Essential Elements of a Job Analysis
Best Practice Tips to Enhance Defensibility

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Webinar Overview

• What is a job analysis and why conduct one?
• What we do with the job analysis results
• Job analysis standards
• Overview of a typical job analysis process
• General rules for job analysis
• Conducting a job analysis “by the rules”
  – 8 step process
• Best practice recap
Job Analysis

- Systematic study of a job to identify the important work behaviors (tasks) and the qualities needed to successfully perform those behaviors.

- It’s about the job, not the people
Why conduct a job analysis?

- When you need accurate, up-to-date information about work being performed in specific positions in the organization
- When you need to know what qualities are needed for successful job performance in specific positions
Why conduct a job analysis?

• Information about the work…
  – “Official” documentation (job descriptions, duty statements, class specifications, etc.)
  – Group positions into classifications
  – Identify the level of positions within a job family or class series
  – Compare similarities and differences across jobs intra- or inter- organizationally
Why conduct a job analysis?

• Qualities needed for job success…
  – Select the most qualified job candidates
  – Identify training goals and needs
  – Succession and career planning
  – Classification decisions
  – Compensation decisions
What information can we get from a job analysis?

• The duties and tasks performed
• An indication of the amount of time spent performing specific duties and tasks
• An indication of the frequency with which specific tasks are performed
• An indication of the relative importance of the tasks
What information can we get from a job analysis?

- Level and complexity of the work
- Work context and performance requirements
- Work environment and working conditions
- Physical requirements
- Tools and equipment used
What information can we get from a job analysis?

- The qualities needed for successful job performance (knowledge, skills, abilities –aka KSAs)
- Relative importance of each KSA
- When each must be possessed (at entry vs. learned on the job)
- If each KSA is positively related to job performance
The Development of Job Analysis Standards

• Civil Rights act of 1964
  – Violations of Title VII and resulting litigation would create new focus on questionable selection practices

• Landmark court cases
  – Albemarle v. Moody (1975)
The Uniform Guidelines on Employee Selection Procedures

- Developed by EEOC, Civil Service Commission (OPM), DOL, and DOJ
- Designed to assist employers in complying with federal law prohibiting employment practices that discriminate against protected groups
- Applied in the enforcement of the laws
- Specifies requirements for job analysis in validation of selection procedures
- Became the foundation for job analysis in human resources and the standard for "defensibility"
Job Analysis Standards and Best Practice

• Uniform Guidelines

• Standards for Educational and Psychological Testing
  – American Educational Research Association, the American Psychological Association (APA), and the National Council on Measurement in Education (NCME)

• The Principles for the Validation and Use of Personnel Selection Procedures
  – Society for Industrial and Organizational Psychology (SIOP)

• Case Law
Typical Job Analysis

**Inputs:**
- Initial data collection – literature review; interviews
- Subject matter experts help develop task and KSA statements
- Incumbents rate the tasks and KSAs based on their own job

**Outputs:**
- List of tasks with indication of relative importance
- List of KSAs with indication of importance, if needed upon hire, and which tasks require each KSA
General Rules for Job Analysis

✓ The job analysis must be conducted on the exact job for which the information is required
  – Not a similar job; not a classification one level above or below

✓ You must collect data from multiple up to date sources
  – Documents, job observations, interviews, focus groups, surveys
General Rules for Job Analysis

- If you are identifying KSAs, you must first identify the tasks
  - Then establish the KSAs thought to be required for performing those tasks

- You must identify all the tasks that may be important, not just the ones initially thought to be important
  - The data analysis will show what is important
General Rules for Job Analysis

✓ Task and KSA statements must be written “correctly”
  – Contain all necessary detail
  – Clear and non-ambiguous
  – Operationalized

✓ You must have a sufficient number of task and KSA statements
  – Generally, enough to fully describe the job and its requirements
General Rules for Job Analysis

✔ You must use subject matter experts
  - Employees who are particularly knowledgeable regarding the work performed and the qualities required for success

✔ At least some (if not most) of the subject matter experts must be current job incumbents
General Rules for Job Analysis

✓ You must collect data from a large enough sample
  - Sufficient number of interviews, focus group participants, survey respondents, etc.

✓ You must collect data from a representative sample
  - Cover all areas of the organization with the positions:
    » locations, departments, work groups, shifts
General Rules for Job Analysis

✓ You must thoroughly document the job analysis process and results
  – Purpose, dates, parties involved, methodology, results
    » and everything you did throughout the process to ensure accuracy and thoroughness
  – In defending a practice, if it isn’t documented, it didn’t happen
Before you get started…

- Have the end in mind: Why is the job analysis being conducted; what is the intended use of the results?

- Who wants the job analysis done: HR, management, the union? What results might they be hoping for?

- Is there management buy-in? Will you be given the resources you need? Will you have access to and use of SMEs.

- Will the SMEs/incumbents provide unbiased data? Do they have any incentive to do otherwise?
Conducting a Job Analysis
“by the rules”
Step 1: Literature Review

- To gain an initial understanding of the job
- To begin drafting task statements

**Sources:**
- Previous job analyses
- Class specifications
- Duty statements
- Job descriptions
- Performance management materials
- Training materials
- Procedure manuals (SOPs), desk references
Step 2: Additional Data Collection

• Interviews with job incumbents and supervisors
  – Need a representative sample
  – How many is enough?
  – You are probably done when you stop hearing new information

• Job observations
  – Essential for identifying physical requirements
  – Physical work context, environmental conditions
  – Social context
Step 3: Develop Final Tasks and KSAs

- **Best method:** Develop task and KSA statements with a panel of SMEs
- **Good method:** Review previously developed task and KSA statements with SMEs and revise as a group
- **Acceptable method:** Send lists of draft tasks and KSAs to SMEs for their individual review and feedback, then revise
Step 3: Develop Final Tasks and KSAs

Key Points:

✓ You must use SMEs in the task and KSA development process – the SME group must include incumbents

✓ SMEs must have the opportunity to add as many statements as they feel are necessary to fully describe the job

✓ At the end of the process, all SMEs indicate to you that the final task and KSA statements are accurate, complete, and fully describe the job and its requirements
Requirements for Task Statements

• Task statements should:
  – Start with a single action verb
  – Be easy to read and understand
  – Describe work done by one person
  – Describe an activity with a clear beginning and end
  – Be specific enough to write associated KSA statements
A task statement should answer the following questions:

- What is the action?
- To whom or what is the action directed?
- What initiates the action?
- How is the action completed? (What tools, equipment or process?)
- What products or services are produced?
Task Statement Guidelines

Task example:

*Explain HR policy and procedures orally either face to face or on the telephone in response to inquiries by staff of County departments to ensure that HR activities are conducted properly.*
Task Statement Guidelines

• Watch out for activities that occur over a period of time

Maintain current knowledge of laws and regulations applicable to programs and services in order to ensure legal compliance.

• If you can’t identify a specific action with a definite beginning and end, it can probably be broken down into multiple tasks.
Task Statement Guidelines

• Avoid evaluative words or phrases

Exercise appropriate judgment in answering questions and releasing confidential information.

Revised:
Make decisions regarding when it is appropriate to release information according to the department’s confidentiality policy.
Task Statement Guidelines

• Avoid words that describe an area of responsibility and not a specific action

  Oversee
  Administer
  Direct
  Manage
Requirements for KSA Statements

• KSA statements should:
  – Be required for the performance of important tasks
  – Be easy to read and understand
  – Be operationally defined
    • Indicate how or in what context it is applied on the job
    • Indicate the level of the KSA required
Requirements for KSA Statements

- Bad KSA:
  
  Knowledge of math.

- A little better:
  
  Knowledge of basic math, including addition, subtraction, multiplication, and division.

- Good KSA:
  
  Knowledge of basic math, including addition, subtraction, multiplication, and division to calculate monthly vendor payments.
Step 4: Task and KSA Rating Process

- You must obtain information regarding the amount of the job (in time) that consists of performing each task
  - Frequency of performance (usually for tasks)
  - Time spent (usually for duties)

- You must obtain ratings of the importance of each task in terms of overall job performance
Step 4: Task and KSA Rating Process

• Common task frequency rating scale:

  How frequently is this task performed on the job?

  0 – This task is not performed on the job
  1 – Performed less than yearly
  2 – Performed every few months to yearly
  3 – Performed every few weeks to monthly
  4 – Performed every few days to weekly
  5 – Performed approximately daily
Step 4: Task and KSA Rating Process

• Common task importance rating scale:

  *How important is this task to overall job performance?*

  0 – *Not* important, or trivial to job performance
  1 – Somewhat important
  2 – Important
  3 – Very Important
  4 – Critical
Step 4: Task and KSA Rating Process

- You must obtain information regarding the importance of each KSA.

- If you are assessing the KSAs in a selection process, you must identify which KSAs are needed at entry into the job.
  - You can test for only those KSAs that are determined to be important for performing the job and cannot be learned on the job (to perform at a minimally-acceptable level).
Step 4: Task and KSA Rating Process

• Common KSA importance rating scale:

  How important is this KSA to overall job performance?
  
  0 – Not important, or trivial to job performance
  1 – Somewhat important
  2 – Important
  3 – Very Important
  4 – Critical
Step 4: Task and KSA Rating Process

- To determine if the KSA is needed at entry:

  *Is this KSA needed at entry into the job?*
  0 – No
  1 – Yes

- Or:

  *When is this KSA needed?*
  0 – Not needed
  1 – At entry
  2 – After hire (after 6 months; after 1 year)
Step 4: Task and KSA Rating Process

• Determine the data collection method
  – Survey
  – Group process
  – Who will be the raters?
    » You must include incumbents

• Sampling plan
  – Ensure representativeness

• Response rates
  – The more, the better
  – Have a plan for getting more responses – and document
Step 4: Task and KSA Rating Process

- The Job Analysis Questionnaire
  - Task and KSA inventories
  - Rating scales
  - Instructions
    » The rating process must be clear
  - Demographic questions
    » To show representativeness or diversity
  - Time and complexity considerations
    » Cognitive load; rater fatigue; motivation loss
Step 5: Data Analysis

- Cleaning the data
  - Get rid of “bad” responses – but make sure you know they are bad rather than “unexpected”

- Statistical analysis
  - Calculate means and percentages, look for outliers

- Apply the task retention criteria
  - Which tasks will be considered “important” and therefore part of the performance domain of the job?
  - Typically those meeting some threshold on both the frequency and importance scales
Step 5: Data Analysis

• Apply the KSA retention criteria
  – Which KSAs will be considered important for performing the job?
  – Typically those rated at least “Important” on the importance scale
  – Identify the subset of important KSAs that are needed at entry
    » Even if developing a test, don’t throw out important KSAs just because they are not needed at entry
Step 5: Data Analysis

• Examine the reliability or at least general agreement in the ratings, especially incumbent vs supervisor
  – Tendencies: incumbents tend to inflate task ratings; supervisors tend to inflate KSA ratings

• Examine the results across locations, work units, departments, etc.
  – Look closely at the ratings for the small number of positions in a particular area –meaningful differences between them and the larger population could get “averaged out”
Step 6: Results Review

• Review results with SMEs

• Decide what to do with tasks or KSAs near the cutoffs
  – You must document the SME’s decisions

• Discuss unexpected results with SMEs
  – If results are changed based on SME input, you must have good justification
Step 7: Task-KSA Linkage

- For each KSA, the important tasks requiring that particular KSA are identified
- KSAs that cannot be linked back to a task cannot be assessed in a selection process

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Step 8: Document the Job Analysis

- Background / Purpose
- Dates
- SMEs
  - Who, qualifications, participation
- Methodology – specific steps
  - Literature review; task/KSA development; SME review; rating process; data analysis; retention criteria; more SME review…
- Complete results (not just lists)
- Job analyst contact information
Best Practice Recap

• The job analysis was conducted on the exact job for which the information is required

• You collected data from multiple up to date sources

• You used subject matter experts

• At least some (if not most) of the subject matter experts are current job incumbents
Best Practice Recap

• You collected data from a large enough sample
• You collected data from a representative sample
• You first identified the tasks, and then the KSAs
• The task and KSA statements are written “correctly”
Best Practice Recap

• You have a sufficient number of task and KSA statements to fully describe the job and its requirements

• You identified all the tasks that may be important, not just the ones initially thought to be important
Best Practice Recap

• You “linked” the KSAs to the work behaviors
• You thoroughly documented the job analysis process and results
• Your job analysis was conducted by an experienced and knowledgeable job analyst (you!)
Questions?
Thanks for attending today’s webinar!

I am available if you have any questions about the content of this webinar:

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