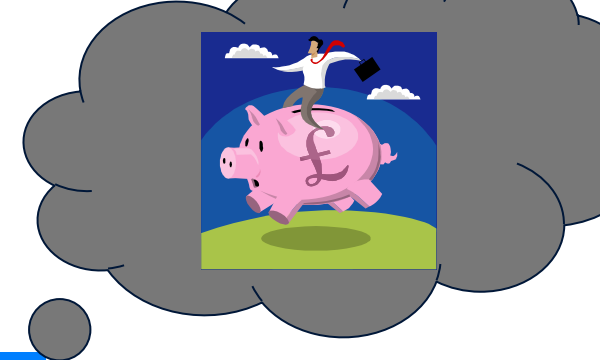


# Blood Bank vs Piggy Bank

Keys to Harmonizing  
Mission and Margin

# The Problem . . .



- “I think my CFO might be an Alien!”



- “We’re all busy trying to save lives and make the World a better place . . .”



- “. . . And all he can think about is Money!”

# The Problem . . .

- “Besides – Half the time I don’t know what the heck he’s talking about . . .”

- “It’s always:  
Capitalize this, and  
Amortize that . . .”

“. . . therefore; I believe we should examine the IRR and the EBITDA to determine the economic feasibility of the project. Don’t you agree?  
And blah, blah, blah and yakity smakity . . .”



- “It’s like he has his own language or something!”

# Other Problems . . .

- Limited Resources – We can't do everything, so how do we choose the best things?
- Unlimited Resources – leading to waste.
- No Finance-Related Problems Here – Just need to pick up some nice CE hours without being totally bored to death.



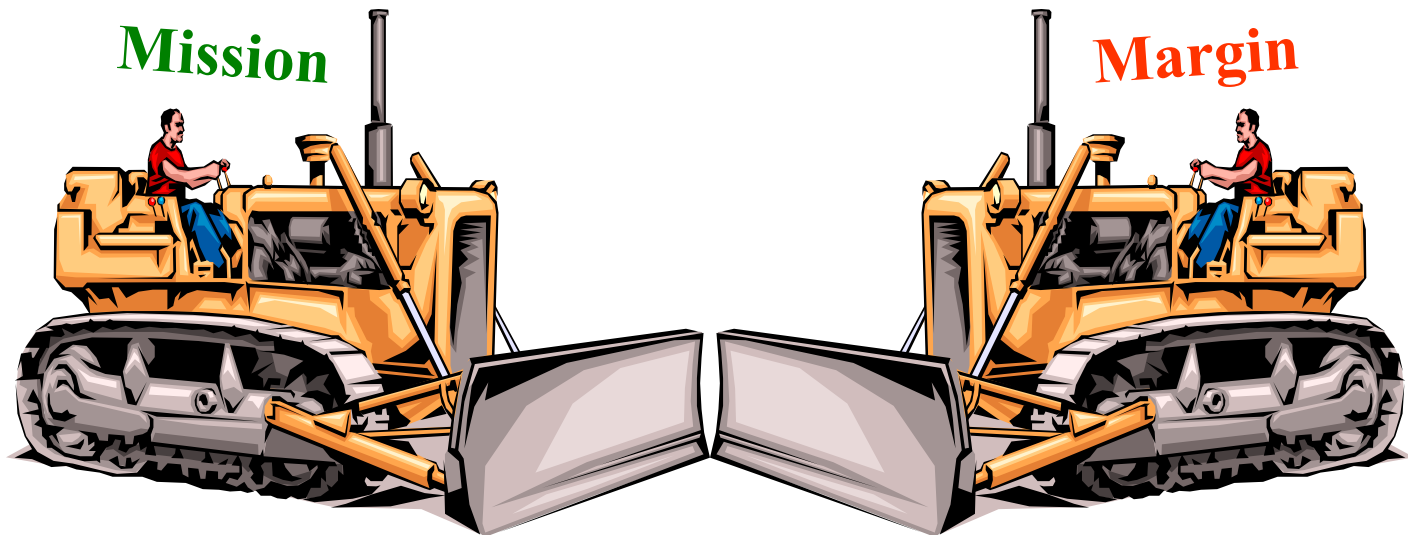
# For the Sake of Discussion . . .

- We'll assume that your problem is this guy . . .



# And . . .

. . . the seemingly competing interests of **Mission** and **Margin**?



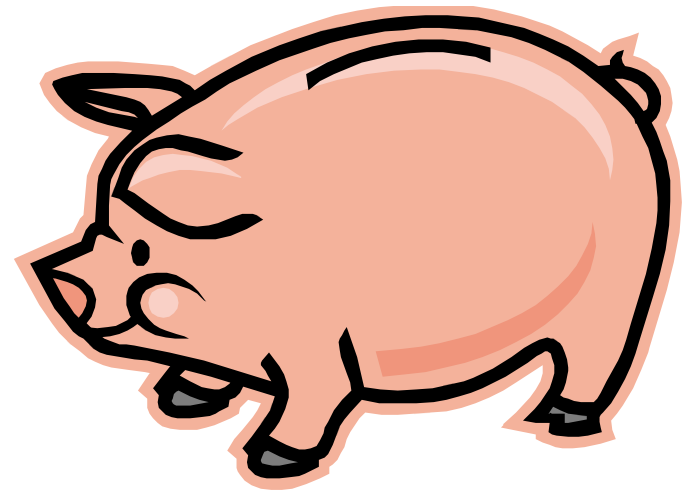
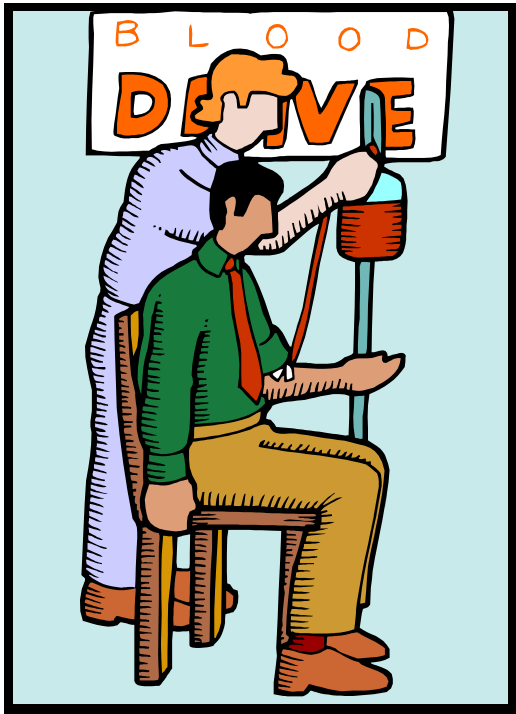
# Relevance . . .

Does Money Matter?



Especially in a Non-Profit  
Medical Setting?

# Margin Vs Mission



- Which is More Important?



# Margin Vs Mission

No Margin = No Mission



. . . But What About . . .

Boring?

Confusing?

# Confusing . . . ? Not at All!

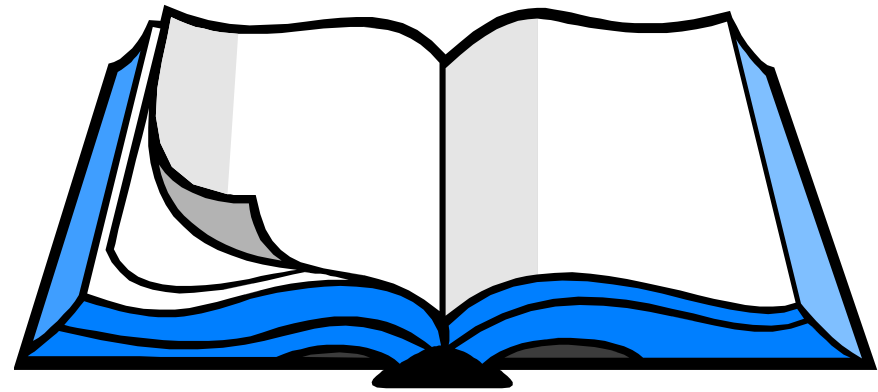
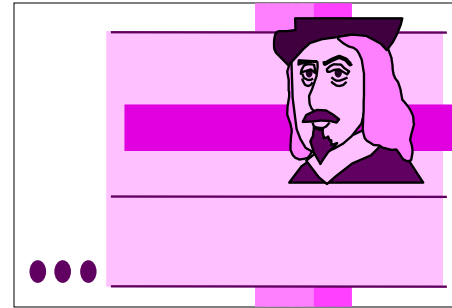
Accounting = The Language of Business

Smash Through the  
Language Barrier



# History

- Luca Pacioli
- Published Summa de Arithmetica in 1494
- First “Double Entry Accounting”

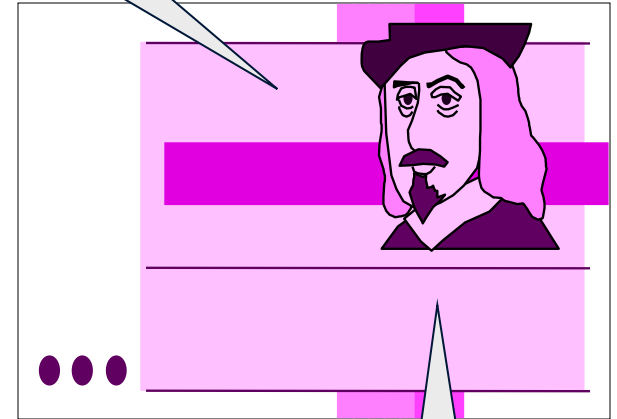


# History

- Luca Pacioli

The major objective of accounting is to provide, without delay, information to the owner about his assets and liabilities. It also provides a means for reporting on stewardship and is a basis for the granting of credit.

How did we do?



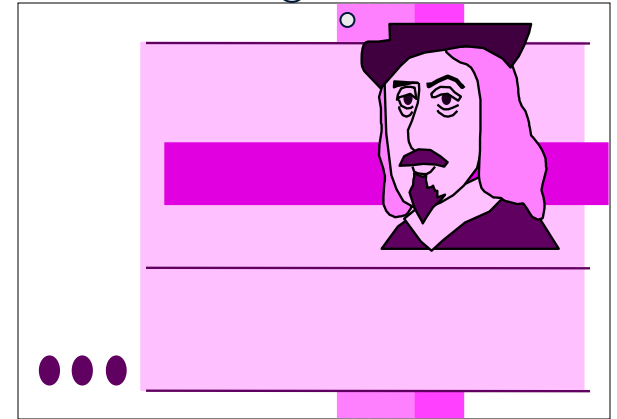
What should we do about it?

# History

Accounting is  
a beautiful  
thing . . . man

- Luca Pacioli

. . . believed in those disciplines exhibiting a natural harmony and balance, with the ideas of perspective, proportion, and symmetry, and continually stressed the duality, integrating tendencies, and balancing features of the “double entry” methodology



## Two Years Later . . .



- April 15, 1496
- Ralph P. Needleman
- Invented the “Pocket Protector”

and later . . .



## Cossack Accountants



# Accounting Types

- Financial Accounting
- Tax Accounting
- Cost/Managerial Accounting



# Core Accounting Theory

Latin = 'He owes'

Debits

=

Credits

Latin = 'He trusts'

- Cash
- Accounts Receivable
- Inventory
- Facilities, Equipment

Have (Assets)

Sometimes called "Capital"

- Accounts Payable
- Wages Payable
- Loans

Owe (Liability)  
Own (Equity)

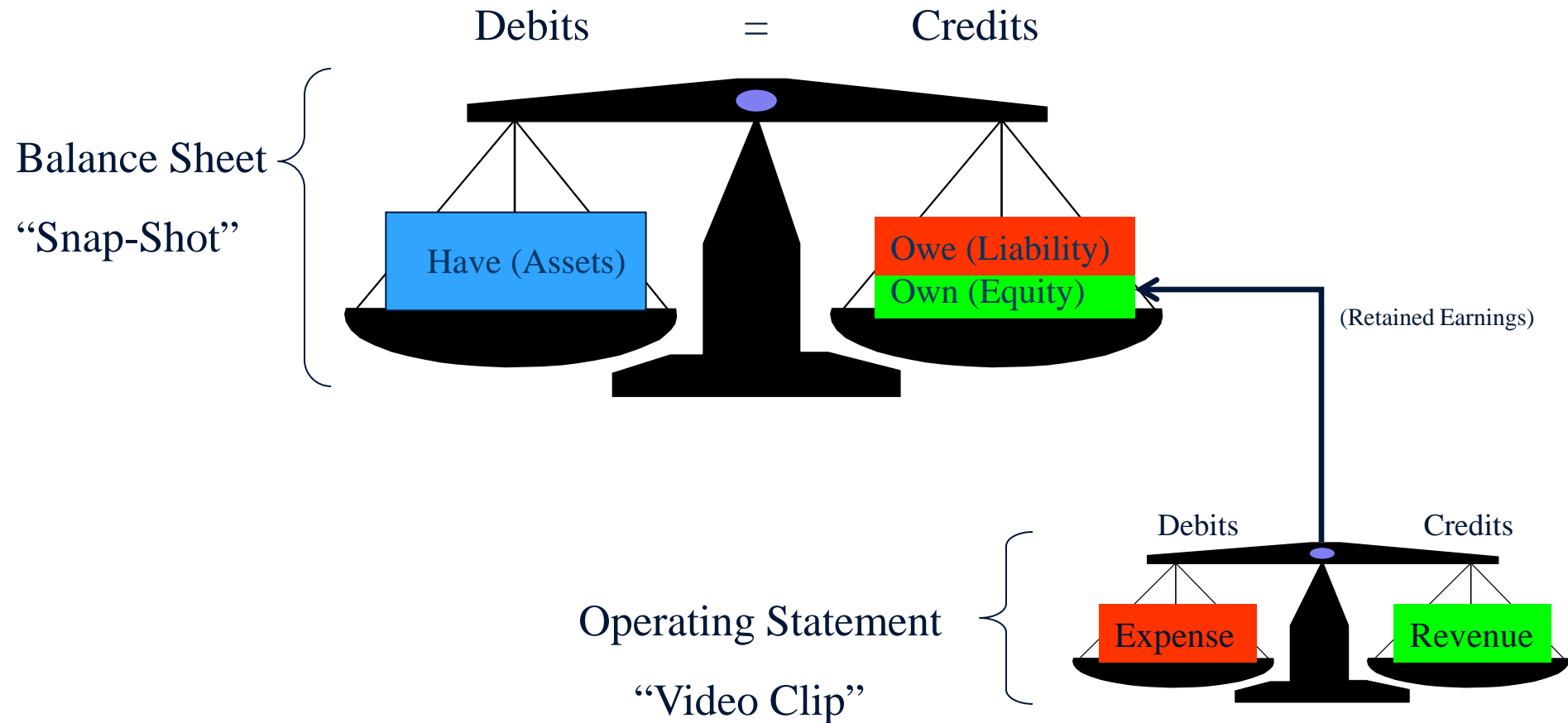
- Stock
- Retained Earnings

# Financial Statements

- Balance Sheet
  - AKA: Statement of Net Assets
- Operating Statement
  - AKA: Profit & Loss Statement or “P&L”
  - AKA: Income Statement
  - AKA: Stmt of Revenue, Expenses, & Changes in Net Assets
- Cash Flow Statement



# Financial Statements



# The “Bottom Line . . . ”

A Rose by Any Other Name

**+ Revenue**

**- Expenses**

-----

= **“The Bottom Line”**

=====

Also Known As:

“Income” or “Net Income”

“Margin” or “Net Margin”

“Earnings” or “Net Earnings”

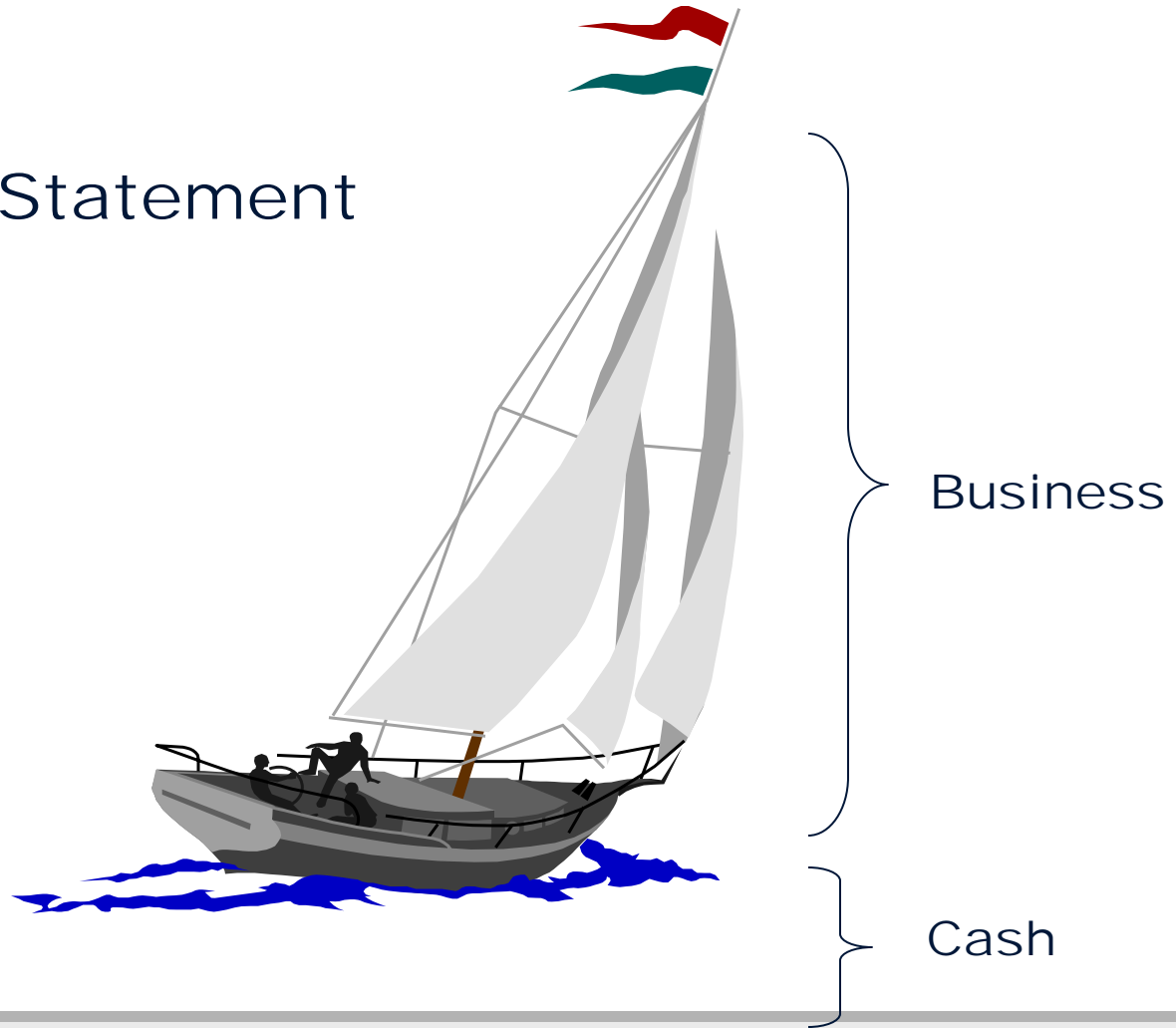
“Profit” or “Net Profit” (if positive)

“Loss” or “Net Loss” (if negative)

“Net”

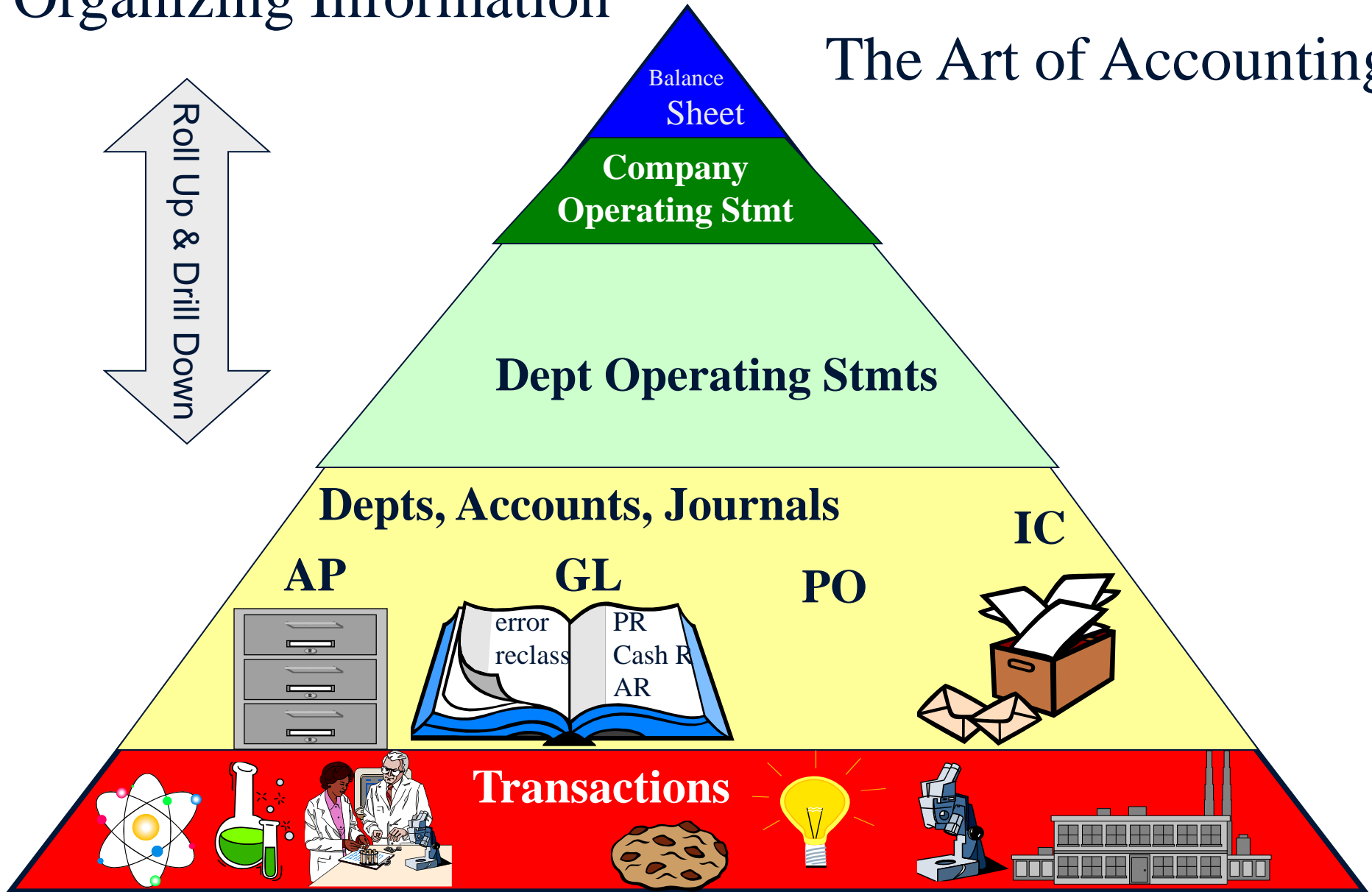
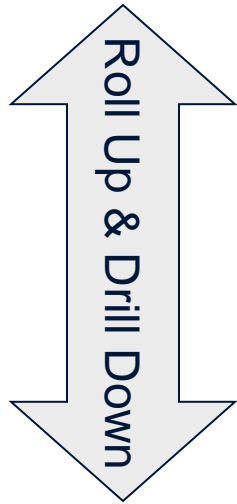
# Financial Statements

Cash Flow Statement



# Organizing Information

# The Art of Accounting



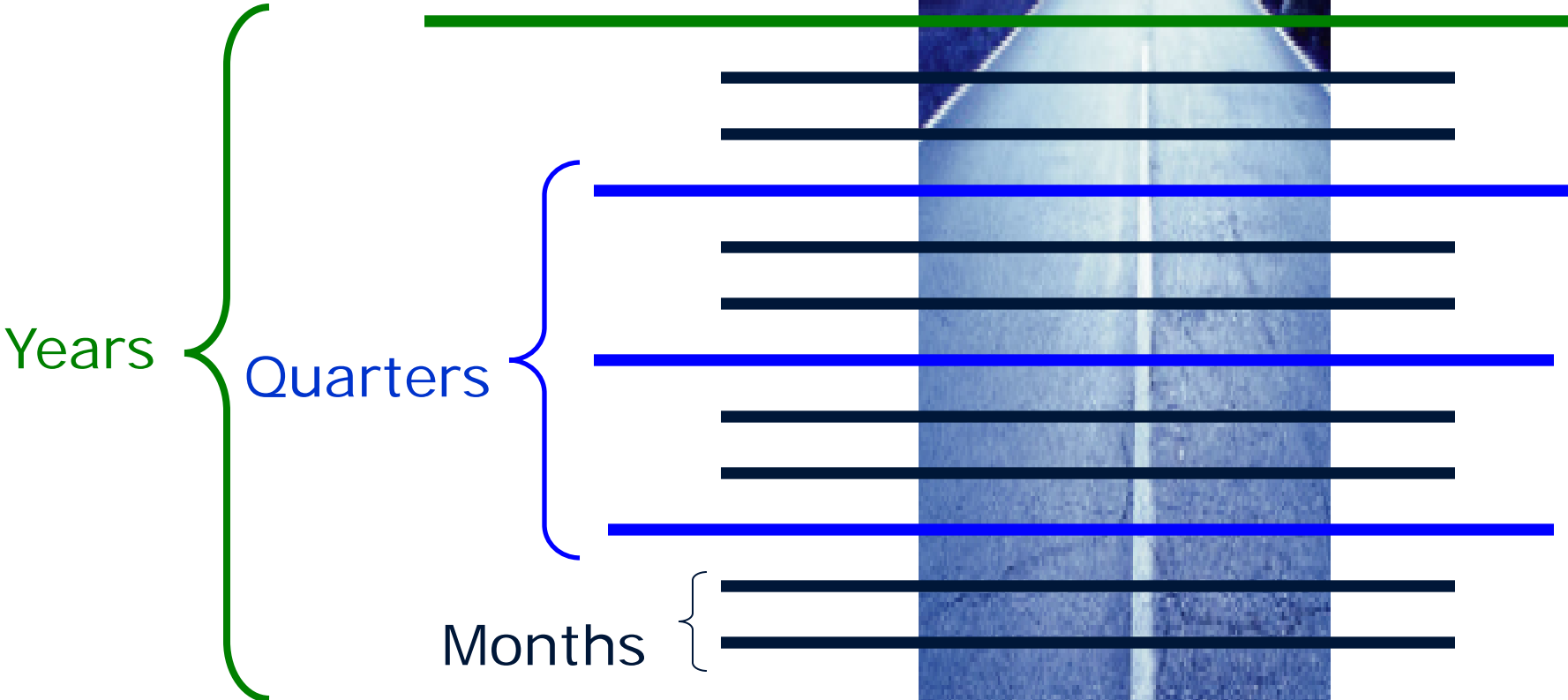
# Accounting Concepts

- Precision – Within Reason

*Materiality*



# Accounting Concepts



Which Period?

# Accounting Concepts

Which Period?

Cash Basis:

Record Transactions in the Period Cash is Exchanged

Accrual Basis:

Record Revenue in Period Earned

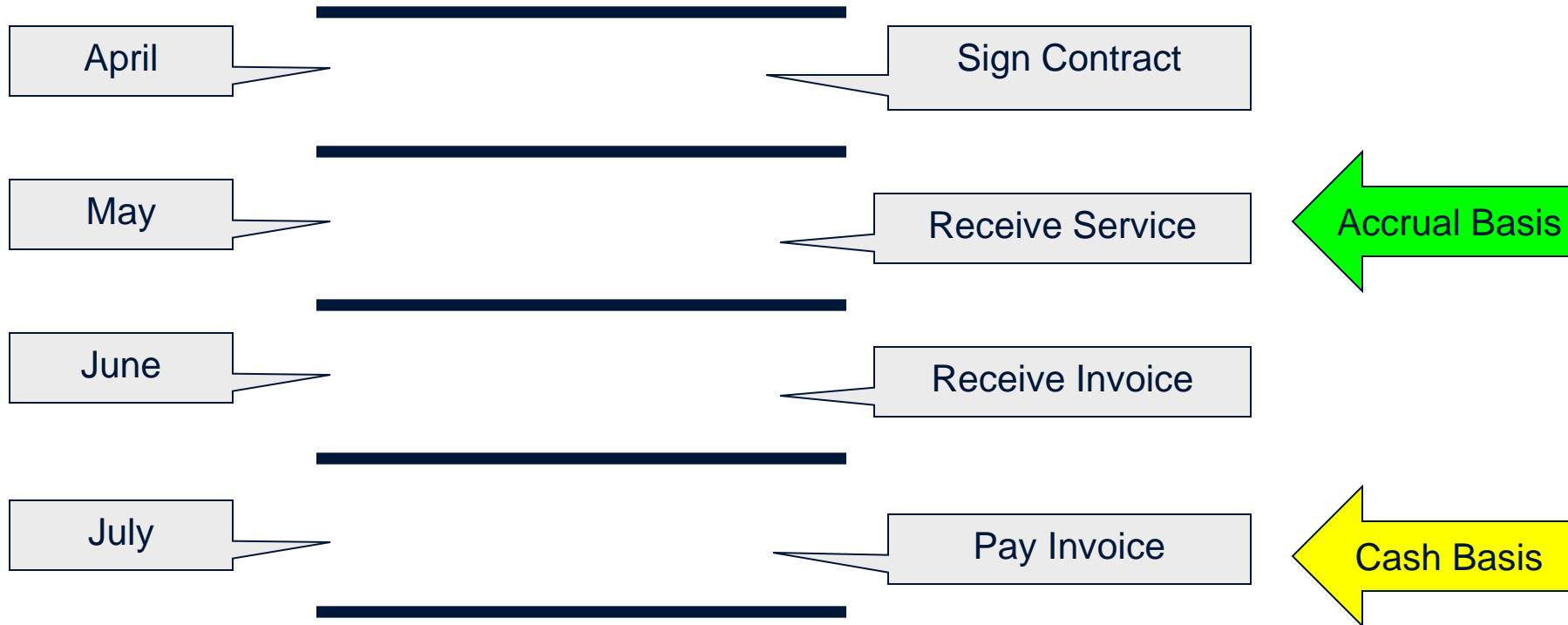
Record Expense in Period Service is Performed, or When Goods are Consumed



**Preferred  
(Required)**

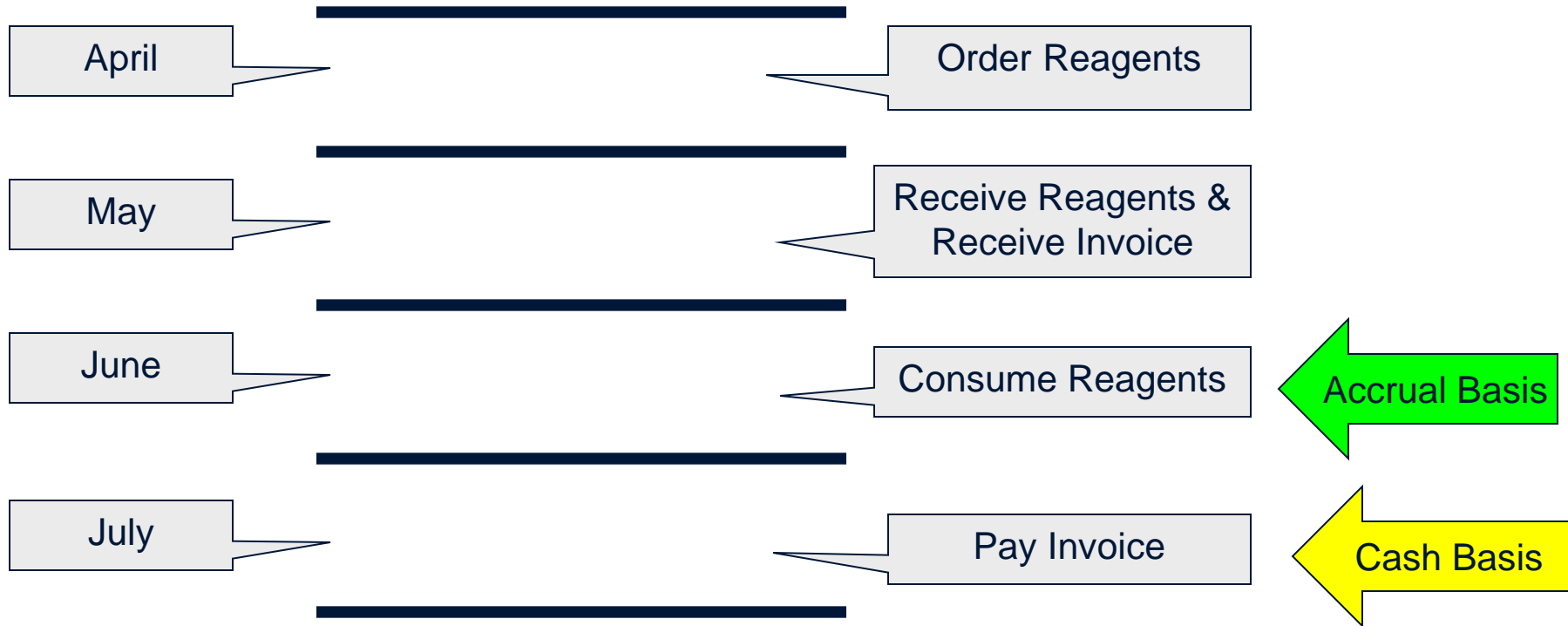
# Accounting Concepts

## Which Period? - Example



# Accounting Concepts

## Which Period? - Example



# Accounting Concepts

## Which Period? (Related Terms & Concepts)

**Prepaid:** Pay up front. Spread expense across period used.

**Capitalize:** To record as an asset. (Expense later, when used)

**Depreciate:** To spread an asset's cost across the periods used.

**Amortize:** Depreciation for **intangible** assets or liabilities.

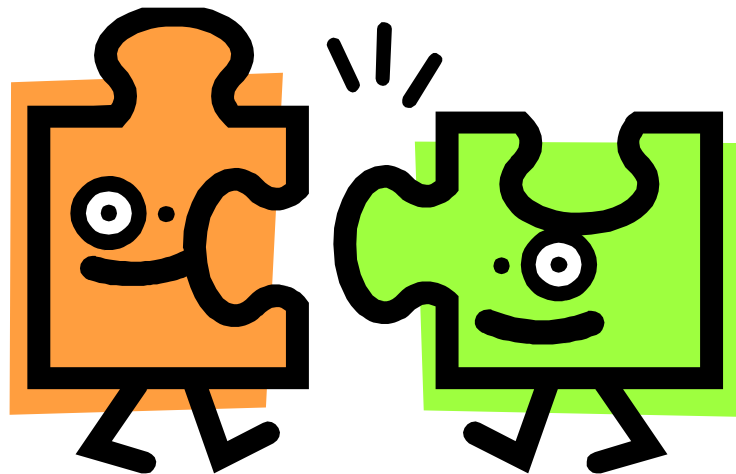
**Accrue:** The act of moving revenue or expense to another period.

# Accounting Concepts

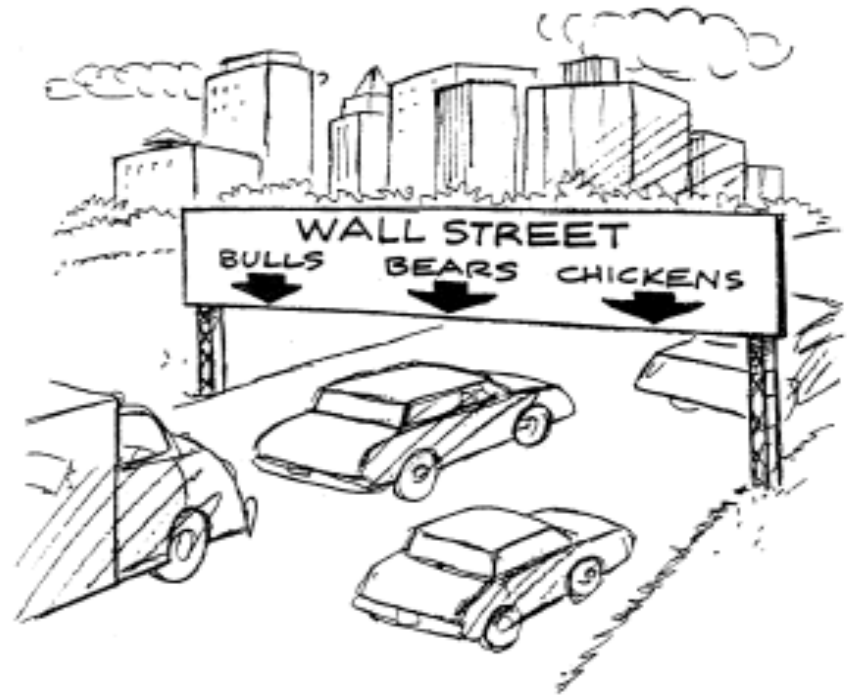
Which Period? (Related Terms & Concepts)

- **Match** Expenses to Related Revenue

(Record them Both in the Same Period)



# Other Financial Terminology . . .



# Measuring Performance

How Did We Do?

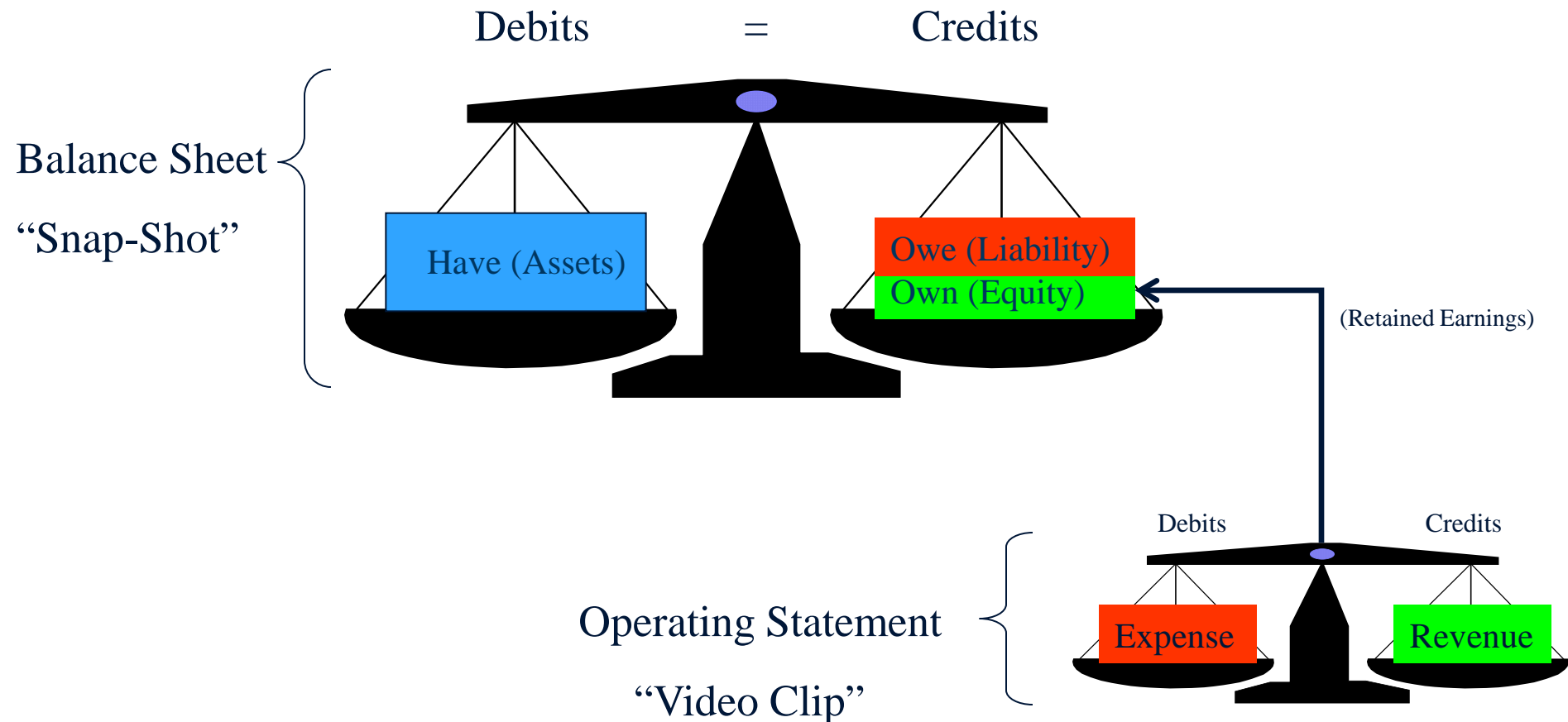


## Performance Indicators



# Measuring Performance

How Did We Do?



# Measuring Performance

How Did We Do? (Terms & Concepts)

**Margin:** Revenue minus expense

**Net Margin or Net Income:** Total revenue minus total expenses

**Common Size Income Stmt:** Express expenses as a % of revenue

**Revenue per Unit:** Revenue divided by some statistical unit

**Expense per Unit:** Expense divided by some statistical unit

# Common Size Income Statement

## How Did We Do?

Revenue	\$1,000	100%
Operating Expense	600	60%
Support Expense	200	20%
Overhead Expense	150	15%
Total Expense	<u>950</u>	<u>95%</u>
Net Margin	<u><u>\$50</u></u>	<u><u>5%</u></u>

Common Size Ratios

Other Ratios:

Revenue/Unit = \$10.00

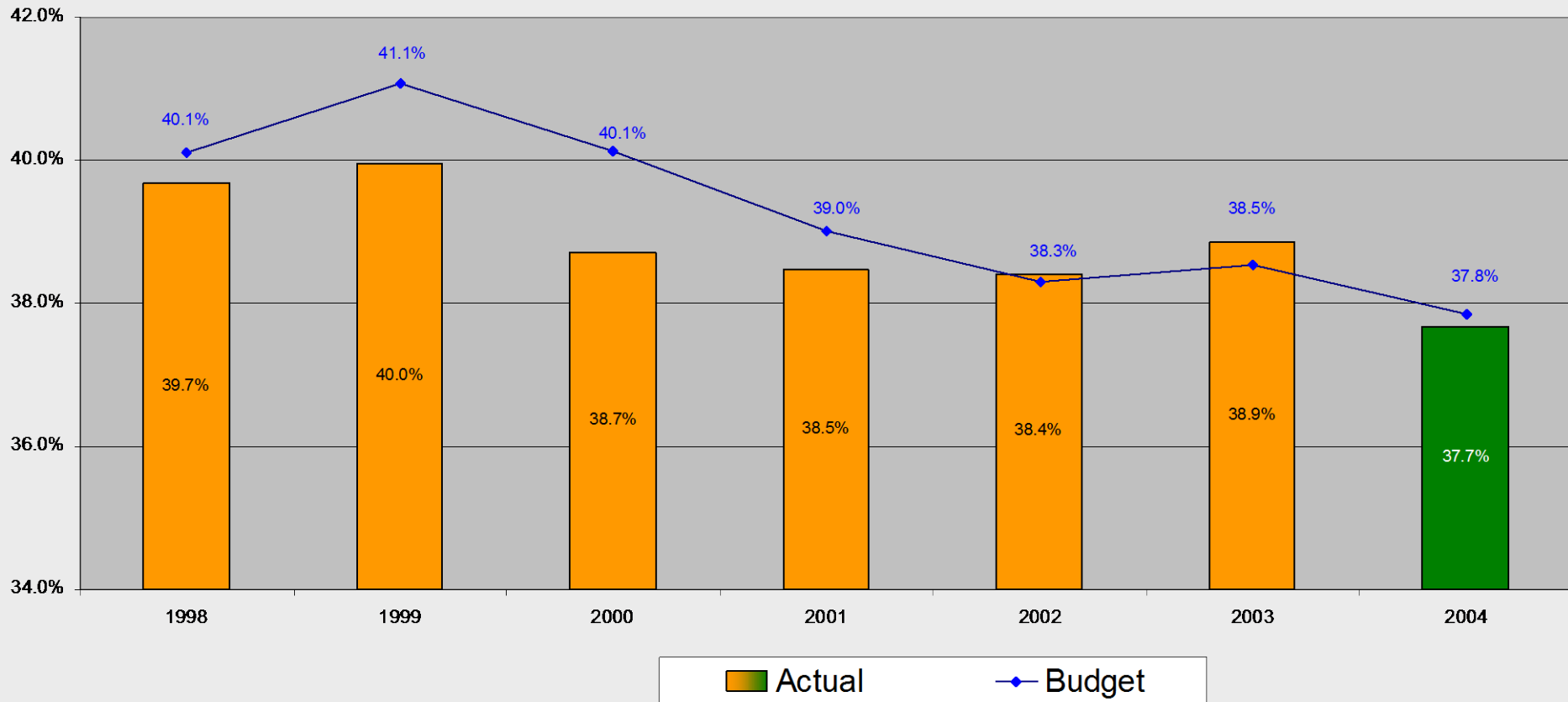
Expense/Unit = \$9.50

Units Produced = 100

# How Did We Do?



## Salaries and Wages as a Percent of Revenue



# Improving Performance

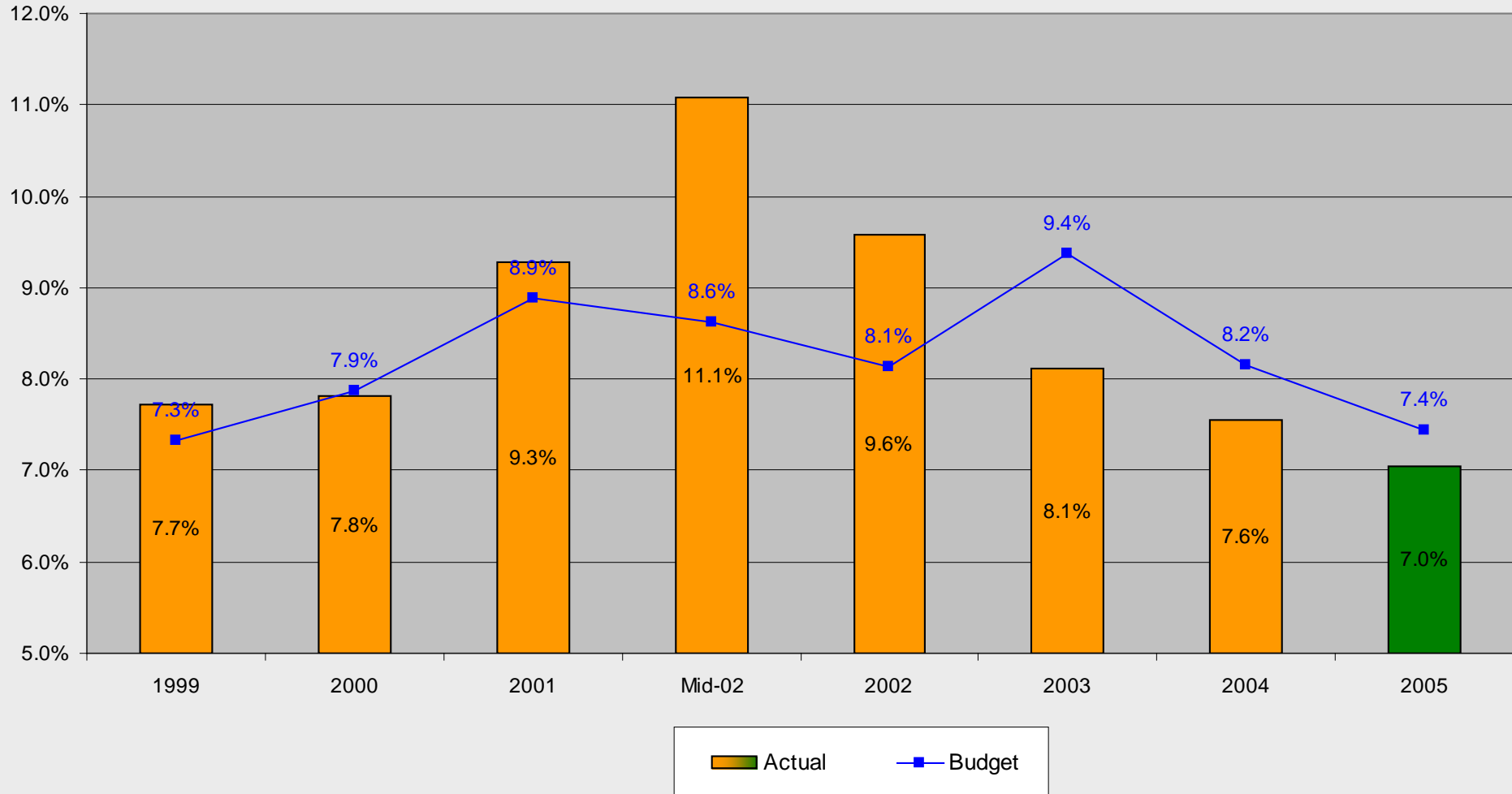
Turning Information Into Action . . .



# What Should we Do About It?



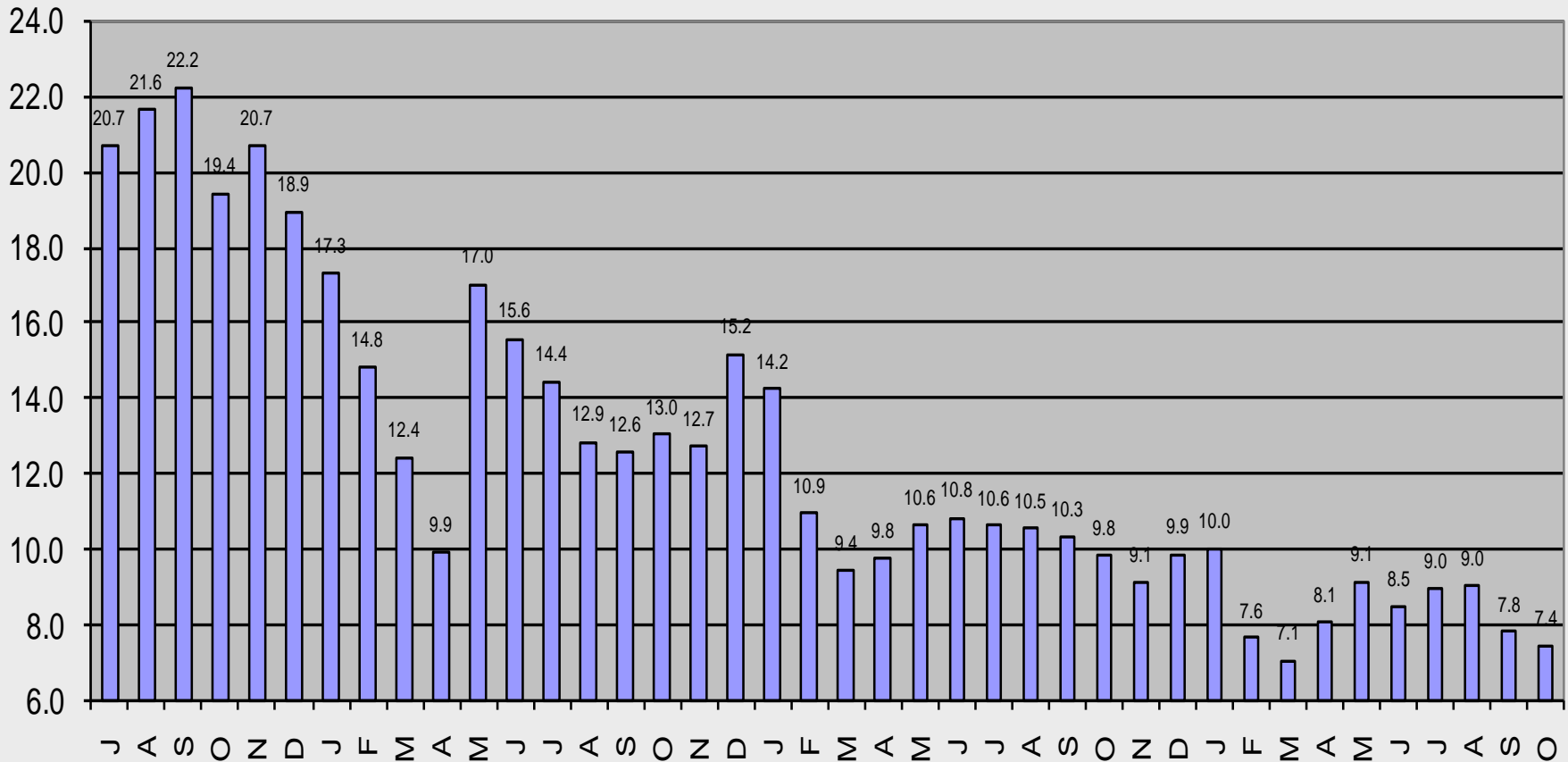
## Referral Testing Expense as a Percent of Revenue



# What Should we Do About It?



## Percent Accounts Receivable Greater Than 90 Days



# Tools for Financial Analysis



- Pay Back Analysis
- Simple Rate of Return
- Net Present Value (NPV)
- Internal Rate of Return (IRR)





# Pay Back Analysis - Formula

$$\frac{\text{Investment Required}}{\text{Net Annual Cash Inflow}} = \text{Pay Back Period}$$

# Pay Back Analysis - Example

ABC Blood Bank buys a Platelet Incubator for \$100,000. The instrument will provide \$25,000 per year in net positive cash flow. How long will it take for ABC to recoup their investment in this instrument?

$$\frac{\$100,000}{\$25,000} = 4 \text{ Years}$$

# Simple Rate of Return - Formula

$$\frac{\text{Incremental Revenues} - \text{Incremental Expenses}^*}{\text{Initial Investment}} = \text{Simple Rate of Return}$$

\* Including Depreciation

# Simple Rate of Return - Example

ABC Blood Bank buys a Platelet Incubator for \$100,000. The instrument will support a \$30,000 per year increase in revenue and will cost \$5,000 per year to operate and maintain. The instrument will be depreciated over 10 years, at a rate of \$10,000 per year. What is ABC's simple rate of return on this investment?

$$\frac{\$30,000 - \$15,000 \text{ (Operating Cost + Depreciation)}}{\$100,000} = 15\%$$

The diagram shows a calculation for the simple rate of return. The numerator is the net annual benefit, calculated as the annual revenue increase of \$30,000 minus the total annual cost of \$15,000. The total annual cost is the sum of the operating cost (\$5,000) and the depreciation (\$10,000). The denominator is the initial investment of \$100,000. The result is 15%.

# Net Present Value (NPV) - Formula

$$\begin{array}{ccc} \text{Present Value} & & \text{Present Value} \\ \text{of Cash} & - & \text{of Cash} \\ \text{Inflows} & & \text{OutFlows} \\ & & \text{=} \\ & & \text{Net} \\ & & \text{Present} \\ & & \text{Value} \end{array}$$

# Net Present Value (NPV) - Example

ZYX Medical Center buys a Apheresis Separator for \$70,000. The machine will produce net positive cash flows of \$20,000 per year over its 5 year life. What is the Net Present Value of this investment?

	Year						Present Value
	0	1	2	3	4	5	
Cash Outflows	(70,000)						(\$70,000)
Cash Inflows		20,000	20,000	20,000	20,000	20,000	84,247
<b>Net Present Value*</b>							<b><u><u>\$14,247</u></u></b>

\* Assumed Interest Rate = 6.0%

# Internal Rate of Return (IRR) - Formula

The interest rate that will cause the Net Present Value of an investment project to be equal to zero.

# Internal Rate of Return (IRR) - Example

ZYX Medical Center buys a Apheresis Separator for \$70,000. The machine will produce net positive cash flows of \$20,000 per year over its 5 year life. What is the Internal Rate of Return on this investment?

	Year						Present Value
	0	1	2	3	4	5	
Cash Outflows	(70,000)						(\$70,000)
Cash Inflows		20,000	20,000	20,000	20,000	20,000	70,000
<b>Net Present Value*</b>							<b><u>\$0</u></b>

\* Assumed Interest Rate = 13.2%

**Internal Rate of Return**

**13.2%**



# Margin and Mission

Margin + Mission = **More Mission!**





Institute for  
Learning

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