Accounting Basics, Part 3

The Income Statement,
Balance Sheet and
Basic Financial Analysis

Part 3

What's Here…

- Introduction
- Financial Statements
- Income Statement
- Balance Sheet
- Sample Statements
- Impacting the Business
- Analyzing Financials

Introduction,
Page 1 of 3

- This *training* picks up where Part 2 stopped.
- Part 1, started with the basics by discussing:

  - Business Types
  - Business Organization
  - Professional Advice
  - Accounting and Records
  - Accrual Accounting
  - Basic Bookkeeping
  - Chart of Accounts
  - Double-Entry Accounting
  - Debits & Credits
  - The Journal
  - The Ledger

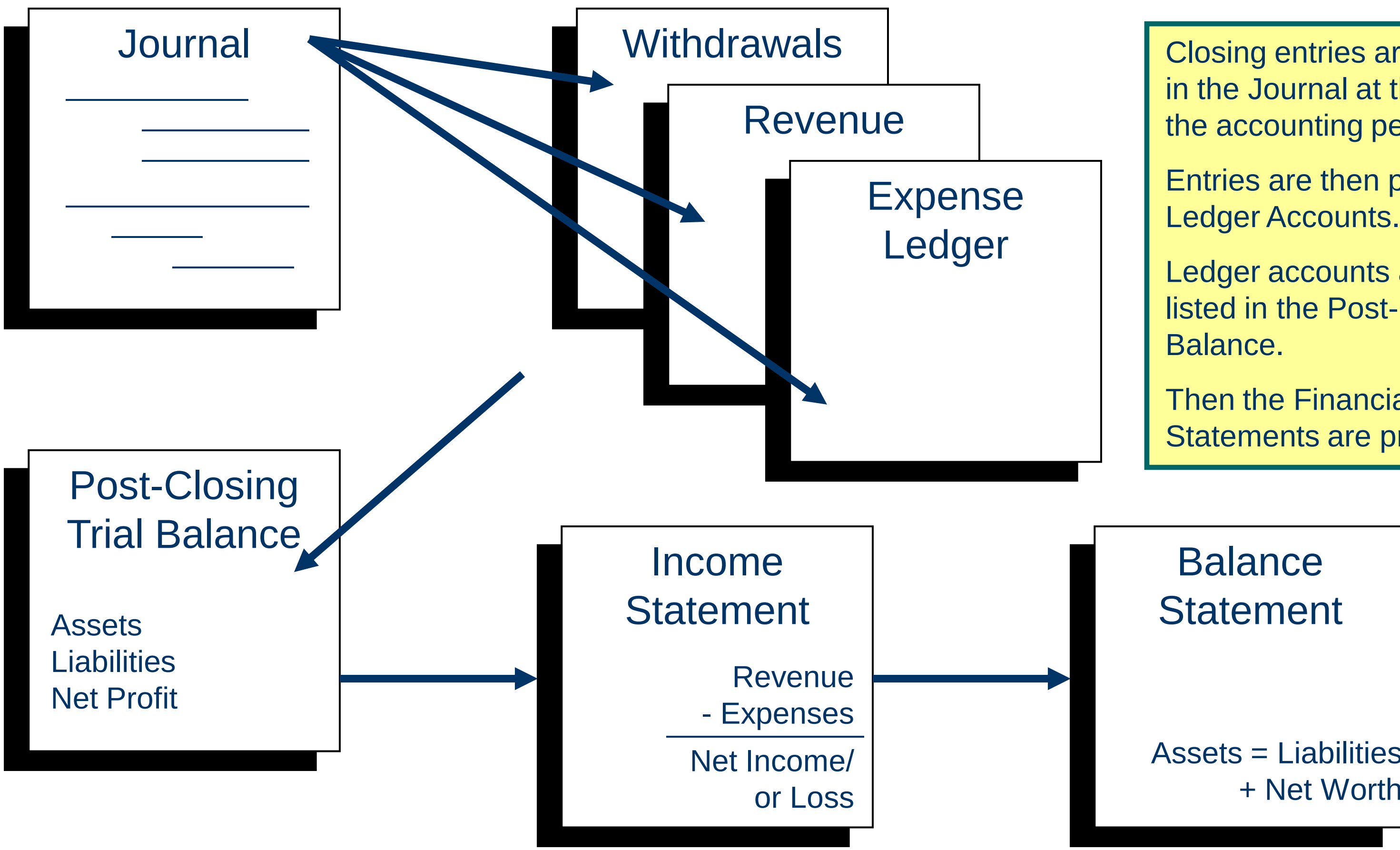
Introduction,
Page 2 of 3

- Part 2, illustrated and discussed:
  - The Accounting Cycle
  - Adjusting Entries
  - Closing Entries
  - Trial Balance
  - Closing Balance

Introduction,
Page 3 of 3

- This *training* illustrates and discusses:
  - Financial Statements
  - The Income Statement
  - The Balance Sheet
  - Analyzing Financials

Financial Statements



Closing entries are recorded in the Journal at the end of the accounting period.

Entries are then posted to Ledger Accounts.

Ledger accounts are then listed in the Post-Closing Trial Balance.

Then the Financial Statements are prepared.

Income Statement,
Page 1 of 3

- Information from the Post-Closing Trial Balance is entered in the Income Statement at the end of the accounting period:

Income Statement

+ Revenue
- Expenses

= Net Income or Loss

Earnings of the business

Costs of the business such as utility bills, insurance, wages, advertising, etc.

Net income (or loss) is moved to the Balance Sheet through the closing entries.

Income Statement,
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- The Income Statement is also known as the Operating Statement
- Composed of two account categories:
  - Income shows sales-related gross revenue
  - Expense show all costs associated with the sales such as Cost of Goods Sold and Personnel costs
- The two operating statement categories, plus to the three Balance Sheet account categories, are the main categories of accounts

Income Statement,
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- Income (Operating) Statements cover a period of time
- Income and Expense are always recorded separately
- Both are used to record gross amounts – gross income and gross expense
- Profit or loss is not a consideration in the individual account elements – it is determined after the entries are made

The Balance Sheet,
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- The Balance Sheet can be prepared after the end-of-month adjustments are entered in the Journal and Ledgers and the adjusting Trial Balance prepared.
- The Balance Sheet shows what the business owns; what it owes; and its earnings (profits) or losses
- The Balance Sheet does NOT provide a clear breakdown of actual business activity

The Balance Sheet,
Page 2 of 4

- The Adjusted Trial Balance accounts include:

Cash
Accounts Receivable
Prepaid
Office Supplies
Equipment
Accumulated Depreciation
Vehicles
Accumulated Depreciation
Land
Accounts Payable
Notes Payable
Unearned Revenue
Mortgage Payable
Capital
Withdrawals

These are the Balance Sheet Accounts

The Balance Sheet,
Page 3 of 4

- The Adjusted Trial Balance accounts include:

Revenue
Wage Expense
Utilities Expense
Repair Expense
Advertising Expense

These are the Income Statement Accounts

The Income Statement Accounts are listed at the bottom of the adjusted trial balance, starting with revenue.

The Balance Sheet,
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Balance Sheet Statement

Assets = Liabilities + Net Worth(*)

Assets: Cash, Accounts Receivable, Equipment, Buildings, Land, etc., elements that help the business generate income

Liabilities: Amounts owed others

Net Worth(*): The difference between Assets and Liabilities. This is the part of the business "owned".

(*) AKA Owner's Equity

Sample Statements,
Page 1 of 2

Business Name
Income Statement
For the Month Ended XXX XX, 20XX

Revenue:			
Service Income			$16,520
Interest Income			250
Total Revenue			$16,770
Expenses:			
Rent		$ 1,500	
Utilities		900	
Supplies		4,000	
Wage		10,000	
Total Expenses			$ 16,400
NET INCOME (LOSS)			**$ 370**

Sample Statements,
Page 2 of 2

Business Name
Balance Sheet
For the Month Ended XXX XX, 20XX

ASSETS		**LIABILITIES**	
Cash	$ 670	Accounts Payable	$ 500
Accounts Receivable	3,500	Notes Payable	1,000
Supplies	2,500		
		Total Liabilities	**$ 1,500**
		NET WORTH	
		Owner Capital	$5,000
		Net Income	370
		-Withdrawals	200
		Owner Capital (ending)	5,170
	$ 6,670		**$ 6,670**

Impacting the Business

- A business owner can make the business grow by:
  - Investing personal cash and assets
  - Generating revenue from operations
  - Debt (borrowing to buy for the business)
- A business owner can make a business decline by:
  - Withdrawals for personal cash or assets
  - Generating expenses from operations
  - Too much debt

Analyzing Financials,
Page 1 of 16

- In addition to the Balance Sheet and Income Statement, business owners / managers need to examine:
  - Cash Flow
  - Inventory
  - Cost of Good Sold
  - Profitability
  - Measures of Debt
  - Measures of Investment
  - Vertical and Horizontal Financial Statement Analysis
  - Ratios

Analyzing Financials,

- Financial Analysis typically considers:
  - Items in a single year’s statement
  - Comparisons for periods of time
  - Comparisons to other similar businesses
- Net Working Capital is the excess of current assets over current liabilities (from the Balance Sheet). It is indication of a business’s risk or lack of.

Analyzing Financials,

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- A traditional method of "analyzing" financials is through relationships (ratios)
  - **Balance Sheet = $100,000**
    - Cash = $20,000
    - Accounts Receivables = $30,000
    - Fixed Assets = $50,000
  - **Ratios:**

Ratios:	Ratio	Relationship	Percentage
Cash:	.2	.2:1	20%
Accounts Receivables:	.3	.3:1	30%
Fixed Assets:	.5	.5:1	50%

Analyzing Financials,
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- Liquidity / Net Working Capital:
  - Indicates ability to meet financial obligations
  - More net working capital equates to less risk

	2006	**2005**
Current Assets	28,000.00	18,500.00
Current Liabilities	-17,800.00	- 6,200.00
Net Working Capital	10,500.00	12,300.00

In this example, the business is at more risk in 2006 than in 2005, Even though its assets increase by nearly $10k, its current liabilities also increased – by $11,600!

Analyzing Financials,

- Current Ratio:

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

2006

$$\frac{28000}{17800} = 1.57$$

2005

$$\frac{18500}{6200} = 2.98$$

The current ratio is a more dependable indication of liquidity than net working capital. Comparing current year's to past year's, the larger the ratio, the lower the risk.

A ratio of 2.0 is considered acceptable for most businesses.

Analyzing Financials,

- Quick Ratio:

$$\textbf{Current Ratio} = \frac{\textbf{Current Assets - Inventory}}{\textbf{Current Liabilities}}$$

2006

$$\frac{28000 - 10000}{17800} = 1.01$$

2005

$$\frac{18500 - 6800}{6200} = 1.88$$

Since inventory is difficult to liquidate quickly, it is subtracted from Current Assets. In this tougher test of liquidity, a ratio of 1.00 or greater is usually recommended. As you can see, the 2006 business example is very marginal. The business needs to reduce liabilities or increase assets.

Analyzing Financials,

- Profitability: Gross Profit Margin

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Sales}}$$

2006 $\dfrac{2000}{8000} = 25\%$

2005 $\dfrac{2500}{5800} = 43\%$

The gross profit margin indicates the percentage of each sales dollar remaining after the business has paid for its goods.

The higher the profit margin, the better.

This business did better in 2005 than in 2006.

Analyzing Financials,
Page 8 of 16

- Profitability: Operating Profit Margin

$$\text{Operating Profit Margin} = \frac{\text{Income from Operations}}{\text{Sales}}$$

2006 $\frac{1000}{8000} = 13\%$

2005 $\frac{1200}{5800} = 21\%$

This ratio ignores interest and taxes.
It represents pure operations.

The higher the Operating Profit Margin, the better.

This business did better in 2005 than in 2006.

Analyzing Financials,

Page 9 of 16

- Profitability: Net Profit Margin

$$\text{Net Profit Margin} = \frac{\text{Net Profit}}{\text{Sales}}$$

2006 $\frac{200}{8000} = 3\%$

2005 $\frac{975}{5800} = 17\%$

The net profit margin is a measure of the business' success with respect to earnings on sales.

The higher the Net Profit Margin, the more profitable the business.

Clearly the example business is not doing well.

Analyzing Financials,

Profitability Analysis:

- If the business' profit ratios are too low, you should ask:
  - Is there enough mark-up on goods? (Check gross profit margin)
  - Are operating expenses too high? (Check operating profit margin.)
  - Are interest expenses too high? (Check net profit margin.)

Analyzing Financials,
Page 11 of 16

- Debt Measures: Debt Ratio

$$\text{Debt Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

2006 $\frac{48800}{72900} = 70\%$

2005 $\frac{26400}{52500} = 50\%$

This ratio indicates the amount of "other people's money" being used to generate profit

The more indebtedness, the greater the risk of failure!

Clearly the example business is not doing well.

Analyzing Financials,
Page 12 of 16

- Investment Measures: Return-on-Investment

$$\text{ROI} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

2006 $\dfrac{200}{72900} = 0.3\%$

2005 $\dfrac{975}{52500} = 2\%$

In addition to salary from the business, the owner should be earning additional money on his/her business investment.

The higher the ROI, the better.

Clearly, the ROI in this example is poor.

Analyzing Financials,

- Vertical Analysis:
  - A percentage analysis of the current and past year's (or period's) Balance Sheets and Income Statements on a single statement
  - Balance Sheet:
    - Each Asset is shown as a percentage of total assets
    - Each liability is shown as a percentage of total liabilities and equity
  - Income Statement
    - Each element is shown as a percent of net sales.

See example income statement on next page.

Business Name: Date ______________

Comparative Income Statement

For Years Ended 12/31/2006 and 12/31/2005

	1998		1997	
	Amount	Percent	Amount	Percent
Sales	$8,000	100.0%	$ 6,000	100.0%
Cost of Goods Sold	-6,000	75.0%	- 3,900	65.0%
Gross Profit	$ **2,000**	**25.0%**	**2,100**	**35.0%**
Selling (Variable) Expense				
Advertising	$ 100	1.3%	$ 50	.8%
Freight	50	.6%	40	.7%
Salaries	150	1.9%	150	2.5%
Total Selling Expense	**$ 300**	**3.8%**	**$ 240**	**4.0%**
Administrative (Fixed0 Expense				
Rent	$ 450	5.6%	$ 250	4.2%
Insurance	150	1.9%	125	2.1%
Utilities	150	3.8%	100	1.7%
Total Administrative Expense	**$ 750**	**9.3%**	**$ 475**	**8.0%**
Income From Operations	**$ 950**	**11.9%**	**$ 1,385**	**23.0**%
Interest Income	0	0.0%	0	0.0%
Interest Expense	- 720	9.0%	- 450	7.5%
Net Income Before Taxes	**$ 230**	**2.9%**	**$ 935**	**51.5**%
Taxes	- 150	1.9%	- 180	3.0%
Net Profit (Loss) After Taxes	**$ 80**	**1.0%**	**$ 755**	**12.5%**

Analyze Financials;

Vertical Analysis:

Example.

Analyzing Financials,
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- Horizontal Analysis:
  - A percentage analysis of the current and past year's (or period's) increases and decreases in the statement items shown on a single statement
  - The actual increase or decrease of an item between current and past year (period) is listed
  - The percentage increase or decrease is listed in the last (right hand) column

See example on next page.

Business Name: **Date ________________**
Comparative Income Statement
For Years Ended 12/31/2006 and 12/31/2005

	1998	1997	Increase / Decrease Amount	Increase / Decrease Percent
Sales	$8,000	$ 6,000	$ 2,000	33.3%
Cost of Goods Sold	6,000	3,900	-2,100	53.8%
Gross Profit	$ **2,000**	**2,100**	**($ 100)**	**(4.8%)**
Selling (Variable) Expense				
Advertising	$ 100	$ 50	$ 50	100.0%
Freight	50	40	10	25.0%
Salaries	150	150	same	same
Total Selling Expense	**$ 300**	**$ 240**	**$ 60**	**25.0%**
Administrative (Fixed0 Expense				
Rent	$ 450	$ 250	$ 200	80.0%
Insurance	150	125	25	20.0%
Utilities	150	100	50	50.0%
Total Administrative Expense	**$ 750**	**$ 475**	**$ 275**	**57.9%**
Income From Operations	**$ 950**	**$ 1,385**	**($ 435)**	**(31.4%)**
Interest Income	0	0	0	0.0%
Interest Expense	720	450	270	60.0%
Net Income Before Taxes	**$ 230**	**$ 935**	**($ 705)**	**75.4%**
Taxes	150	180	30	16.7%
Net Profit (Loss) After Taxes	**$ 80**	**$ 755**	**($ 675)**	**(89.4%)**

Analyze Financials;
Horizontal Analysis:
Example.

Summary, Page 1 of 3

- The financial statement is one tool to help you manage your business
- If financial results don’t meet expectations, the owner must act
  - Is the data accurate and valid?
  - What can be done to immediately cut expenses?
  - What can be done to increase productivity of assets?

Summary, Page 2 of 3

- If return on investment is too low, what can you do to increase return from existing assets?
- If profit is too low, is mark-up adequate and competitive? Also, are the operating expenses too high, proportionately? And are interest costs too high … too much debt?

Summary, Page 3 of 3

- Is liquidity low? This runs the risk of insolvency. Examine the composition of current assets and current liabilities.
- Use the vertical and horizontal analyses to identify trends and compositions that may signify trouble.

Additional Information,
Page 1 of 2

- Basic Accounting *Training Nugget,* Part 1, covers:
  - Business Types
  - Business Organization
  - Professional Advice
  - Accounting and Records
  - Accrual Accounting
  - Basic Bookkeeping
  - Chart of Accounts
  - Double-Entry Accounting
  - Debits & Credits
  - The Journal
  - The Ledger

Additional Information,
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- Basic Accounting *Training* Part 2, covers:
  - The Accounting Cycle
  - Adjusting Entries
  - Closing Entries
  - Trial Balance
  - Closing Balance