

# Evidence Before Intuition: Designing a Job-Related Employee Selection System

Lanie Cudiamat

## Abstract

Organizations frequently describe hiring as a search for the best candidate, yet the phrase conceals a demanding measurement problem: best for which work, according to which evidence, combined by which rule, and reviewed against which outcome? This conceptual-design article transforms a broad instructional manuscript on recruitment and selection into an auditable model for evidence-centered hiring. The source presents job analysis, recruitment channels, applicant screening, interviewing, selection methods, job offers, onboarding, inclusion, legal concerns, informal sponsorship, and technology. The present article narrows that breadth to one argument: selection quality depends on a traceable chain connecting work requirements to assessment content, scoring, decision rules, and post-hire review. A six-stage system is proposed: define work, specify evidence, standardize collection, combine scores, document decisions, and learn from outcomes. The article explains why job analysis must govern what is assessed; why interviews should use common, behaviorally anchored questions; why work samples and other predictors require evidence appropriate to their intended use; and why mechanical score combination ordinarily offers greater consistency than unaided holistic judgment. Two practical tools are introduced: a job-evidence alignment matrix and a decision-audit record. The model also identifies common failure modes, including vague fit criteria, method shopping, compensatory decisions made after scores are known, and technology that automates an undefined process. The article does not report applicants, scores, or organizational outcomes. It offers a testable design proposition for teaching, small-enterprise practice, and future validation research.

**Keywords:** personnel selection; job analysis; structured interview; work sample; decision rule; evidence-based management

## Introduction

Hiring decisions are consequential forecasts. An organization observes imperfect information before employment and attempts to infer how a person will perform in work that has not yet occurred. The difficulty is not solved by adding more steps. Resume screens, interviews, personality measures, cognitive tests, reference checks, and technology can create an appearance of rigor while remaining disconnected from the actual job. A valid-looking process is not necessarily a job-related one.

The source instructional manuscript surveys the full recruitment and selection cycle, beginning with job analysis and job description and extending through recruitment strategy, applicant screening, interviews, selection methods, offers, onboarding, diversity, legal considerations, informal sponsorship, and technology (Recruitment and Selection, n.d.). Its breadth is useful for instruction, but a journal argument requires a narrower organizing problem. This article focuses on the decision architecture that should connect those components. Recruitment determines who enters

the pool; selection determines what evidence is collected and how it is used. Both should be governed by explicit work requirements.

A long research tradition supports structured and validated selection procedures. Schmidt and Hunter (1998) synthesized evidence showing that selection methods differ in predictive usefulness and that combinations of predictors can improve decision quality. Sackett and Lievens (2008) emphasized that personnel selection involves constructs, methods, applicant responses, subgroup differences, and organizational context rather than a contest among isolated instruments. The practical lesson is not that one method should be used everywhere. It is that methods should be selected, scored, and combined for a defined purpose.

This stance conflicts with a persistent preference for intuition. Highhouse (2008) argues that beliefs in personal expertise and the uniqueness of each candidate help sustain resistance to decision aids. Experienced hiring managers may value discretion because it feels responsive, but unconstrained discretion makes it difficult to distinguish insight from inconsistency. Evidence-centered selection preserves professional judgment while locating it at defensible points: defining the work, evaluating the quality of evidence, setting rules in advance, and interpreting documented exceptions.

### **Purpose and Design Question**

The article has three objectives: to establish job analysis as the control point for selection design; to propose a six-stage system that makes evidence and decisions traceable; and to provide tools for auditing the alignment and use of selection information. The central question is: How can an organization move from a vacancy to a defensible hiring decision without allowing method preference or post hoc intuition to replace job-related evidence?

### **Conceptual-Design Approach**

#### **Source and Unit of Analysis**

The analysis treats the instructional manuscript as a curricular artifact. Its chapters and examples were mapped to decision points rather than summarized chapter by chapter. The unit of analysis is the selection inference: a claim that an observed response, score, credential, or work history supports a conclusion about a job requirement. Each inference was examined for four links: the work requirement, the evidence-producing method, the scoring rule, and the decision consequence. No employment records, candidates, test data, or validation coefficients were available or inferred.

#### **Standards for a Defensible System**

Four standards organize the model. Job relatedness requires every criterion and assessment to be connected to documented work. Standardization requires comparable opportunities, questions, conditions, and scoring where comparison is intended. Decision consistency requires rules for combining evidence to be specified before individual outcomes invite adjustment. Learnability requires the organization to retain enough information to examine whether the process predicts relevant outcomes and produces avoidable errors. These standards are compatible with the Society for

Industrial and Organizational Psychology's (2018) principles for validating and using personnel selection procedures.

### **Stage 1: Define the Work Before Defining the Candidate**

Selection begins with work, not with a portrait of the ideal applicant. Job analysis identifies tasks, responsibilities, conditions, interactions, tools, and the knowledge, skills, abilities, and other characteristics needed for effective performance. Brannick et al. (2007) describe job and work analysis as a family of systematic approaches that connect information about work to human-resource decisions. Morgeson and Humphrey's (2006) work-design framework further shows that jobs include task, knowledge, social, and contextual characteristics. A role that appears to require persuasion may in fact require technical diagnosis, documentation, emotional regulation, or coordination under time pressure.

Vague competency labels create weak selection. Communication, leadership, initiative, and fit sound relevant but can mean almost anything. Competency modeling becomes useful when broad labels are translated into observable behavior and linked to organizational context. Campion et al. (2011) recommend rigorous practices such as defining competencies, connecting them to strategy and work, involving relevant experts, and documenting the process. The immediate output should be a short list of priority requirements, not an encyclopedic profile that no applicant could fully satisfy.

The organization should also distinguish requirements needed at entry from those that can be learned after hiring. Treating every desirable capability as an entry requirement narrows the pool and may reward access to prior opportunity rather than capacity to perform. Conversely, assuming that critical safety, licensing, or foundational knowledge can always be taught after hiring creates operational risk. The distinction should be made before recruitment messaging and screening thresholds are written.

### **Stage 2: Specify the Evidence Needed**

For each priority requirement, designers should state what observable evidence would increase confidence and what alternative explanations could produce the same observation. A resume may document experience but not proficiency. An interview answer may display verbal fluency while revealing little about performance in a quiet analytical role. A credential may establish completion of training without demonstrating current skill. Evidence is strongest when the task required by the method resembles or samples the relevant work and when scoring captures the intended construct.

Work samples are attractive because their content can closely reflect job activity, but fidelity alone does not guarantee quality. A sample must represent important work, be feasible for applicants, use standardized materials, and have scoring rules that distinguish levels of performance. Cognitive, personality, or knowledge measures may add information when their use is supported by theory and evidence. Ployhart (2006) argues that modern staffing must integrate changes in technology, labor markets, strategy, and organizational context; methods should be chosen within a staffing system, not purchased as isolated products.

**Table 1***Job-evidence alignment matrix for selection design*

| Work requirement                             | Evidence task                                                | Scoring anchor                                                           | Threat to inference                                                      |
|----------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|
| <b>Diagnose a recurring customer problem</b> | Work sample using a realistic case and available information | Identifies cause, checks assumptions, proposes feasible response         | Prior familiarity with the exact case rather than transferable diagnosis |
| <b>Coordinate competing deadlines</b>        | Structured situational interview with follow-up probes       | Prioritizes by consequence, communicates trade-offs, monitors completion | Verbal confidence mistaken for planning quality                          |
| <b>Produce accurate records</b>              | Timed but realistic documentation exercise                   | Completeness, accuracy, traceability, and appropriate escalation         | Typing speed dominates the intended construct                            |
| <b>Learn a new procedure</b>                 | Brief instruction followed by novel application              | Retains essential rules and adapts them to a changed example             | Assessment becomes a memory test with no transfer                        |
| <b>Exercise safety judgment</b>              | Critical-incident scenarios based on documented hazards      | Recognizes risk, stops unsafe action, follows reporting sequence         | Obvious cues reveal the preferred answer                                 |

*Note.* The examples illustrate alignment logic. Actual requirements, tasks, and anchors must be developed from the specific job and intended use.

### Stage 3: Standardize Evidence Collection

Standardization makes candidate evidence comparable. In interviews, structure can include analysis-based questions, common administration, limited and planned probing, behaviorally anchored rating scales, interviewer training, independent ratings, and controlled access to nonessential information. Campion et al. (1997) organized interview structure into content and evaluation dimensions, while Levashina et al. (2014) reviewed evidence showing that structured employment interviews can improve reliability and validity while reducing opportunities for irrelevant influence.

Structure does not require robotic interaction. Candidates can ask questions, interviewers can clarify instructions, and reasonable accommodation can be incorporated. What should not change casually is the construct being assessed. If one applicant receives coaching, additional scenarios, or a different standard because an interviewer feels rapport, the resulting scores no longer have the same meaning. Deviations should be documented and reviewed rather than concealed.

Screening also needs structure. Minimum qualifications should be stated in observable terms; reviewers should use the same evidence windows; and reasons for exclusion should correspond to criteria established before the applications were seen. Keyword automation is not a substitute for this design. It can accelerate a rule, but it cannot determine whether the rule represents the job.

### Stage 4: Combine Scores by a Declared Rule

Organizations often collect structured evidence and then abandon it at the final meeting. Interviewers review scores, discuss impressions, and choose the candidate who feels strongest overall. This creates a second, unstructured selection procedure that can override the first. Kuncel et al. (2013) found that mechanical combination of information generally outperforms holistic clinical combination across selection and

admissions contexts. Mechanical does not mean thoughtless; it means that the rule for combining inputs is specified and applied consistently.

A compensatory rule allows strength on one predictor to offset weakness on another. A multiple-hurdle rule requires candidates to meet designated thresholds in sequence. A hybrid may set noncompensable requirements for safety or licensure and combine remaining predictors using weights. The correct rule depends on the work and evidence. What matters is that thresholds, weights, tie handling, and the treatment of missing information are defined before decision makers know whom the rule will favor.

Professional judgment remains necessary when evidence quality changes. A disrupted assessment, unverifiable credential, or accommodation issue may make a score uninterpretable. The response should be to collect comparable evidence or document why the value is excluded, not to invent a favorable or unfavorable adjustment. Exceptions should address evidence quality, not rescue a preferred candidate.

## Stage 5: Document the Decision

A defensible selection record should show the approved job requirements, methods, scoring keys, reviewer ratings, combined result, deviations, and final decision. Documentation serves several functions: it supports consistency, enables review, preserves organizational learning, and reduces dependence on memory. It also exposes whether the formal process is ceremonial. If the recorded evidence identifies one candidate and the decision selects another without a job-related explanation, the organization should confront that gap rather than label it discretion.

The record should be proportionate. Small organizations do not need a complex platform to create traceability; a controlled matrix with named criteria and signed ratings may be sufficient. The purpose is not to accumulate personal data. Only information necessary for the stated decision and review should be retained under an appropriate governance process.

**Table 2**

*Decision-audit record*

| Audit question                                                     | Evidence to retain                                 | Acceptable exception                                 | Warning sign                                              |
|--------------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------|
| <b>Was the requirement defined before recruitment?</b>             | Approved job analysis or requirement statement     | Documented change in the job before scoring          | Criterion appears after a favored applicant is identified |
| <b>Did applicants receive comparable assessment opportunities?</b> | Administration checklist and accommodation record  | Adjustment that preserves the intended construct     | Unrecorded coaching, added questions, or unequal time     |
| <b>Were ratings anchored to observable behavior?</b>               | Completed scales and concise behavioral notes      | Rater flags evidence as insufficient                 | Global labels such as impressive, weak, or good fit       |
| <b>Was evidence combined as declared?</b>                          | Formula, hurdle rule, weights, and result          | Predefined procedure for missing or invalid evidence | Final meeting replaces scores with consensus intuition    |
| <b>Can the decision be reviewed later?</b>                         | Versioned decision record and responsible approver | Correction of a documented administrative error      | No trace of why the selected candidate prevailed          |

*Note. Retention and access should be limited to legitimate organizational purposes and governed by applicable policy.*

## **Stage 6: Learn from Outcomes Without Rewriting History**

A selection system should be reviewed against outcomes that were defined before hiring. Relevant criteria may include task performance, training completion, safety behavior, quality, or retention, but each has measurement error and contextual influences. A supervisor rating is not a pure indicator of employee quality; it can reflect opportunity, support, workload, or bias. Validation therefore requires careful criterion definition and enough observations to support the intended inference.

Post-hire review should examine more than whether selected candidates succeeded. Organizations should evaluate score distributions, missing data, assessor agreement, applicant progression, exceptions, and whether particular methods add useful information beyond cheaper or less burdensome alternatives. Evidence-based management treats practitioner expertise, stakeholder concerns, organizational data, and scientific research as complementary sources rather than allowing one source to dominate by habit (Barends et al., 2014).

Learning must not become retroactive storytelling. A successful hire does not prove that every step was valid, and an unsuccessful hire does not prove that a rejected applicant would have performed better. Review should look for patterns across decisions and preserve the original rules so that improvement is based on evidence rather than hindsight.

## **Discussion**

### **Technology Cannot Repair an Undefined Process**

The source manuscript treats technology as a major influence on sourcing, screening, interviewing, and assessment. The six-stage system clarifies the order of work: define and validate the inference before automating it. An applicant-tracking system can apply screening criteria consistently, but it can also reproduce vague or irrelevant criteria at scale. Video platforms can standardize administration, but standardized delivery does not validate the question or score. Procurement should begin with the job-evidence matrix and require vendors to explain what is measured, how scores are produced, and how use will be monitored.

### **Referral Information Is Evidence, Not Authority**

Employee referrals and informal sponsorship may widen access to information about candidates, but they should not alter the assessment standard. A referral can identify a person or provide a verifiable example of prior behavior. It cannot establish entitlement to the role. Separating sourcing from selection permits organizations to benefit from networks while preventing a sponsor's status from bypassing job-related evidence.

### **Efficiency Must Be Defined Against Decision Quality**

Time-to-fill and cost-per-hire are useful operational measures, but they can reward speed at the expense of evidence. A shorter process is an improvement when it removes redundancy or low-value methods while preserving the relevant inference. It is a deterioration when it substitutes unstructured screening, hides disagreement, or shifts effort to applicants without adding information. Selection utility includes the value of better decisions, the cost of methods, the proportion selected, and the consequences of errors; efficiency should be evaluated within that wider system.

## Implications for Teaching and Practice

In teaching, the model converts a chapter sequence into a design exercise. Students can select a real or hypothetical job, identify priority requirements, propose evidence tasks, write scoring anchors, choose a combination rule, and audit a mock decision. The assignment makes clear that an attractive interview question is not enough; every element must connect to the work and the decision.

For practice, the model supports incremental improvement. An organization can begin by structuring one high-volume interview, replacing global fit ratings with behavioral anchors, recording the combination rule, and reviewing exceptions quarterly. The aim is not maximal testing. It is minimal sufficient evidence collected and used consistently.

## Research Agenda

Future studies can evaluate whether the alignment matrix improves the job relatedness and interrater agreement of locally developed selection systems. Design-based research could compare hiring teams using the audit record with teams using existing practice, while preserving appropriate confidentiality and consent. Outcomes should include process fidelity, assessor agreement, applicant burden, subgroup progression, decision reversals, and criterion-related evidence after hire. The present article supplies a transparent model for such testing and does not claim effectiveness.

## Conclusion

Selection quality depends less on the number of methods than on the integrity of the chain connecting work to evidence and evidence to decision. The proposed six-stage system begins by defining the work, specifies what evidence is needed, standardizes collection, combines scores by a declared rule, documents the decision, and learns from outcomes. Each stage constrains a different form of avoidable ambiguity.

Evidence before intuition does not eliminate human judgment. It makes judgment accountable. Experts define the work, design meaningful evidence, review anomalies, and improve the system; they do not silently replace recorded results with preference. A hiring process built on that distinction is more teachable, auditable, and capable of learning.

## References

- Barelds, E., Rousseau, D. M., & Briner, R. B. (2014). Evidence-based management: The basic principles. Center for Evidence-Based Management.
- Brannick, M. T., Levine, E. L., & Morgeson, F. P. (2007). Job and work analysis: Methods, research, and applications for human resource management (2nd ed.). Sage.
- Campion, M. A., Fink, A. A., Ruggeberg, B. J., Carr, L., Phillips, G. M., & Odman, R. B. (2011). Doing competencies well: Best practices in competency modeling. *Personnel Psychology*, 64(1), 225-262. <https://doi.org/10.1111/j.1744-6570.2010.01207.x>
- Campion, M. A., Palmer, D. K., & Campion, J. E. (1997). A review of structure in the selection interview. *Personnel Psychology*, 50(3), 655-702. <https://doi.org/10.1111/j.1744-6570.1997.tb00709.x>
- Highhouse, S. (2008). Stubborn reliance on intuition and subjectivity in employee selection. *Industrial and Organizational Psychology*, 1(3), 333-342. <https://doi.org/10.1111/j.1754-9434.2008.00058.x>

- Kuncel, N. R., Klieger, D. M., Connelly, B. S., & Ones, D. S. (2013). Mechanical versus clinical data combination in selection and admissions decisions: A meta-analysis. *Journal of Applied Psychology*, 98(6), 1060-1072. <https://doi.org/10.1037/a0034156>
- Levashina, J., Hartwell, C. J., Morgeson, F. P., & Campion, M. A. (2014). The structured employment interview: Narrative and quantitative review of the research literature. *Personnel Psychology*, 67(1), 241-293. <https://doi.org/10.1111/peps.12052>
- Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91(6), 1321-1339. <https://doi.org/10.1037/0021-9010.91.6.1321>
- Ployhart, R. E. (2006). Staffing in the 21st century: New challenges and strategic opportunities. *Journal of Management*, 32(6), 868-897. <https://doi.org/10.1177/0149206306293625>
- Recruitment and selection. (n.d.). Unpublished instructional manuscript.
- Sackett, P. R., & Lievens, F. (2008). Personnel selection. *Annual Review of Psychology*, 59, 419-450. <https://doi.org/10.1146/annurev.psych.59.103006.093716>
- Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin*, 124(2), 262-274. <https://doi.org/10.1037/0033-2909.124.2.262>
- Society for Industrial and Organizational Psychology. (2018). *Principles for the validation and use of personnel selection procedures* (5th ed.). Author.