



# Costing Human Resources

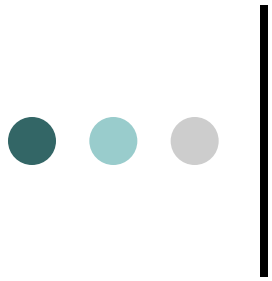
The Financial Impact of Behavior in  
Organizations

Wayne F. Cascio



# Costing Human Resources

- First recognized approach was developed by R.G. Barry Corp. of Columbus OH in 1967.
- Department managers measured on five costs:
  - Recruiting
  - Acquisition
  - Formal Training
  - Informal Training
  - Development



“People are our most  
valuable asset.”



# Asset Based Strategies

- Historical Cost
- Replacement Cost
- Present Value of Future Earnings
- Value to the Organization



# Historical Cost

- Assets are placed on the books at acquisition cost.
- Assets are depreciated of their anticipated useful life.
- Maintenance costs for the assets are expensed during each operating period.



# Replacement Cost

- A reasonable substitute for market value.
- Confounded by cost of acquisition (inefficient hiring).
- Often, turnover is low enough to make replacement cost only an educated guess.



# Present Value of Future Earnings

- A projection of a person's future compensation in today's dollars.
- Limited by forecasting the contribution based on average output.
- Limited by measuring worth as cost, not contribution to revenue or profit.



# Value to the Organization

- Value is determined by internal competition of managers to obtain services of that individual.
- Difficult to implement.





# Strengths/Weaknesses

- Investment is tracked and is appropriate for external reporting.
- Dollar is not stable over time.
- Write-offs of failed programs is subjective.
- People, as assets, are not saleable, value is not confirmed in the marketplace.
- Only costs are measured, not value to the current organization.



# Strengths/Weaknesses

- People are thought to gain value with experience.
- People measures are usually behavioral and statistical, rather than financial.
- Economic measures of people are typically cost-based, rather than asset based.



# Behavioral Costing

## Cascio's Approach

- Effective measurement must include the value of employee output, as well as cost.



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- Effective measurement must include variability of output and cost by individual and group.



# Behavioral Costing

## Cascio's Approach

- Effective measurement must include the value of employee output, as well as cost.
- Effective measurement must include variability of output and cost by individual and group.
- Many organizations do not want to measure and be accountable for how well they manage people.



# Behavioral Costing

## Cascio's Approach

- Focus on dollar value of behavioral outcomes in organizations.



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- Focus on dollar value of behavioral outcomes in organizations.
- Do not focus on the value of the individual, but on the economic consequences of behavior.



# Behavioral Costing

## Cascio's Approach

- Focus on dollar value of behavioral outcomes in organizations.
- Do not focus on the value of the individual, but on the economic consequences of behavior.
- This is an expense model, not an asset model.





# Behavioral Costing

## Two Considerations

- Outlay costs (materials) + Time costs (supervision)
- Fixed (independent of output) + Variable (dependent on output) + Opportunity (alternative use of resource)



# Behavioral Costing

	<b>Fixed</b>	<b>Variable</b>	<b>Opportunity</b>
<b>Outlay</b>	<b>Rest Rooms Parking Time Clocks</b>	<b>Wages Freezer Gear</b>	<b>Automation</b>
<b>Time</b>	<b>HR Staff Government Reporting</b>	<b>Supervisors</b>	<b>Customer Service</b>



# Behavioral Costing

## Challenges

- No methods of measurement.
- Top management believes the cost is unquantifiable.
- Some managers want to avoid measurement.
- Past efforts have failed.



# Behavioral Costing

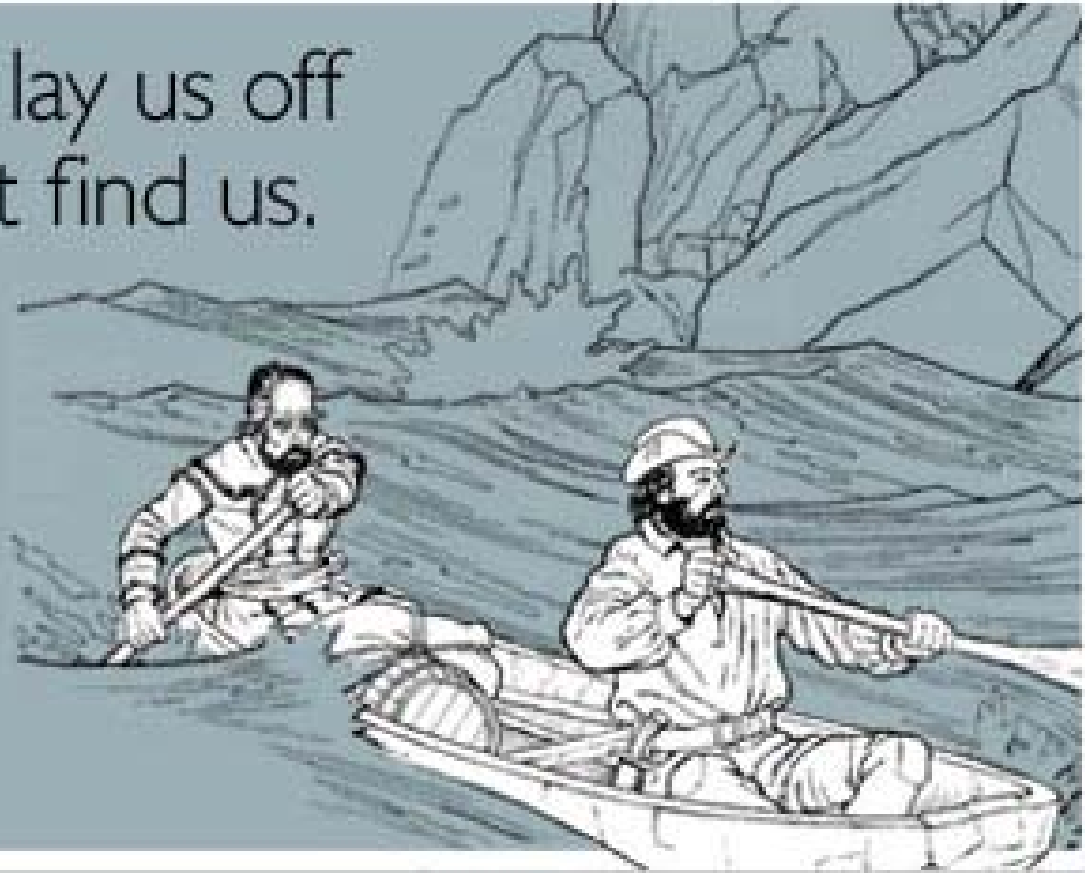
## Cost Impact Categories

- Compensation Programs
- Benefits
- Personnel Taxes
- Recruiting and Training
- Affirmative Action/Selection
- Turnover
- Safety

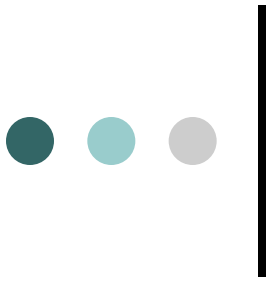


# Turnover

They can't lay us off  
if they can't find us.



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# Turnover

**Turnover =**

**(Separations/Average Work Force Size) X 100**

**Voluntary**

**Involuntary**

**Employee – Conduct**

**Employer – Operations**



# Turnover

**Cost of Turnover =**

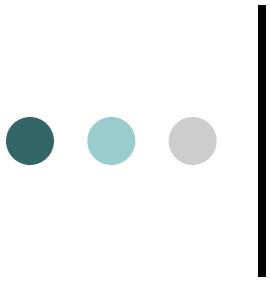
**Separation Costs**

**+**

**Replacement Costs**

**+**

**Training Costs**

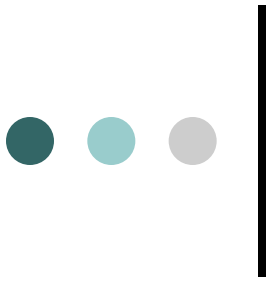


# Turnover

## Separation Costs

- Exit Processing \$ 35
  - Plant Staff (1x\$25)
  - Payroll (.5x\$20)
- Separation Pay \$ 0
- Unemployment Tax Impact \$ 6,750
  - 20 Weeks x \$320
  - ESD, WA 2011

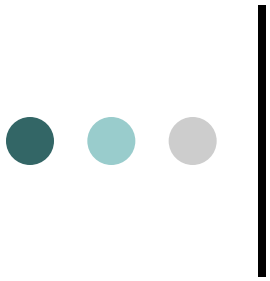




# Turnover

## Replacement Costs

○ Communication of Vacancy	\$	85
○ Pre-employment Admin (2x\$25)	\$	50
○ Selection Interviews (.5x\$100)	\$	50
○ Testing – Fit for Duty + Drug	\$	170
○ Orientation (1x\$25)	\$	25
○ Relocation Expense	\$	0



# Turnover

## Training Costs

○ Materials - Books	\$	30
○ Equipment - Boots	\$	75
○ Formal Training (4x\$150)	\$	600
○ Training Wages (32x\$11.75)	\$	376
○ OJT Observation (12x1x\$30)	\$	360



# Turnover

**Cost of Turnover =**

**Separation Costs** **\$6,785**

**+**

**Replacement Costs** **\$ 380**

**+**

**Training Costs** **\$1,441**

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**Total** **\$8,606**



# Turnover

**Cost of Turnover =**

**Average Work Force      420**

**X**

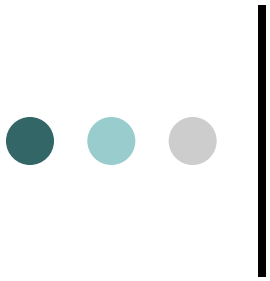
**Turnover Rate                      .15**

**X**

**Turnover Costs                      \$8,606**



**Total                      \$542,178**



# Turnover

**Difference in Performance =**

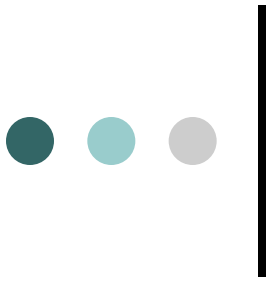
**Pay:**

$$\text{(Rate}_{\text{Leaver}} - \text{Rate}_{\text{Replacement}}) \times \text{Hours}$$

**+**

**Productivity:**

$$\text{(Rate}_{\text{Leaver}} - \text{Rate}_{\text{Replacement}}) \times \text{Cost/Unit}$$



# Turnover

## Remedies

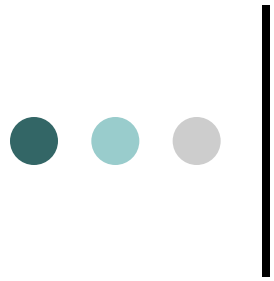
- Realistic Job Preview
- Performance Testing
- Training Payback Plans: Airlines
- Pre-Employment Training Program
- Job Enrichment



# Job Enrichment

## Expected Outcomes

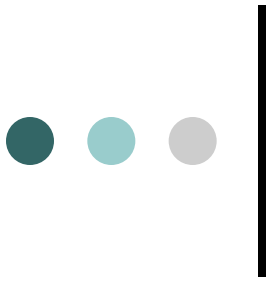
- Hackman & Oldham – Job Diagnostic Survey
  - Travelers Insurance, data entry workers
- High internal work motivation
- High work performance
- High work satisfaction
- Low absenteeism and turnover



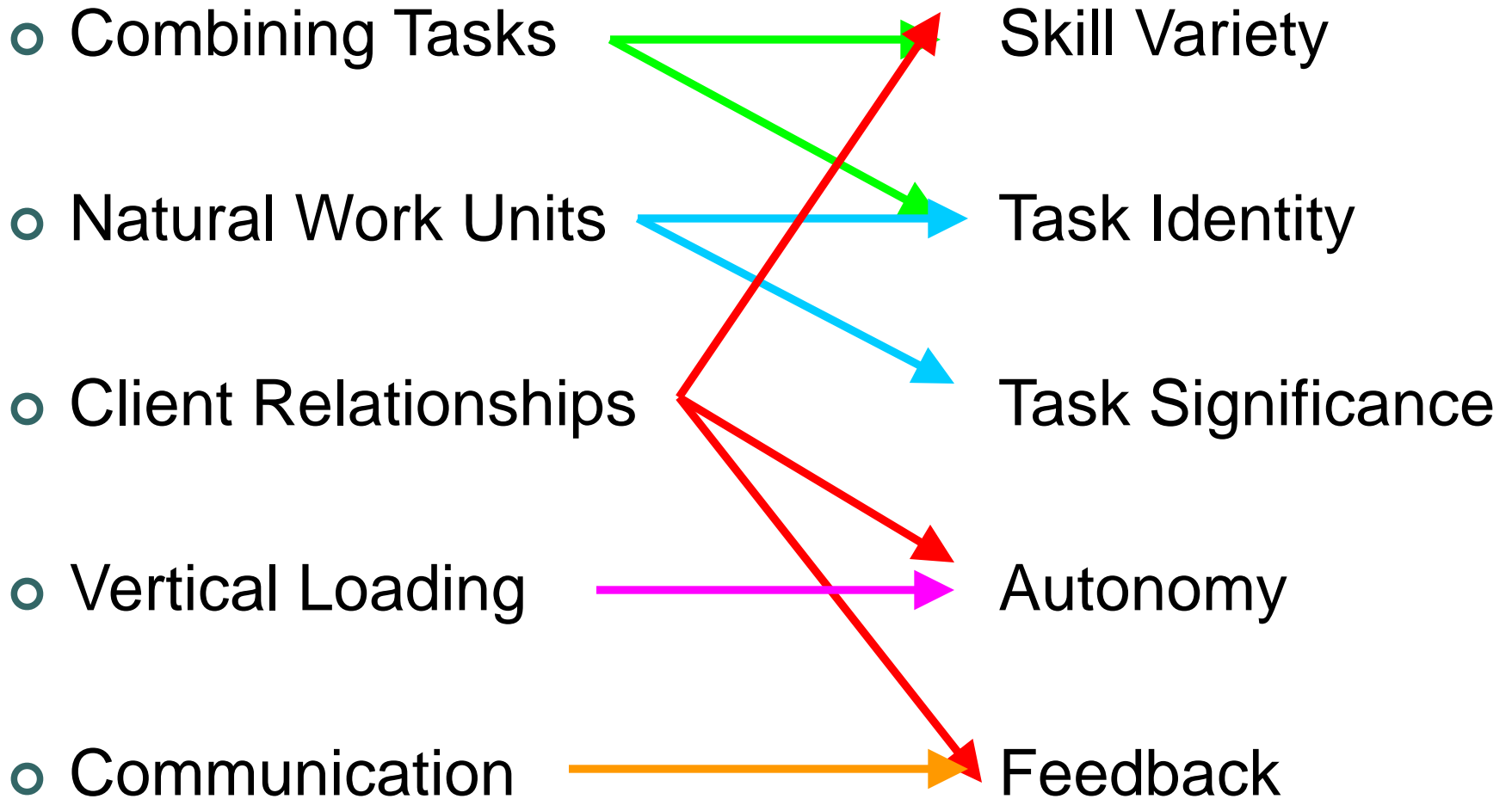
# Job Enrichment

- Experience meaningfulness of work
  - Skill Variety
  - Task Identity
  - Task Significance
- Responsibility for work outcomes – Autonomy
- Knowledge of work results - Feedback





# Job Enrichment

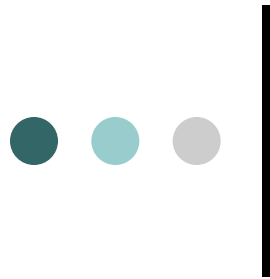


# Absenteeism

May you someday  
be as creative at work  
as you are with your  
excuse for not coming  
into work tomorrow.

som**ee**cards





# Absenteeism

**Cost of Absence =**

**Hours X (Sick Pay + Benefits)**

**+**

**Hours X Replacement Wage**

**+**

**Staff Costs**

**+**

**Difference in Performance**



# Absenteeism

**Cost of Absence = @2% \$708/employee**

**40 Hours X (\$0 Sick Pay + \$7 Benefits)**

**+**

**40 Hours X .5 X \$17 Replacement Wage**

**+**

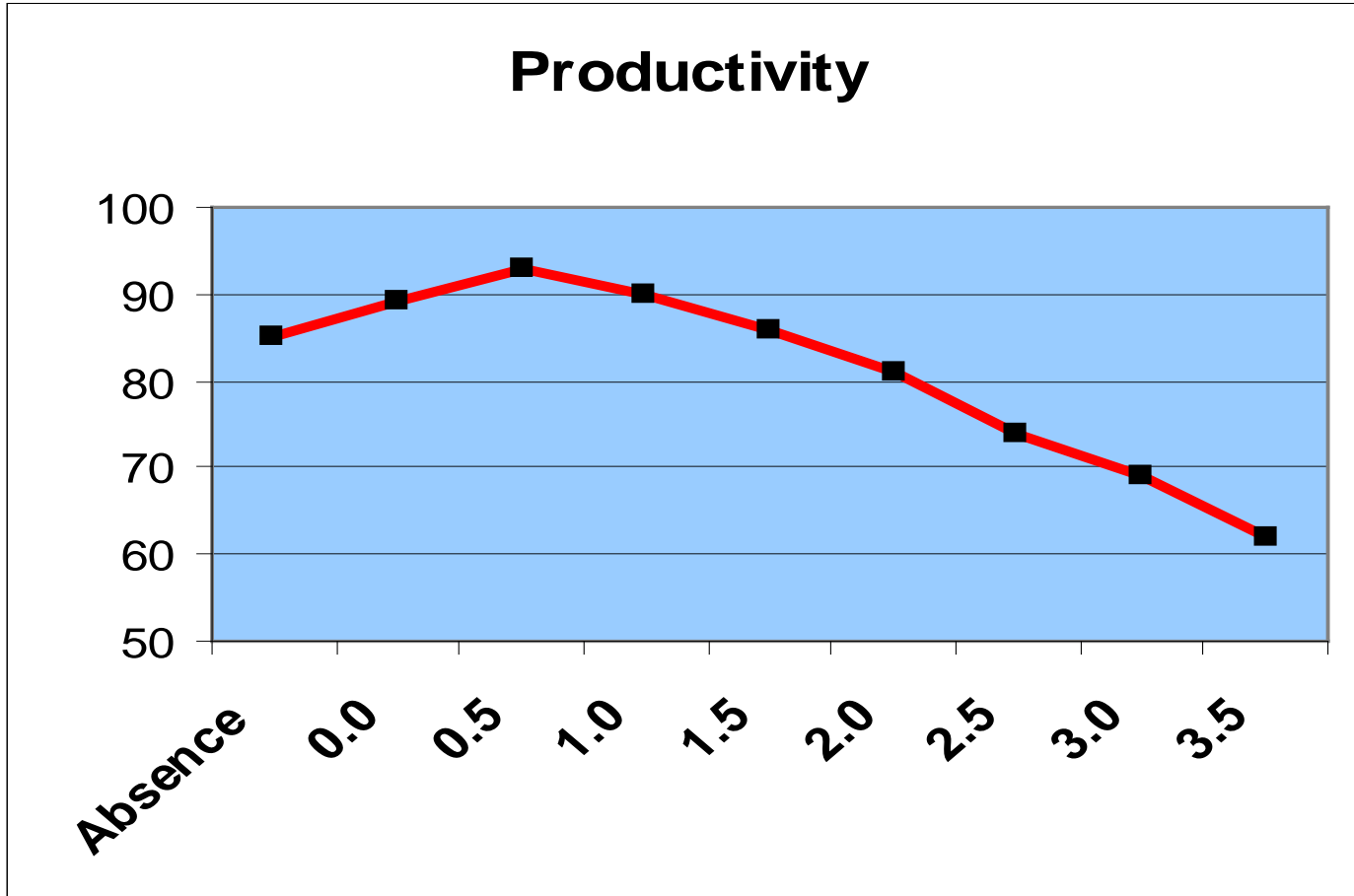
**5 X .2 X \$20 Staff Costs**

**+**

**40 X .1 X \$17 Difference in Performance**



# Absenteeism





# Overtime

**2011 STRAIGHT**

**OVERTIME**

<b>WAGE</b>	<b>15.00</b>	<b>22.50</b>
<b>FICA</b>	<b>1.15</b>	<b>1.72</b>
<b>UI</b>	<b>0.47</b>	<b>0.71</b>
<b>WORKERS COMP</b>	<b>1.05</b>	<b>1.05</b>
<b>HEALTH/LIFE</b>	<b>4.50</b>	<b>0.00</b>
<b>PROFIT SHARING</b>	<b>1.05</b>	<b>0.00</b>
<b>401K MATCH</b>	<b>0.60</b>	<b>0.00</b>
<b>PAID TIME OFF</b>	<b>1.27</b>	<b>0.00</b>
<b>BONUS</b>	<b>0.75</b>	<b>1.13</b>

**TOTAL**

**25.84**

**27.11**



# Overtime

**2011 STRAIGHT**

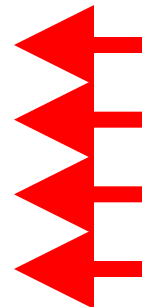
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**TOTAL**

**25.84**

**27.11**



# Productivity

I've had a horribly busy day  
converting oxygen into  
carbon dioxide.

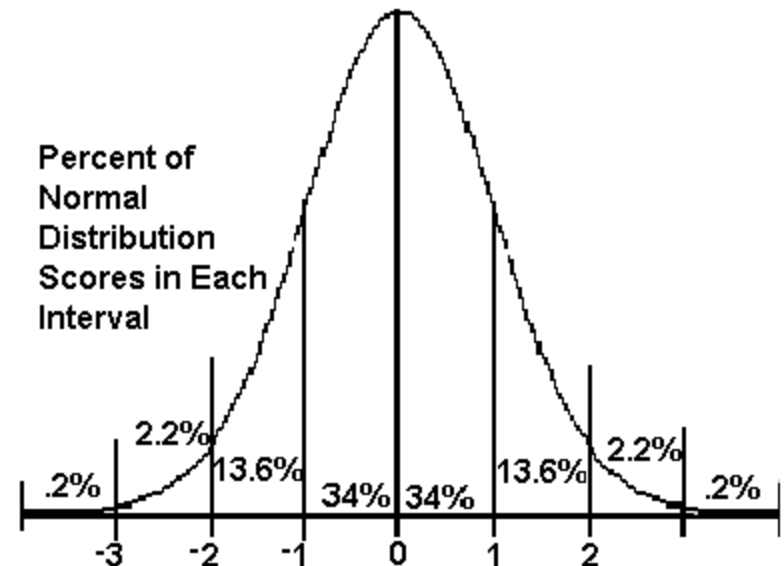


your  cards  
someecards.com



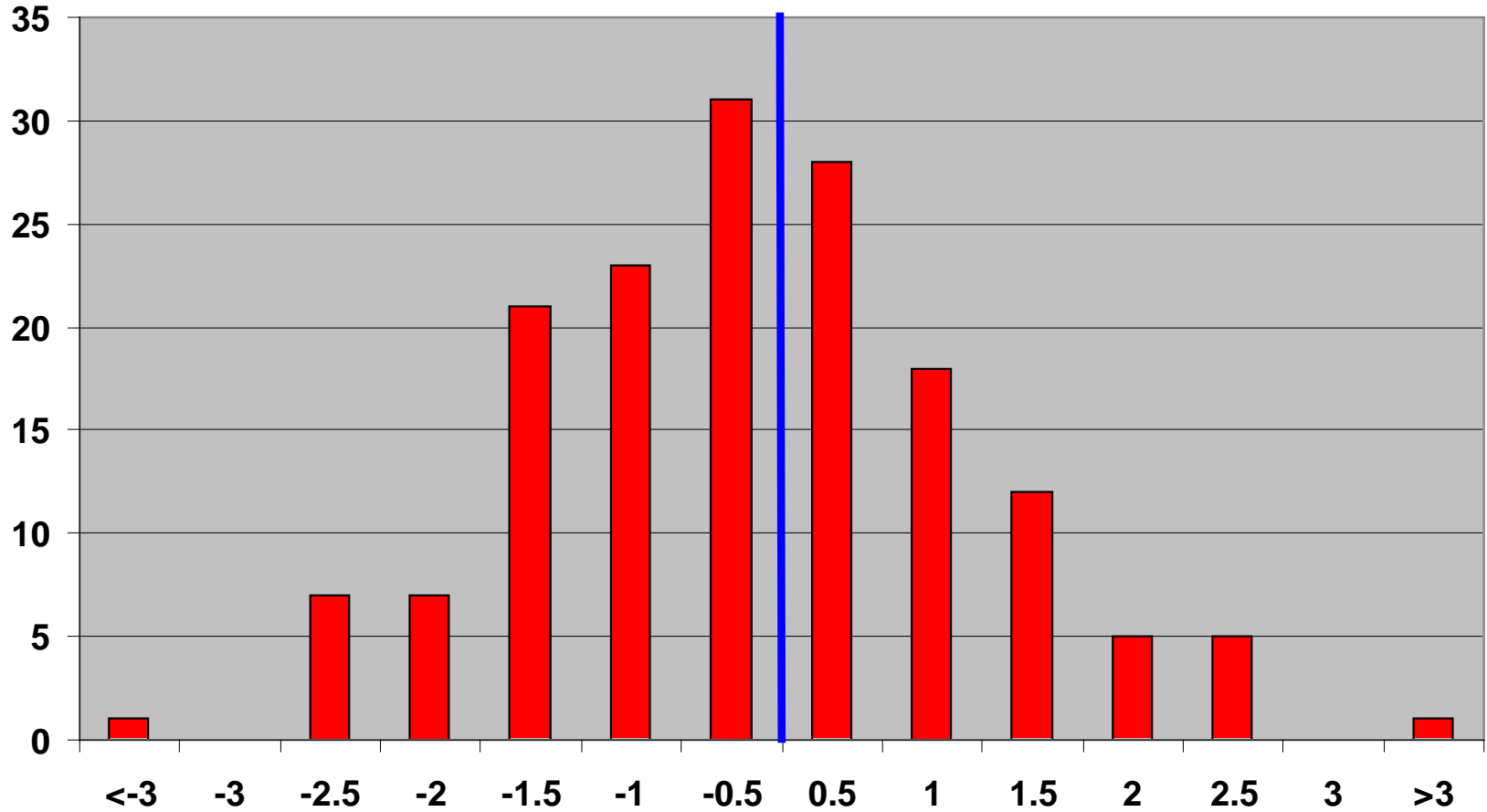
# Productivity

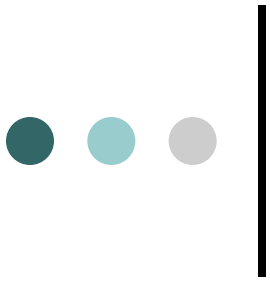
- Wage (Pounds/Hour) = Cost/CWT
- Pay for Longevity can be a cost trap.
  
- Standard Deviation \$.02/CWT



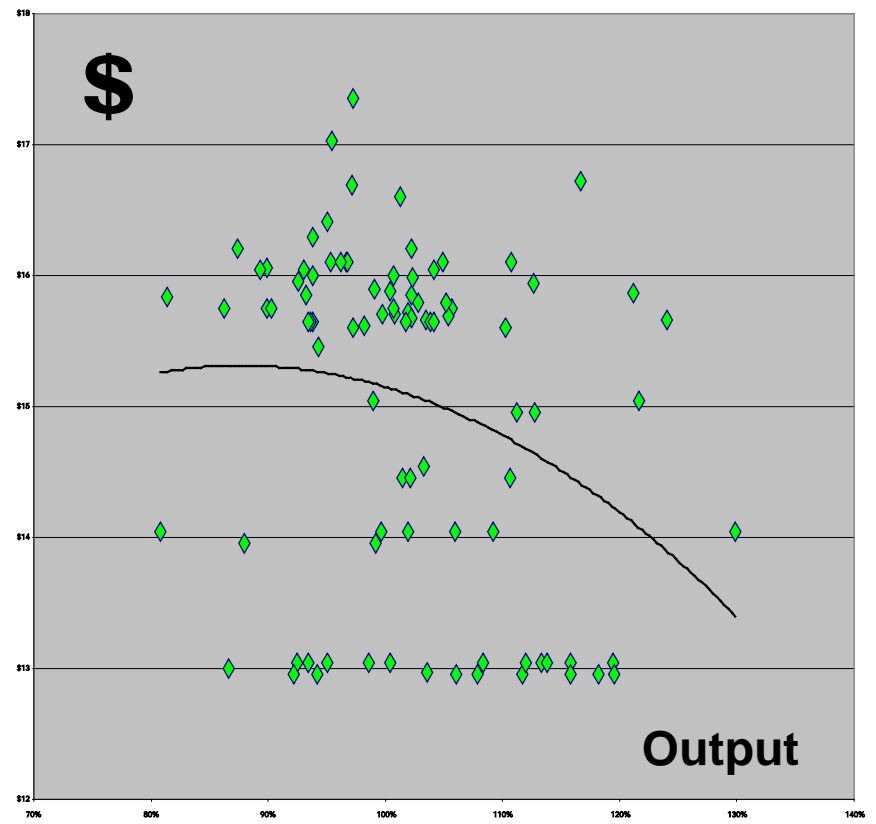
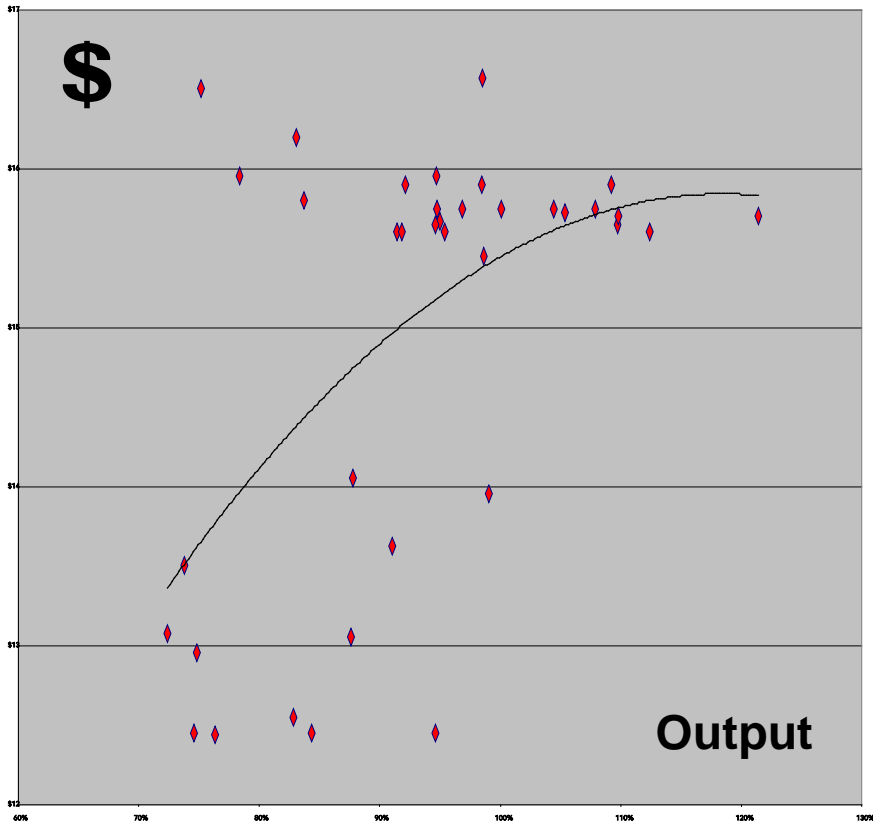


# Productivity





# Productivity





# Productivity





# Attitudes

- Attitudes have 3 elements:
  - Cognition – Knowledge of the focal object
  - Emotion – Feeling toward the focal object
  - Action Tendency – Readiness to respond
- Attitude → Behavior → Outcome
- Performance = Attitude X KSAO's



# Attitudes

- One method of costing uses correlations between attitude survey response and unit cost of production
- Weaknesses:
  - Vulnerable to confounding variables
  - Attitude-Behavior relationships may not be stable over time



# Attitudes

- Survey to measure:
  - Job satisfaction
  - Job involvement
  - Employee intrinsic motivation
- Measure performance:
  - Attendance/Turnover/Error/Output
- Determine correlation between attitude and performance



# Attitudes

- Develop an OD project to improve attitudes

- Value of OD Project =

$$r \times SD_{\text{Performance}} \times \uparrow SD_{\text{Attitude}} = \uparrow \text{Output}$$

$$\uparrow \text{Output} \times \text{Cost/Unit} = \$\$\$\$\$$$





# Attitudes

Example:

Motivation – Mean 70, SD 10

Performance – Mean 8,000, SD 700

Correlation –  $r = .20$

$.20 \times 700 \times .5 = 70$  Pounds / Hour

$70 \times 1,800 \times \$0.0021 = \$265$

# Attitudes





# Training

- Kirkpatrick Model

- Reaction – Did participants appreciate it?
  - Learning – Did participants gain skill?
  - Performance – Did on the job behavior change?
  - Results – Did the behavior change produce economic benefit?
- What is the duration of the benefit?
  - What is the cost of the training?



# Further Study

- Performance Management
  - Dr. Aubrey C. Daniels
- Analyzing Performance Problems
  - Dr. Robert F. Mager
- [accountingforpeople.org](http://accountingforpeople.org)
  - Human Potential Accounting
  - Dr. Michael Reddy

# Questions?

Let's try and remember to stop electing people who are as terrible with money as we are.



somee cards