SYSTEM OPERATOR SELECTION
60 years of research on System Operator success factors

Dozens of Control Centers in the USA & Canada

Separate studies on Transmission & Distribution Operators

Database of hundreds of current successful System Operators
CHALLENGES IN SELECTING SYSTEM OPERATORS

- More difficult than many selection problems
  - Situations do not repeat frequently
  - Impossible to predict all problems which can arise
  - Small number of system operators in any one company
CHALLENGES IN SELECTING SYSTEM OPERATORS

- Long learning curve
  - Expensive training programs
  - Takes time before you know for sure
SELECTING SYSTEM OPERATORS

Employer provides objective and realistic information

Applicant provides objective and accurate information

THE IDEAL
Employers are selling in order to fill slots.

Applicants are selling themselves.

Over 25% of job applicant information is distorted.

REALITY CHECK
SELECTING SYSTEM OPERATORS

REALITY CHECK

Over 50% of employees believe that lying during an interview is okay.

Most managers are not good interviewers.

The people who are easy to find are the ones you don’t want.
QUESTIONS TO ANSWER ABOUT SYSTEM OPERATIONS CANDIDATES

Can the candidate do the job?

Can the candidate learn and grow?

Will the candidate do the job?

Will the candidate get along with others?
METHODS TO SELECT SYSTEM OPERATORS

- Educational/work experience
- References
- Interviews
- Employment tests
ADVANTAGES OF EMPLOYMENT TESTING

- **Knowledge**, abilities, and **skills**, are precisely measured, not merely assumed in the light of diplomas, grades, and certificates.

- **Work behaviors**, difficult to assess in interviews, are readily evaluated.
ADVANTAGES OF EMPLOYMENT TESTING

- **Halo effect is eliminated** by objective display of a candidate’s weaknesses as well as strengths.
- **Comparative judgments** between candidates are easier to make.
PREDICTORS OF SUCCESS

- Mental Abilities
- Work Interests
- Work Behaviors
BENCHMARKS

- Applicants need to be compared to a reference point
- Best reference point is current system operators
- Ideally a large-scale benchmark involving hundreds of current system operators
- Large-scale benchmarks increase precision in measurement
ACCURACY IN BENCHMARKS

- No failures among Above Average candidates
- Few failures among Satisfactory candidates
- Only 5% of candidates selected were terminated/resigned/transferred due to performance deficiencies
CORE SUCCESS FACTORS

- Consistent across 6 research studies on thousands of system operators

- Differ for Transmission & Distribution Operators
Evolving Success Factors

- Change as the job responsibilities change
- Change with automation/computerization
- Change as training programs change
SUCCESS FACTORS DIFFER FOR DISTRIBUTION & TRANSMISSION

- Cognitive Abilities
- Work Behaviors
- Benchmarks differ, too
NEW SUCCESS FACTORS IN 2003/2012 FOR DISTRIBUTION OPERATORS

- Working with Visual Tools
- Documentation Interest
- Decisiveness
- Positive Outlook
NEW SUCCESS FACTORS IN 2003/2012 FOR TRANSMISSION OPERATORS

- Continuous Learning
- Analytical Orientation
- Business Interest
Increase in mental ability scores from 1994 to 2003 to 2012

Average scores for Work Behaviors & Work Interests have risen over time

Reflect increasing work requirements necessary for success
SYSTEM OPERATORS VS. GENERAL POPULATION

- Intellectually sharper
- More accepting of others
- Stronger customer orientation
- Handle stress better
- Enjoy data & visual tools
- Greater results orientation
EMPLOYMENT TESTING IS LEGAL

- If it successfully predicts work performance
- If it conforms to Equal Employment Opportunity Commission (EEOC) Guidelines
- If it is fair
- If it is used with consistency
EMPLOYMENT TESTING IS A TOOL

- One of several you can use
- The only objective tool
- Not all tests are created equal
- Be an informed user
WHAT WE HAVE LEARNED FROM STUDYING SYSTEM OPERATORS

- There are **CORE SUCCESS FACTORS** that have remained constant over decades in Control Centers.

- There are **Evolving Success Factors** that change as the job changes.
WHAT WE HAVE LEARNED FROM STUDYING SYSTEM OPERATORS

- There are Measureable Differences between Transmission & Distribution System Operators.

- System Operators exceed general population of employees in numerous Mental Abilities & Work Behaviors.

- There are valuable Employment Tests that predict system operator work performance.
REMEMBER

Training and Retention Succeed

only when

Selection Succeeds
SYSTEM OPERATOR SELECTION