Recruiting and Selecting the Analytic Workforce

Workforce Development and Intelligence Analysis for National Security Purposes: A Workshop

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Agenda

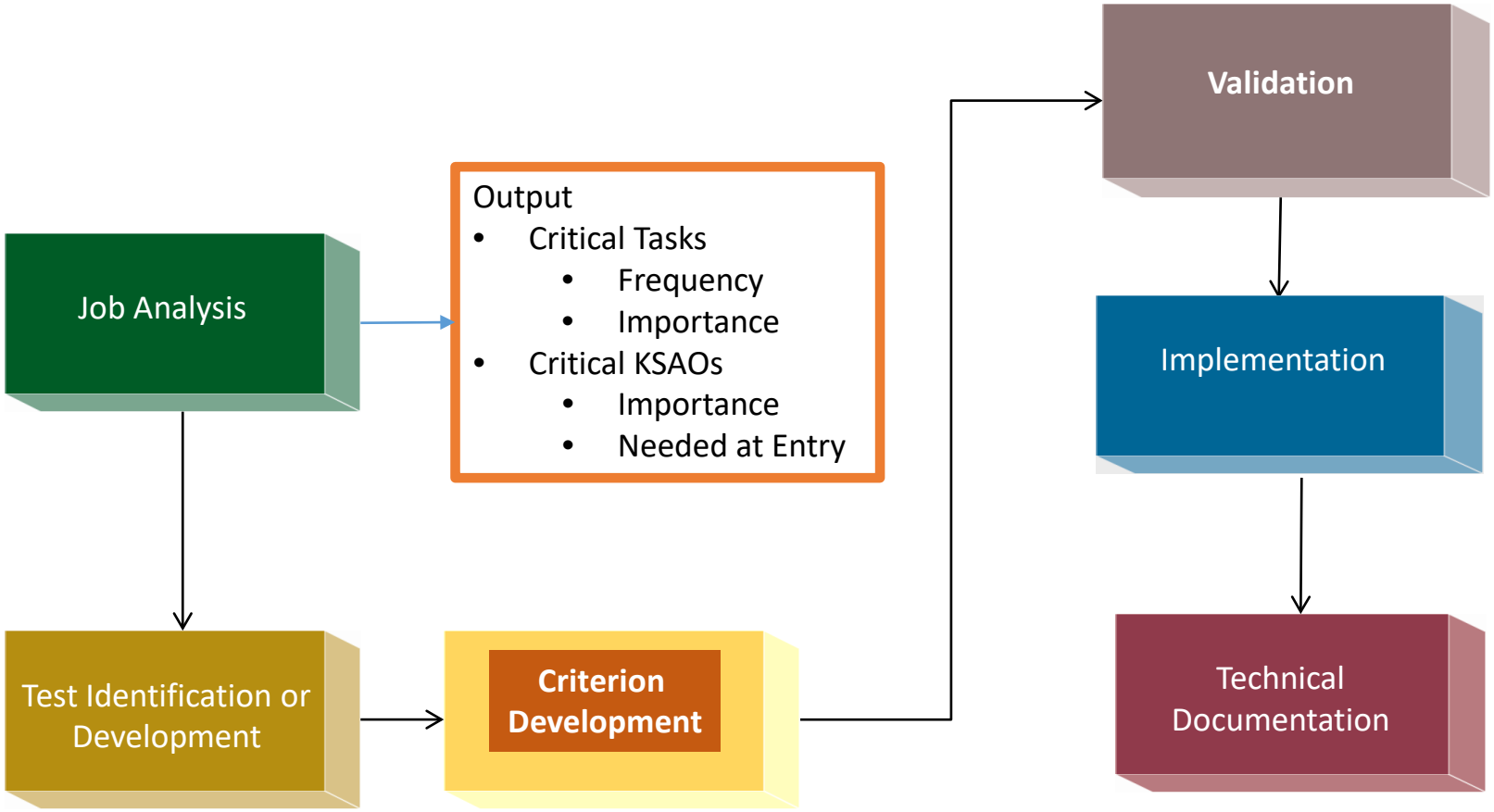
- Selection
  - Process
  - Considerations in Selection Testing
  - Analyst Job
  - Possible Approaches
- Recruitment
  - Generating applicants
  - Maintaining candidates
  - Influencing job choice

Overview of different types of selection procedures

- Multiple-choice tests (e.g., cognitive ability tests)
- Self-description inventories (e.g., personality inventories)
- Work samples
- Biographical data
- Situational judgment inventories
- Structured interviews
- Scored application blanks
- Experience requirements
- Resume reviews
- Unstructured interviews
- Educational requirements
- Grade point average requirements
- Reference checks
- Credit checks
- Drug tests
- Background investigations
- Physical requirements
- Appraisals of job performance
- Estimates of advancement potential

There are many types of selection procedures, but the right types and mix of procedure is determined by following a systematic process.

Test development and criterion-related validation process



Validation

- **Criterion-related Validation Strategy**
  - Establishes the statistical relationship between test performance and job performance
  - Two approaches:
    - Concurrent - Gathers test data on job *incumbents* and relates it to current job performance
    - Predictive – Gathers data on job *applicants* and relates it to future job performance
  - Requires large participant samples

- **Content Validation Strategy**
  - Establishes the rational relationship between the test content and the job content
  - Judgment-based approach using subject matter experts (SMEs)

- **Other Validation Approaches**
  - Construct validation
  - Validity generalization
  - Synthetic validation
  - Transportability

Pros-cons of validation approaches

Content-Related Validation

- Relies on SME judgment
- Typically takes less time to complete
- Lower financial investment
- Does not require any criterion
- Can utilize smaller, representative samples
- SMEs are usually willing to participate
- May not be sufficient for measures of personality and intelligence (UGESP)
- Cannot address fairness/bias concerns

Criterion-Related Validation

- Relies statistical relationship between predictor and criterion
- Typically takes a longer time to collect predictor and criterion data
- Can be expensive – particularly concurrent studies
- No good, easy criterion (performance is now is not potential/progression later takes too long)
- Requires a large, representative sample
- Incumbents often to not like to be tested
- Leaves organizations vulnerable during the validation period if applicants are used instead of incumbents
- May be the “gold standard” for validity evidence in litigation

Considerations in selection testing

- Predictive power/validity
- Feasibility of appropriate validation strategy
- Coverage of job domain
- Integration of knowledge, skills, abilities, and other personal characteristics
- Alignment with the context of the job
- Costs
- Time
- Staffing environment
- Personnel requirements
- Diversity
- Adverse impact and other legal risks
- Applicant reactions

Selecting the right assessment types

	Likely Success at Predicting:				
Assessment Type	**Overall Job Success**	**Early-Service Turnover**	**Adverse Impact**	**Applicant Reaction**	**Typical Type of Validation**
Structured Interview	Medium	Low	Low	+	Content
Cognitive Ability	High	Low	High	±	Criterion
Personality Tests	Low	Medium	Low	±	Criterion
Biographical Data	Medium	High	Low	±	Criterion
Situational Judgment	Medium	Low	Medium	+	Criterion
Work Simulations	High	Low	Medium	+	Content

Selecting the right assessment types

Assessment Type	Cost to Develop or Customize	Cost to Validate	Cost to Maintain	Time to Develop or Customize	Time to Validate
Structured Interview	Low	Low	Medium	Medium	Low
Cognitive Ability	Low	Medium	Low	Low	High
Personality Tests	Low	Medium	Low	Low	High
Biographical Data	Medium	High	Low	Low	High
Situational Judgment	Medium	High	Low	Medium	High
Work Simulations	Medium	Low	High	High	Low

Selecting the right assessment types

Assessment Type	Cost to Administer	Time to Administer	Personnel Requirements
Structured Interview	High	High	High
Cognitive Ability	Low	Low	Low
Personality Tests	Low	Low	Low
Biographical Data	Low	Low	Low
Situational Judgment	Low	Low	Low
Work Simulations	High	High	High

What is known about the analyst's job

Three Main Tasks

1. Research and write short, readable papers for policy makers
2. Write longer thought-piece papers
3. Brief policy makers and others

Possible Knowledge, Skills, Abilities, and Other Characteristics

- Analyzing/ critical thinking
- Writing
- Researching
- Working with others: networking/ collaboration/ team work
- Constructive confrontation/ standing one's ground
- Communications skills

Qualities critical to success (CIA Website)

- Problem solving: Have an impact by helping US policymakers as they take on the United States' most challenging foreign relations challenges. Be prepared to think critically and creatively.
- Strong communication skills: Present analysis directly and concisely to customers with limited time. An ability to write and speak clearly is vital.
- Teamwork: Collaborate to pool expertise and provide comprehensive answers to questions of national security concern. Intelligence analysis is a team sport that yields a corporate product with no single person's name on it.

Sample items: Structured Interview

- Tell me about a time when someone disagreed with your point of view. How did you respond?
- Tell me about a time when you had to plan your work and that of others to achieve an important goal.

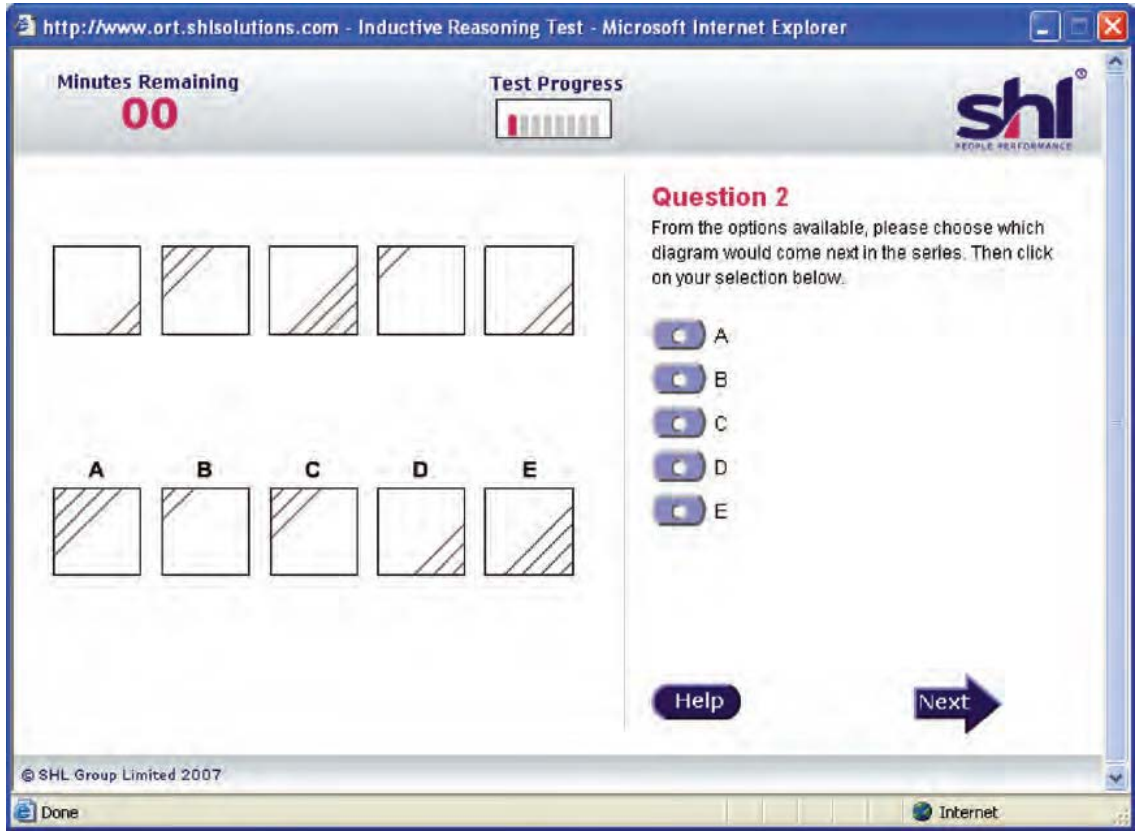
Example: Structured Interview Question and Behavioral Anchors

Work Direction / Planning and Organizing			
4 – Superior	3 – Good	2 – Adequate	1 – Poor
• Identifies and sets clear, specific objectives and strategies and makes assignments based on objectives, priorities, and subordinates' abilities or developmental needs	• Identifies and sets broad project objectives and strategies and makes assignments based on either objectives, priorities, or personnel abilities	• Devises a general plan and delegates assignments accordingly	• Fails to plan or provides an insufficient and ineffective plan.
• Develops comprehensive contingency and fallback plans that can be adapted in the face of specific unforeseen events	• Develops contingency and fallback plans that anticipate and identify specific potential difficulties	• Develops contingency and fallback plans that identify general potential difficulties	• Fails to consider a contingency or fallback plan, or provides an ineffective and inefficient contingency plan.
• Identifies and obtains the necessary resources to accomplish one's own work and that of subordinates well in advance	• Identifies potential resource limitations and plans ahead to ensure necessary resources are available resources as needed	• Identifies resources necessary to accomplish the work and requests them to be available as needed	• Fails to correctly identify or provide resources necessary for accomplishing the work
• Anticipates, identifies, and removes conflict and obstacles to work before they hinder progress	• Resolves conflict and obstacles in a timely fashion to avoid hindering work progress	• Takes corrective actions to resolve or minimize conflict and obstacles that may be hindering work progress	• Allows conflict and obstacles to work progress to escalate before deciding what to do and taking corrective action

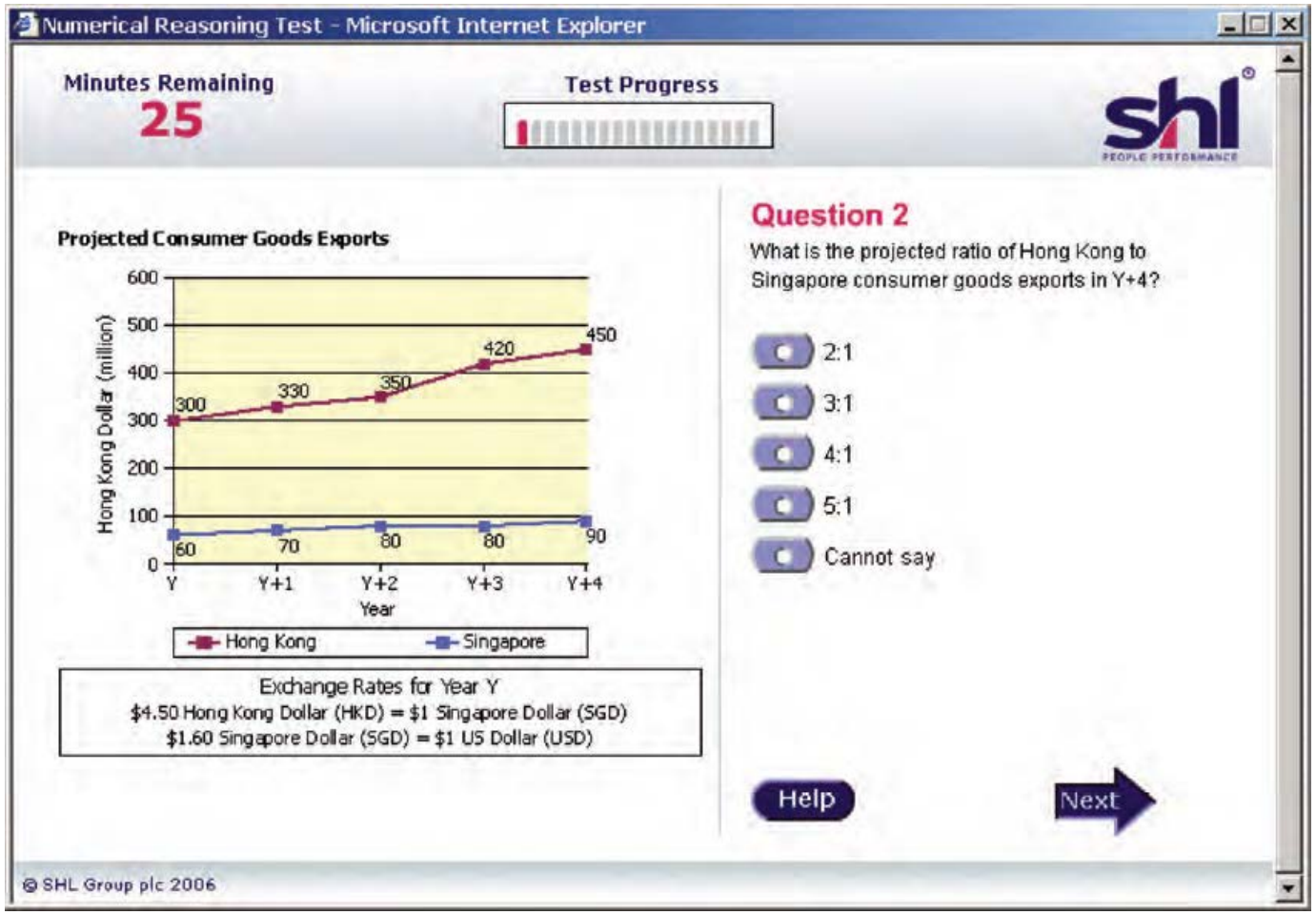
Sample items: Situational Judgment

- You have written a paper on an important subject. It has been reviewed by number of people, and the paper has been well-received by your colleagues in your team. Right before it is to be published, a senior leader calls you into her office and provides some feedback and many suggestions for revision. You explain to the senior leader why you believe your ideas are correct and succeed in convincing her on some points but not on others. What would you do?
  A. Ignore all of the suggestions.
  B. Make only those suggested revisions with which you agree.
  C. Make all the suggested revisions.
  D. Ask someone else on the team which suggestions to implement.
  E. Abandon the paper.

Sample Items: Cognitive Ability



Sample items: Cognitive Reasoning



Sample items: Personality

- I enjoy working as a member of a team.
- I like to be recognized for the work I do.
- I like to work independently.

A. Strongly agree
B. Agree
C. Neither agree nor disagree
D. Disagree
E. Strongly disagree

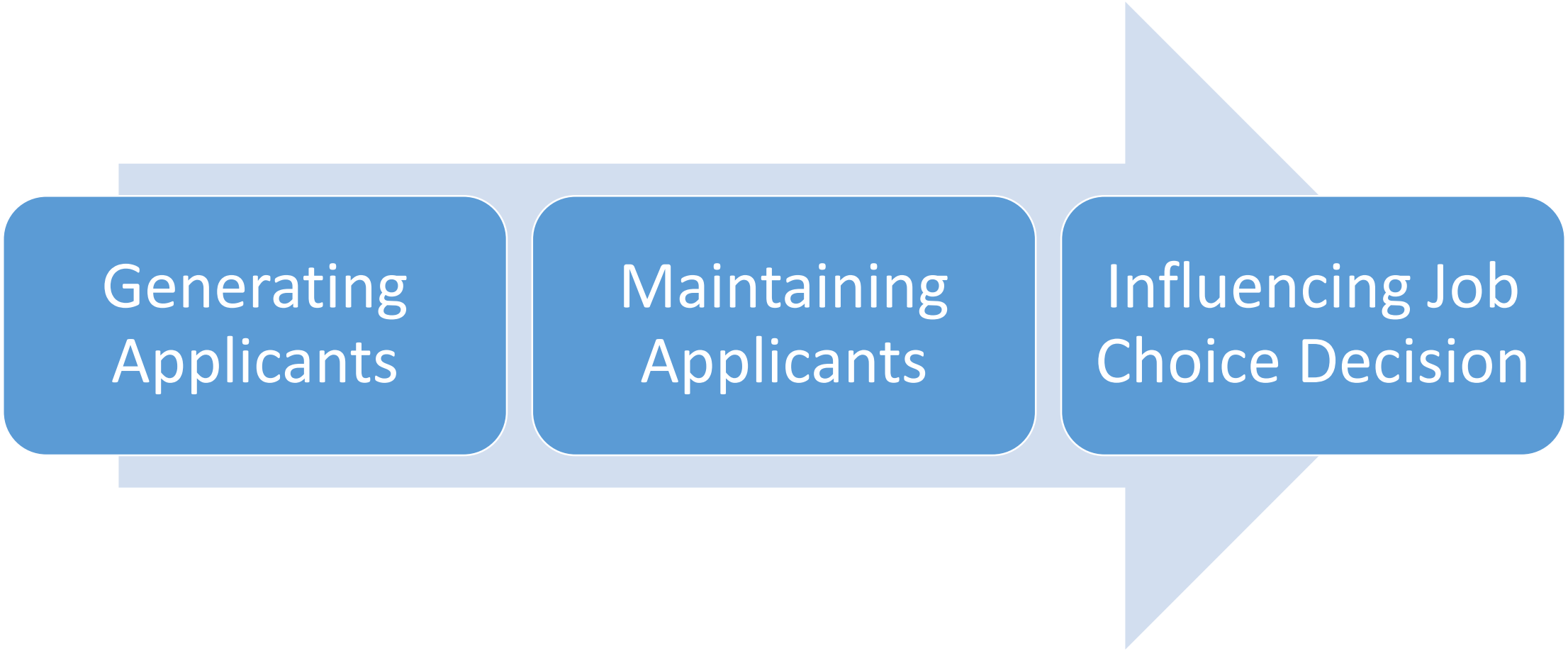
Sample items: Simulation

- Day in the Life
- You are an intelligence analyst working in the Directorate of Analysis. You day begins by reviewing information related to your area of expertise. Then you attend a team meeting in which the team discusses various issues and decides which ones should be written up in a brief policy paper. You will be assigned a paper to write and then progress through the editing process…

Questions to consider

- What does the job require on Day One?
- To what extent will your test(s) accurately measure the ability to perform the job?
- How much of the job requirements will be covered in the selection program? What is missing?
- What are the costs to build (or buy), maintain, administer, and score the test? How much time will it take?
- What effect on diversity will the test(s) have?
- Will the test help build the employment brand? How will applicants react?

Recruiting


Generating Applicants
Maintaining Applicants
Influencing Job Choice Decision

Generating applicants

- Where is the best place to look for candidates (active and passive)?
  - Organization career websites
  - Recruitment firms
  - Internal recruiters
  - College placement offices
  - Job boards
  - Social media (e.g., LinkedIn, Facebook)
  - Employee referrals
- What are the most effective ways to communicate with candidates?
  - Advertisements
  - Brand awareness
  - News media
  - Websites
  - Recruiters
  - Brochures
- What are the best design and content for communications to attract candidates?
  - Include important information
  - Are honest and accurate
  - Are memorable
  - Are easy to find and navigate

The effectiveness of recruiting messages is dependent on the candidate's own demographic characteristics, values and personality.

Maintaining candidates

Each interaction between the candidate and the organization has an effect on the candidate's interest in pursuing employment with the organization.

- Applicants prefer recruiters who are warm, informative, competent, and trustworthy.
- Demographic characteristics of the recruiter have no consistent effect on applicant attraction.
- Similarity of the recruiter and the candidate has no consistent effect.

- Selection procedures affect candidate's perceptions of the organization and willingness to accept a job.
  - Feedback
  - Job-relatedness
  - Explanations
  - Context of testing
- RJPS generally lower turnover and increase performance levels by the effect is moderated by timing and medium.

Influencing Job Choice

- There appears to be no universal set of components that are attractive to all candidates.
- Attractiveness of a job is a function of the candidate's demographic characteristics, values, and personality.

Attractiveness of a job is a function of the candidate's demographic characteristics, values, and personality.

- Research consistently supports an expectancy-based job choice model. The candidate estimates the probability of achieving outcomes, weights those probabilities by the desirability of those outcomes, sums across probabilities, and selects the job with the highest score.
- There is some evidence that job choice is a less rational process.

Final thoughts

- Selection
  - The selection process must measure important KSAOs that are necessary to perform the job and are needed at entry into the job.
    - It is not required that all important and needed at entry KSAOs be measured.
  - Effective and sustainable selection tools take into account a number of factors, including prediction, diversity, feasibility, costs, and employment brand.

- Recruiting
  - Because of the importance of individual characteristics in reactions to recruiting efforts, multiple approaches (e.g., methods, messages) are usually needed to reach a broader audience.
  - All information about an organization has a potential impact on candidates' perceptions of it as an employer.
  - Organizations must adapt to the changing needs and habits of the candidate pool.
  - Organizations need to recruit where candidates with the prerequisite KSAOs are likely to be found and take into consideration the effects of the selection process on recruiting.