



The Real Meaning of ROI...for HR

**WorldatWork
Conference and Exhibition**

8 May 2006

LIVE PRESENTATION VERSION

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Today's Discussion

- Thinking About the Topic
- Why is This Important?
- What ROI is (and is not)
- Measuring Business Performance
- Terminology and Concepts
- Calculating Return on Investment
- A Compensation Example
- Other Compensation Implications

The Value of This Session

- Enhance your ability to add value in financial discussions
 - Note: All HR discussions are financial discussions
- Increase your ability to translate your ideas into the language of business
- Improve your ability to communicate with financial and line managers
- Encourage the asking of good questions and clarifying statements about financial impact
- Develop your understanding of the dynamics of the financial aspects of HR

10 Things You'll Need to Do to Calculate ROI

1. Understand the basics of accounting and finance
2. Gather data from the financial accounting system
3. Gather data from the cost accounting system
4. Gather data not available in either the financial accounting or cost accounting system
5. Gather data from the HRIS
6. Gather data from HR not available from the HRIS
7. Gather data from line managers (if they will talk to you)
8. Make estimates
9. Make assumptions
10. Build a model using all of the above

HR Issues Can Be Monetized

Formula for evaluating return on additional training

$$C_0 + J_0 < \sum_{t=1}^T \frac{K_t - J_t}{(1 + r)^t}$$

Source: Edward P. Lazear, *Personnel Economics for Managers*

We Can Lose the Forest in the Trees

Formula for evaluating return on candidate screening

$$\lambda \int_{q_{\min}}^{q_{\max}} qf(q) dq + (1 - \lambda) \left[\int_{q_{\min}}^{q_{\max}} qf(q) dq + wF(w) \right] - \tau > \int_{q_{\min}}^{q_{\max}} qf(q) dq$$

Source: Edward P. Lazear, *Personnel Economics for Managers*

Our goal is effective measurement and communication,
not academic perfection

A Pop Quiz

- What is the approximate temperature in this room?
 - 68°
 - 21°
 - 294°

- Which scale did you use?
 - Why?

Why is This Important?

“When you **cannot** express it in numbers, your knowledge is of a meager and unsatisfactory kind.”

“When you **can** measure what you are speaking about and express it numbers, you know something about it.”

Lord Kelvin (1824-1907)

Why is This Important?

- Managers make resource allocation decisions based on financial information, not just “numbers” or “metrics”
- Organizations manage based on “management accounting” as well as financial accounting systems
- HR costs have the highest effect of any cost category on profitability in most organizations...if all costs are measured
- Effectiveness of the HR function continues to be questioned by new entrants in the field...and we lack data to confirm our effectiveness

What ROI is NOT

- A generic term for “outcome”
- One or more quantitative metrics measuring nonfinancial factors
 - Employee attitude survey results
 - Turnover rates
- A new idea invented by HR
- A ratio of employer expenditures to “perceived value”
- A singular concept or formula defined or endorsed by a regulatory body

What ROI IS

- A well-defined family of analytical financial measures developed by the financial (not accounting) field
- A measure of the net financial value resulting from a given transaction or series of transactions
 - In HR, a transaction may be an expenditure or a behavior
- A specific dollar amount - or percentage derived from dollar amounts - that communicates the financial impact of a transaction
- Arguably, the single criterion on which business decisions are made in most organizations

Measuring Business Performance: A Review

What is it called?

Who does it?

What is it?

Financial
Accounting

Controller
(Internal)

Auditor
(External)

Balance Sheet
Income Statement ("P&L")
Cash Flow Statement

Tax
Accounting

Tax Director
(Internal)

Tax CPA
(External)

Federal Tax Return
State Tax Returns
Local Tax Returns

Management
Accounting

Financial
Analysis

Financial Analysts

External Analysts

Budgets
Variance Reports
Ratios and Measures

Measuring Business Performance: A Review

What is it called?

Financial
Accounting

Tax
Accounting

Management
Accounting
Financial
Analysis

Who Cares?

Investors
Lenders
Media

Tax Authorities
Federal, State, Local

Board Members
Executives
Investors
Analysts

What are the Rules?

Generally Accepted
Accounting Principles (GAAP)
International Accounting
Standards (IAS)

Tax Regulations/Rulings
State Tax Codes/etc.
Local Tax Requirements

No Rules
Varying Definitions
Company-Determined

Terminology and Concepts: Four Traps

- Cost
- Profit
- Value
- Worth

Terminology and Concepts

Expenses, assets and capitalization

- Organizations only spend money on two things: Expenses and Assets
 - *Expenses* are (the dollar value of) goods or services used in the current period
 - *Assets* are (the dollar value of) goods or services used in one or more future periods, but...
- Tangible assets are generally capitalized, intangible assets are generally expensed...or ignored

**Our problem in HR:
Accountants treat virtually everything we do as an
expense to acquire intangible assets**

Terminology and Concepts

➤ **Cash vs. accrual**

- Cash transactions are actual inflows or outflows of money
- Accrual transactions reflect financial transactions that may or may not result in actual inflows or outflows of money

➤ **“Hard dollar” vs. “soft dollar”**

- Hard dollar typically refers to cash or accrual items easily captured by the accounting system
 - ✓RIF will create hard dollar cost of severance pay
- Soft dollar typically refers to items agreed to have financial impact but not easily captured and/or measurable
 - ✓RIF may create soft dollar cost of reduced productivity

What Have We Learned So Far?

- ROI is a widely accepted approach to assessing the financial impact of a transaction and is used in all areas of business
- Various disciplines - accounting, finance, economics, HR - disagree on the right approach to measuring financial performance, value, and cost
- Management requires a valid financial analysis for decision-making and receives detailed financial input from accounting, finance, and the markets...but little or none from HR
- It is critical to understand what terms do and do not mean before using them or acting on them

What We're Going to Learn

- Calculating ROI for HR requires no greater degree of estimates and assumptions than other financial measurement and reporting systems
- Most organizations do not have the data collection and measurement systems required for calculating the true financial impact of HR transactions
- Financial estimates are always better than mere quantification of subjective factors

What Do Directors & Executives Want to Know?

- How much will this cost?
 - Expense focus
- What do we get for this?
 - Revenue focus
 - Cost reduction focus
- What is the ROI?
 - Return on investment focus



How Much Will This Cost?

- Accounting expense
- Cash outflow
- Investment in asset
- Earnings dilution
- Ownership dilution
- Opportunity cost

**Must be able to communicate
all aspects of
financial outflows from HR ideas**

What Do We Get for This?

- Revenue increase
- GAAP profit
- Cash inflow
- Balance sheet equity
- Public market value
- Theoretical value added

**Must be able to communicate
all aspects of
financial inflows from HR ideas**

What is the ROI?

- Must define “return” and “investment”
 - Primarily defined in financial statements (which?)
 - Return = profit (which?) or cash flow (which?)
 - Investment = assets, capital, equity, capitalized expenses (which?)

What is the ROI for HR?

- Must define “return” and “investment” ourselves

- “Return” will almost always be defined in terms of:
 - GAAP income, and/or
 - Cash inflow, and/or
 - GAAP-based return measures, and/or
 - Market-based return measures

- “Investment” will almost always be defined in terms of:
 - GAAP expense, and/or
 - Cash outflow, and/or
 - Asset purchase, and/or
 - Dilution

Must be able to present elements of return and investment not captured by the financial system

A Practical Model for ROI in HR

1) Define the hypothesis

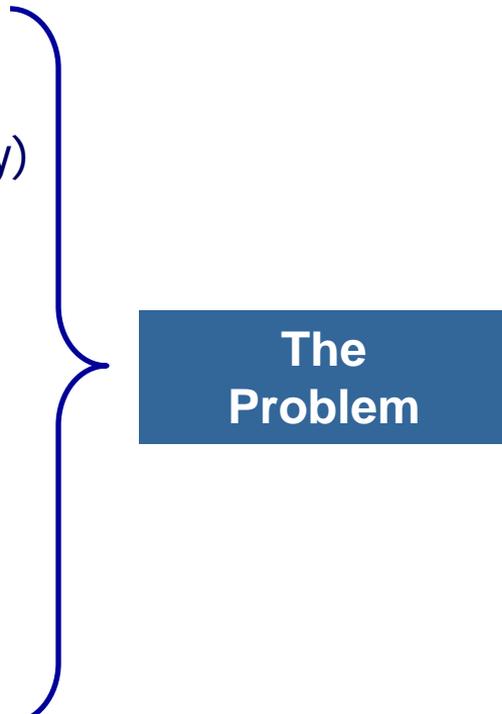
“Increasing total compensation will increase our profitability”

HR impact: Low pay results in:

- Turnover (per exit interviews)
- Lower job satisfaction (per employee survey)
- Reduced productivity (attributed impact)

Projected financial impact of program:

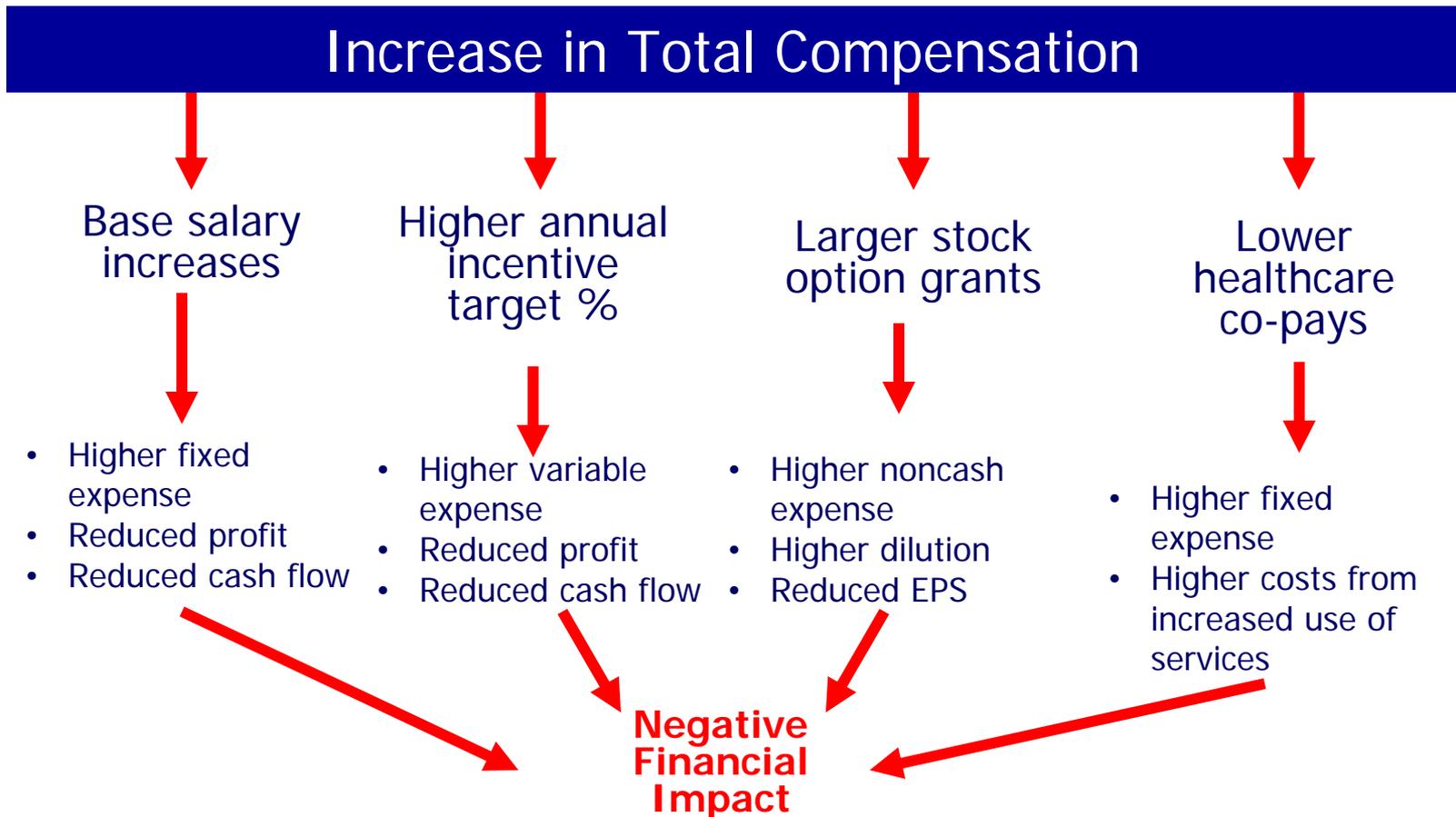
- Higher compensation expense
- Reduced operating cash flow
- Reduced EPS
- Lower share price



**The
Problem**

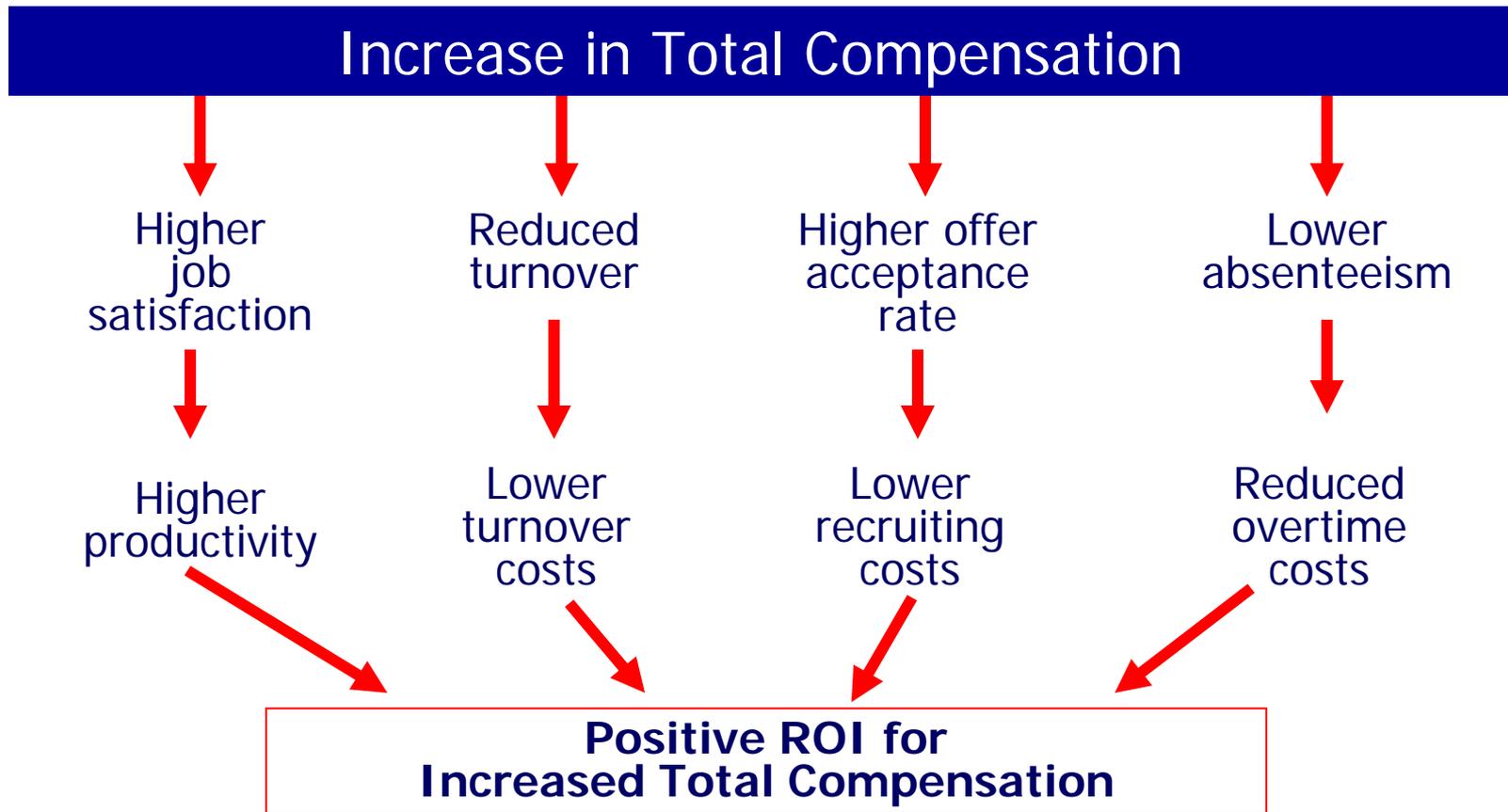
A Practical Model for ROI in HR

2) Clarify the linkages: traditional financial view



A Practical Model for ROI in HR

2) Clarify the linkages: HR's financial view



A Practical Model for ROI in HR

3) Develop integrated financial model concepts

- Program costs
- Program benefits

Requires assumptions and estimates:

- Each worker has a cost and a value to the business
- Each worker produces gross margin, directly or indirectly
- Gross margin is related to both time spent and level of effort spent
- Each worker produces a net margin after direct and indirect *marginal* and *allocated* SG&A costs attributed to their employment

A Practical Model for ROI in HR

4) Gather data

This may not be measured and may require assumptions

- Projected increase in total compensation costs
- Program development cost
- Increase in program administration cost
- Program evaluation cost

- Hiring costs
- Turnover costs
- Benefit costs
- Overtime costs
- Gross margin of an employee's work
- Productivity levels

A Practical Model for ROI in HR

5) Develop financial model: Employee Value

Example: Salesperson turnover cost

•Salary		\$70,000
•Commission target		\$30,000
•Benefits (company cost)		<u>\$15,000</u>
•Total Direct Employee Expense		\$115,000
•Other SG&A Expenses		<u>\$35,000</u>
•Total Employee Cost		\$150,000
•Revenue target	\$1,000,000	
•Gross Margin (50%)	\$500,000	
•Net Employee Margin	\$350,000	

A Practical Model for ROI in HR

5) Develop financial model: Employee Value

The Salesperson was easy; what about the:

- Software Engineer?
- Administrative Assistant?
- Controller?
- Plant Manager?

Rule of thumb:

If you can't estimate the value contributed
by a position, eliminate the position immediately
(the parking lot game)

A Practical Model for ROI in HR

6) Define and quantify assumptions

Lost productivity due to dissatisfaction preceding turnover

Percent of time spent grumbling internally	(hrs/month)	2	1.2%
Percent of time spent grumbling externally	(hrs/month)	1	0.6%
Ripple effect of grumbling to others	(hrs/month)	1	0.6%
Time spent job hunting	(hrs/month)	4	2.3%
Productivity impact of reduced focus			<u>5.0%</u>
Total impact of dissatisfaction			9.6%

Annual impact on gross margin	\$500,000	x	9.6%	=	\$48,000
			as a percent of cash compensation		48.0%
			as a percent of total expense		32.0%

A Practical Model for ROI in HR

6) Define and quantify assumptions

Lost Productivity Due to Turnover

When an employee decides to leave, their productivity declines during the final weeks of employment (outgoing productivity loss)

Week T - 4	-10%	
Week T - 3	-30%	
Week T - 2	-40%	
Week T - 1	-50%	
Lost productivity in final month	-33%	
Gross margin loss		-\$13,542

When an employee is hired, their productivity is not at 100% during the first month(s) of employment (incoming productivity cost)

Week H + 1	-80%	
Week H + 2	-50%	
Week H + 3	-20%	
Week H + 4	-10%	
Productivity gap in first month	-40%	
Gross margin loss		-\$16,667

Total transition cost: transitional productivity	\$30,208
Cost as a percent of total cash compensation	30.2%

A Practical Model for ROI in HR

6) Define and quantify assumptions

		<u>Monthly Cost</u>		<u>Total Cost</u>
Dissatisfaction	9.6%	\$4,000.00	2 months	\$8,000.00
Outgoing productivity loss	13.5%	\$5,625.00	1 month	\$5,625.00
Incoming productivity loss	16.7%	\$6,958.33	1 month	\$6,958.33
Total Lost Gross Margin				\$20,583.33
Percent of Total Cash Compensation				20.6%

What about:

Position vacancy costs vs. position vacancy savings

Recruiting costs?

Management time spent selecting replacement staff?

Formal training cost?

Time spent by other employees training and orienting?

HR transaction costs?

A Practical Model for ROI in HR

- 7) Calculate reasonable range through sensitivity analysis
 - Use a low-end estimate to obtain a dollar amount
 - Estimate is more valuable than a value of zero resulting from not trying to develop an estimate
 - HR costs and returns are so highly leveraged that conservative assumptions will still yield a powerful calculation

- 8) Identify most probable point in range and an expected value
 - “Most probable” will require consensus
 - Expected value is the sum of probability-weighted scenarios

Future Tactics and Strategies

Transactional

- Understand management accounting methods and systems
- Collect and organize financial and operational data on economic transactions
- Coordinate assumptions with finance group

Systemic

- Institute individual time sheets with activity codes
- Allocate costs to line and staff unit users
- Keep financial records for current and future periods

A Compensation Example

- Share plan accounting issue has highlighted the complexities of discussing employee “cost”
 - Is a noncash expense a cost?
 - If it's a noncash expense does it affect cash flow?
 - Which matters more – income or cash flow?
 - What about dilution?
 - Do you mean EPS dilution or ownership dilution?
 - How do we trade forms of cash and equity to adjust the mix and then determine the ROI?
 - Is there really an impact on behavior?

A Compensation Example

Example of option accounting issue: expense efficiency

	Notes	Shares	Price	Accounting Expense	Value at End of Period		
					\$12.50	\$25.00	\$37.50
Options	1	1,000	\$25.00	\$15,000	\$0	\$0	\$12,500
Accounting Efficiency					0%	0%	83%
RSU	2	333	\$25.00	\$8,325	\$4,163	\$8,325	\$12,488
Accounting Efficiency					50%	100%	150%
One-Time Salary Adjustment	3,4		\$7,500	\$23,297	\$23,297	\$23,297	\$23,297
Accounting Efficiency					100%	100%	100%

1	Black-Scholes Value as a percent of face value	60%
2	Options converted to RSUs by a factor of	33.3%
3	Salary adjustment a percentage of RSU	50%
4	Future salary increases	3.5%
5	Period (years)	3

A Compensation Example

Example of option accounting issue: cash vs. accrual

	Notes	Shares	Price	Accounting Expense	Value at End of Period		
					\$12.50	\$25.00	\$37.50
Options	1	1,000	\$25.00	\$15,000	\$0	\$0	\$12,500
Cash Inflow					\$0	\$0	\$29,375
Cash Flow vs. Gain					#DIV/0!	#DIV/0!	235%
RSU	2	333	\$25.00	\$8,325	\$4,163	\$8,325	\$12,488
Cash Inflow					\$1,457	\$2,914	\$4,371
Cash Flow vs. Gain					35%	35%	35%
One-Time Salary Adjustment	3,4		\$7,500	\$23,297	\$23,297	\$23,297	\$23,297
Cash Inflow					-\$23,297	-\$23,297	-\$23,297
Cash Flow vs. Gain					-100%	-100%	-100%

1	Black-Scholes Value as a percent of face value	60%
2	Options converted to RSUs by a factor of	33.3%
3	Salary adjustment a percentage of RSU	50%
4	Future salary increases	3.5%
5	Period (years)	3
6	Corporate tax rate	35.0%

A Compensation Example

Example of option accounting issue: ROI

Assumptions

1. Salary-only vs. restricted stock vs. stock options attract and retain different talent levels
 - Salary only = 0.9x
 - Restricted stock = 1.0x
 - Stock options = 1.1x
2. Productivity impact of incentive differences is:
 - Salary only = .9x
 - Restricted stock = 1.0x
 - Stock options = 1.1x
3. Value to company = (talent x productivity)
 - Salary only = .81x
 - Restricted stock = 1.00x
 - Stock options = 1.21x

A Compensation Example

Example of option accounting issue: ROI

	Notes	Shares	Price	Accounting Expense	CF @ \$37.50	Accrual ROI	CF ROI	CFROI vs. Salary
Options	1	1,000	\$25.00	\$15,000	\$29,375	303%	499%	6.8
RSU	2	500	\$25.00	\$12,500	\$6,563	300%	353%	4.8
One-Time Salary Adjustment	3,4	0	\$7,500	\$23,297	-\$23,297	74%	74%	1.0

1	Black-Scholes Value as a percent of face value	60%
2	Options converted to RSUs by a factor of	33.3%
3	Salary adjustment a percentage of RSU	50%
4	Future salary increases	3.5%
5	Period (years)	3
6	Corporate tax rate	35.0%
7	Base employee value	\$50,000
8	Salary-only talent factor	0.90
9	RSU talent factor	1.00
10	Stock option talent factor	1.10
11	Salary-only productivity factor	0.90
12	RSU productivity factor	1.00
13	Stock option productivity factor	1.10



Other Compensation Implications

- Research shows extreme differences in productivity between highest performers and average performers
 - How can we differentiate pay by a factor of 4x or 8x when salary ranges, merit matrices, option guidelines only differentiate by a fraction of that?

- Imminent retention and hiring crisis with soaring healthcare costs is focusing C-level executives' attention on employment costs
 - What other area of our business is facing such escalating costs?

 - Are employees an unaffordable resource?

Other Compensation Implications

- Global rationalization of labor markets is requiring reassessment of return on employees costs
 - Do employees in any location provide the same total return?
 - Can we accept a slightly lower result given that costs are substantially lower?
 - Or do we need a higher return because risk is greater?

In Closing

- Meaningful measurements involve a degree of subjectivity
 - Measurement
 - Calculation
 - Interpretation

But it is better to have an approximate measure of the right thing than a precise measure of the wrong thing.

– Claude Balthazard