WHITEPAPER

Job analysis: The secret to effective and compliant hiring practices





Table of Contents

Introduction to job analysis	2
What is a job analysis?	3
What can stakeholders gain from job analysis?	4
How do IOs conduct job analysis?	8
How can job analysis drive success in the hiring process?	9
Conclusion	12
References	13

Introduction to job analysis

Most of us will spend over 80,000 hours of our lives working. Needless to say, our jobs have a large impact on our lives: where we live, who we spend our time with, and how much time we have to spend with our families and friends. Despite this importance, there can sometimes be a missing link between the actual work we do and our organization's understanding of these roles. This is where job analysis comes in. Job analysis is the foundation of best practices in Industrial and Organizational (IO) Psychology—and the answer to some of the most painful problems organizations face in their hiring practices: legal and compliance risk, candidate drop-off due to poor experience, making the wrong hires, and more. In this paper, we will explore what job analysis is, why it's so important, and how it can inform an organization's selection system.

What is a **job analysis?**

Job analysis is the first suggestion almost all IO Psychologists would make if you asked them how they would approach improving people processes. The issue, however, is that job analyses are not done nearly enough in practice because, for stakeholders who are not IOs, the benefits of job analyses are not well understood and conducting one can require a lot of time and resources. This article will explain why job analyses are so critical in later sections, but first, for people who are not familiar with job analyses—what are they? **A job analysis is a systematic process for collecting information on the important work-related aspects of a job**. Some of the information collected includes details on the work activities, tools and equipment used, context of the work environment, and requirements of the personnel performing the job. Ultimately, job analyses provide data-driven results to help understand the most important aspects of a job and the characteristics that make up an ideal candidate for the job.





What can stakeholders gain from job analysis?

If you think of your organization as your home, would you want to build on a foundation that was established from estimated measurements to save time and costs upfront, or would you rather spend the time and effort to ensure that the foundation was precisely measured and reduce costs in the long-run? Job analyses provide those precise measurements that can be leveraged in a variety of ways to build the foundation of your organization, which results in writing more effective job descriptions, establishing legal defensibility in hiring decisions, making performance appraisal processes less subjective and more fair, and more. Here are some of the top uses for job analysis data.

In this section:

- Job descriptions
- Legal defensibility
- Compensation and benefits
- Performance appraisal and management
- Training and development
- Role clarity

Improves accuracy of job descriptions

Job descriptions are often a candidate's first experience with a company; because of this, they can impact a candidate's perception of the company and their likelihood to apply for the role. Fifty-two percent of applicants say the quality of a job description is "very influential" or "extremely influential" on their decision to apply for a job. As this statistic suggests, the description provides important information about what is required from a role.

If a job description is poorly written and not informative, candidates may apply under false pretenses—or not apply at all. According to a survey conducted by Indeed, <u>62% of employers</u> report getting too many applications from unqualified candidates. This can put strain on recruiting teams as they filter through candidates to find those who are qualified.

When job descriptions are based on job analysis data, they include a must-have list of knowledge, skills, abilities, and other characteristics (KSAOs) and focus on the requirements of the job, rather than irrelevant attributes (e.g., gendered words, and oftentimes even college degrees). A detailed job description can help candidates understand the exact requirements of the role, similar to a <u>realistic</u> job preview. Not only does this improve the candidate experience, but it also helps <u>decrease applications from unqualified candidates</u>, saving recruiters time and energy. Likewise, ZipRecruiter found that utilizing gender-neutral language resulted in <u>42% more responses</u> from applicants.

Establishes legal defensibility

Organizations must ensure that assessment tools and processes do not discriminate against any protected group and comply with all relevant laws and regulations. In the last 100 years, <u>federal and local</u> <u>legislation</u> has made great strides in trying to protect the rights of workers. As an example, <u>Title VII of the 1964 Civil Rights Act</u> makes it illegal to discriminate against a person on the basis of race, sex, color, religion, or national origin. Nowadays, few organizations are going to intentionally discriminate against employees based on these categories; however, certain job requirements may lead to unintentional group differences, also known as disparate impact or <u>"adverse impact</u>". With this in mind, job analysis has become a way for organizations to establish the job relevancy of work requirements. For instance, if a company is going to require that a software engineer be able to lift 50 pounds, then there should be documentation on why that is a necessary job requirement for the role—otherwise it may lead to unintentional group differences.

Remaining compliant with federal and local laws goes beyond adverse impact, and the stakes of such have never been higher. As evidence of this, the EEOC saw an <u>almost 20% increase in</u> <u>discrimination charges</u> in 2022, as well as an increase in damages awarded from those lawsuits. Thus, conducting job analysis in order to have an added layer of legal defensibility may be more critical than ever. What's more, the EEOC's *Uniform Guidelines on Employee Selection Procedures* explicitly advocates for <u>utilizing job analysis</u> as the basis for any hiring action.

Helps employers identify appropriate compensation and benefits

Conducting a job analysis can educate the organization on what knowledge, skills, abilities, and other characteristics (KSAOs) are required for a role. Relatedly, knowing this information helps determine <u>what an appropriate compensation package and benefits</u> might look like for a given role. Factors related to these KSAOs might include the level of education or experience needed, amount of responsibility, degree of independence, risk of injury, and so on. Taking these factors into account can help organizations determine pay, or pay levels, that align with a role in a way that promotes fairness and equality as opposed to potentially contributing to gender or racial pay gaps.

Likewise, if an organization has done a thorough job analysis and knows these compensation and benefits details beforehand, they can include that <u>information in the job description</u>, which may encourage applicants to apply and align with ongoing legislation such as <u>pay</u> <u>transparency laws</u>.

Bolsters performance appraisal and management

A job analysis establishes the core requirements of a role. In doing so, a job analysis also provides information that can help establish performance standards and <u>determine what criteria should be used</u> <u>in the performance appraisal process</u>. Ideally, the performance appraisal process should focus on the tasks and output (i.e., work characteristics) that are <u>most important to the role</u>. Doing so helps managers understand who is performing well based on relevant criteria that everyone is aligned to, thus promoting a fair rating process and removing potential subjectivity and biases that can arise in performance appraisals. Identifying the most important work tasks can also help organizations set specific and measurable performance goals and objectives for their employees.

Identifies training and developmental needs

Job analysis can identify important knowledge, skills, abilities, and other worker characteristics to help inform <u>training and development</u> <u>needs</u>, including: who needs training, when training should take place (e.g., immediately after being hired), the content of training, and more. For instance, a job analysis may specify that knowledge of a specific coding language is important for a role. But, because coding languages are <u>often similar</u>, and thus trainable, the organization may choose to hire people who can code in similar languages since they could easily train them on the other language, rather than require it at time of hire. By identifying skills that can be trained on-the-job, an organization can further open the top of the hiring funnel, potentially increasing diversity and improving the candidate experience along the way.

Increases role clarity for candidates and employees alike

Because job analysis defines the key requirements of a role, it can contribute to <u>role clarity</u>. Role clarity occurs when an employee understands what is expected of them. Role clarity goes beyond the content of a job description and onboarding documents—it means employees truly understand the content of their job, the performance standards, and the scheduling and work methods required by the role. When an employee has high role clarity, it can lead to <u>reduced</u> <u>role ambiguity</u>, <u>increased productivity</u>, and <u>improved job satisfaction</u> <u>and reduced turnover</u>.

How do IOs conduct job analysis?

Job analysis can be conducted with multiple methods, most of which fall into one of two categories: <u>work-oriented or worker-oriented</u>.

Work-oriented vs. worker-oriented approach

There are some key differences between the work-oriented and the worker-oriented job analysis approaches. As the name suggests, a work-oriented job analysis focuses on the work itself, such as the specific tasks an employee is required to do on the job. Meanwhile, a worker-oriented job analysis focuses on the individual doing the job. This involves identifying the employee requirements to perform the job, specifically the knowledge (e.g., knowledge of algorithms), skills (e.g., coding skills), abilities (e.g., mathematical ability), and other characteristics (e.g., personality traits). When combined, these variables are referred to as "KSAOs" and make up a profile of what it takes to perform a job.

Methods

The methods for conducting a job analysis are similar for both work-oriented and worker-oriented job analysis. Common methods include interviews, questionnaires, focus groups, and direct observation. The methodology used for job analysis will depend on the preferences of the organization and individual conducting the job analysis, as well as the resources at hand.

For instance, interviews can provide in-depth information about a role and can give interviewers an opportunity to probe into ambiguities; however, they can be time consuming and may be skewed if a representative sample isn't used. On the other hand, questionnaires can be a great way to quickly collect a large amount of information about a role, but do not leave much room for follow-up questions based on responses.

How can job analysis drive success in the hiring process?

At this point, the importance of job analysis is clear. However, the value of job analysis goes beyond building selection systems, and can assist in decision-making as well. Some potential use cases include defining a sourcing and recruiting strategy, picking assessment content, and more.





Defining a sourcing and recruitment strategy

The insights drawn from job analysis can be used to develop targeted sourcing strategies, accurate job descriptions, essential selection criteria, and better screening and interviewing protocols, all of which can improve the overall effectiveness of a recruitment strategy.

As an example, an organization looking to hire for an entry-level software engineering role could focus on the qualification of a college degree, narrowing their recruiting efforts to solely university candidates. Alternatively, a job analysis could demonstrate that a college degree is not required for such a role. This finding might encourage the organization to expand their sourcing and recruiting efforts to include return to work programs, bootcamps, and self-taught candidates—all of which could help improve fairness and bolster diversity initiatives, as an added benefit.

By improving the recruitment and selection processes, organizations can <u>attract employees</u> who are a good fit for the role and organizational culture. This may lead to the organization hiring employees who are <u>better suited to the job</u>, resulting in employees who are more satisfied, more committed to the organization, and less likely to quit.

Picking assessment content

The <u>content</u> of the pre-hire assessment should be aligned with the requirements of the job. Job analysis reveals what KSAOs or tasks are required by the job, which helps employers know what should be measured in the hiring process. This means employers can select or create content that aligns with the core skills of the role.

Using job-relevant assessment content helps employers screen applicants in a more fair and unbiased way because they're focused on the core requirements of the role as opposed to irrelevant traits (e.g., where someone went to school). It also helps candidates understand what's required of them, and if they're even a <u>good fit for</u> <u>the job</u>. Thus, it's no surprise that research has shown <u>job relevance</u> to be a key factor in improving candidate reactions during hiring.

Choosing an assessment format

Pre-hire assessments can be administered in different formats, such as work samples, situational judgment tests, or skills-based assessments. The organization should choose a format that is appropriate for the job, is feasible given the organization's resources, and has been shown to be effective in predicting job performance or other important job-related outcomes.

Some of the most effective methods for predicting job performance include <u>work samples</u>, job knowledge tests, and structured <u>interviews</u>. However, it is worthwhile to note that each pre-hire assessment format has its advantages and disadvantages, and employers should choose the format(s) that best align with their goals and the specific requirements of the role. In some cases, a combination of different assessment formats may provide the most comprehensive evaluation of a candidate's KSAOs.

Defining an assessment strategy and process

Job analysis can inform an organization's assessment strategy by providing information about the knowledge, skills, abilities, and other characteristics (KSAOs) required for a specific job. This can then be used to identify the most important job competencies, design a job-relevant assessment, determine an appropriate assessment format, choose a scoring threshold for said assessment, decide where to use the assessment in the hiring process, and more. Let's illustrate this with an example.

Say an organization conducted a job analysis for a general software engineer. The job analysis revealed that the top three most important skills for the role include: knowing at least one coding language, the ability to perform software testing, and experience with debugging. However, the job analysis also revealed some niche skills, such as working with code versioning tools. The organization may decide to measure the most important observable skills using a technical skills assessment at the top-of-the-funnel. They may also measure soft skills, such as communication skills, in an interview. And rather than assessing for code versioning tools, the hiring team may choose to train new hires on these skills during onboarding. All of these decisions form an organization's assessment strategy.

Conclusion

Job analysis is an important process that involves breaking down a job into its component parts and analyzing the knowledge, skills, abilities, and other characteristics (KSAOs) required for successful performance in that role. Building a selection system based on job analysis leads to better job descriptions, stronger legal defensibility, improved performance appraisal systems, stronger training programs, and more. These improvements can lead to important outcomes, such as improved **employee fit**, which can result in **improved job performance and decreased turnover**. Needless to say, job analysis is more than just an IO Psychologist's favorite two-word quip—it's a business necessity.

References

Advantages and disadvantages of Job Analysis. Management Style Guide. <u>https://www.managementstudyguide.com/advantages-disadvantages-job-analysis.htm</u>

Albemarle Paper Co. v. Moody, 422 U.S. 405 (1975). https://supreme.justia.com/cases/federal/us/422/405

Arthur, W., Jr, Bell, S. T., Villado, A. J., & Doverspike, D. (2006). The use of person-organization fit in employment decision making: an assessment of its criterion-related validity. *Journal of Applied Psychology*, 91(4), 786–801. <u>https://doi.org/10.1037/0021-9010.91.4.786</u>

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 Publications.

Cascio, W. F., & Aguinis, H. (2010). *Applied psychology in human resource management*. New York: Prentice-Hall.

Chapman, D. S., Uggerslev, K. L., Carroll, S. A., Piasentin, K. A., & Jones, D. A. (2005). Applicant Attraction to Organizations and Job Choice: A Meta-Analytic Review of the Correlates of Recruiting Outcomes. *Journal of Applied Psychology*, 90(5), 928–944. <u>https://doi.org/10.1037/0021-9010.90.5.928</u>

Civil Rights Act of 1964 § 7, 42 U.S.C. § 2000e et seq (1964). https://www.eeoc.gov/statutes/title-vii-civil-rights-act-1964Equal Employment

Opportunity Commission (EEOC) (2023). 2022 Annual Performance Report (APR), https://www.eeoc.gov/2022-annual-performance-report-apr

Gallup. (2023). *State of the global workplace report*. Gallup. <u>https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx</u>

Gatewood, R.D., Feild, H. and Barrick, M. (2008) *Human Resource Selection*. Thomson South-Western, Mason.

Gilliland, S. W. (1993). The Perceived Fairness of Selection Systems: An Organizational Justice Perspective. *The Academy of Management Review*, 18(4), 694–734. <u>https://doi.org/10.2307/258595</u>

Griggs v. Duke Power Co., 401 U.S. 424 (1971). https://supreme.justia.com/cases/federal/us/401/424/

Hassan, S. (2013). The Importance of Role Clarification in Workgroups: Effects on Perceived Role Clarity, Work Satisfaction, and Turnover Rates. *Public Administration Review*, 73(5), 716–725. <u>http://www.jstor.org/stable/42003000</u>

Higgins, S., & Ryan, M. (2023, January 9). *How to navigate New State pay transparency laws in 2023*. Foley & Lardner LLP. <u>https://www.foley.com/en/insights/publications/2023/01/navigate-new-state-pay-transparency-laws-2023</u>

Industrial-Organizational Psychology. (2018, August 28). <u>http://www.siop.org/instruct/textbook.aspx</u>

Jex, S. M., & Britt, T. W. (2014). Organizational psychology: A scientist-practitioner approach (3rd ed.). John Wiley & Sons, Inc.

Job/Task/Work Analysis/Competency Modeling and Classification. (2018, August 28). https://www.siop.org/Events-Education/Educators/Incorporating-I-O

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2), 281–342. <u>https://doi.org/10.1111/j.1744-6570.2005.00672.x</u>

Pijnacker, L. (2019, September 25). *HR analytics: Role clarity impacts performance*. Effectory. <u>https://www.effectory.com/knowledge/hr-analytics-role-clarity-impacts-performance/</u>

Prien, E. P., Goodstein , L., Goodstein, J., & Gamble, L. G. (2009). *A practical guide to job analysis*. Pfeiffer.

Sackett, P. R., Zhang, C., Berry, C. M., & Lievens, F. (2022). Revisiting meta-analytic estimates of validity in personnel selection: Addressing systematic overcorrection for restriction of range. *Journal of Applied Psychology*, 107(11), 2040–2068. <u>https://doi.org/10.1037/apl0000994</u>

Sanchez, J. I., & Levine, E. L. (2012). The rise and fall of job analysis and the future of work analysis. *Annual Review of Psychology*, 63, 397–425. https://doi.org/10.1146/annurev-psych-120710-100401

SHRM. (2022). Avoiding Adverse Impact in Employment Practices [Review of Avoiding Adverse Impact in Employment Practices]. Society for Human Resource Management. <u>https://www.shrm.org/resourcesandtools/tools-and-samples/toolkits/pages/avoidingadve rseimpact.aspx</u>

Survey: How to Improve Your Job Postings to Attract Better Candidates. Indeed. <u>https://www.indeed.com/hire/c/info/how-to-improve-your-job-postings-to-attract-better</u> <u>-candidates</u>

Thompson, D. E., & Thompson, T. A. (1982). Court standards for job analysis in test validation. *Personnel Psychology*, 35(4), 865–874. <u>https://doi.org/10.1111/j.1744-6570.1982.tb02228.x</u>

Uggerslev, K.L., Fassina, N.E. and Kraichy, D. (2012), Recruiting Through the Stages: A Meta-Analytic Test of Predictors of Applicant Attraction at Different Stages of the Recruiting Process. *Personnel Psychology*, 65: 597-660. <u>https://doi.org/10.1111/j.1744-6570.2012.01254.x</u> U.S. Equal Employment Opportunity Commission. (1978). Uniform Guidelines on Employee Selection Procedures. *Federal Register*, 43(247), 38290-38315. <u>https://www.eeoc.gov/laws/guidance/uniform-guidelines-employee-selection-procedures</u>

U.S. Office of Personnel Management. (n.d.). *Realistic Job Previews*. U.S. Office of Personnel Management.

https://www.opm.gov/policy-data-oversight/assessment-and-selection/other-assessment -methods/realistic-job-previews

Why learn another programming language?. Runestone Academy. <u>https://runestone.academy/ns/books/published/cpp4python/IntroCpp/whylearncpp.html</u>

Zerga, J. E. (1943). Job analysis: a résumé and bibliography. *Journal of Applied Psychology*, 27(3), 249–267. <u>https://doi.org/10.1037/h0059927</u>

ZipRecruiter. (2018, August 20). *Removing these gendered keywords gets you more applicants*. ZipRecruiter. <u>https://www.ziprecruiter.com/blog/removing-gendered-keywords-gets-you-more-applicants</u>







Let's talk tech hiring

Schedule a discovery call to explore how you can give time back to engineers, improve speed-to-hire, and reduce bias with CodeSignal.

GET STARTED

