x.															0	#DIV/0!
															0	#DIV/0!
															0	#DIV/0!
y. Miscellaneous (Unspecified)															0	#DIV/0!
z. Subtotal Fixed Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!
aa. Subtotal Total Operating Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!
bb. Loan Principal Payment															0	#DIV/0!
cc. Capital Purchases															0	#DIV/0!
dd. Other Start-up Costs															0	#DIV/0!
ee. Reserve and/or Escrow															0	#DIV/0!
ff.															0	#DIV/0!
6.) TOTAL CASH PAID OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!
7.) CASH POSITION END OF MONTH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ESSENTIAL OPERATING DATA																
A. Sales Volume (Dollars)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!
B. Accounts Receivable (End of Month)																
C. Bad Debt (End of Month)															0	
D. Inventory on Hand (End of Month)																
E. Accounts Payable (End of Month)																
F. Depreciation															0	
Fixed Costs	0															
Contribution Margin	#DIV/0!															
Break-even Sales =	#DIV/0!															

## **Appendix B**

### **Construction Company Example Financials**

**Quality-Built Construction**  
**Profit & Loss**  
January through December

	<u>Jan - Dec</u>
<b>Ordinary Income/Expense</b>	
<b>Income</b>	
4110 · Construction Income	820,705.00
<b>Total Income</b>	<u>820,705.00</u>
<b>Cost of Goods Sold</b>	
5110 · Job Related Costs	318,282.21
5200 · Job Labor Costs	158,015.78
<b>Total COGS</b>	<u>476,297.99</u>
<b>Gross Profit</b>	344,407.01
<b>Expense</b>	
6020 · Advertising	9,950.00
6060 · Bank Service Charges	154.00
6100 · Car/Truck Expense	10,589.89
6135 · Computer Supplies/Equipment	2,350.00
6140 · Contributions	1,200.00
6160 · Dues and Subscriptions	2,500.00
6180 · Insurance	3,147.20
6200 · Interest Expense	3,180.00
6490 · Office Supplies	9,921.81
6500 · Payroll Expenses (office)	133,000.00
6570 · Professional Fees	7,452.00
6610 · Postage and Delivery	1,820.00
6650 · Rent	15,380.00
6800 · Telephone	12,756.30
6820 · Taxes	2,043.00
6830 · Training and Conferences	9,900.00
6900 · Meals and Entertainment	3,035.85
6920 · Tools & Machinery (under \$500)	7,074.31
6970 · Utilities	1,850.00
<b>Total Expense</b>	<u>237,064.18</u>
<b>Net Ordinary Income</b>	<u>107,342.85</u>
<b>Net Income</b>	<u><u>107,342.85</u></u>

**Quality-Built Construction**  
**Balance Sheet**  
As of December 31

**ASSETS**

**Current Assets**

**Checking/Savings**

1110 - Company Checking Account	99,761.85
1120 - Company Savings Account	167,550.00
1130 - Payroll Checking Account	58.06
1140 - Petty Cash Account	131.10
<b>Total Checking/Savings</b>	<b>267,501.01</b>

**Accounts Receivable**

1210 - Accounts Receivable	43,650.00
<b>Total Accounts Receivable</b>	<b>43,650.00</b>

**Other Current Assets**

1320 - Retentions Receivable	3,350.00
1330 - Security Deposit	1,200.00
<b>Total Other Current Assets</b>	<b>4,550.00</b>

**Total Current Assets** 315,701.01

**Fixed Assets**

1510 - Automobiles & Trucks	32,952.00
1520 - Computer & Office Equipment	19,882.00
1530 - Machinery & Equipment	25,643.00
1540 - Accumulated Depreciation	-6,500.00

**Total Fixed Assets** 71,957.00

**TOTAL ASSETS** 387,658.01

**LIABILITIES & EQUITY**

**Liabilities**

**Current Liabilities**

<b>Accounts Payable</b>	
2010 - Accounts Payable	41,723.07
<b>Total Accounts Payable</b>	<b>41,723.07</b>
<b>Credit Cards</b>	

2050 - Mastercard Payable 211.83

**Total Credit Cards** 211.83

**Other Current Liabilities**

2100 - Payroll Liabilities 1,942.33

2200 - Customer Deposits 27,500.00

2240 - Worker's Comp Payable 821.06

**Total Other Current Liabilities** 30,263.39

**Total Current Liabilities** 72,198.29

**Long Term Liabilities**

2460 - Truck Loan 13,985.00

**Total Long Term Liabilities** 13,985.00

**Total Liabilities** 86,183.29

**Equity**

3910 - Retained Earnings 194,131.87

**Net Income** 107,342.85

**Total Equity** 301,474.72

**TOTAL LIABILITIES & EQUITY** 387,658.01



# Quality Built Construction Breakeven Analysis

			Variable Cost	Fixed Cost
<b>Ordinary Income/Expense</b>				
<b>Income</b>				
4110 - Construction Income	820,705.00			
<b>Total Income</b>	<b>820,705.00</b>	<b>100.0%</b>		
<b>Cost of Goods Sold</b>				
5110 - Job Related Costs	318,282.21	38.8%	318,282	
5200 - Job Labor Costs	158,015.78	19.3%	158,016	
<b>Total COGS</b>	<b>476,297.99</b>	<b>58.0%</b>		
<b>Gross Profit</b>	<b>344,407.01</b>	<b>42.0%</b>		
<b>Expense</b>				
6020 - Advertising	9,950.00	1.2%		9,950
6060 - Bank Service Charges	154.00	0.0%	154	
6100 - Car/Truck Expense	10,589.89	1.3%	10,590	
6136 - Computer Supplies/Equipment	2,350.00	0.3%		2,350
6140 - Contributions	1,200.00	0.1%		1,200
6160 - Dues and Subscriptions	2,500.00	0.3%		2,500
6180 - Insurance	3,147.20	0.4%		3,147
6200 - Interest Expense	3,160.00	0.4%		3,160
6490 - Office Supplies	9,921.81	1.2%		9,922
6500 - Payroll Expenses (office)	133,000.00	16.2%		133,000
6570 - Professional Fees	7,452.00	0.9%		7,452
6610 - Postage and Delivery	1,820.00	0.2%	1,820	
6650 - Rent	15,360.00	1.9%		15,360
6800 - Telephone	12,756.30	1.6%		12,756
6820 - Taxes	2,043.00	0.2%		2,043
6830 - Training and Conferences	9,900.00	1.2%		9,900
6900 - Meals and Entertainment	3,036.66	0.4%		3,036
6920 - Tools & Machinery (under \$500)	7,074.31	0.9%		7,074
6970 - Utilities	1,850.00	0.2%		1,850
<b>Total Expense</b>	<b>237,064.16</b>	<b>28.9%</b>		
<b>Net Ordinary Income</b>	<b>107,342.85</b>	<b>13.1%</b>		
<b>TOTALS</b>			<b>488,662</b>	<b>224,700</b>
<b>Variable Exp / Net Sales</b>			<b>59.5%</b>	
<b>Contribution Margin</b>			<b>40.5%</b>	
<b>Break-even</b>			<b>555,388</b>	

## Quality Built Construction Breakeven Analysis

	\$	%	
	.		1.00
Sales	820,705.00	1.00	1.00
COGS	476,297.99	0.58	
Gross Profit	344,407.01	0.42	
Other Variable Expenses			
6060 · Bank Service Charges	154.00	0.00	
6100 · Car/Truck Expense	10,589.89	0.01	
6610 · Postage and Delivery	1,620.00	0.00	
Total Other Variable Exp.	12,363.89	0.02	
Total Variable Expense	488,661.88	0.60	0.60
Contribution Margin	332,043.12	0.40	0.40

# Quality Built Construction Ratio Analysis vs. RMA

	RMA	Subject	Subject	
	%	\$ Values	%	
<b>INCOME DATA</b>				
Net Sales	100.0%	820,705	100.0%	
Gross Profit	41.6%	344,407	42.0%	
Profit Before Taxes	5.1%	107,343	13.1%	
<b>LIQUIDITY RATIOS</b>				
Current	1.2	4.37		Divide total current assets by total current liabilities. Rough indication of the firm's ability to service current obligations
Quick	0.9	4.31		Add cash and equivalents to trade receivables. Then, divide by total current liabilities. Values less than "1" imply a dependency on inventory to service current obligations.
Sales / Receivables	27.3	18.80		Measures the number of times receivable turn over in a year. The higher the turnover the shorter the time between sale and cash collection
Cost of Sales / Inventory	20.7	N/A		Measures the number of times inventory turns over in a year.
Cost of Sales / Payables	40.6	11.42		Measures the number of times payable turn over in a year. The higher the turnover the shorter the time between purchase and payment.
<b>LEVERAGE RATIOS</b>				
Debt / Worth	3.3	0.29		Expresses the relationship between capital contributed by creditors and that contributed by owners. The higher the ratio the greater the risk being assumed by creditors.

## **Appendix C**

### **What to Look for in An Accounting Firm**

# What to Look for in An Accounting Firm

Our company is searching for an accounting firm. Listed below are our requirements. If you would be interested in working with our company, we would appreciate receiving a proposal from you, based on these requirements.

## Services Required:

- 1 Developing revenue, expense, and capital expenditure plans, assist in preparing a break-even analysis and cash flow requirements.
- 2 Preparing year-end financial statements and assisting in determining whether quarterly or monthly financial statements would be of greater value.
- 3 Reviewing the present accounting system and assisting in establishment of a more sophisticated system -- and a means to monitor both.
- 4 Meeting regularly to evaluate and discuss current business operations, new opportunities, prospective changes, and general business matters. Developing a relationship for business advice, analysis, and counsel that will assist in making this company more successful. Developing a practical business plan.
- 5 Providing tax planning and compliance, addressed on a regular basis, including income, business, payroll, and estate taxes. Determining best strategies to minimize personal income tax impact relative to the company.
- 6 Becoming our key business advisor.

## Qualifications Desired

- 1 An accounting firm with the appropriate technical expertise, manpower, and resources to support us. A firm that is in business to help owners of closely-held businesses.
- 2 An understanding of the needs of our industry and a commitment to doing what needs to be done.
- 3 An involvement of two principals or managers so that there will be familiarity with our account in the firm.

## Costs

We recognize that the activities, level of involvement and qualifications that we require necessitate a substantial professional commitment on the part of the accounting firm we choose. We understand that these services are not available at "bargain" prices. However, we must be certain that the benefits received are at least equal to or greater than the cost. We need an estimate of the potential annual cost for all of the services indicated.

## References

Please provide the names and phone numbers of three companies with whom you are presently doing business at the levels shown in our requirements.

Business Resource Services provides practical in-person and on-line financial training programs and software for companies worldwide. The programs give small business owners, banks and corporations and franchises financial tools to improve the financial health of their organizations. For more information on BRS visit [www.brs-seattle](http://www.brs-seattle), or call 800.488.3520.