



The Benefits of Using Scientifically-Based Assessments as a Core Component of the Hiring Process

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Summary

In the context of financial and market factors, the overall performance of an organization is directly caused and maintained by the quality of the people executing the work. The use of scientifically-based assessment tools during the sourcing, recruitment, and employee selection process increases the revenue and profitability of an organization by helping managers select the most-qualified applicants for each open position. In addition to leading to greater financial performance, scientifically-based hiring tools have been shown to decrease turnover, absenteeism, and legal risks associated with hiring. Moreover, a standardized hiring process enhances a company's brand. Finally, investment in scientifically-based assessment tools is inexpensive when compared to the cost of implementation, and is within the reach of any company looking to improve how it acquires employee talent.

Introduction

It has been said that “the people make the place”, and smart leaders know that ongoing success depends on the quality of employees at all levels. But how can a savvy organization staff critical functions with the best and brightest? In the broadest sense, there are multiple methods of improving employee job performance at the individual, group, and organizational level. Along with compensation and training functions, recruitment and hiring is implicit in the onboarding and eventual success of the people in the organization and ultimately the company itself.

In this paper, we explain how recruiting and hiring may be improved by the use of scientifically-based assessment tools, such as personality questionnaires, tests, interviewing, and other hiring instruments and processes. We review the typical hiring process of companies, how this is usually flawed, and methods for improving the quality of new hires and newly promoted leaders.

Overview of a typical hiring process

In general, the progression from determining the need for a new employee and final hiring and placement is summarized by the following steps:



1. Developing and posting the job announcement.
2. Receiving resumes and completed job applications.
3. Evaluating resumes and applications, eliminating some from contention and moving others to the next step of the hiring process.
4. Contacting individuals for interviews or other prescreening activities, including administration of tests and assessments.
5. Evaluating applicant qualifications gathered in the previous steps, and inviting some to continue applying while informing others that they are no longer being considered.
6. Contacting job candidates for more extensive interviews. In many hiring situations, this may involve meeting job candidates for the first time, face-to-face.
7. Checking references.
8. Extending offers to the best candidates and rejecting others.
9. Completing post-offer screenings (e.g., medical examinations and background investigations).
10. Accepting offers and terms of compensation.
11. Onboarding and orienting the newly-minted employee.

Without exception, there are numerous opportunities to improve every step described above and in *any* process of sourcing, recruiting, selecting, and placing individuals into open positions. The same can be said for promotional systems designed to assist leaders with choosing who to promote internally. Not surprisingly, even something as mundane and routine as the extension of offers may be improved simply by setting deadlines and quickly contacting good candidates (something even the best companies can stand to improve.) So with all the potential enhancements to typical hiring systems, where should an organization focus its efforts?

It turns out that the part least often improved - but where organizations have the most to gain - is in the collection and evaluation of candidate qualifications. As we will detail in the following sections of this paper, there is substantial evidence that suggests improvements to how we judge applicant qualifications can provide impressive gains in performance, compliance with EEOC regulations, legal guidelines and fair hiring practices, and reduction in the stress of the hiring process for both company and applicant. Within these activities, the most important process to improve is in the tools and systems used to judge the quality of external job candidates.

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The role of selection and assessment tools in hiring

As stated above, the greatest improvement a hiring organization can make is in how it collects information about – and how it evaluates – candidate qualifications. In general, the tools, processes and systems used to judge a job candidate's fitness for an open position fall into four different categories:

- Collection of resumes and applications
- Interviews, via phone, text messaging, and traditional one-on-one
- Administration of tests and other written assessments
- Background checks and references

Nonetheless, it is not enough to simply collect and document candidate skills and traits; rather, these must be 1) characteristics related both to essential job functions as well as successful performance of those functions; and, 2) able to be evaluated by hiring managers and recruiting staff. Put another way, the key success factor in modern hiring decisions is not identification of the existence of a particular qualification; rather, what is the **quality or extent** of that qualification? The chasm between simply identifying the existence of a desirable job qualification (e.g., bachelor's degree, number of years in sales management, expatriate experience) and the actual level of that qualification is impossibly wide. If it wasn't, the resume or generic job application would suffice. However, because the mere existence of a KSAO or competency has no bearing on the quality of one's job performance, it becomes critical to evaluate skills in depth.

Most managers and business leaders are aware of the need to carefully evaluate candidates, but the usual method starts with a resume review and ends with an informal and unstandardized interview. Drawbacks and limitations of this approach are detailed in the next section.

Drawbacks of typical hiring strategies

There are two categories of flaws in modern hiring situations: 1) the passage of time, which leads to delays in sorting through applicants in an efficient way; and, 2) the lack of scientific and proven methods typically used to sort through candidates.

The first type of drawback is as difficult to improve as any other process flaw encountered in the course of doing business: Hiring simply takes time, especially with multiple positions to fill and an often heavy infusion of resumes, applications, and one-on-one inquiries. With little help from technology or

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assessment, the busy recruiter or hiring manager must manually sort through an unsystematic, widely varying stack of resumes. This is often found to be one of the most stressful and least liked aspects of a manager's job. Clearly, it is critical to get managers the help they need to more systematically and quickly sort through their initial pool of applicants.

The systems and tools used to sort through candidates represent the other category of activity needing improvement. Certainly, the job interview is the greatest area for concern. Several decades and hundreds of studies have found that information gathering during the typical interview is fraught with error. These include:

- the tendency for interviewers to make snap judgments early in their interactions with candidates;
- the difficulty in suppressing personal biases and stereotypes when interviewing;
- weighing negative information more heavily than positive aspects of the candidate; and,
- the inability of typical interviewers to make accurate evaluations of many job-specific skills, instead relying on a global impression of the candidate.

Unfortunately, this is by far the most common type of hiring process, and its use will not change in the near future; the one-on-one interview will always necessarily be with us.

But how critical is this issue? Don't organizations largely make decent hiring decisions and aren't many experienced managers "good judges of character?" Unfortunately, the answer is both "yes" and "no." Few organizations consider their hiring to be "in crisis" and many aren't especially familiar with EEOC and legal guidelines for hiring. The primary question is how much it can be improved, and how important it is for a particular role.

Certainly, some hiring situations are more critical than others. For example, sales roles (both management and those directly in touch with prospects and customers) represent a particularly salient example of how good hiring practices may enhance an organization and also how poor hiring may derail a company from meeting its goals. In any profit-making enterprise, the difference between the best salesperson and the worst is usually quite wide, reflecting variations in revenue acquisition of 100-500%. Retention of sales personnel plays a large role too, as there is often a "ramp-up" period for new representatives, during which revenue is low and opportunities are lost due to lack of product knowledge and specific training.

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(NOTE: It is worth a reminder that a comprehensive hiring process cannot immediately correct flaws in product development, marketing strategy, technological infrastructure, and deeply ingrained negative habits and practices within a given organizational setting. However, the long-term benefits of best practices recruitment and hiring augment employee relations and leadership capabilities. How a company may enhance retention via excellent leadership and comprehensive compensation strategies is the other side of the story, but beyond the scope of this paper.)

How job-specific hiring tools improve hiring

Modern assessment tools improve the selection of employees because they allow hirers to view numerous, relevant candidate qualifications and make better-informed hiring decisions. The analysis of specific qualifications leads to more accurate hiring decisions because more relevant information may be gathered prior to the interview as well as throughout the hiring process.

Traditional processes stand in stark contrast to best practices recruitment and hiring systems, which involve some or all of the following tools and processes:

- Grassroots and one-on-one recruitment (college fairs, walk-in applicants) as well as sourcing and recruitment via online job boards and corporate job sites;
- Applicant tracking systems (ATS) and candidate management tools whose use is required and standardized;
- Questionnaires such as qualifications reviews, personality tests, and biodata;
- Traditional tests such as skills certifications, cognitive ability, and job knowledge assessments; and,
- Simulations and situational judgment measures, including work samples and managerial assessment centers.

Use of proven examples of each of the categories of tools and systems above often leads to both short- and long-term gain in the quality of employees brought into the organization. However, it is important to follow a system that helps match assessment tools to the particulars of a hiring situation. Accurately leveraging these tools is captured in the following three-step methodology:

1. **Identify critical characteristics for success** - This step involves a process often referred to as job analysis, competency modeling, or both. It usually includes an examination of job documentation, and/or surveys and interviews with incumbents and managers. Often, a job description or competency model is developed as a result of these

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activities. It is critical to get this right, as documented job duties, along with linked KSAO's and competencies, becomes the basis for the selection system.

2. **Choose appropriate measures** – After establishing the standards and success factors for the job, one selects the tests, inventories, interview questions, and other tools that will be used to evaluate applicants. Ideally, assessment tools are explicitly linked to results from the previous step.
3. **Evaluate accuracy and collect feedback** – Once the selection system has been deployed, it may be evaluated for prediction of job success, user acceptability, technical sophistication and performance, and adverse impact. Once evaluation results (included so-called validity studies) are obtained, the system may be modified and enhanced to increase hiring accuracy, appeal to job applicants, and ease-of-use by managers and recruiting staff.

By using this model, assessments will augment hiring in a manner that will deliver better employees, legal defensibility and long-term value. Each step in the process is critical to these results. In the case of step 1, identifying the relevant requirements of the job leads directly to a tighter focus for managers in determining interview questions, tests and inventories, and other tools used to evaluate qualifications.

In step 2 - choosing appropriate measures – the match between the skills to be assessed in applicants and the actual requirements for success in the job is most critical. Fortunately, an important trend in pre-employment assessment is the use of job-specific parameters, norms, and other tools used to assess the very specific KSAOs and competencies required for successful job performance in individual roles. There is a substantial amount of evidence suggesting that many general qualities predict job performance, including job knowledge, general mental ability, conscientiousness as well as interpersonal qualities such as agreeableness and trust. Nonetheless, the requirement for critical traits varies from job to job, with some roles requiring higher levels of specific characteristics than others. As such, it is often necessary to tailor proven, valid assessment tools according to specific job demands in order to truly reap their advantages.

Step 3 is often not attempted by hiring organizations, but is vital to the continuous improvement and ultimate success of best practices recruitment and hiring systems. After an assessment process has been in place long enough to hire employees and judge their subsequent job performance,

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scores or ratings on the assessment tool or system may be statistically compared to job performance measures, such as supervisor performance evaluations, financial outcomes, and other indicators. Subsequently, modifications to the system may be completed, with hiring accuracy and usability enhanced.

Improvements in job performance, retention, and company financials via scientific selection techniques

The primary question asked by organizations looking to develop their hiring with assessment technology is, “Does it work?” Fortunately, nearly 60 years of evidence has accumulated to reveal that a methodical, scientifically-based selection strategy is a more-than-worthwhile investment for a typical organization. From a variety of critical angles, careful research has confirmed that thoughtful improvements to hiring systems result in more accurate hiring decisions.

The vast majority of this evidence originates from researchers in industrial/organizational psychology, who have successfully demonstrated that scores on many widely available selection tools are related to performance on the job (Hunter & Hunter, 1984). Via thousands of studies, most evidence shows that higher (or simply “better”) scores on tools such as personality inventories (Hurtz & Donovan, 2000), cognitive ability tests (Schmidt & Hunter, 1998) and work samples/simulations (Roth, Bobko, & McFarland, 2005) is statistically correlated with better job performance. Historically, this original conclusion was reached regarding the selection of U.S. pilots in World War II, with credit being given to the use of job-specific assessment tools to effect drastic improvements in flying performance and uniformly low accident and fatality rates.

Even the lamentable interviewing process can be more accurate when interviewers use a structured and standardized process, guided by the use of behavioral and situational judgment questions (McDaniel, Whetzel, Schmidt, & Maurer, 1994.) This is further augmented (and made more legally compliant) by the administration of training in how to utilize interview guides and dedicated technology.

Not only has extensive research demonstrated a link between measures of individual differences in applicants and their subsequent job performance, but attempts at capturing return-on-investment have reported positive data as well. Kincaid and Gordick (2003), in an extensive review of the ROI evidence for various leadership development and hiring initiatives, found documentation of returns ranging up to 2,300%, and improvements in profit and cash flow near

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20%. Profitability and profit growth have even been linked to the number of strategic hiring processes in place at a firm, and ROI actually tends to increase as the level (and cost) of employees increases. In other words, scientific selection pays off even more for the most senior and highest paid positions. Relatedly, Hunter, Schmidt, and Judiesh (1990) found that investment in valid assessment tools provides greater ROI as the demands of the specific role increase in complexity. A series of studies by Paul Bernthal (2002) found an ROI of over 100% in a variety of settings where science-based selection was implemented, with these impressive gains occurring in the first year of the new hiring process. Moreover, he and his team found an ROI of 466% after four years of a comprehensive hiring program implemented by a nationwide retailer.

Judgments regarding the ROI of scientifically-based selection are not simply based on improvements in job performance by employees selected using assessment tools versus those who are not. Rather, more methodical recruitment and hiring also leads to better retention, less absenteeism, and higher job satisfaction and employee engagement as well. These represent indirect outcomes of assessment, and may be augmented by tailored compensation packages, employee development, and quality-of-life initiatives.

Of concern to many medium-sized and large organizations, the use of scientific selection does not hamper efforts to comply with fair employment practices either. Instead, legal compliance is actually enhanced, not degraded, and is a perfect example of a win-win situation in strategic investment in HR practices. When EEOC and OFCCP guidelines and relevant case law are taken into account, better documentation of critical job duties results, as does more due diligence in determining specific selection assessment tools to implement. Moreover, systematic evaluation of the system is more likely to occur, leading to greater improvements in hiring practices.

In summary, initial and ongoing investments in recruitment and hiring technology are likely to result in improved job performance and retention, and may add to revenue and profitability over the long run.

In Brief: The need for systematic hiring procedures during a labor crunch

Fewer qualified candidates for an open position make it even more imperative to thoroughly examine them and select the right employee. With fewer candidates, it is often less obvious as to which are superior to those less qualified. The "gut feel" approach to hiring must be reduced, as it is even more critical to find a good employee with so little choice.

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How use of assessment enhances corporate brand and market image

There is some evidence to suggest that job applicants form and modify their impressions of a company from the point that they read the initial job announcement to the final contact with recruiters or hiring managers. Using job-related assessments communicates seriousness and a certain level of technical sophistication of the hiring organization.

To be sure, the use of assessment does not positively affect brand, overall prestige, or market reputation when recruiting and HR personnel are not systematically processing applicants in a timely manner. Inattention to these issues can short-circuit conscientious hiring initiatives and decrease both their short-term and ultimate impact.

The low cost of entry of scientific selection

The adoption of advanced hiring technology and processes is often delayed and ultimately limited by perceptions of high cost and the excessive use of resources both human and technical. Is this concern warranted? Of course, any business owner will agree that “non-core” activities are always essential, that “it takes money to make money” and that improvements to infrastructure and operations – without an external revenue source/sale - are often necessary and nearly always painful.

Where does a first-time commitment to investing in sophisticated selection tools fit into this? There are three appropriate comparisons here. The first involves a simple comparison to issues meant to enhance quality of life and general progress of the company range widely. These include new buildings, redecoration, pretty lobbies, etc. In comparison to many of these capital initiatives, the initial cost of scientifically-based selection and assessment is quite inexpensive.

Next, specific efforts to encourage motivation and improve performance at all levels also vary widely in cost and effort, but also in effectiveness. A series of Watson-Wyatt studies (2004) point to vast differences in the effectiveness of different initiatives. In their analysis of the effect of different HR and training initiatives on shareholder value in public companies, they found that careful efforts to recruit and select employees rank high in ROI, but developmental training, quality-of-life strategies, and 360-degree feedback rank fairly low. These studies also detail strategic compensation and assessment of leadership as having substantial impact on the bottom line.

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The third – and probably most appropriate measure – are comparisons to specific measures to recruit and hire new employees, such as executive recruiting, college fairs, and job sites and portals. The distinction between the impact of these strategies and that of scientifically-based selection is less clear, but an important distinction is found in the cost-of-entry of such initiatives. Relationship-based executive recruitment, for example, usually costs an organization about one-third of the position's salary, and may even reach the \$100,000 mark – *for only one hire!* Implementing a proven selection tool company-wide tends to require investment in the low-six figure range, and may even cost less than \$50,000 per year for small and medium-sized companies.

For the company looking to improve the people side of the business, few human capital strategies can lead to as much long-term improvement in organizational performance as comprehensive, scientifically-based recruitment and selection tools.

Conclusion

The savvy organization is already aware of most of the main points of this paper, so what do the best organizations do to ensure that their efforts at building scientifically-based assessments pay off? The following are typical of companies that take hiring seriously:

- Start with the most critical jobs first.
- Match the requirements of the job to your assessment tools; the more specific to a particular job, the more they will accurately assess your candidates
- Build a selection system on a foundation of established assessment tools, not faddish or unproven questionnaires or tests.
- Invest in the proper amount of resources necessary for success; don't short-circuit hiring efforts by skimping or short-cutting.

The final piece of the puzzle is evaluation of how well scientific selection systems work. In investigating the impact of their recruitment and hiring strategies, many organizations find immediate impact, but all find ways to make ongoing improvements to their processes and tools. Overall, the benefits of scientifically-based recruitment and selection are available to any organization; it is up to the leadership of companies both small and large to facilitate the implementation of these tools and reap the benefits of better-qualified employees.

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