



Introduction to Business

FLAT WORLD
LEARN ON™



Chapter 12

The Role Of Accounting In Business

Chapter Objectives

- Define *accounting* and identify its uses
- Understand the three basic financial statements
- Apply breakeven analysis
- Understand cash-basis vs. accrual
- Evaluate a company's performance

Stakeholders

“...parties who are interested in the activities of the business because they’re affected by them...”



Accounting

“...measuring and summarizing business activities, interpreting financial statements, and communicating the results to management and other decision makers.”

Fields of Accounting

- Management Accounting – provides information to decision makers *inside* the organization to help operate the business
- Financial Accounting – furnishes information to individuals and groups *inside/outside* the organization to assess the firm's financial performance

Management Accounting

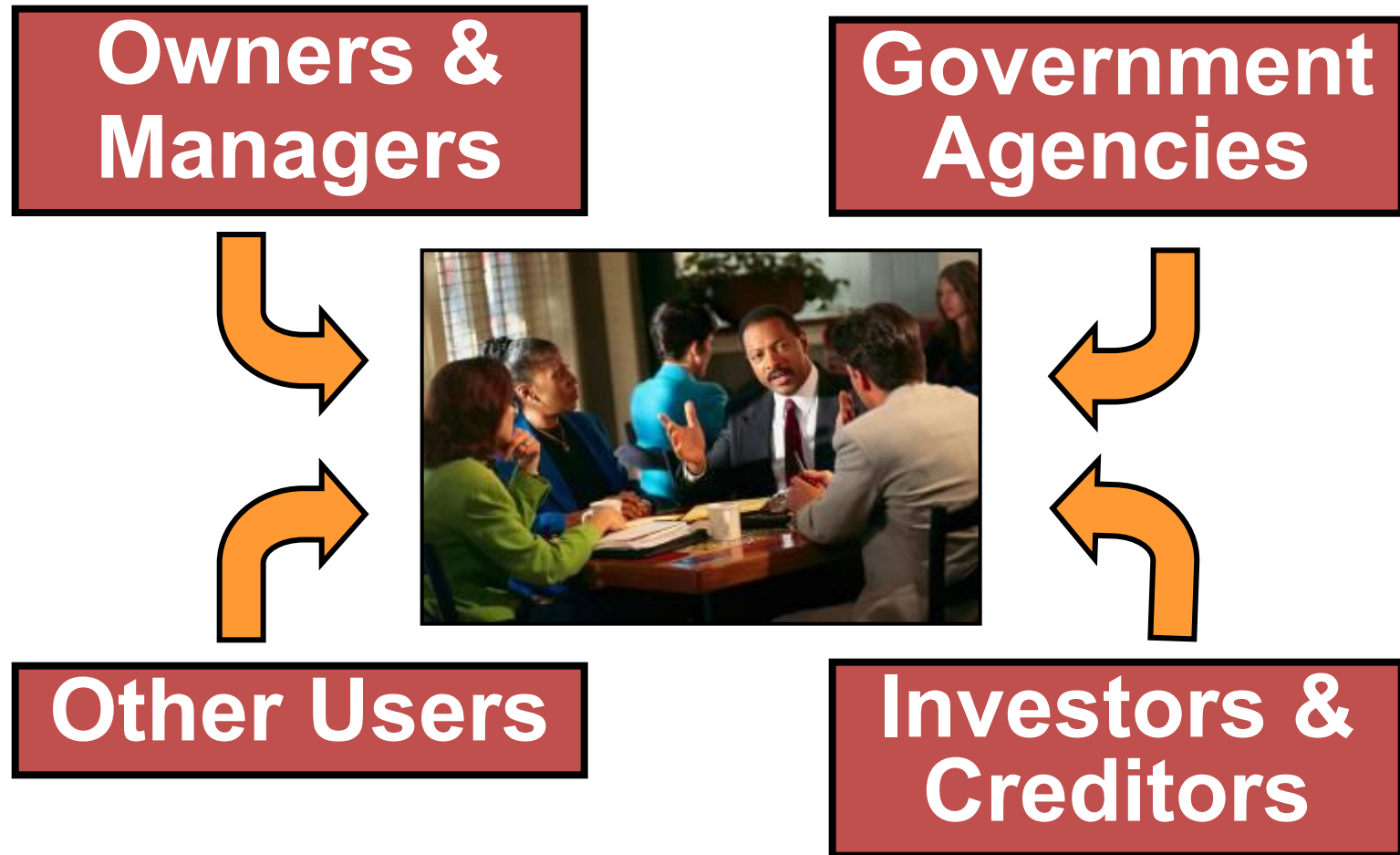
Provides information and analysis to decision makers inside the organization to help them operate the business



Financial Accounting

- Prepare Statements
 - Income Statement
 - Balance Sheet
 - Statement of Cash Flow
- Using Generally Accepted Accounting Principles

Users Of Accounting Information



Understanding Financial Statements

- Income Statement – What sales and expenses are and whether a profit is made
- Balance Sheet – Indicates assets and liabilities and amount invested in company
- Statement of Cash Flows – Shows how much cash flows in and out



Income Statement

- Revenues (or Sales)
- Cost of Goods Sold
- Gross Profit
- Operating Expenses
- Net Income (or Loss)



Stress-Buster Income Statement

Stress-Buster Company

Income Statement Month Ended September 30, 20X1

Sales (100 X \$10)		\$1,000
Less Cost of goods sold (100 X \$6)		<u>600</u>
Gross profit (100 X \$4)		400
Less Operating expenses		
Salaries	240	
Advertising	40	
Table rental	<u>20</u>	
	300	
Net income (profit)		<u><u>\$100</u></u>

Proposed Income Statement #1

Stress-Buster Company

Income Statement
Month Ended September 30, 20X1
[If Cost of goods sold is \$5 per unit]

Sales (100 X \$10)		\$1,000
Less Cost of goods sold (100 X \$5)		<u>500</u>
Gross profit (100 X \$5)		500
Less Operating expenses		
Salaries	240	
Advertising	40	
Table rental	<u>20</u>	
	300	
Net income (profit)		<u><u>\$200</u></u>

Proposed Income Statement #2

Stress-Buster Company

Income Statement Month Ended September 30, 20X1 [If Sales increase to 150 units]

Sales (150 X \$10)		\$1,500
Less Cost of goods sold (150 X \$6)		<u>900</u>
Gross profit (150 X \$4)		600
Less Operating expenses		
Salaries	240	
Advertising	40	
Table rental	<u>20</u>	
	300	
Net income (profit)		<u><u>\$300</u></u>

Breakeven Analysis

“...To break even, total sales revenue must exactly equal all your expenses...”

- Fixed Costs
- Variable Costs
- Contribution Margin
Per Unit
- Breakeven Point In Units



Proposed Income Statement #3

Stress-Buster Company

Income Statement

Month Ended September 30, 20X1
[At breakeven level of sales = 75 units]

Sales (75 X \$10)		\$ 750
Less Cost of goods sold (75 X \$6)		<u>450</u>
Gross profit (75 X \$4)		300
Less Operating expenses		
Salaries	240	
Advertising	40	
Table rental	<u>20</u>	
	300	
Net income (profit)		<u><u>\$ 0</u></u>

Balance Sheet

“...tells what you have (and where it came from) *at a specific point in time...*”

- Assets – Business resources
- Liabilities – Debts owed to outside entities
- Owner’s Equity – Amount invested

Accounting Equation

$$\int \frac{x+5}{x^2-2x-3} dx$$

Assets = Liabilities + Owner's Equity

$$= 2 \ln (x-3) - \ln (x+1)$$

$$= \ln \frac{(x-3)^2}{x+1} + C$$

Stress-Buster Balance Sheet

Stress-Buster Company

Balance Sheet
As of September 1, 20X1

Assets

Cash	<u>\$600</u>
------	--------------

Liabilities and Owner's equity

Liabilities	400
-------------	-----

Owner's equity	<u>200</u>
----------------	------------

Total Liabilities and Owner's equity	<u>\$600</u>
---	---------------------

Stress-Buster Balance Sheet #2

Stress-Buster Company

Balance Sheet
As of September 30, 20X1

Assets

Cash (original \$600 plus \$100 earned)	<u>\$700</u>
--	--------------

Liabilities and Owner's equity

Liabilities	400
-------------	-----

Owner's equity (\$200 invested by owner plus \$100 profits retained)	<u>300</u>
--	------------

Total Liabilities and Owner's equity	<u><u>\$700</u></u>
---	---------------------

Accrual Accounting

“...accountant records a transaction *when it occurs...*”

- Account Receivable
- Account Payable
- Inventory



Classified Balance Sheet

- Assets
 - Current—Convert to cash within a year
 - Long-Term—Hold for more than a year
- Liabilities
 - Current—Pay off within a year
 - Long-Term—Not due for more than a year

College Shop Balance Sheet

The College Shop

Balance Sheet
As of January 1, 20X1

Assets

Current assets

Cash	\$ 50,000
Inventory	75,000

Long-term assets

Furniture, displays, and equipment	150,000
---------------------------------------	---------

Total Assets

\$275,000

Liabilities and Owner's equity

Current liabilities

Loan payable (due this year)	\$ 25,000
------------------------------	-----------

Long-term liabilities

Loan payable (due in 5 years)	100,000
-------------------------------	---------

Owner's equity

150,000

Total Liabilities and Owner's equity

\$275,000

College Shop Income Statement

The College Shop

Income Statement

Year Ended December 31, 20X1

Sales		\$500,000
Less Cost of goods sold		<u>275,000</u>
Gross profit		225,000
Less Operating expenses		
Salaries and employee benefits	75,000	
Depreciation (\$150,000/5)	30,000	
Rent and utilities	20,000	
Advertising	20,000	
Other (insurance, office expenses, miscellaneous)	<u>30,000</u>	
Total Operating expenses	175,000	
Operating income		50,000
Less Interest expense (8% X loans of \$125,000)		<u>10,000</u>
Net income before Income taxes		40,000
Less Income taxes (25% X income before taxes)		<u>10,000</u>
Net income		<u><u>30,000</u></u>

End-of-Year Balance Sheet

The College Shop

Balance Sheet
As of December 31, 20X1

Assets

Current assets

Cash	\$ 70,000
Accounts receivable	90,000
Inventory	80,000

Total Current assets	240,000
-----------------------------	----------------

Long-term assets

Furniture, displays, and equipment	150,000
Less: Accumulated depreciation	(30,000)

Total Long-term assets	120,000
-------------------------------	----------------

Total Assets	<u>\$360,000</u>
---------------------	-------------------------

Liabilities and Owner's equity

Current liabilities

Accounts payable	\$80,000
------------------	----------

Long-term liabilities

Loan payable (due in 4 years)	100,000
-------------------------------	---------

Owner's equity

(150,000 + 30,000)	180,000
--------------------	---------

Total Liabilities and Owner's equity	<u>\$360,000</u>
---	-------------------------

Statement Of Cash Flows

“...tells...where cash came from and where it went.”

Activities:

- Operating
- Investing
- Financing



Cash Flow Statement

The College Shop

Cash Flow Statement As of December 31, 20X1

Cash inflows from Operating activities	\$45,000
Cash outflows from Financing activities	<u>25,000</u>
Increase in cash during the year	<u><u>\$20,000</u></u>

Comparative Income Statement

The College Shop Comparative Income Statement Years Ended December 31, 20X2 and 20X1

	<u>12/31/20X2</u>	<u>12/31/20X1</u>
Sales	\$600,000	\$500,000
Less Cost of goods sold	<u>387,000</u>	<u>275,000</u>
Gross profit	213,000	225,000
Less Operating expenses	<u>180,000</u>	<u>175,000</u>
Operating income	33,000	50,000
Less Interest	10,000	10,000
Less Income taxes	<u>5,000</u>	<u>10,000</u>
Net income	<u>\$ 18,000</u>	<u>\$ 30,000</u>

Income Statement With Vertical Percentage Analysis

The College Shop

Comparative Income Statement
Years Ended December 31, 20X2 and 20X1
[Using vertical percentage analysis
showing each item as a % of sales]

	<u>12/31/20X2</u>		<u>12/31/20X1</u>	
	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>
Sales	\$600,000	100	500,000	100
Less Cost of goods sold	<u>387,000</u>	<u>64</u>	<u>275,000</u>	<u>55</u>
Gross profit	213,000	36	225,000	45
Less Operating expenses	<u>180,000</u>	<u>30</u>	<u>175,000</u>	<u>35</u>
Operating income	33,000	6	50,000	10
Less Interest	10,000	2	10,000	2
Less Income taxes	<u>5,000</u>	<u>1</u>	<u>10,000</u>	<u>2</u>
Net income	<u>\$ 18,000</u>	<u>3%</u>	<u>\$ 30,000</u>	<u>6%</u>

Ratio Analysis



- **Profit Margin**

How much of each sales dollar is left after certain costs have been covered

- **Management Efficiency**

measure a company's ability to use its assets and manage its liabilities

- **Management Effectiveness**

How well the company is performing with the invested money

- **Financial Condition**

Assess firm's financial strength

Gross Profit Margin

**Gross Profit
Margin**

=

**Gross Profit
Sales**



Net Profit Margin

Net Profit
Margin

=

Net Profit
Sales



Comparative Balance Sheet

The College Shop

Comparative Balance Sheet
As of December 31, 20X2 and 20X1

	<u>12/31/20X2</u>	<u>12/31/20X1</u>
Assets		
Current assets		
Cash	\$ 76,000	\$70,000
Accounts receivable	92,000	90,000
Inventory	<u>110,000</u>	<u>80,000</u>
Total Current assets	278,000	240,000
Long-term assets		
Furniture, equipment net of depreciation	<u>90,000</u>	<u>120,000</u>
Total Assets	<u>368,000</u>	<u>\$360,000</u>
Liabilities and Owner's equity		
Current liabilities		
Accounts payable	\$ 70,000	80,000
Long-term liabilities		
Loan	<u>100,000</u>	<u>100,000</u>
Total Liabilities	170,000	180,000
Owner's equity	<u>198,000</u>	<u>180,000</u>
Total Liabilities and Owner's equity	<u>\$368,000</u>	<u>\$360,000</u>

Inventory Turnover

<http://www.investopedia.com/articles/basics/05/052005.asp?o=40186&l=dir&qsrc=999&go=investopediaSiteSearch&ap=investopedia.com>

**Inventory
Turnover**

=

**Sales
Inventory**



Return On Assets

<http://www.investopedia.com/articles/basics/05/052005.asp?o=40186&l=dir&qsrc=999&qo=investopediaSiteSearch&ap=investopedia.com>

**Return On
Assets**

=

**Net Profit
Total Assets**



11/16 Monthly Service

<input type="checkbox"/> Daily Balance	
Date	Amount
10/20	\$ 738.97
10/21	526.82
10/22	580.53
10/23	524.21
10/26	362.24
10/27	308.42

Current Ratio

Current
Ratio

=

Current Assets
Current Liabilities



Debt-To-Equity

**Total Debt
to Equity**

=

**Total Liabilities
Total Equity**



Interest Coverage

Interest
Coverage

=

Operating Income
Interest Expense



In class activity:

What Are Our Ratios Trying to Tell Us?

The accountant for your company just ran into the office and told you that your *gross profit margin* increased while your *net profit margin* decreased. She also reported that while our *debt-to-equity* ratio increased, our *interest coverage* ratio decreased.

She was puzzled by the apparent inconsistencies. Help her out by providing possible explanations for the behavior of these ratios.