

Intro to Financial Reporting & Preparing Simple Financial Statements

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Our Agenda

1. Why do we have accounting?
2. Unveil the framework
3. Introduce two major financial statements
 - a. Balance Sheet
 - b. Income Statement
 - c. Relation between B/S and I/S
4. Analyze five transactions for Dawg Company
5. Summarize these transactions & prepare financial statements

Why do we need Accounting?


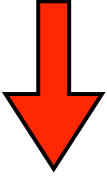

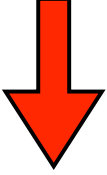

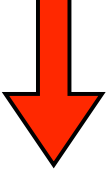


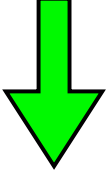

- Science produces an idea that has potential value in the marketplace.
- Takes \$ to convert this idea to a product.
- Investors seek opportunities to invest in quality projects. Need reliable information.
- Investors require a return on their investment that exceeds their next best alternative.
- Accounting is a financial information system. Used to project the future and report on the past. Investors have to trust the info to give up their \$.

Key points

- Information has value in a world of uncertainty. Since we all live and work in a world of uncertainty, information has value (up to a point) and can be useful for *decision making*.
- When ownership and management are separated, (accounting) information has value for *monitoring* management.
- When ownership and management are separated, auditing has value to ensure information is of adequate *quality*.

If accounting works ~~well~~, poorly what happens to...

e.g., Post Enron, WC,
Post Lehman?

Trust in the capital markets?		
No. of market participants?		
Stock market prices?		
Availability of venture capital?		
Cost of venture capital?		

Now from the leading authority on business...

**High-quality information is
necessary for a well-functioning
global market economy...**



and for attracting investors to fund your fabulous idea(s)

1. Balance Sheet Equation “the framework”

$$\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$$

- What are **Assets**?
 - What the firm **owns** or has the **right to use**
- What are **Liabilities**?
 - What the firm **owes**
- What is **Owners' Equity**?
 - The **residual** difference, i.e., Assets - Liabilities

Balance Sheet Equation:

Three views

- Assets = Liabilities + Owners' Equity
- Investments = Financing
- Resources = Claims on the Resources

2a. Balance Sheet

- What is it?
 - Snapshot of firm's **investing** & **financing** activities
 - Presents a list of the firm's **Assets**, **Liabilities** and **Owner's Equity**
 - **Assets** represent the firm's **investing** activities
 - **Liabilities & Owners' Equity** represent the sources of capital, i.e. the firm's **financing** activities
- Linked through the balance sheet equation

Our Example Company iRobot

“At iRobot, we believe there is a better way to accomplish many of the dull, dirty and dangerous tasks that face us today.”

iRobot products



iRobot Balance Sheet -- Assets

iROBOT CORPORATION CONSOLIDATED BALANCE SHEETS

	December 27, 2008	December 29, 2007
	(In thousands)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 40,852	\$ 26,735
Short term investments	—	16,550
Accounts receivable, net of allowance of \$65 and \$65 at December 27, 2008 and December 29, 2007, respectively	35,930	47,681
Unbilled revenue	2,014	2,244
Inventory, net	34,560	45,222
Deferred tax assets	7,299	5,905
Other current assets	3,340	2,268
Total current assets	123,995	146,605
Property and equipment, net	22,929	15,694
Deferred tax assets	4,508	4,293
Other assets	12,246	2,500
Total assets	<u>\$ 163,678</u>	<u>\$ 169,092</u>

iRobot Balance Sheet -- Liabilities & OE

LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY

Current liabilities:

Accounts payable	\$ 19,544	\$ 44,697
Accrued expenses	10,989	7,987
Accrued compensation	6,393	4,603
Deferred revenue and customer advances	2,632	1,578
Total current liabilities	39,558	58,865
Long term liabilities	\$45,002	—
Commitments and contingencies (Note 12):		
Redeemable convertible preferred stock, 5,000 shares authorized and zero outstanding at December 27, 2008 and December 29, 2007	—	—
Common stock, \$0.01 par value, 100,000 and 100,000 shares authorized and 24,811 and 24,495 issued and outstanding at December 27, 2008 and December 29, 2007, respectively	248	245
Additional paid-in capital	130,637	122,318
Deferred compensation	(314)	(685)
Accumulated deficit	(10,895)	(11,651)
Total stockholders' equity	119,676	110,227
Total liabilities, redeemable convertible preferred stock and stockholders' equity	\$ 163,678	\$ 169,092

2b. Income Statement

- What is it?
 - Captures firm's *performance* during a period
 - Lists **Revenues** earned and **Expenses** incurred
 - Net Income = **Revenues** minus **Expenses**
 - Net Income explains some of the changes in Owners' Equity due to operations for the period

Key Income Statement definitions

$$\text{Revenues} - \text{Expenses} = \text{Net Income}$$

- **Revenues** reflect *accomplishment*, typically *increases* in Assets due to operating, e.g., selling a product or service
- **Expenses** reflect *effort*, typically *decreases* in Assets or increases in liabilities in the attempt to produce revenue, e.g., the cost of merchandise sold, salaries & wages

iRobot Income Statement

Fiscal Year Ended
December 27, December 29, December 30,
2008 2007 2006
(In thousands, except per share amounts)

	<u>December 27,</u> <u>2008</u>	<u>December 29,</u> <u>2007</u>	<u>December 30,</u> <u>2006</u>
Revenue:			
Product revenue	\$ 281,187	\$ 227,457	\$ 167,687
Contract revenue	<u>26,434</u>	<u>21,624</u>	<u>21,268</u>
Total revenue	<u>307,621</u>	<u>249,081</u>	<u>188,955</u>
Cost of revenue:			
Cost of product revenue(1)	190,250	147,689	103,651
Cost of contract revenue(1)	<u>23,900</u>	<u>18,805</u>	<u>15,569</u>
Total cost of revenue	<u>214,150</u>	<u>166,494</u>	<u>119,220</u>
Gross margin	93,471	82,587	69,735
Operating expenses:			
Research and development(1)	17,566	17,082	17,025
Selling and marketing(1)	46,866	44,894	33,969
General and administrative(1)	28,840	20,919	18,703
Litigation and related expenses(2)	<u>—</u>	<u>2,341</u>	<u>—</u>
Total operating expenses	<u>93,272</u>	<u>85,236</u>	<u>69,697</u>
Operating (loss) income	199	(2,649)	38
Other income, net	<u>926</u>	<u>3,151</u>	<u>3,831</u>
Income before income taxes	1,125	502	3,869
Income tax expense (benefit)	<u>369</u>	<u>(8,558)</u>	<u>304</u>
Net income	<u>\$ 756</u>	<u>\$ 9,060</u>	<u>\$ 3,565</u>

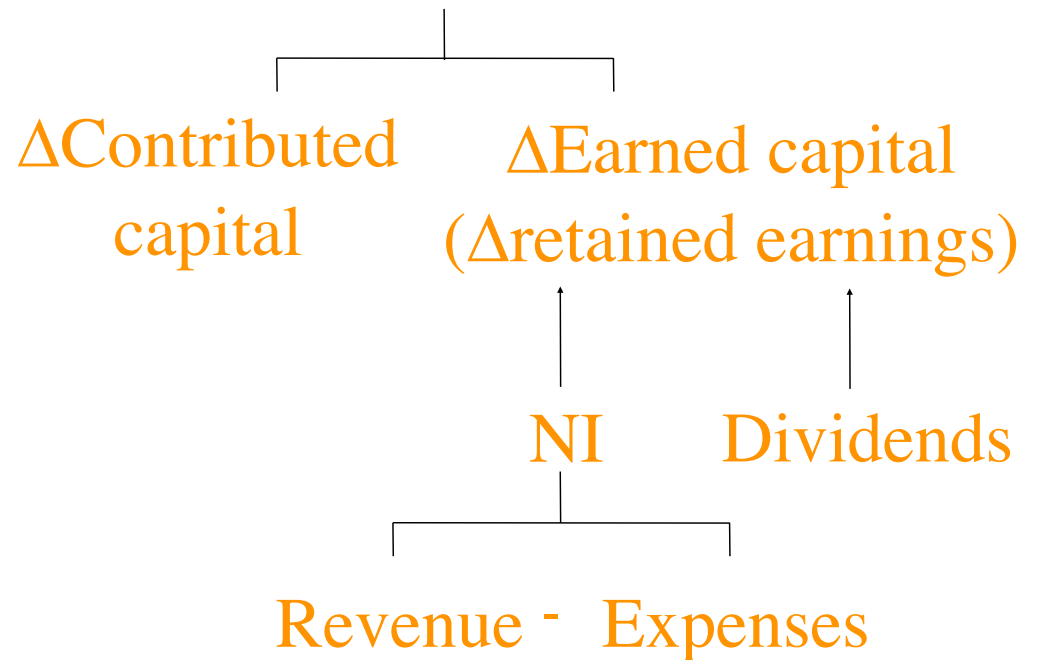
2c. Relation between Income Statement & Balance Sheet

- Income Statement explains *changes* in Owners' Equity over a period due to operations
- For corporations, this link occurs through a specific Owners' Equity account -- Retained Earnings

$$\text{--Retained earnings} = \sum(\text{Net Income} - \text{Dividends})$$


Relation between B/S and I/S

$$\Delta \text{ Assets} = \Delta \text{ Liabilities} + \Delta \text{ Owners' Equity}$$



iRobot's Owners' Equity section

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 = \$756

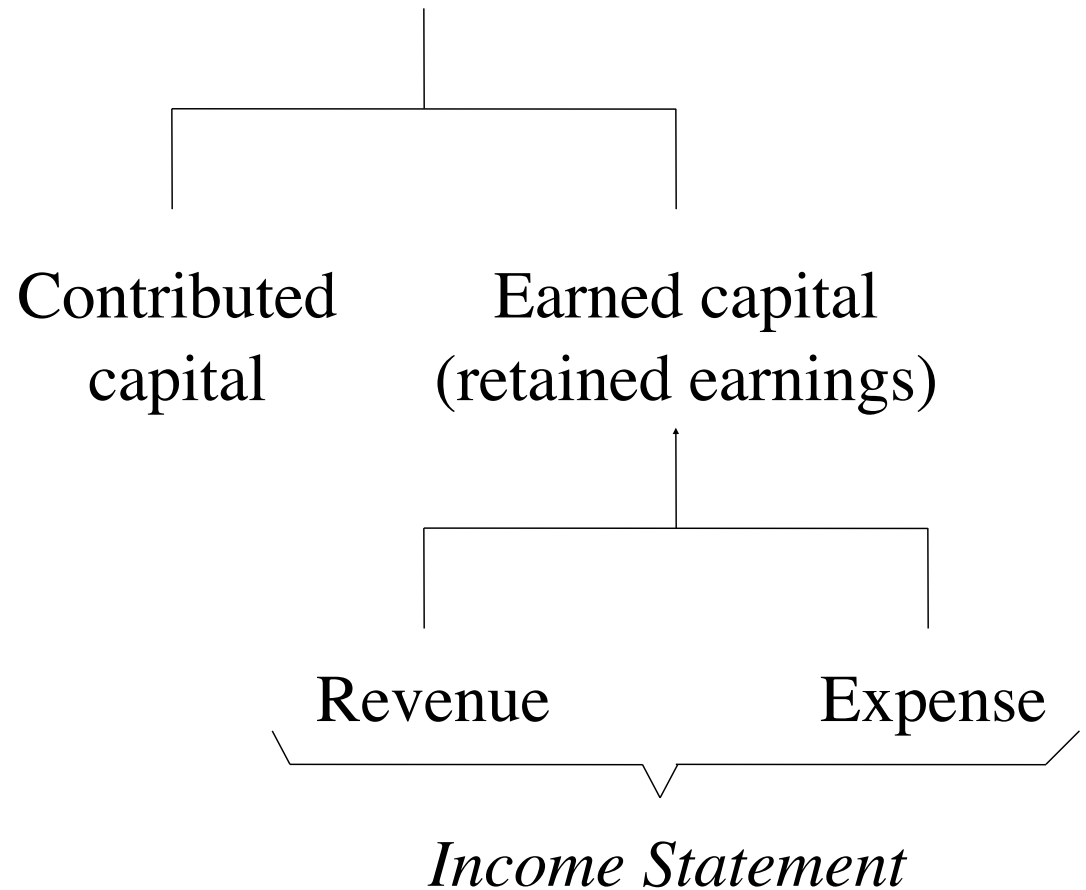
iRobot Income Statement

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December 27, 2008 December 29, 2007 December 30, 2006
(In thousands, except per share amounts)

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Relation between B/S and I/S

$$\text{ASSETS} = \text{LIABILITIES} + \text{OWNERS' EQUITY}$$



\$756

3. Analyzing Transactions

- We are ready to create financial statements from the underlying transactions
- Transactions are the key building blocks for building statements
- Again, the purpose of these statements is to help users assess the financial condition, performance and cash flows of a firm

Dawg Company

- Dawg Co. was conceived by two UW Foster School alums
- Dawg Co.'s mission: provide 'sustainable warmth' during Seattle's long winters.
- Strategy: leverage Seattle's coffee culture
- First product: insulated mugs with the UW Foster school logo



Dawg Company

Dawg Co. buys & sells UW Foster-School mugs

- Transaction #1: Dawg Co. issues 5,000 shares at \$10 per share.
- How is the balance sheet affected?
 - Assets?
 - Liabilites?
 - Owners' equity?

Effects on the B/S Equation?

- Transaction #1 (continued): Dawg Co. issues 5,000 shares at \$10 each to fund the new business.
- How is the Balance Sheet equation affected?

$$\begin{array}{rcc} \textit{Assets} & = & \textit{Liabilities} + \textit{Owners' Equity} \\ \\ \text{(Cash) } \$50,000 & = & 0 \qquad \qquad \text{(Stock) } \$50,000 \\ \hline +\$50,000 & & \hline & & +\$50,000 \end{array}$$

Transactions & the Balance Sheet

- Transaction #2: Dawg Co. buys office equipment for \$15,000 in cash.
- How is the Balance Sheet affected?
 - Assets?
 - Liabilities?
 - Owners' Equity?

Effects on the B/S Equation?

- Transaction #2 (continued): Dawg Co. buys \$15,000 of office equipment for cash.
- How is the Balance Sheet equation affected?

$$\textit{Assets} = \textit{Liabilities} + \textit{Owners' Equity}$$

(Equipmt) \$15,000

\$0

\$0

(Cash) - \$15,000

\$0

\$0

\$0

Transactions & the Balance Sheet

- Transaction #3: Dawg Co. buys 5,000 mugs from ThermoServ at \$5 each, using credit.
- How is the Balance Sheet affected?
 - Assets?
 - Liabilities?
 - Owners' Equity?

Effects on the B/S Equation?

- Transaction #3 (continued): Dawg Co. buys 5,000 mugs at \$5 each using credit.
- How is the Balance Sheet equation affected?

$$\textit{Assets} = \textit{Liabilities} + \textit{Owners' Equity}$$

(Inventory) \$25,000	=	(AP) \$25,000		\$0
<hr/>		<hr/>		<hr/>
+ \$25,000		+ \$25,000		\$0

Transactions & the Balance Sheet

- Transaction #4: Dawg Co. sells 3,000 mugs to Starbucks for \$8 each. As is typical, Starbucks will pay later.
- Sales transaction has two parts:
 1. Revenue: inflow of assets
 2. Expense: outflow of assets

Effects on the B/S Equation?

- Transaction #4 (part 1): Dawg Co. sells 3,000 mugs to Starbucks for \$8 each. Starbucks will pay later.
- How is the Balance Sheet equation affected?

$$\textit{Assets} = \textit{Liabilities} + \textit{Owners' Equity}$$

(Acct. Rec.) \$24,000	=	0	(Revenue) \$24,000
<hr/>		<hr/>	<hr/>
+\$24,000		\$0	+\$24,000

Effects on the B/S Equation?

- Transaction #4 (part 2): Dawg Co. sells 3,000 mugs to Starbucks for \$8 each. Recall that we paid \$5 each.
- How is the Balance Sheet equation affected by the expense part of this sales transaction?

$$\textit{Assets} = \textit{Liabilities} + \textit{Owners' Equity}$$

$$\begin{array}{rccr} \text{(Inventory) } -\$15,000 & = & 0 & \text{(Expense) } -\$15,000 \\ \hline & & & \\ -\$15,000 & & \$0 & -\$15,000 \end{array}$$

How did Dawg 'perform' on the Sale to Starbucks? Summary of Transaction #4

- Sold 3,000 insulated mugs to Starbucks.
 - Sold for \$8 each
 - Sales (revenue) = \$24,000
- Cost of mugs sold?
 - Cost was \$5 each
 - Cost of Goods Sold (expense) = \$15,000
- (Gross) Profit on sale?
 - Sales minus CGS
 - \$24,000 - \$15,000 = \$9,000

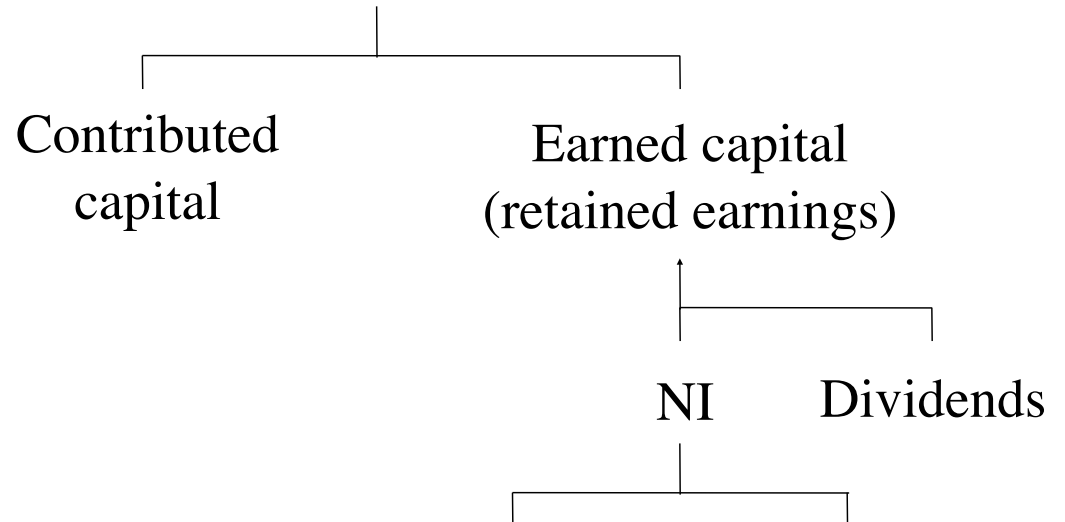
What is left on the Balance Sheet?

Summary of Transaction #4

- How many mugs are left in Inventory?
 - Started with 5,000 (from transaction #3)
 - Sold 3,000 mugs to Starbucks.
 - Must be 2,000 left
- Cost of remaining mugs?
 - Cost was \$5 each
 - Cost of current inventory = \$10,000 (2,000 mugs @ \$5 each)
- Another summary view
 - Transaction 3: Purchased mugs costing \$25,000
 - Transaction 4: Sold \$15,000 of these mugs to Starbucks
 - Current balance = \$10,000 (\$25,000 - \$15,000), same as above

Relation between B/S and I/S

$$\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$$



Accounts receivable	+	Inventory	=	Liabilities	+	Contributed capital	+	Revenue	-	Expenses
\$24,000	+	-\$15,000	=	\$0	+	\$0	+	\$24,000	-	\$15,000

Net asset inflow
= \$9,000

Gross Profit
= \$9,000

Transactions & the Balance Sheet

- Transaction #5: Dawg Co. pays \$6,000 in wages to its dedicated part-time employees.
- How is the Balance Sheet affected?
 - Assets?
 - Liabilities?
 - Owners' Equity?

Effects on the B/S Equation?

- Transaction #5 (continued): Dawg Co. pays \$6,000 in wages to its part-time employees.
- How is the Balance Sheet equation affected?

$$\textit{Assets} = \textit{Liabilities} + \textit{Owners' Equity}$$

(Cash) -\$6,000	=	0	(Wage exp) -\$6,000
<hr/>		<hr/>	<hr/>
-\$6,000		\$0	-\$6,000

4. Summary of Transactions

- Introduce a spreadsheet to summarize the five transactions we just discussed
- From this spreadsheet, we can prepare the three major financial statements
 - Balance Sheet
 - Income Statement
 - Statement of Cash Flows

Dawg Co. Financial Summary

	Assets				Liab.	Owners' Equity	
	Cash	Account Rec	Inventory	Equipmt	Account Payable	Contrib Capital	Retained Earnings
1	50,000					50,000	
2	-15,000			15,000			
3			25,000		25,000		
4		(a) 24,000					(a) 24,000
			(b)-15,000				(b)-15,000
5	-6,000						-6,000
tot	29,000	24,000	10,000	15,000	25,000	50,000	3,000

Dawg Co. Income Statement

DAWG COMPANY

Income Statement for 3 months ended:

June 30,
2003

Sales revenue:	\$	24,000
Cost of goods sold		15,000
Gross Profit	\$	<u>9,000</u>
Other expenses:		
Wages	\$	<u>6,000</u>
Total other expenses	\$	<u>6,000</u>
NET INCOME	\$	3,000

Reconciliation to Ending Owners' Equity

Beginning Owners' Equity		0
Net Income (Loss)		3,000
Dividends		<u>0</u>
Ending Owners' Equity		3,000

Final look at Dawg Co. (I/S)

- Income Statement
 - Revenues exceeded CGS on first sale - a crucial step toward profitability
 - Other expenses are minimal so far (wages)
 - Squeaked out a small profit
- A profit in the first period reflects good *performance* -- but is it sustainable?

Dawg Co. Balance Sheet

DAWG COMPANY

	June 30,
Balance Sheet as of:	200x
ASSETS:	
Current assets:	
Cash	\$ 29,000
Accounts receivable	24,000
Inventories	10,000
<i>Total current assets</i>	<u>\$ 63,000</u>
Non-current assets:	
Equipment	15,000
<i>Total non-current assets</i>	<u>\$ 15,000</u>
TOTAL ASSETS	<u>\$ 78,000</u>
LIABILITES:	
Current liabilities:	
Accounts payable	\$ 25,000
TOTAL LIABILITIES	<u>\$ 25,000</u>
OWNER'S EQUITY	
Common stock	\$ 50,000
Retained earnings	3,000
<i>Total owners' equity</i>	<u>53,000</u>
TOTAL EQUITIES	<u>\$ 78,000</u>

6. Final look at Dawg Co. (B/S)

- Balance sheet
 - Assets: Converted initial cash into equipment and inventory. Generated accounts receivable from sale.
 - Liabilities: Owe our supplier, ThermoServ
 - OE: Small profit & no dividends => increase
- Our *financial position* has changed as would be expected given a new business

Summary of Key Points

- Accounting collects, summarizes and communicates information to interested investors, suppliers, customers and employees
- Accounting information must be reliable to have value
- Measure financial position and performance
- $\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$
- $\text{Income} = \text{Revenue} - \text{Expenses}$

Thank you