Introduction

- Grace Lee
- Ph.D. in Industrial/Organizational Psychology
- Senior consultant at APTMetrics, a talent management consulting firm based in Darien, CT
- Some of our areas of expertise:
  - Employee Selection
  - Competency Development and Validation
  - Leadership Assessment and Development
  - Performance management
  - 360-Degree Feedback
  - Organizational Surveys
About APTMetrics

Full-service HR process consulting firm comprised of:
  • Ph.D. industrial/organizational psychologists
  • HR professionals
  • IT specialists

Diversity supplier
  • Certified by U.S. Small Business Administration as a WBE
  • Certified by the Women’s Business Enterprise National Council

What sets APTMetrics apart:
  • Professional integrity
  • Evidence-based approach
  • Technical expertise
  • Customer service
Talent Management Challenges in the Towing Industry

- How can you select mariners who “buy-in” and will adhere to new safety management systems?
- How can you identify candidates who are more oriented to work safety?
- How can you hire and retain safe mariners?

**Pre-Hire:**
- Pre-Employment Assessment
- Structured Interview
- Realistic Job Preview

**Post-Hire:**
- Training & Development
- Employee Surveys
- 360-Feedback
- Performance Management
- Exit Surveys
Safety Research and Statistics

- **Business Impact**
  - $183 billion annual cost for 3.2 million disabling injuries
  - Economic impact of each disabling nonfatal work injury: $48,000 (National Safety Council)
  - 1.2 million nonfatal occupational industry/illness cases requiring away days to recuperate
  - 5,804 work-related fatalities, 4.1 million nonfatal occupational injuries and illnesses

- **Towing Industry Safety Statistics**
  - Average number of fatalities per year = 8 per 100,000 (2007-2013)
  - 96 injuries to crew in 2013 (vessel class and service were either ‘towing vessel’ or ‘barge’)
    - 28% were serious or severe
Talent Acquisition Funnel

Attract Candidates (Post, Recruit, Source)

- Minimum Qualifications
- Preferred Qualifications
- Pre-Employment Assessments
- Structured Interviews

Narrowing the Funnel

Hire!
Pre-Employment Assessments

• Defined as a standardized series of problems or questions that assess an applicant’s knowledge, skills, abilities, or other characteristics

• Different Types of Pre-Employment Assessments
  • Biographical Data
  • Cognitive Ability Tests
  • Integrity Tests
  • Interviews
  • Job Knowledge Tests
  • Personality Tests
  • Physical Ability Tests
  • Work Samples and Simulations
Benefits of a Pre-Employment Assessment

- Linked to key competencies required for success on the job
- Screens out individuals in a consistent and fair way
- Can provide a realistic job preview for candidates
- Helpful for recruiters when there is a large volume of applicants, especially for entry-level jobs
- Improves retention rates and reduces associated costs
Benefits of a Pre-Employment Assessment

• Effect of Pre-Employment Assessment
  • Research shows that employees’ safety motivation and conscientiousness are linked to reduced accident levels
  • Safety motivation of hired employees correlates very strongly with safety performance

• Consider impact on:
  • Job performance: Quality/efficiency, reduced costs due to errors and related rework, customer satisfaction
  • Safety costs: Direct and indirect (injuries, time lost, Worker’s Compensation)
  • Turnover: hiring/training costs, workload burdens, loss of productivity, loss of knowledge
Selection & Assessment

• How do you go about developing a pre-employment assessment?
  
  • **Job Analysis** – Gather background information, observe the job, conduct interviews and focus groups to identify the most important and critical knowledge, skills, and abilities needed to be successful

  • **Validation** – Analyze test data and performance data to ensure that the test predicts job performance (and safety performance!)
Client Example – Pre-Employment Assessment

• Created an online assessment for workers in a large food services and facilities corporation
  • Culinary, Environmental Services, Food Service, and Maintenance

• Part of the assessment measured **Safety Orientation** in order to reduce likelihood of workplace accidents and improve compliance

• Employees who scored higher on **Safety Orientation** also had higher safety performance
Client Example - Turnover

- Employees who scored higher on the overall assessment were less likely to turnover
  - In the validation sample (N=407), of the 48 who left in a 7-month period, 37.5% failed the assessment
Client Example - Business Impact Analyses

• Follow-up business impact analyses conducted internally by client showed that locations that use the new assessment have 32% less turnover compared to locations that do not use the new assessment (N=20,351)
  • Retention rate for applicants who took and passed the assessment was 66.09%
  • Retention rate for applicants who did not take the assessment was 49.60%
Claim Costs

Average Claim Costs by Safety Score

- **Top Third**: $16,609
- **Average Claim Cost**: $2373 (N = 7)

- **Middle Third**: $12,595
- **Average Claim Cost**: $1260 (N = 10)

- **Bottom Third**: $60,102
- **Average Claim Cost**: $5464 (N = 11)

Employees who had higher claim amounts tended to score lower on the Safety scale.

If assessment is used, project that new hires will be less likely to file a claim and/or claim will be less costly.
Examples of Assessments
Enhanced Mobile Interface

Smart Phone Interface

1) In which one of the following areas do you most excel?

A. Helping others to solve their problems
B. Setting challenging goals for myself
C. Determining priorities for getting things done
D. Organizing many details
E. Something other than the above options

Next

1 of 13

Tablet Interface

1) In which one of the following areas do you most excel?

A. Helping others to solve their problems
B. Setting challenging goals for myself
C. Determining priorities for getting things done
D. Organizing many details
E. Something other than the above options

Next
Situational Judgment (SJT)

Use the following information to answer the question below.

BACKGROUND: You manage a team of four people, including three Project Managers (PMs) and an Administrative Specialist who supports all three PMs equally. The team has been working together very productively for over a year. However, the Administrative Specialist has recently experienced some challenges while working with one of the PMs on a current project.

SITUATION: After listening to the PM's voicemail, you look up to see the Administrative Specialist walking into your office. She is clearly upset. You close your office door, ask the Administrative Specialist to sit down, and she tells you the following:

"I'm sorry for dropping in like this, but I was hoping you could help me figure out an issue I'm having with one of the PMs. This PM asked me to work on several projects, but every time I try to help or make suggestions, he gets annoyed or impatient. He's rejected every single idea I've had. Basically, if it's not his idea, it's not a good idea. He just wants me to do exactly what he tells me to do, even though I know I can make some significant improvements to his projects.

"I've tried my best to work with him, but I don't think he really wants my help. I'd much rather work with the other two PMs - they respect my skills and opinions and treat me like a member of the team.

"Do you have any advice?"

7) What is the BEST guidance you can give the Administrative Specialist?

A) Tell the Administrative Specialist to do her best to ignore the PM's negative attitude. The Administrative Specialist needs to help all members of the team, even the ones who are difficult to work with.

B) Encourage the Administrative Specialist to continue to bring these types of issues to you in the future. It is important to address conflicts like this before they negatively affect her or the team.

C) Encourage the Administrative Specialist to handle issues like this on her own, rather than coming to you. It is important for her to learn how to resolve conflicts without involving her manager.

D) Explain to the Administrative Specialist that she should do as the PM asks rather than offering suggestions, as he does not seem willing to listen.
**Situation 1**: Your teammates think that the deadline is unrealistic, and that they will not be able to complete the project on time if they follow all existing policies and procedures. While you agree that they may not be able to meet the deadline, you believe they are up to the challenge.

**Situation 2**: You are halfway through the project and realize that it cannot realistically be completed on time.

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**Situation 1**: What is the BEST thing you can tell your teammates?

- A. “I know this is a difficult goal given our current policies. If you think we can’t do it, I’ll go back to my manager and tell him that.”
- B. “I know we can achieve this goal and I will support you in however we get there.”
- C. “We need to follow policies and procedures to help us maintain high quality, even if it means that we don’t complete the project on time.”
- D. “It’s important that we finish the project on schedule, and we will do whatever is necessary to get it done.”

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**Situation 2**: What is the MOST effective action you can take?

- A. Break down the project into specific steps and eliminate unimportant steps so that you can meet the deadline.
- B. Establish a more reasonable timeline and then negotiate with your boss to change the project deadline.
- C. Identify steps to improve your efficiency at tasks that are negatively affecting your ability to complete the project on time.
- D. Tell your manager that you cannot meet the deadline and ask for an extension.
High Fidelity Cognitive Assessment

SelectionMetrics Demonstration

RULES FOR ACCEPTING MERCHANDISE AND CREDIT CARD VOUCHERS

In the past, APTMetrics has received many improperly completed merchandise and credit card vouchers. The errors include vouchers without signatures and vouchers where the individual item prices do not add up to the total price. Vouchers with errors should not be accepted.

To reduce the number of merchandise and credit card vouchers that are returned by the Business Office, please follow these rules:

1. Make sure all vouchers are signed and include a date.
2. Make sure the individual item prices add up to the total amount on merchandise vouchers.
3. Only accept APTMetrics' issued merchandise vouchers. Refuse all merchandise vouchers that are not issued by APTMetrics.
4. Ensure that the invoice number and the customer’s driver’s license number (DL#) are written on merchandise vouchers.
5. Only accept credit card vouchers from TrueCredit, CreditWorld, or SuperCard credit cards.
6. Do not accept credit card vouchers from expired credit cards: The voucher’s date (Date) has passed the credit card expiration date (Card Exp. Date).

Please use the information in this merchandise voucher to answer the question below.

Date: 07/17/2012
Invoice Number: 1459
APTMetrics
One Thordal Circle
Darien, CT 06820

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>$127.64</td>
</tr>
<tr>
<td>Item 2</td>
<td>$73.14</td>
</tr>
<tr>
<td>Item 3</td>
<td>$222.22</td>
</tr>
<tr>
<td>Total</td>
<td>$444.44</td>
</tr>
</tbody>
</table>

DL# TK05364
Name: Sandra Doe

Sign Here X
Bob L. Jones

13) Is this voucher acceptable?

A  Yes, this voucher is acceptable
B  No, the individual prices do not add up to the total
C  No, it is not company issued
D  No, the company address is incorrect
E  No, the date is incorrect
High Fidelity Cognitive Assessment

How many total mistakes were made?

① 0
② 1
③ 2
④ 3

The correct answer is 2 because two items were not completed according to the instructions. First, the sidewalk is not clean. Second, there is still a tool in the garden.

Please click Next using your mouse or press the right arrow key on your keyboard to go to the questions.
Structured Interview

Presenting

The ability to develop and deliver formal presentations to others that may include management, peers, team members, and others outside the organization. This includes presenting information on a variety of topics in clear, concise, interesting, and convincing manner; commanding the audience’s attention; developing effective presentation materials (e.g., handouts, visual aids); and handling questions and contrary or argumentative positions from the audience.

Lead Question: Describe a time when you developed and delivered a presentation designed to update employees and/or managers about a significant program initiative.

Probe Questions:
- How did you decide what content to include?
- How did you ensure that your message captured your audience’s attention?
- How was the presentation received?

<table>
<thead>
<tr>
<th>Level</th>
<th>Rating</th>
<th>Behavioral Evaluation Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outstanding</strong></td>
<td>5</td>
<td>Developed a detailed, comprehensive, and thoroughly organized presentation along a timeline of activities and actions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Developed a core message and ensured all data and analysis included in the presentation were aligned to that message.</td>
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<td></td>
<td></td>
<td>Determined the most appropriate and impactful data for inclusion in the presentation.</td>
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<tr>
<td></td>
<td></td>
<td>Designed creative ways to deliver the core message and capture the audience’s attention, even on the least interesting parts of the presentation.</td>
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<tr>
<td></td>
<td></td>
<td>Proactively anticipated questions and criticism and answered them thoroughly and appropriately.</td>
</tr>
<tr>
<td><strong>Above Expectations</strong></td>
<td>4</td>
<td>Candidate described experience, performance or knowledge that exceeded the standards listed under Meets Expectations standards, but did not fully meet the standards listed under Outstanding standards.</td>
</tr>
<tr>
<td><strong>Meets Expectations</strong></td>
<td>3</td>
<td>Organized the presentation along a timeline of activities and actions.</td>
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<td></td>
<td></td>
<td>Solicited input from others when creating the presentation.</td>
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<tr>
<td></td>
<td></td>
<td>Selected data and analysis for inclusion in the presentation that fit with the timeline approach to the presentation agenda.</td>
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<tr>
<td></td>
<td></td>
<td>Designed creative ways to capture the audience’s attention.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Answered questions as they arose and remained composed even in the face of criticism.</td>
</tr>
<tr>
<td><strong>Below Expectations</strong></td>
<td>2</td>
<td>Candidate described experience, performance or knowledge that did not fully meet the standards listed under Meets Expectations standards.</td>
</tr>
<tr>
<td><strong>Unacceptable</strong></td>
<td>1</td>
<td>Failed to create a consistent message or logical flow to the presentation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Did not solicit input from others when creating the presentation.</td>
</tr>
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<td></td>
<td>Became overwhelmed and/or developed ineffective strategies to handle the inclusion of a wide variety of data in the presentation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Failed to organize the presentation along a timeline of activities and actions taken.</td>
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<tr>
<td></td>
<td></td>
<td>Was unable to answer questions, or lost composure when challenged.</td>
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Summary

- Pre-employment assessments can measure attitudes towards safety, safety orientation, and other characteristics that are required for success on the job.
- Use of pre-employment assessments may help companies to hire mariners who perform better on the job and have higher safety performance.
- Use of pre-employment assessments can also help to improve retention and reduce turnover and associated costs.
Questions? Thank you!

Contact me
glee@aptparametrics.com