



Human Capital: Return on Investment

Measuring the Cost of Non- Performance

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Purpose of This Session



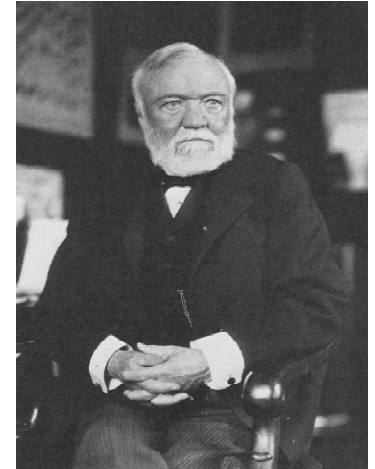
1. Classify specific human capital (HC) costs – talk about & show examples
2. Describe how human performance technology (HPT) can help quantify those costs

Talk about the "cost of non-performance"

Putting Human Capital in Context

“The only irreplaceable capital an organization possesses is the knowledge and ability of its people. The productivity of that capital depends on how effectively people share their competence with those who can use it.”

- Andrew Carnegie



CARNEGIE, Andrew
(1835-1919)

And Today. . .



Remarks by Jeff Taylor, Chief Executive Officer and Founder, Monster.com Summit on the 21st Century Workforce, June 20, 2001, MCI Center, Washington, DC

"Human capital...there's no question it is the *issue of this decade.*

"You have to put your employees at the center. Most companies - I even see it today - still say, 'Our customers are first, our employees are second.' I think this is a pile of baloney.

"Every company is going to have to retool their company, they're going to have to retrain their current workers, and they're going to have to recruit new workers..."

"The key competitive difference in the 21st century will be people. It will not be process. It will not be technology. It will be people. . . . The stakes are high."

US Comptroller General, David Walker
September 1999 conference sponsored by the National Academy of Public Administration in Washington



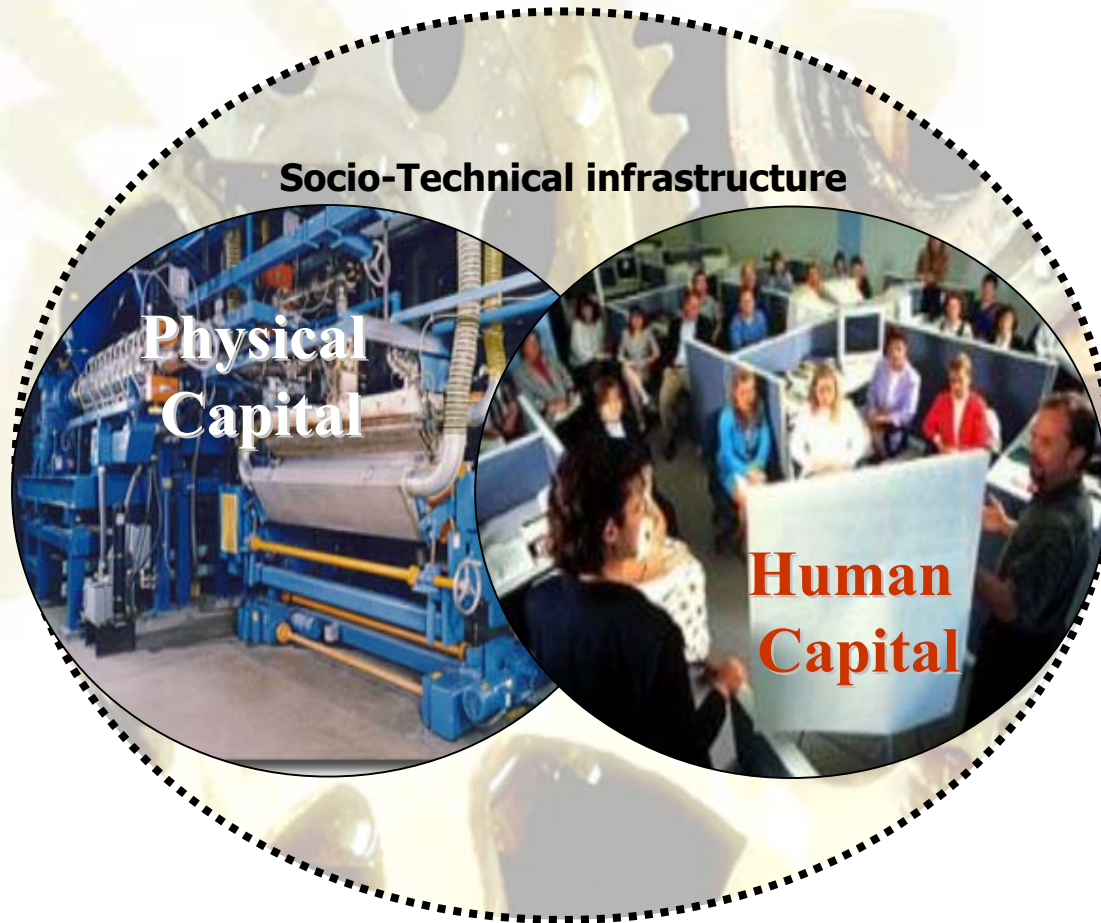
Three Types of Capital

- ◆ Structural Capital
physical structures,
intellectual property; methods
- ◆ Customer Capital
goodwill; relationships
- ◆ Human Capital
talent; skills; ability

- *Bates Gruppen*
Norweigan arm of *Bates Worldwide*
source: *Fortune Apr. 30 2001*



Human Capital in Context



Courtesy of Performance Technology Group, Inc.

"Those firms with the most highly educated workforce enjoy above average productivity and profitability. These facts serve as testimony to the growing importance of human capital and those investments that maintain and/or enhance its value."

- *Unseen Wealth: Report of the Brookings Task Force on Understanding Intangible Sources of Value*
Human Capital Sub-Group
October 2000

"People are often surprised when I tell them that **60 percent of manufacturers can't meet customer demand because they can't find adequately skilled workers**; or that **40 percent are handicapped in implementing productivity improvements** because of the skilled labor shortage."



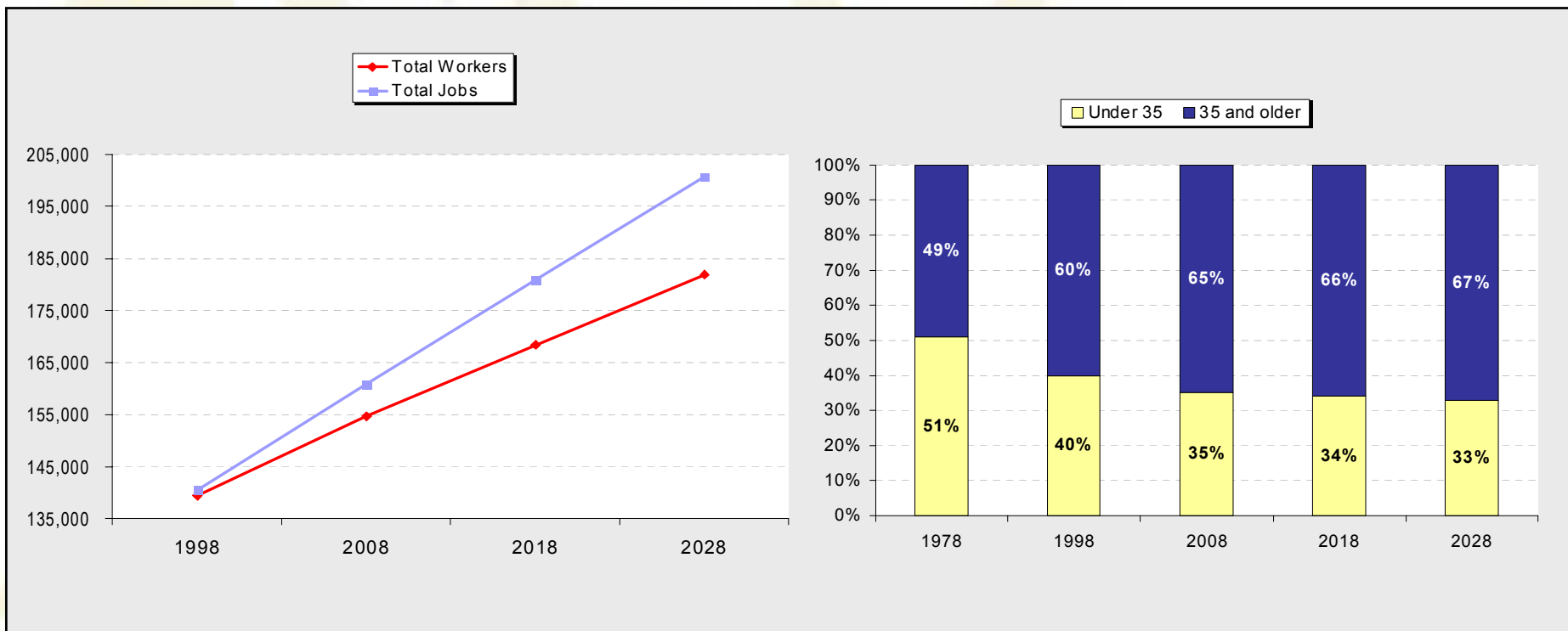
US DOL Assistant Secretary for Employment & Training Emily Stover DeRocco's Remarks at the National Association of Manufacturers Conference in Nashville, TN, April 10, 2002



"And, in spite of the downturn in the technology sector, **the forecast is for a continuing and growing shortage of high tech workers. Overall, by 2010 there may be a shortage of 4 to 6 million workers.** Businesses can't expand without skilled workers; the lack of workers inhibits their ability to compete globally and even to keep up with quality control."

- Remarks by US Assistant Secretary for Employment & Training Emily Stover DeRocco at the Job Corps Alpha Leadership Conference - July 22, 2002 - Washington, D.C

Picture This!



Source: US Census Bureau and Bureau of Labor Statistics, with analysis by National Alliance of Business

Breaking News!

Breaking News

Auto
Mechanics
Scarce

DOWJONES

February 18, 2004

DETROIT -(Dow Jones)- Auto technicians will be in high demand in coming years as the industry faces a shortfall of 35,000 mechanics through 2010.

A report in USA Today said a recent survey showed each dealer will need to hire, on average, two mechanics within the next six months, up from one a year ago.

<http://www.smartmoney.com/bn/ON/index.cfm?story=ON-20040218-000470-0911>

More Breaking News. . .



Glenn Mahone/Bob Jacobs
Headquarters, Washington
RELEASE: 04-071

February 25, 2004



PRESIDENT SIGNS NASA WORK FORCE FLEXIBILITY ACT INTO LAW

NASA Administrator Sean O'Keefe today expressed his appreciation to the President for signing into law a new act giving NASA greater flexibility to restructure and revitalize its work force. President George W. Bush yesterday signed the NASA Flexibility Act of 2004.

"strengthening human capital" is one of NASA's top management challenges. The agency's over-60 science & engineering work force outnumbered its under-30 employees by nearly 3-to-1.

The Challenge

Firms themselves know *little about the nature and magnitude of the investments* they make in human capital, and they *know even less about the effectiveness of those investments.*

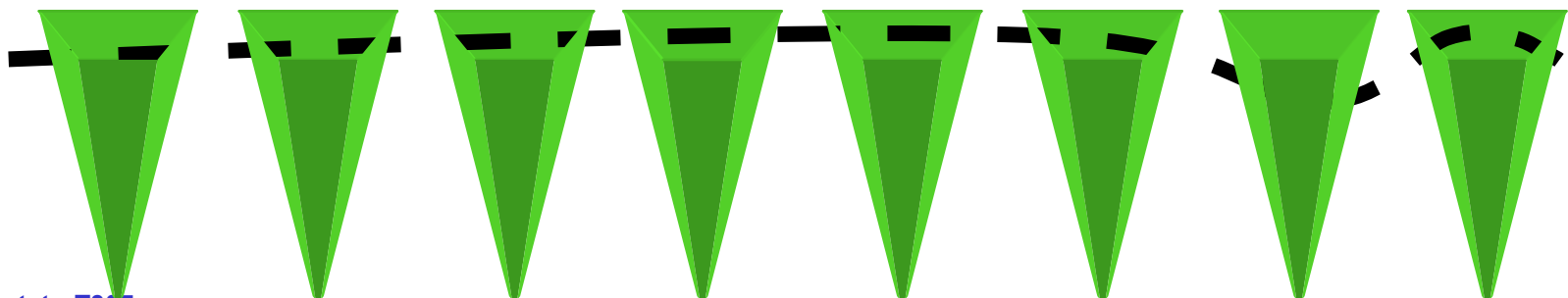
The New Relationship: Human Capital in
the American Corporation (2000)

Margaret M. Blair, editor,
Thomas A. Kochan, editor

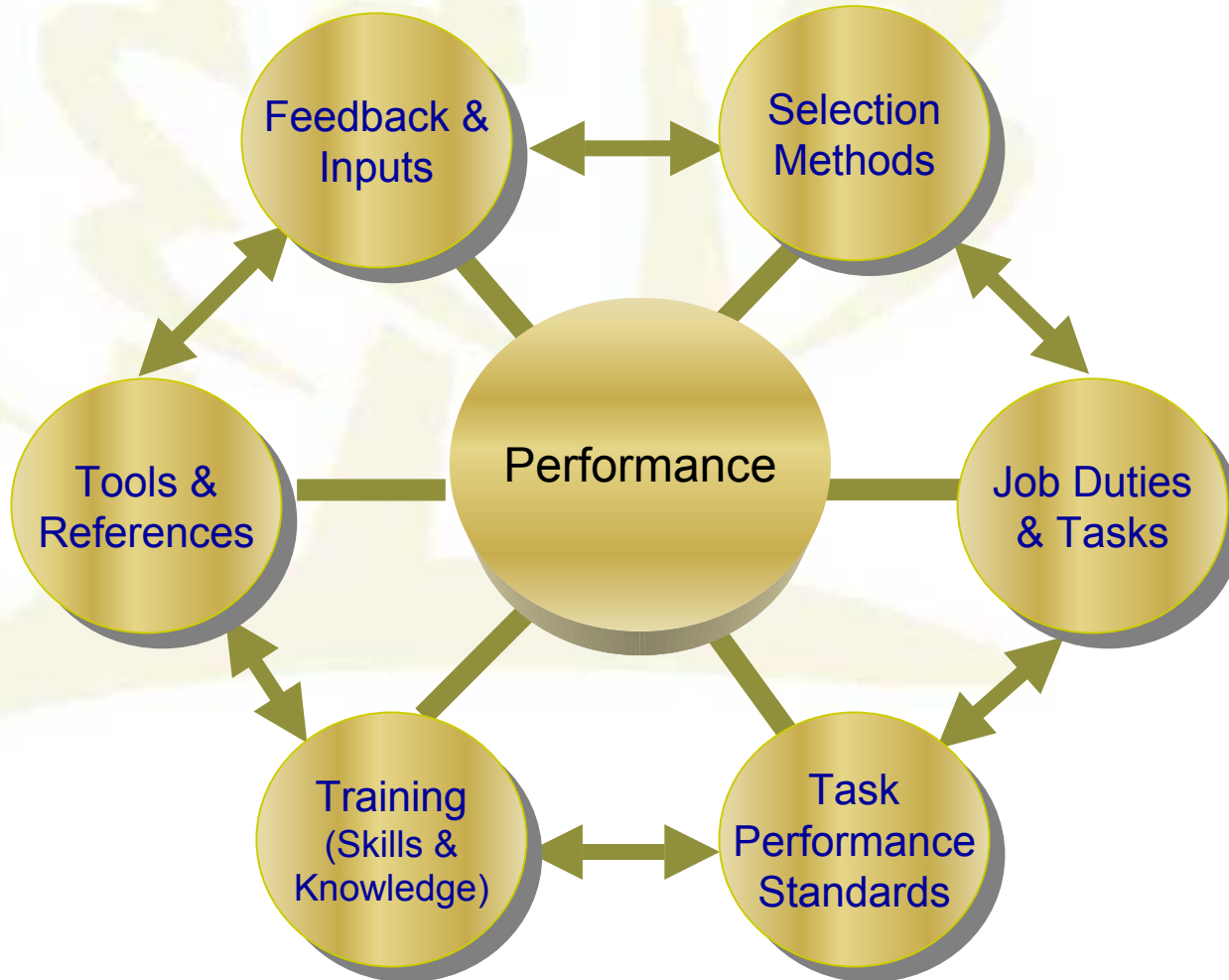
New Perspective, Fresh Approach

Human Performance Technology (HPT) – Integrated, Systematic Response –

- Changes system in such a way that the system is improved in terms of the achievements it values.
- Systems view of performance gaps: analyze both gaps and systems, and design cost-effective and cost-efficient interventions based on analysis of data, scientific knowledge, and documented precedents.



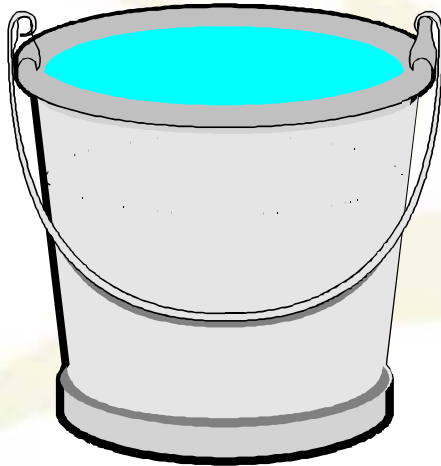
Performance Wheel – HPT Model



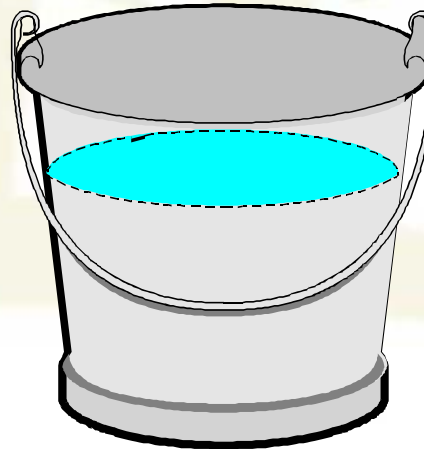
Source: www.performancetechnology.com

Human Performance Technology Asks:

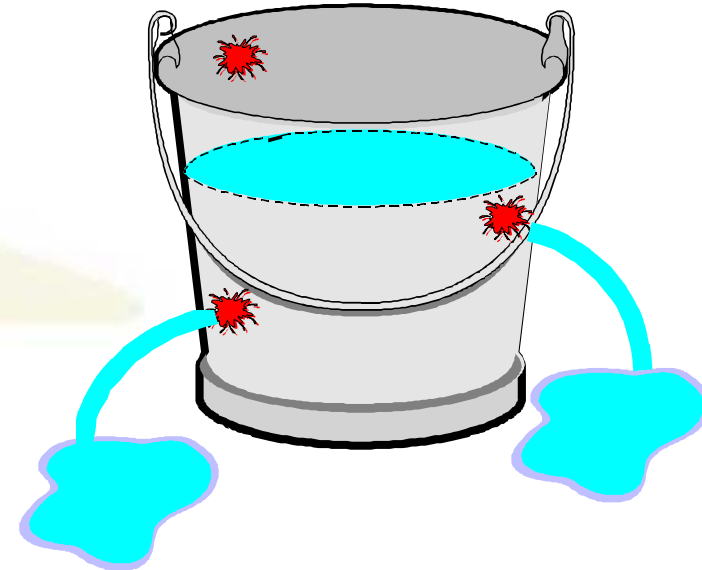
What's the Cost of Non-Performance?



What is our
Potential
Capacity?



What is our
Performing
Capacity



Limiting Factors =
Waste

Costs of Non-Performance

Retention / Turnover

State of Iowa calculates it costs \$113,296 to replace a state employee making \$64,450 per yr



State of Iowa, Human Resource Management, Staffing Decision Guide, May 2001, pg 7
<http://www.state.ia.us/government/dgs/Purchase/ContractingGuide/Staffing%20Guide%20Manual.pdf>

1% change in turnover can have a \$1.25 million impact on an organization employing 10,000

Source: Employment Policy Foundation, *hrbenchmarks*, Dec 2, 2002

Cost of Non-Performance

Attraction Analysis

1. applicant's experience, including efficiency of processing
2. effectiveness of interviewing
3. perceived competitiveness of compensation
4. reasons applicants accepted/rejected the job offers

Attraction Analysis - Example

NEW STAFF RECRUITMENT FEEDBACK SURVEY 2002
University of Melbourne, Workplace Relations Unit

<u>Attraction</u>	<u>Yes (%)</u>	<u>No (%)</u>	<u>Awareness</u>	<u>Yes (%)</u>	<u>No (%)</u>
Career Opportunities	55.5	44.5	Advertisement	39.3	60.7
Work Environment	51.7	48.3	Web	31.3	68.7
Job Security	46.4	53.6	Contact (associate/ colleague)	24.2	75.8
Location	31.8	68.2	Contact (friend)	12.8	87.2
Pay/Remuneration	28.4	71.6	Search company	0.9	99.1
Prestige	23.2	76.8	Professional email networks	1.9	98.1
Hours	23.2	76.8			
On-site Facilities	15.6	84.4			
Family Friendly Policies	9.5	90.5			
Employer of Choice	0.9	99.1			

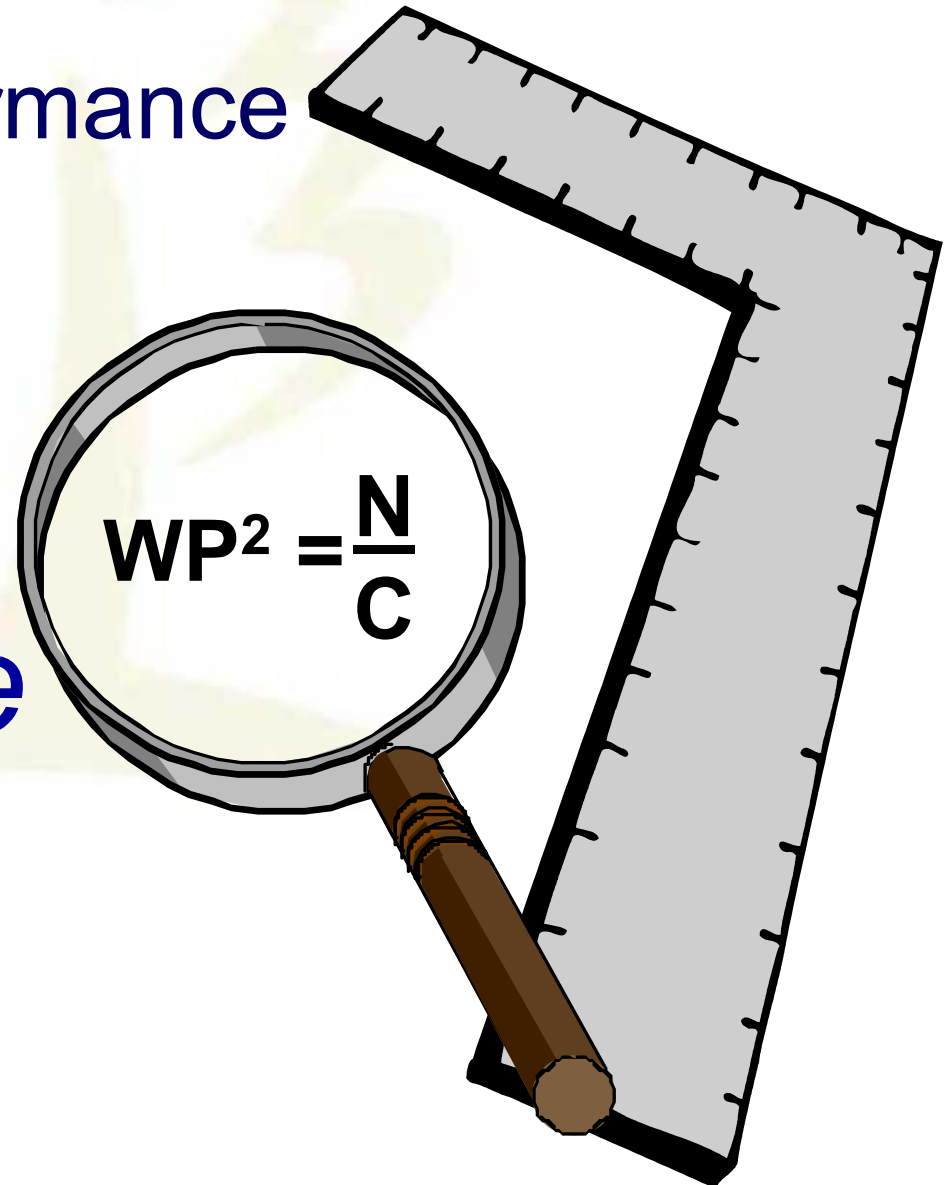
18 Questions overall: probed time-to-interview, time-to-hire, satisfaction with process, etc.

Individuals hired during the period 1 April to 9 December 2002,
N=211 (34% response rate)

Cost of Non-Performance

Critical, new metric:

*Workforce
Performance
Potential*



Costs of Non-Performance (cont'd)

About \$5.6 billion to \$16.8 billion is wasted annually on ineffective training programs

“American industry is spending billions and billions on training programs and doing no evaluation of their effectiveness. You have to measure it.”

- Cary Cherniss, Rutgers University



The Kirkpatrick Model

Level	Type of Measure	Focus
1 Reaction	Satisfaction	Learner satisfaction with the program
2 Learning	Learning, Attitudes	Principles, facts, techniques
3 Behavior	Behavioral change	Changes in job behavior
4 Results	Results	Tangible results – cost, quality, quantity

- **Study of 15 countries in the Organization for Economic Cooperation and Development**
- **Majority believe employee training produces "productivity improvements, greater workforce flexibility, savings on material and capital costs, improved quality of the final product or service, and a more motivated workforce."**

BUT...most companies have not measured the cost benefits or ROI

No other workplace issue on which so much money is spent with as little accountability.

Situation at Merck:

**1986 – \$25
million spent
on training**

**1991 - \$70
million spent
on training**

Myths & Realities No. 16: Return on Investment in Training, Bettina L. Brown, Center on Education & Training for Employment, Ohio State University, ERIC/ACVE, 2001

Cost Benefit vs ROI

$$\text{B/C Ratio} = \left(\frac{\text{Total Benefits}}{\text{Program Costs}} \right)$$

$$\text{ROI} = \left[100 \left(\frac{\text{Total Benefits} - \text{Program Costs}}{\text{Program Costs}} \right) \right]$$

Total benefits	\$7,760,00
Program costs	\$59,080
B/C ratio	129.49
ROI	12.8

Source: **Measuring Return on Investment (ROI)**, David P. Wegenast, D.S.W., Proceedings of the Fourth Annual National Human Services Training Evaluation Symposium, May 23-25, 2001, UC Berkeley

"Doing training ROI analysis is a fancy way of doing cost-benefit analysis."

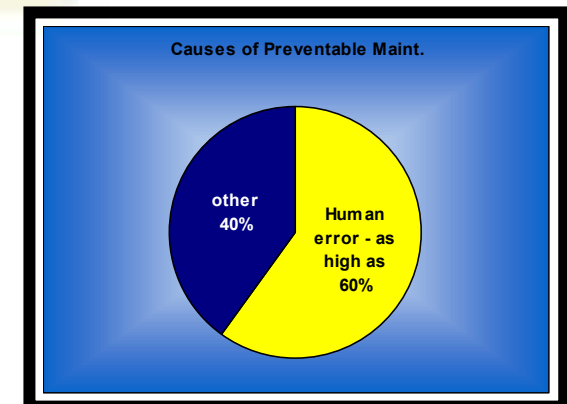
Olga Bulatova, Direct of Ernst & Young Professional Education Center in the CIS Countries

Cost of Non-Performance (cont'd)

"HSB Reliability Technologies has analyzed hundreds of manufacturing facilities over the years. ***One of the company's findings is that 40% to 60% of all maintenance at plants was unnecessary.***

Of those "preventable maintenance" actions within the purview of the production/operations and maintenance department, 30% to 60% could be attributed to human performance deficiencies. . .lack of proper training, insufficient training, or inadequate human factors engineering (job aids, incentives, and environment)."

- Source: *Cement Americas* magazine, July 1 2000



Cost of Non-Performance (cont'd)

Employee Orientation / Onboarding

* Impact on Retention

New employees that went through a structured orientation program were **69% more likely to be with the company after 3 years** than those who did not.

Source: Corning Glass Works, 1981, "Putting Out the Welcome Mat," by Rebecca Ganzel, Training Magazine, March 1998, www.trainingmag.com

* Impact on Productivity

Employees who are carefully oriented to both the company and the job **reached full productivity two months sooner** than those who weren't.

Source: Texas Instruments, 1981, "Putting Out the Welcome Mat", by Rebecca Ganzel, Training Magazine, March 1998, www.trainingmag.com

Shazam!



Cost of Non-Performance (cont'd)

Percentage of Empowered Workforce

Median productivity

0%-25%

\$150,000

26%-75%

\$165,000 (110%)

76%-99%

\$180,000 (120%)

100%

\$237,000 (158%)



Source: Industry Week 1999 and 2001 Census data

Value Proposition

- ◆ Turnover Cost for an \$8/hour employee is \$9,445.00*
 - ◆ Average Turnover in a 1000 employee organization is 21% or 210 employees
 - ◆ Realized human asset value loss ($210 \times \$9,445 = \$1,983,450$)
 - ◆ Inclusion of mid-level, technical, and senior management significantly increase this loss.
- ◆ The average “Settlement” for a Sexual Harassment Charge is \$40,000
- ◆ The cost to an employer per case of disabling injury averages \$29,000.

*Average of 15 studies

Source: Work Institute © 2003

Value Proposition

Potential Payback:

Lower Turnover from 21% to 16%

$$21\% (210) - 16\% (160) = 50 \quad 50 \times \$9445 = \quad \$472,250$$

Eliminate 1 Sexual Harassment Charge \$40,000

Eliminate 2 Workers Comp. incidents \$58,000

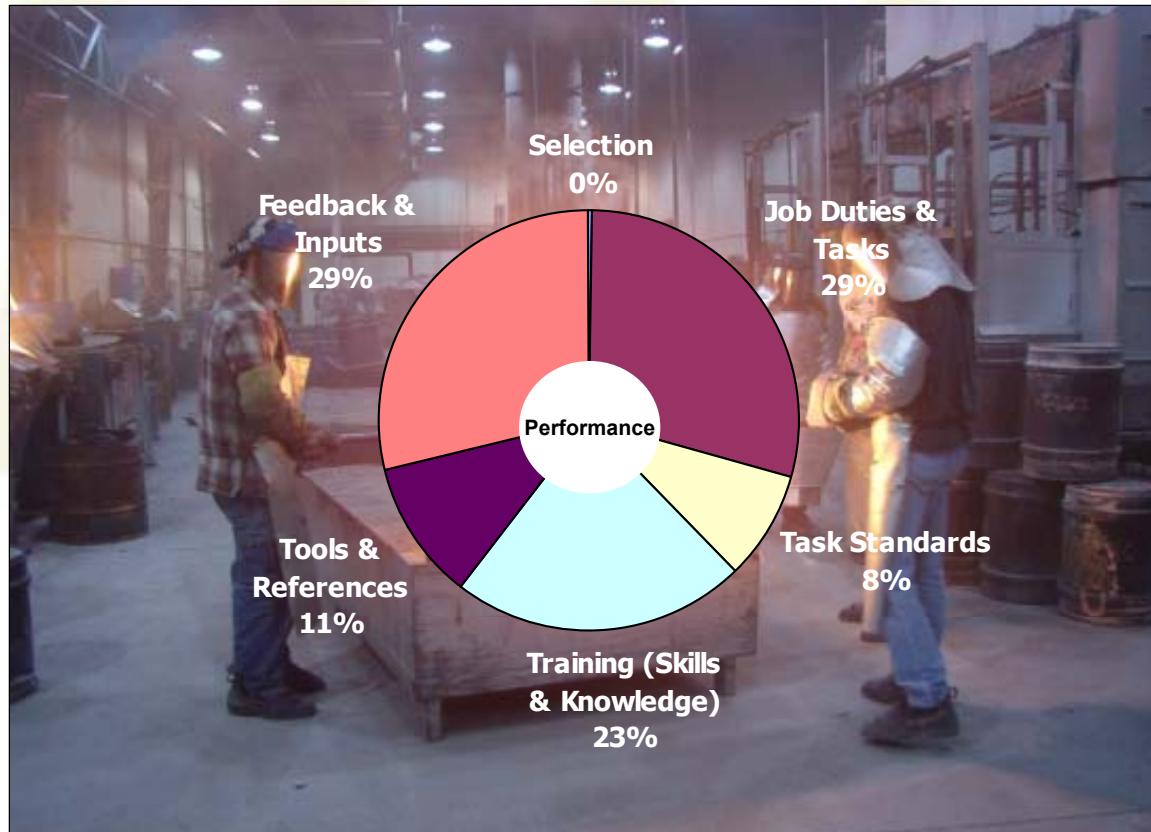
Average Annual Payback \$570,250

>10 x investment \$50,000

Why Focus on Human Capital?

- ◆ **Work has changed**: high-tech, knowledge intensive, dynamic, lean, outsourcing
- ◆ **Workforce has changed**: demographics, aging, skill-gaps, top-heavy, temps, loyalty
- ◆ **Solutions are expensive**: recruiting, incentives, teams, training, high-performance work systems

Devise a Strategy – Integrate Solutions





An ROI Lens. . .

ROI Perspective

- ◆ Specify desired outcomes beforehand
- ◆ Capture baseline data
- ◆ Establish measurement criteria – what & when
- ◆ Identify potential variables

Cost Avoidance ROI

Business Benefits ROI

For More Information. . .



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The logo for Performance Technology Group, Inc. features a stylized 'P' inside a square frame with horizontal lines. The text 'Performance Technology Group, Inc.' is written in a bold, sans-serif font, with 'Performance' in black, 'Technology' in orange, and 'Group, Inc.' in black.

The End

Thank you!