In Hiring, Algorithms Beat Instinct

by Nathan R. Kuncel, David M. Klieger, and Deniz S. Ones
You know your company inside out. You know the requirements of the position you need to fill. And now that HR has finished its interviews and simulations, you know the applicants, too—maybe even better than their friends do. Your wise and experienced brain is ready to synthesize the data and choose the best candidate for the job.

Instead, you should step back from the process. If you simply crunch the applicants’ data and apply the resulting analysis to the job criteria, you’ll probably end up with a better hire.

Humans are very good at specifying what’s needed for a position and eliciting information from candidates—but they’re very bad at weighing the results. Our analysis of 17 studies of applicant evaluations shows that a simple equation outperforms human decisions by at least 25%. The effect holds in any situation with a large number of candidates, regardless of whether the job is on the front line, in middle management, or (yes) in the C-suite.

Moreover, in our research, conducted with Brian S. Connelly, of the University of Toronto, we looked at studies in which the people making the call were highly familiar with the organization and often had more information about the applicants than was included in the equation. The problem is that people are easily distracted by things that might be only marginally relevant, and they use information inconsistently. They can be thrown off course by such inconsequential bits of data as applicants’ compliments or remarks on arbitrary topics—thus inadvertently undoing a lot of the work that went into establishing parameters for the job and collecting applicants’ data. So they’d be better off leaving selection to the machines.

Needless to say, there would be strong resistance to this idea. Surveys suggest that when assessing individuals, 85% to 97% of professionals rely to some degree on intuition or a mental synthesis of information. Many managers clearly believe they can make the best decision by pondering an applicant’s folder and looking into his or her eyes—no algorithm, they would argue, can substitute for a veteran’s accumulated knowledge. If companies did impose a numbers-only hiring policy, people would almost certainly find ways to circumvent it.

So we don’t advocate that you bow out of the decision process altogether. We do recommend that you use a purely algorithmic system, based on a large number of data points, to narrow the field before calling on human judgment to pick from just a few finalists—say, three. Even better: Have several managers independently weigh in on the final decision, and average their judgments.

In this way, you can both maximize the benefits offered by algorithms and satisfy managers’ need to exercise their hard-earned wisdom—while limiting that wisdom’s harmful effects.

---

The bars below show the percentages of above-average employees (as gauged by three different measures) hired through algorithmic systems versus human judgment. The numbers represent improvement over chance.

---

# Talent

**by Nathan R. Kuncel, David M. Klieger, and Deniz S. Ones**

**In Hiring, Algorithms Beat Instinct**

---

**The Predictive Power of Numbers**

The bars below show the percentages of above-average employees (as gauged by three different measures) hired through algorithmic systems versus human judgment. The numbers represent improvement over chance.

---

Nathan R. Kuncel and Deniz S. Ones are professors of psychology at the University of Minnesota. David M. Klieger is a research scientist at the Educational Testing Service.