
Getting a Return on Your Testing Investment

29th Annual IPMAAC Conference
SHAPING THE FUTURE
Through Excellence in Personnel Selection
June 22, 2005

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THE MODERN JOB INTERVIEW —

...ONE FINAL QUESTION: WITH WHICH CHARACTER IN *DILBERT* DO YOU IDENTIFY MOST CLOSELY?



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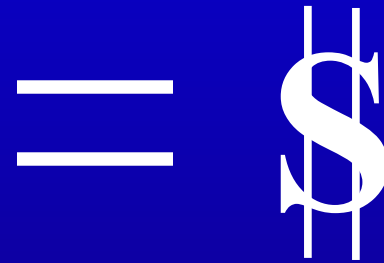
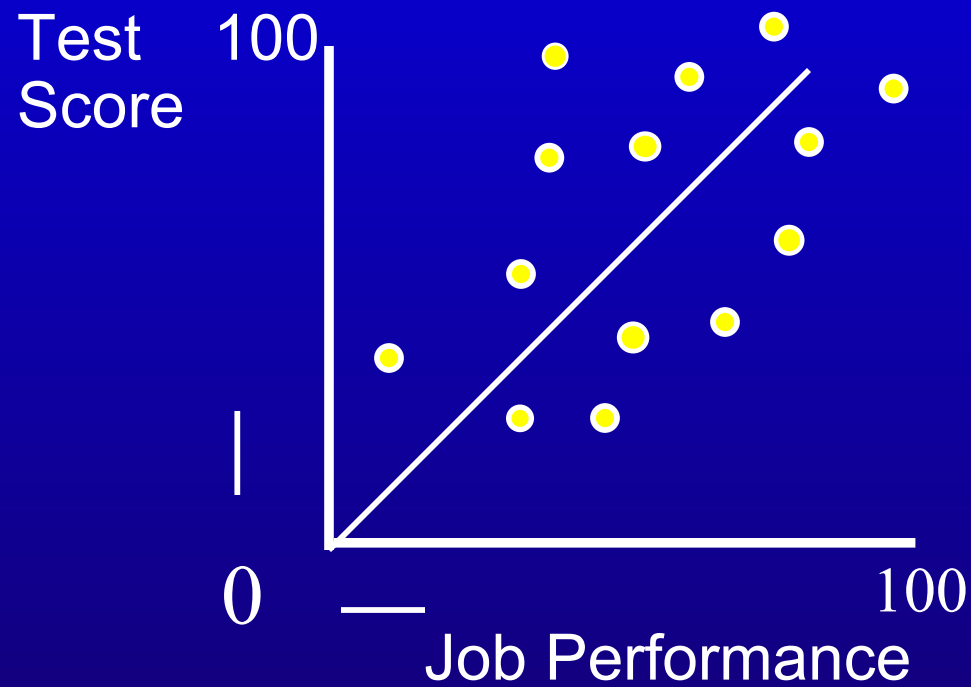
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We Can Do Better!

“It’s a lot more work, but we’ll all be the better for it.”

=> R.J. Harvey, 2005 IPMAAC Keynote Address

Impact of Testing



Personnel Selection is the Ultimate H.R. Technology

- The purpose of technology (or innovation) is to improve the way we do business: valid hiring tests do this
 - Valid selection vs. “Quick and Dirty” = a \$5,000 to \$25,000 advantage
 - Fairness and job-relatedness increase access for all persons, staving off favoritism in hiring
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Return on Investment Example: Selection for Dispatchers

- 50 positions in work unit
- Example of one position of turnover caused by dismissal after 10 weeks of training
- Terminated person would not have been hired if new test had been place
- \$20/hour total salary = \$8,000 lost just in salary
- Cost of testing = \$1,800, so the R.O.I for this one event is: ($\$8,000 - \$1,800 = \$6,200$ [potential savings], “gain” or return then is $\$6,200 / \$1,800 = 344\%$)

Return on Investment

- What is it?
 - Why should we care about it?
 - What is the investment?
 - What is the return?
-

Return on Investment Involves

- Investment: buying or doing something with \$
 - A process or use for what was acquired
 - Tracking of costs to buy
 - Tracking of costs to use
 - Tracking of outcomes: did it payoff?
 - Reporting (proclaiming) the results
-

Why Not to Care About Return on Investment

- Our leaders are frequently influenced by the slogan of the month (e.g., reinventing government, best practices, better-faster-cheaper)
 - At the time, the slogan may seem to make sense (or is it cents? - what currency does it really have?)
-

Why Care About Return on Investment Now

- It makes good business sense
 - It makes good professional sense
 - It makes for improved customer relations
 - Things that are shown to work get rewarded
-

Areas of Investment (administrative)

- Job Announcement
 - Exam scheduling
 - Test scoring and statistics
 - Results notices
 - Referral for vacancies
 - Maintaining eligible lists
 - Communication with clients
 - Appeals, grievances, litigation, and other complaints
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Areas of Investment (developmental)

- Job analysis
 - Test development
 - Purchasing tests, working with vendors
 - Test validation research
 - Other research supporting specific tests or testing programs
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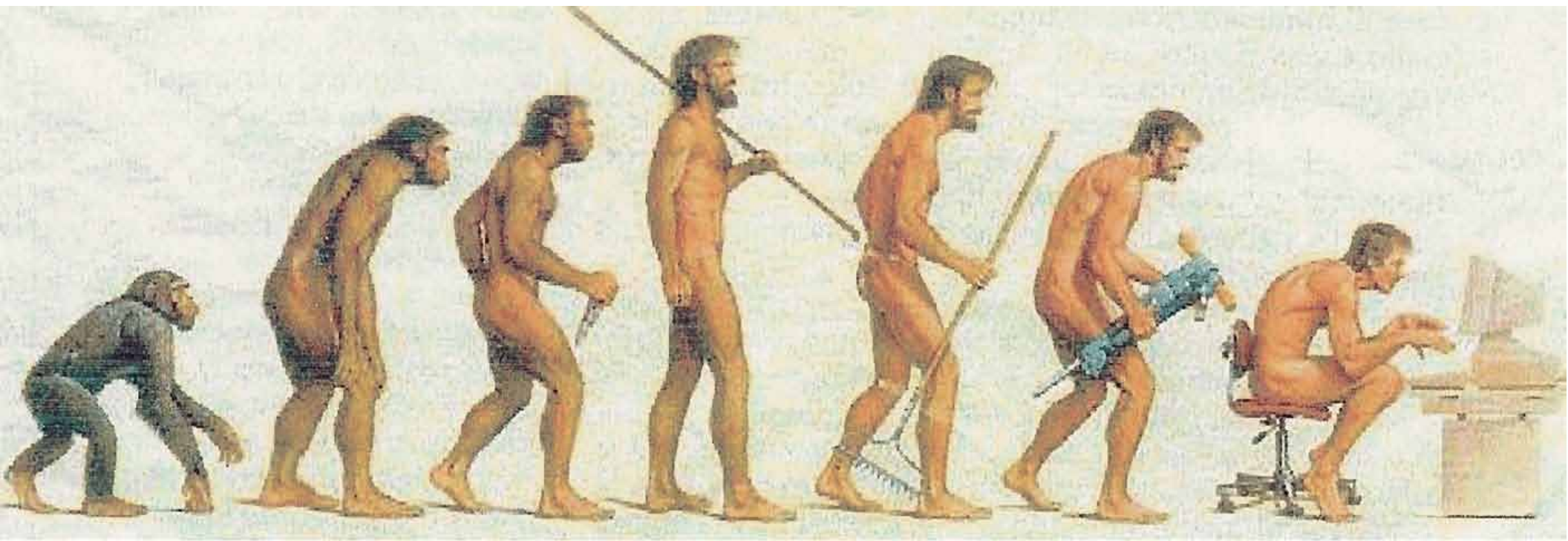
Cost Estimates Using Valid Tests

- \$20 per examinee total cost
- \$10 per examinee in administrative cost
- \$10 per examinee in research, design, and acquisition

- Range in costs
 - ▶ \$1 - \$5 for basic clerical positions
 - ▶ \$10 - \$300 for administrative or technical positions
 - ▶ \$10 - \$500 for supervisory positions
 - ▶ \$200 - \$2,500 for management or executive positions

But, What's the Trend in Hiring?

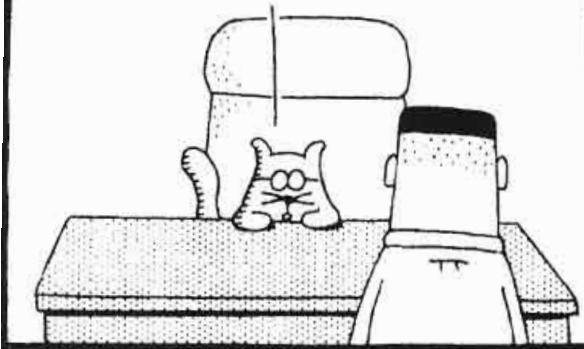
- Better
 - Faster
 - Cheaper
-



DILBERT

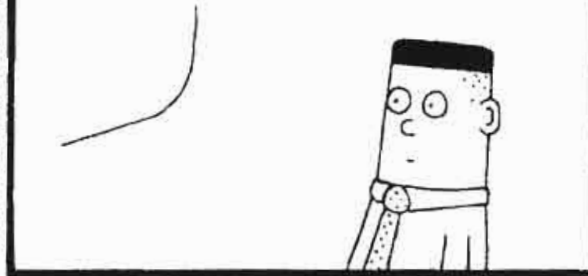
CATBERT: EVIL H.R. DIRECTOR

WE'RE ALMOST
OUT OF KITTY
LITTER.



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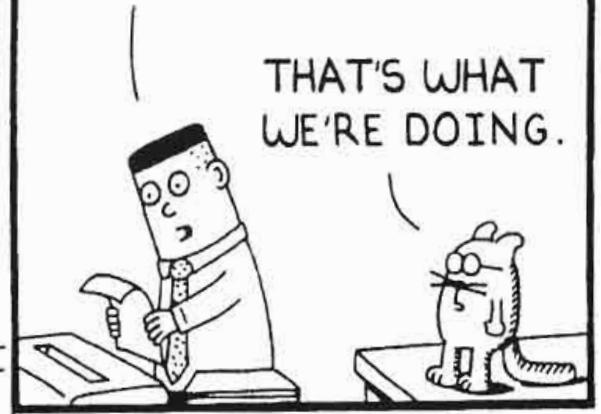
GATHER ALL THE
RÉSUMÉS WE GOT
THIS WEEK AND
RUN THEM THROUGH
THE SHREDDER.



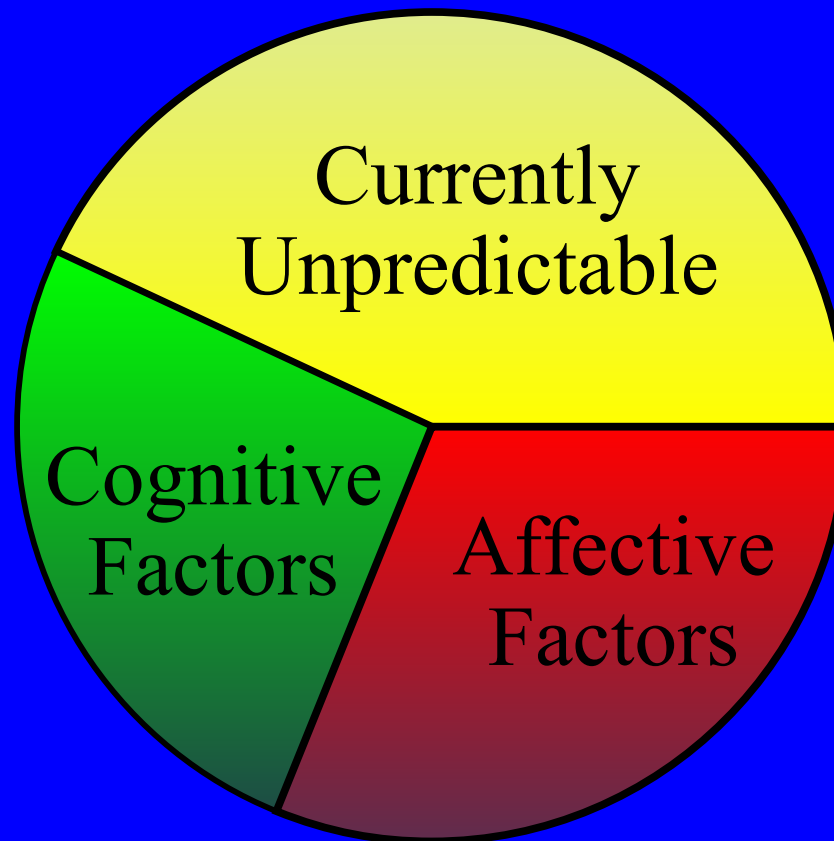
SHOULDN'T WE BE
MATCHING THESE
WITH OUR OPENINGS?

THAT'S WHAT
WE'RE DOING.

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Cognitive and affective assessment and job success



Item analysis for sample question

What has given you the most difficulty in any job that you have had?

- A. A supervisor who gave inconsistent direction.
- B. Having to deal with too many insignificant details.
- C. Disagreements or gossip amongst co-workers.
- D. A supervisor who watched over my work too closely.

	A	B	C	D
Upper	20	10	10	60
Middle	20	40	10	30
Lower	30	50	10	10

**But Good Tests Are
Expensive. Where Will We
Get The Money?**

Cost Containment Example: 7,400 Employees in 92 Job Classes

Administrative Savings Through Validation and Consolidated Testing

- 92 separate recruitment/basic exams: \$294,000
- 15 job groupings/more thorough exams: \$117,000
- 1 group/sophisticated exam: \$46,000



**“Any other qualifications besides being the lesser
of two evils?”**

Relative Validity of Test Types

■ Work sample tests:	.54
■ General mental ability tests:	.51
■ Structured interviews:	.51
■ Job knowledge tests:	.48
■ Assessment centers:	.36
■ Biodata:	.36
■ Job experience (years):	.18
■ Training and experience ratings:	.11

Return Example: Employees

- 100 positions
 - 20% turnover
 - \$20,000 average salary
 - \$3,000 replacement cost
-

Return Example: Hiring Process

- Assumes valid replacement
- Assumes candidate and employee variability
- Assumes management commitment to cost control

Initial Staffing

Group	Productivity Ratio	Starting Staff	Work Units
A	3.0	10	30
B	2.5	20	50
C	2.0	40	80
D	1.5	20	30
E	1.0	10	10
		100	200

\$2,000,000 payroll

Year One

Group	Ratio	Starting Staff	Lose	Hire	End Staff	Work Units
A	3.0	10	2	10	18	54
B	2.5	20	4	4	20	50
C	2.0	40	8	0	32	64
D	1.5	20	4	0	16	24
E	1.0	10	2	0	8	8
		100	20	14	94	200

Savings = \$3,000 x 6 (fewer hires) + \$20,000 x 6 (salaries)

\$138,000 in first year!

Year Two

Group	Ratio	Starting Staff	Lose	Hire	End Staff	Work Units
A	3.0	18	4	10	24	72
B	2.5	20	4	4	20	50
C	2.0	32	6	0	26	52
D	1.5	16	3	0	13	19
E	1.0	8	2	0	6	6
		94	19	14	89	199

Savings = \$3,000 x 5 + \$20,000 x 11

\$235,000 in second year

Year Three

Group	Ratio	Starting Staff	Lose	Hire	End Staff	Work Units
A	3.0	24	5	10	29	87
B	2.5	20	4	4	20	50
C	2.0	26	5	0	21	42
D	1.5	13	3	0	10	15
E	1.0	6	1	0	5	5
		89	18	14	85	199

Savings = \$3,000 x 4 + \$20,000 x 15

\$312,000 in third year

Year Four

Group	Ratio	Starting Staff	Lose	Hire	End Staff	Work Units
A	3.0	29	5	10	33	99
B	2.5	20	4	4	20	50
C	2.0	21	4	0	17	34
D	1.5	10	2	0	8	12
E	1.0	5	1	0	4	4
		85	16	14	82	199

Savings = \$3,000 x 3 + \$20,000 x 18

\$369,000 in fourth year

Year Five

Group	Ratio	Starting Staff	Lose	Hire	End Staff	Work Units
A	3.0	33	6	10	37	111
B	2.5	20	4	4	20	50
C	2.0	17	3	0	14	28
D	1.5	8	2	0	6	9
E	1.0	4	1	0	3	3
		82	16	14	80	201

Savings = \$3,000 x 2 + \$20,000 x 20

\$406,000 in fifth year

Return Example: Five Year Results

- Workforce gradually declines from 100 to 80
 - Net cost savings of \$1,460,000
 - No reductions in service level
-

**But How Can You Find The
Time?**

Recruitment Schedule

<u>January</u> Police Sergeant Groundskeeper	<u>February</u> Fire Engineer Receptionist	<u>March</u> Summer Workers Dispatcher
<u>April</u> Police Captain Secretary	<u>May</u> Fire Captain Clerical Supervisor	<u>June</u> Police Recruit
<u>July</u> Battalion Chief	<u>August</u> Maintenance Worker Basic Clerical	<u>September</u> Management Analyst Student Intern
<u>October</u> Firefighter	<u>November</u> Administrative Assistant	<u>December</u> Accountant Park Ranger

Longer Term: Do Assessments Well

- Communication with everyone
 - Implement really effective examinations
 - Recruitment schedule planning
 - Seize the opportunity to hire the best
 - Proclaim the good (ROI) results! Make presentations, write articles
 - Keep everyone enthused with the great results of using good tests in hiring
-

**We Have the Best Story
Around. We Need to
Discover and Develop the
Best Ways to Tell it.**

Contact for more

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