

# Strategic Job Analysis

## *Predicting Future Job Requirements*

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# Strategic Job Analysis?



Cool!



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# Strategic Job Analysis

- **What is Strategic Job Analysis (SJA)?**
  - Focuses on jobs as they will exist in the future
  - Anticipates performance requirements due to changes in
    - Technology
    - Organizational structure
    - Organizational functions
- **What distinguishes SJA from traditional approaches?**
  - Multiple vantage points
  - Multiple perspectives
  - Multiple methods



# Strategic Job Analysis

- **When should you consider conducting a SJA?**
  - Change in organizational direction
  - New mission
  - Occupation in transition
  - Technological change

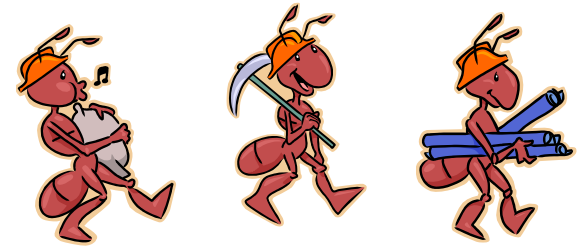


# Environmental Scan



## Thinkers

- Schneider & Konz (1989)
- May (1996)
- Cronshaw (1998)
- Sanchez (1994)
- Singh (2008)
- Schippmann (2010)
- Sanchez and Levine (2012)



## Doers

- Landis, Fogli, & Goldenberg (1998)
- Kolmstetter (2003)
- Sager, Russell, Campbell, & Ford (2005)
- Koch, Strobel, Miller, Garten, Cimander, & Westhoff (2012)



# Some Examples

## How has SJA been used?

- Large Insurance Company (Landis, Fogli, & Goldenberg, 1998)
  - Identified tasks considered to be critical in the future
  - Used SJA information to plan for organizational change
- TSA Screener Occupation (Kolmstetter, 2003)
  - Combined traditional and future oriented job analyses to establish the skill requirements and selection procedures for a new workforce of screeners
- US Army *Select 21* (Sager, Russell, Campbell, & Ford, 2005)
  - Defined knowledge, skills, and attributes needed for effective performance in situations likely to be encountered in the 21<sup>st</sup> century



# The Process

## Descriptive

*What is currently done?*

### Step 1

Define present duties and critical work behaviors

### Step 2

Describe job changes over the past 5 years

## Prescriptive

*What should be done?*

### Step 3

What are the current major issues and challenges?

### Step 4

What major issues/challenges will persist or worsen in the future?

## Predictive

*What will be done in the future?*

### Step 5

Predict job change expected over the next 5 years

### Step 6

Predict future duties and critical work behaviors



# Descriptive

## *What is currently done?*

*Step 1: Define the present duties and critical work behaviors*

*Step 2: Describe changes over the past 5 years*

### **Actions**

- Examine existing documents
  - Position descriptions
  - Work products
  - SOPs and manuals
- Talk to Subject Matter Experts (SMEs)
  - Job incumbents
  - Supervisors
- Look for changes
  - Technology applied
  - Typical transactions
  - Workforce size
  - Mission focus





# Prescriptive

## *What should be done?*

*Step 3: What are the current major issues and challenges?*

*Step 4: What major issues and challenges will persist or worsen in the future?*

## **Actions**

- Examine existing documents
  - Work planning documents
  - Reports of accomplishments
- Talk to managers, customers, experts
  - Agency managers
  - Customers
  - Academics, leaders in professional groups and associations
- Examine
  - Skill levels
  - Skill gaps
  - Knowledge management
  - Political implications



# Predictive

## *What will be done in the future?*

*Step 5: Predict job change expected over the next 5 years*

*Step 6: Predict future duties and critical work behaviors*

### **Actions**

- Examine future-oriented documents
  - Strategic plans
  - Futurists' predictions
  - Policy papers
- Talk to senior leaders and policy makers
  - Senior executives
  - Policy analysts
  - Futurists, members of think tanks
- Predict changes
  - Technology applied
  - Typical transactions
  - Workforce size
  - Mission focus



# Strategic Job Analysis at CBP

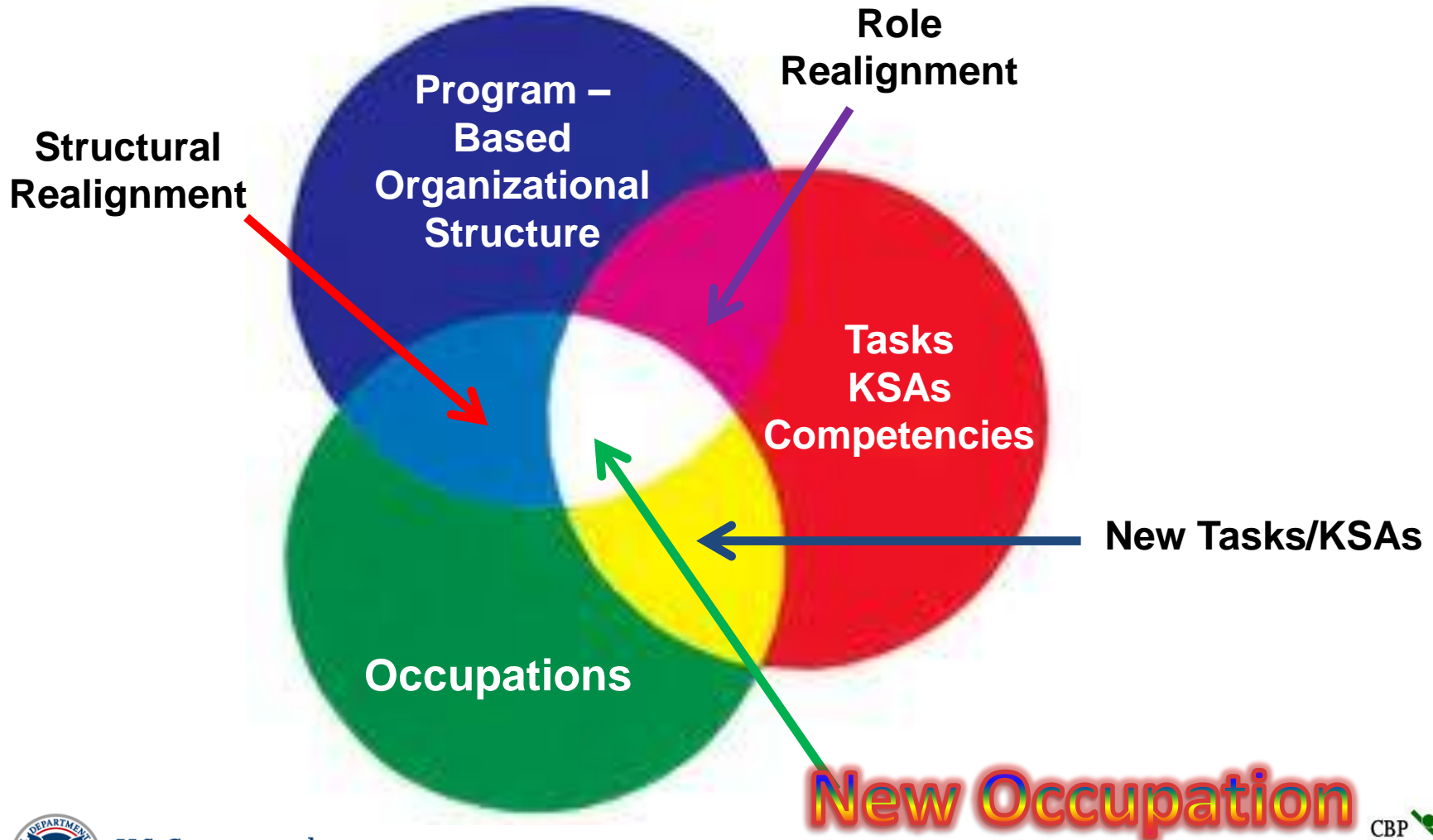


# Challenges

- “Black box”
- Lack of clarity regarding desired outcomes
- Vague definition of impacted occupations
- Role confusion

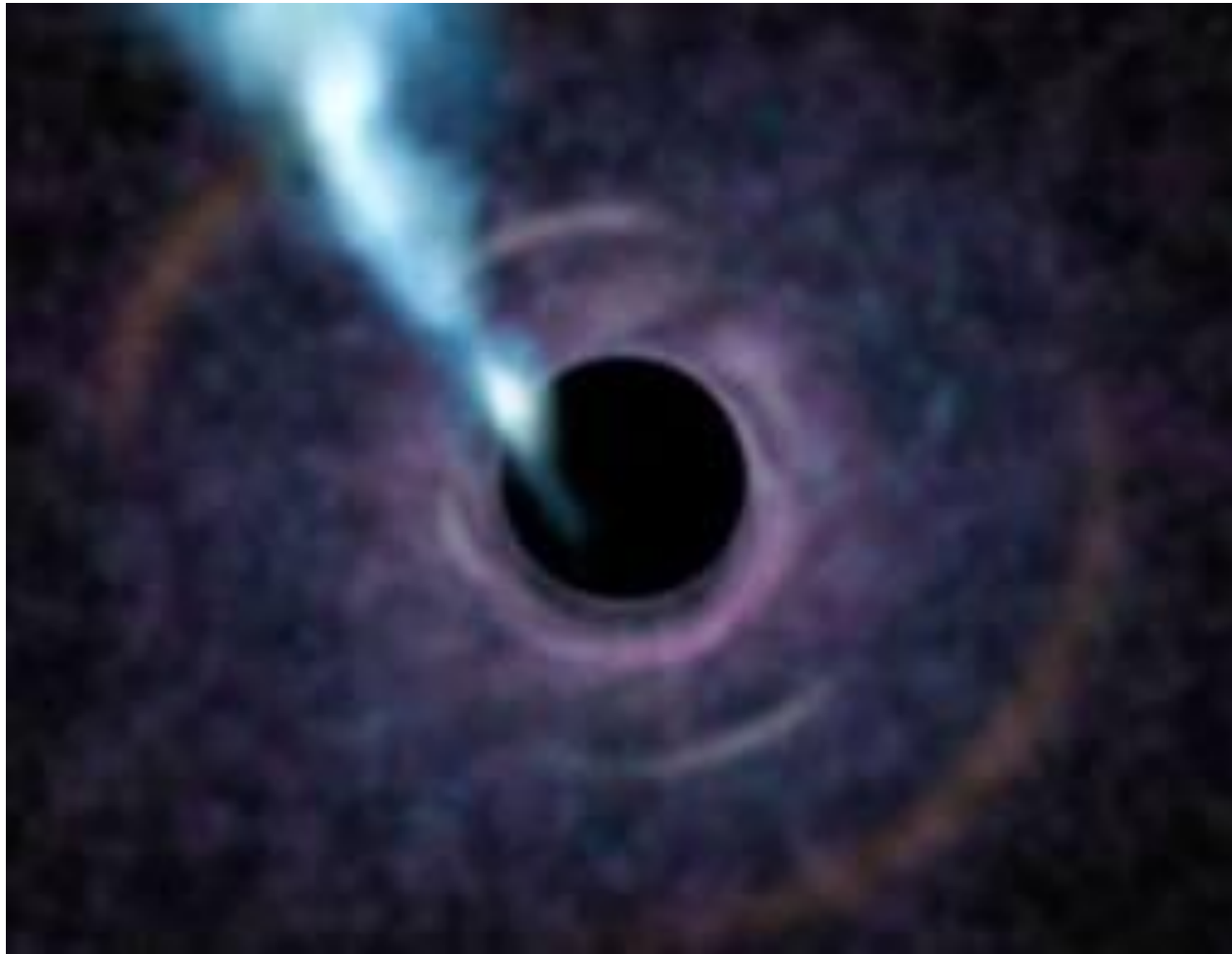


# Changing How We Do Business



# Change . . .

## *Without Top-Level Support*



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# Lessons Learned

- Top-level support is critical
- A “Concept of Operations” is REALLY helpful
- Document your actions
  - Strategies
  - Processes
  - Activities
- Anticipate resistance to change
  - Human Resources staff
  - SMEs
  - Program Offices
- Plan for delays/setbacks



# References

- Anderson, N., Lievens, F., van Dam, K., and Ryan, A.M. (2004). Future perspectives on employee selection: Key directions for future research and practice. *Applied Psychology: An International Review*, 53, 487-501.
- Arvey, R.D., Salas, E., and Guialuca, K.A. (1992). Using task inventories to forecast skills and abilities. *Human Performance*, 5, 171-190.
- Bruskiewicz, K.T. and Bosshardt, M.J. (1996). An evaluation of a strategic job analysis. Paper presented at the 11th Annual Conference of the Society for Industrial and Organizational Psychology, San Diego, CA.
- Cronshaw, S.F. (1998). Job analysis: Changing nature of work. *Canadian Psychology*, 39, 5-13.
- Koch, A., Strobel, A., Miller, R., Garten, A., Cimander, C., and Westhoff, K. (2012). Never use one when two will do: The effects of a multi-perspective approach on the outcome of job analyses using the critical incident technique. *Journal of Psychology*, 11, 95-102.
- Kolmstetter, E. (2003). I-Os making an impact: TSA Transportation Security Screener skill standards, selection system and hiring process. *The Industrial-Organizational Psychologist*, 40, 39-46.
- Landis, R.S., Fogli, L., and Goldberg, E. (1998). Future-oriented job analysis: A description of the process and its organizational implications. *International Journal of Selection and Assessment*, 6(3), 192-198.



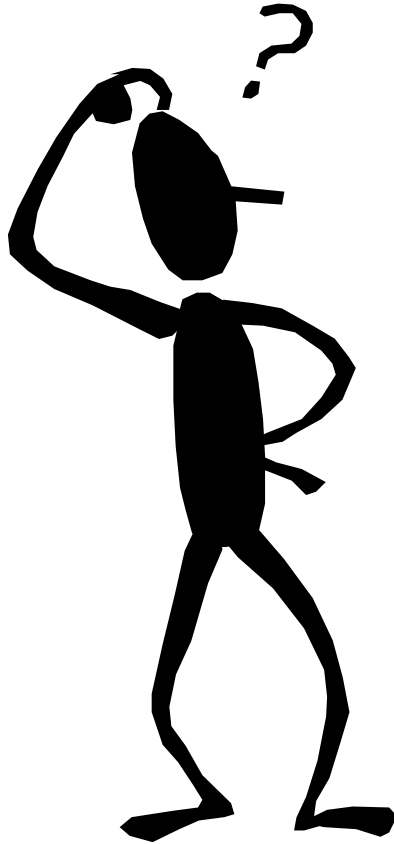


# More References

- Levine, E.L. and Sanchez, J.I. (2007). Evaluating work analysis in the 21<sup>st</sup> century. *Ergometrika*, 4, 1-11.
- May, K.E. (1996). Work in the 21<sup>st</sup> century: Implications for job analysis. *The Industrial Psychologist*, 33(4). Retrieved from <http://www.siop.org/tip/tip.aspx>
- Sager, C., E., Russell, T. L., Campbell, R.C., and Ford, L. A. (2005). *Future Soldiers: Analysis of Entry-Level Performance Requirements and their Predictors*. Alexandria, VA: United States Army Research for the Behavioral Sciences, Technical Report 1169.
- Sanchez, J.I. (1994). From documentation to innovation: Reshaping job analysis to meet emerging business needs. *Human Resource Management Review* 4(1), 51-74.
- Sanchez, J.I. and Levine, E.L. (2012). The rise and fall of job analysis and the future of work analysis. *Annual Review of Psychology*, 63, 397-425.
- Schippmann, J.S. (2010). *Strategic job modeling: Working at the core of integrated Human Resources*. New York: Psychology Press.
- Schneider, B. and Konz, A. (1989). Strategic job analysis. *Human Resource Management*, 28(1), 51-63.
- Siddique, C.M. (2004). Job analysis: A strategic human resource management practice. *International Journal of Human Resource Management*, 15(1), 219-244.
- Singh, P. (2008). Job analysis for a changing workplace. *Human Resource Management Review*, 18, 87-99.



# Questions



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