

THE BUSINESS CASE

FOR LOGIC BASED TESTING

The basic business case:

As a long term strategy, using logic based testing can positively impact the bottom line by increasing the organization's productivity per staffing dollar

HOW?

Three Categories where Logic Based Testing Can Add Value

- Validity
- Economy
- Strategic value

VALIDITY

THE TRUTH ABOUT VALIDITY

- Validity is about ***business value***
 - Typically thought to relate to legal defensibility
 - Science of testing predates legal applications
 - Uses by US Army, 19th Century
 - Primary concern of validity is testing for the correct critical skills
 - Validity is about identifying those who have the greatest potential to succeed in the org

Validity = Value

- ❖ Less validity means a **reduced** probability that a particular hiring decision will result in a new hire who is a valuable contribution to the organization
- ❖ Greater validity means an **increased** probability that a particular hiring decision will result in a new hire who is a valuable contribution to the organization

SHORT TERM COSTS

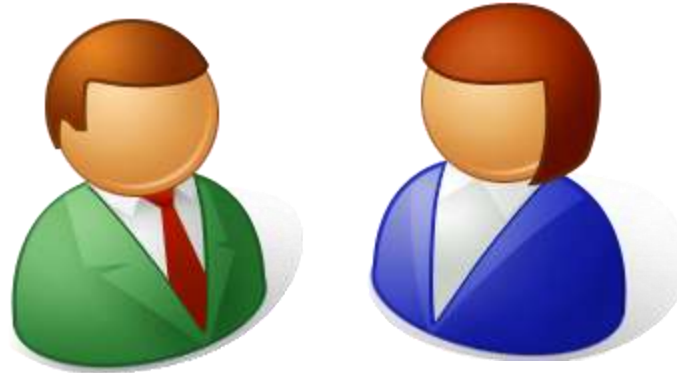
- Assume a vacancy in a position paying \$3k/month
- A typical strategy of reviewing resumes and then interviewing will require \$18k-\$27k to put the right person in the job
- High-validity testing, like logic based testing, would require \$6k-\$9k to put the right person in the job
- That's a short term savings of \$12k-\$18k

SHORT TERM COSTS

Another View

- Assume a vacancy in a position paying \$3k/month
- Organizational investment to fill the job = \$6k-\$9k
- If you double the probability of a good new hire by switching from poorly validated tools to logic based testing, you double your return on that investment

Validity = Value



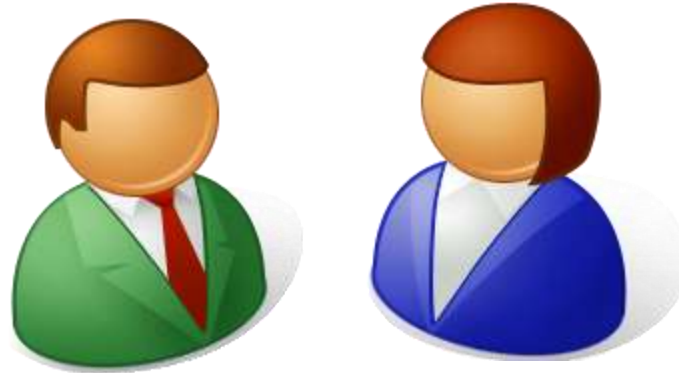
What HR says

“You need a valid test so that we can defend it if we get challenged.”

What the Hiring Manager *hears*

“HR is making me jump through hoops and waste valuable time because of some stupid law.”

Validity = Value



What HR *should* say

“You need a valid test so that you can identify those applicants who have the greatest potential to succeed in the job.”

What the Hiring Manager *hears*

“I’ll save money and get a better employee if I use a valid test.”

ECONOMY

EFFICIENCY & EFFECTIVENESS

- Logic based testing uses a multiple choice format
- Large numbers of candidates can be testing with minimal staff time
 - Easy and almost instantaneous to score
 - A few trained clerical staff can administer the exam
 - Results are immediate and easy to interpret
- No other testing method has as rich a blend of effectiveness (i.e. validity) and efficiency
- Other methods that are equally efficient to administer do not save money, because they are ineffective

STRATEGIC VALUE

- Maximize the applicant pool
 - The ability to test large numbers of applicants efficiently & effectively makes this possible
- Maximize the quality of the eligibility list
 - maximizing applicant pool + highly valid testing = maximizing the quality of the eligibility **list**
- Maximize the quality of the eligibility list = hiring high performers
 - If you fill your list with high performers, you will hire high performers
- A long term strategy of hiring high performers = improved productivity and increased creativity in the workforce
- Logic based testing is a uniquely qualified tool for this purpose due to its mix of efficiency and effectiveness

- There is a correlation between increased selection validity and increased productivity
- Logic based testing is one of the most valid tools available
- Increased productivity = \$\$\$
- A study by Watson Wyatt suggests that using a highly valid testing method, like logic based testing, can increase stockholder value of a private sector organization by nearly 2%-3%.
- In public sector terms, that's like getting 2%-3% more value out of each staffing dollar

Strategic Value

- A long term strategy of using logic based testing could increase the value of each dollar of payroll by 2%-3%
- Consider the total payroll of your organization
- How much bottom line impact does that turn out to be?

Case Study

The Accounting Test

- Agency A used the following method for selecting entry-level Accountants
 - Campus job fairs; invite qualified individuals to apply
 - Quick open and close to minimize additional applications
 - Interviews

The ACCOUNTING TEST

- Advantages of the process from the hiring dept perspective
 - Quick: approx 3 weeks from recruitment open to interviews
 - Hiring department has control over the process from beginning to end
 - Hiring department likes most of the candidates they've hired through this process

- HR reviewed the process:
 - the small number of applicants due to quick open and close was
 - minimizing the number of good applicants, and
 - minimizing the possibility of getting a high performer
 - The job fair “pre-screen” had very low reliability
 - Likely screening in some poor candidates
 - Likely screening out some good candidates
 - The interview has equally poor reliability

- Interview was the primary selection tool
 - Consisted of two question types
 - Accounting knowledge questions
 - Pseudo-psychological questions (“if you were a ball what type of ball would you be?”)
 - Latter type are of little value
 - A validation study demonstrated that accounting knowledge did not distinguish the top performers from the mediocre performers
 - Validation study indicated that reasoning and analytical skills were the primary distinction

HR Recommended Changes

- Maximize the applicant pool by advertising heavily and leaving it open for 3 weeks
- Use a multiple choice exam:
 1. Test required level of accounting knowledge (P/F)
 2. Test reasoning skills (ranked)
 3. Invite top candidates, ranked according to reasoning skills, to selection interviews
- HR developed logic based test items for this process

The Results?

- Five weeks from opening of recruitment to Interviews
 - using the multiple choice exams allowed the agency to screen large numbers effectively and efficiently
- Dept claimed they interviewed the best group of candidates they had seen in many years
- Dept bragged about list to other departments
- In the end, four departments hired off that list
- Other departments began asking for a similar testing method