

Hiring Technologies: Research and Policy Recommendations



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November 30, 2021

Agenda:

1. Introduction and Overview
2. Large Hourly Employers Research
3. Policy Recommendations



HELP WANTED

An Examination of
Hiring Algorithms, Equity, and Bias

December 2018

Upturn

Miranda Bogen
Aaron Rieke

Why do employers use hiring technologies?

Time -to -hire: speed up the process

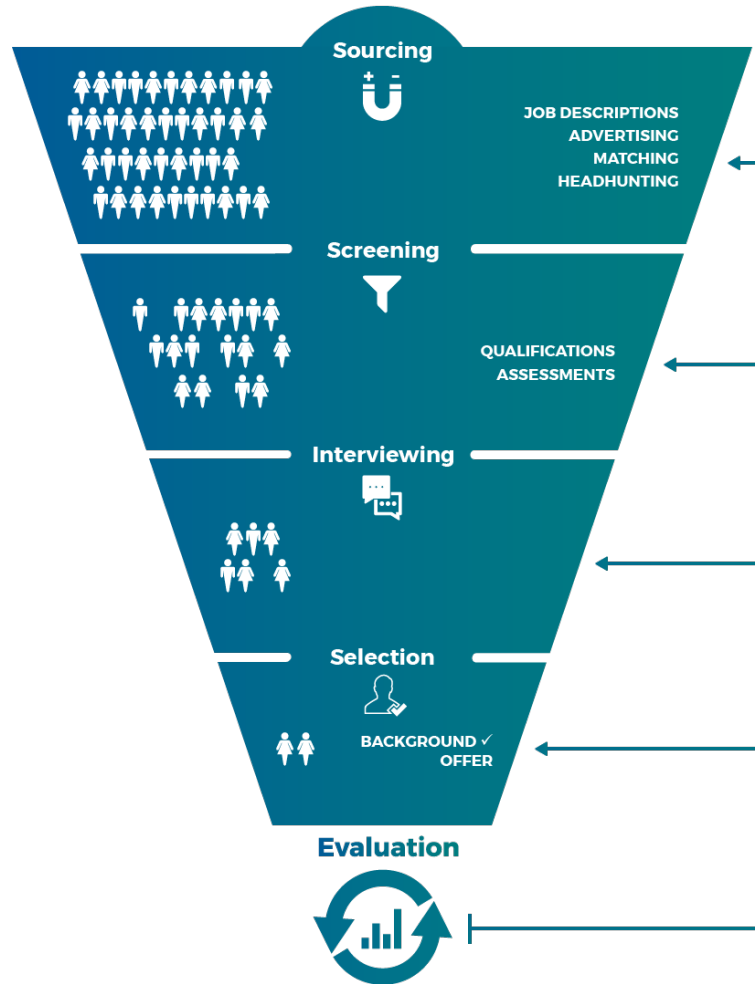
Cost -per -hire: stretch recruiting budgets

Tenure: hire people who stay

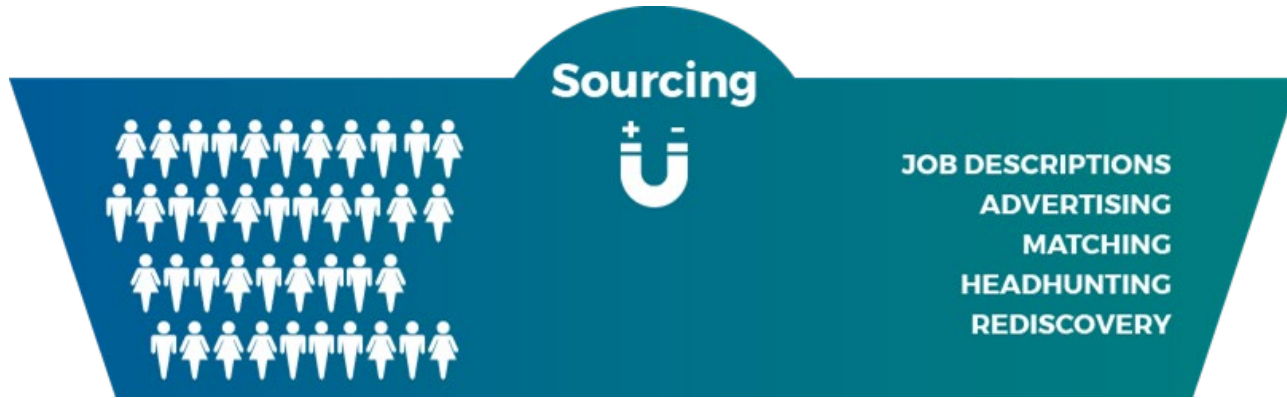
Quality of hire: hire people who deliver results

Diversity: hire more diverse workers

THE HIRING FUNNEL





Sourcing: encouraging applicants to apply, or express interest, in an employer's job opportunities.







Sourcing / Advertising

Policy analyst in United States 🔔 Job alert Off

3,216 results

**Multifamily Credit Policy Analyst** Promoted
Freddie Mac
McLean, VA, US
The country's largest multifamily lender is seeking a highly motivated individual to join its fa... www.freddiemac.jobs
 Be an early applicant
2 weeks ago

**CWMD Policy Analyst** Promoted
SAIC
Reston, VA, US
BA/BS in Security Studies, Political Science, International Relations, Biodefense required and six o...
saiccareers.ttcportals.com
 3 alumni work here
3 days ago

**Housing Policy Analyst**
PHADA - Public Housing Authorities Directors Association
Washington D.C. Metro Area
A 1,900 member trade organization based on Capitol Hill, the Public Housing Authorities Directors Association (PHADA) is seeking a...
New  Easy Apply

Suggested Post



T-Mobile Careers

Sponsored · 

LIKE PAGE

Become an Expert!



Launch a Customer Care career with the Un-carrie...

ecentralmetrics.com

APPLY NOW

   35

5 Comments · 3 Shares



Like



Comment

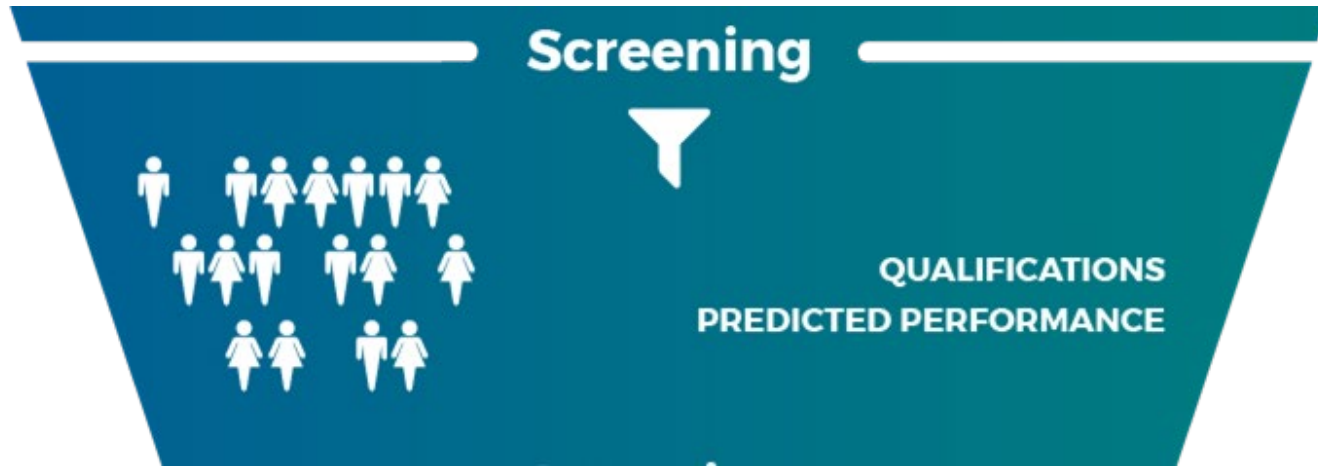


Share

Sourcing / Matching

The image shows a screenshot of the ZipRecruiter website's job search results page. The top navigation bar includes the ZipRecruiter logo, 'JOBS', and links for 'Suggested jobs' (6), 'Job Alerts', and 'Applied jobs'. Below the navigation is a search bar with the text 'Santa Monica, CA, US' and a 'Search Jobs' button. The main heading reads 'Your Suggested Jobs: Sunday, January 3'. Below this, a text line says 'Below are other jobs you might like, based on your resume, prior job applications and search history'. The job listings are arranged in a grid. Each listing includes a company logo, company name, location, a brief description, and buttons for 'Dismiss' and '1-Click Apply' or 'View Details'. A rating overlay is positioned on the right side of the page, featuring three circular icons: a thumbs down, a fist, and a thumbs up. The thumbs up icon is highlighted with a green border and a black callout box containing the word 'Interested'. Above the icons is a 'Rating:' label and an 'Auto-advance:' toggle switch. Below the icons are the labels 'Hide candidate' and 'Interested'.

Screening: filtering out applicants and prioritizing those remaining



Screening / Qualifications



Wayland Albertson A 👍 I agree 👎 I don't agree

Customer Experience Representative - Sales and Cash ▼

- A Job fit
- C Skills match
- B Resume quality
- A Screening questions

Retail

Inside Sales

Cash Handling

Supply Management

Customer Service

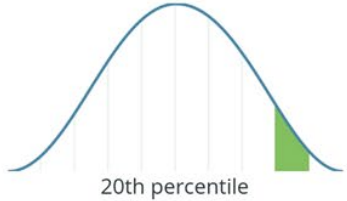
Heavy Lifting

Microsoft Office

Food

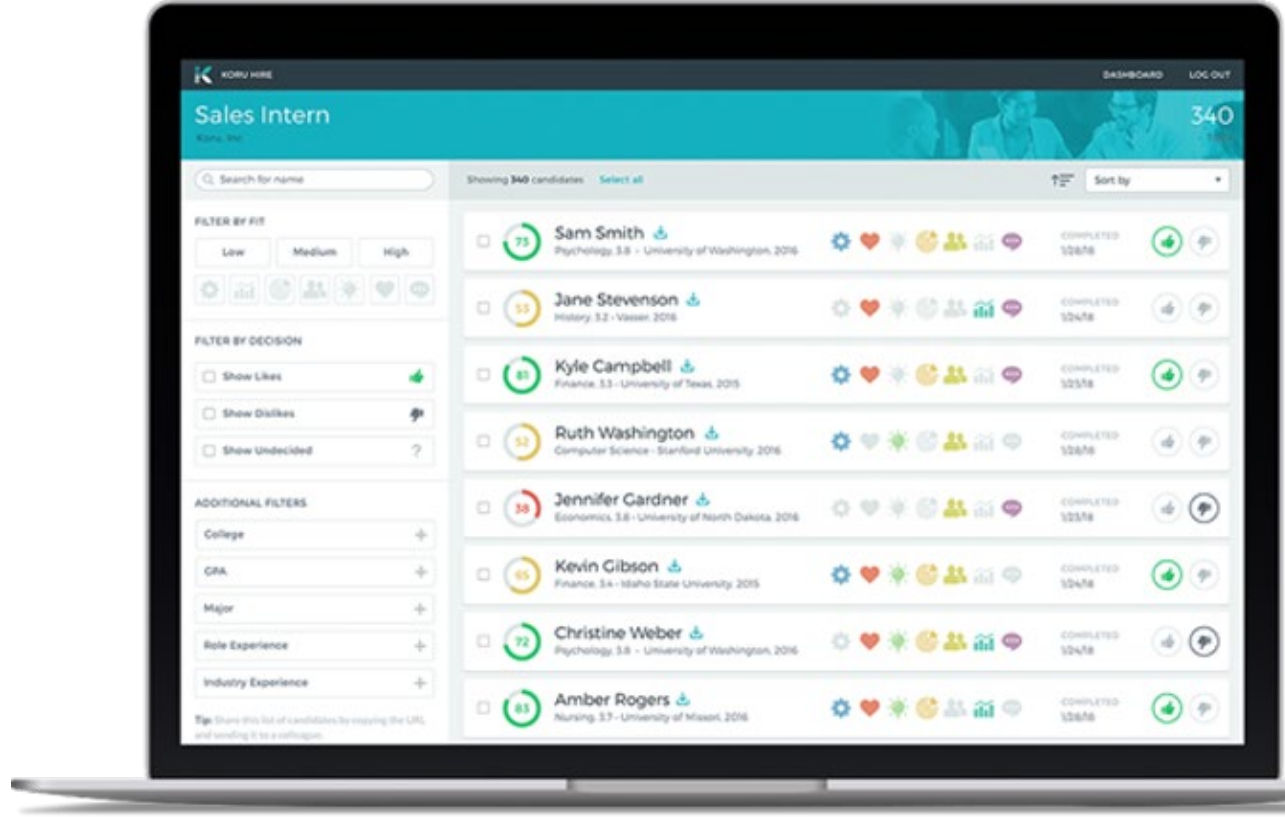
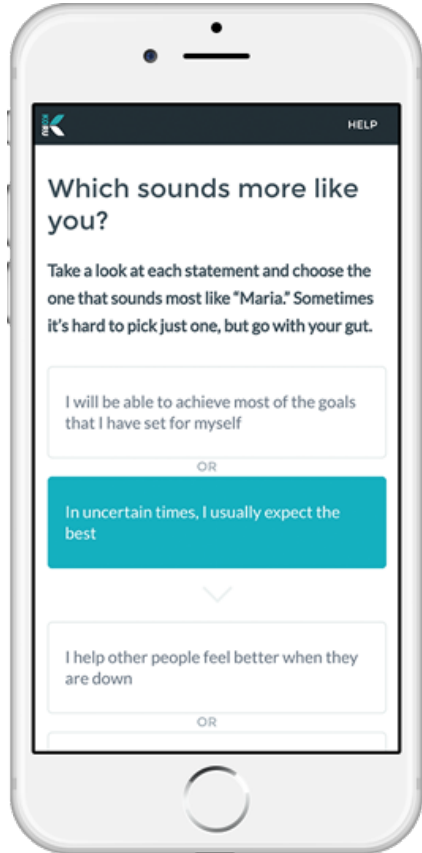
World Religions

Lawn care

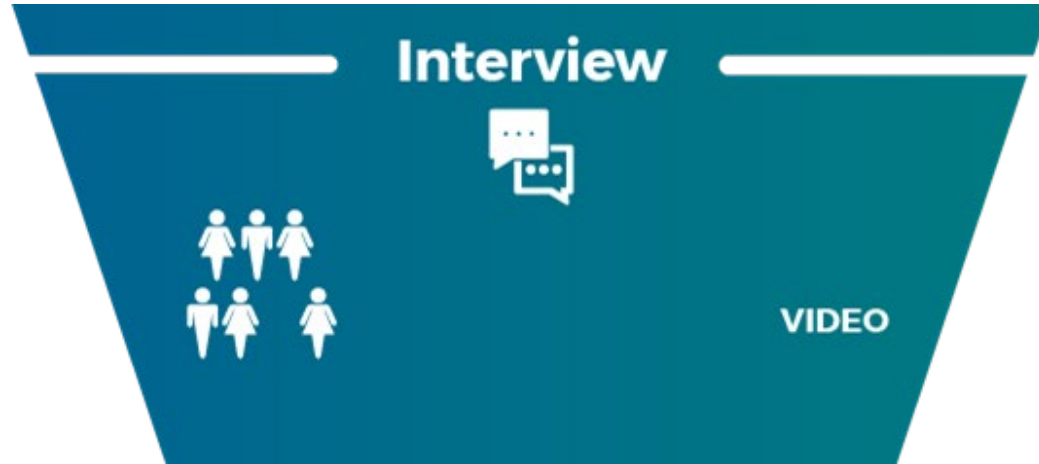


- 🏆 Worked for a top company
- 🏆 Attended a top school
- % In the **top 20%** of applicants

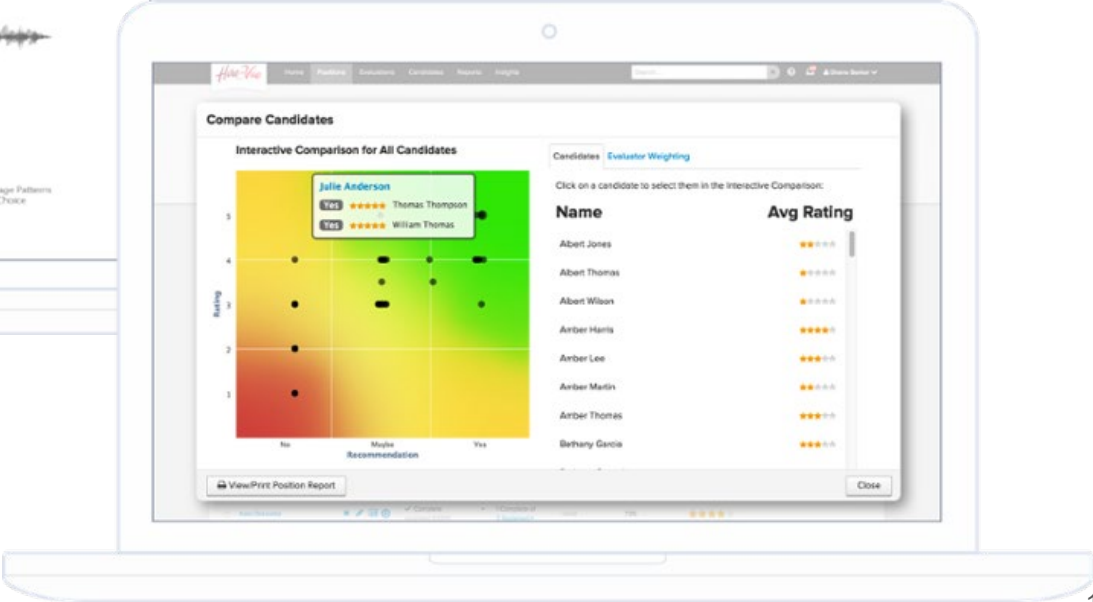
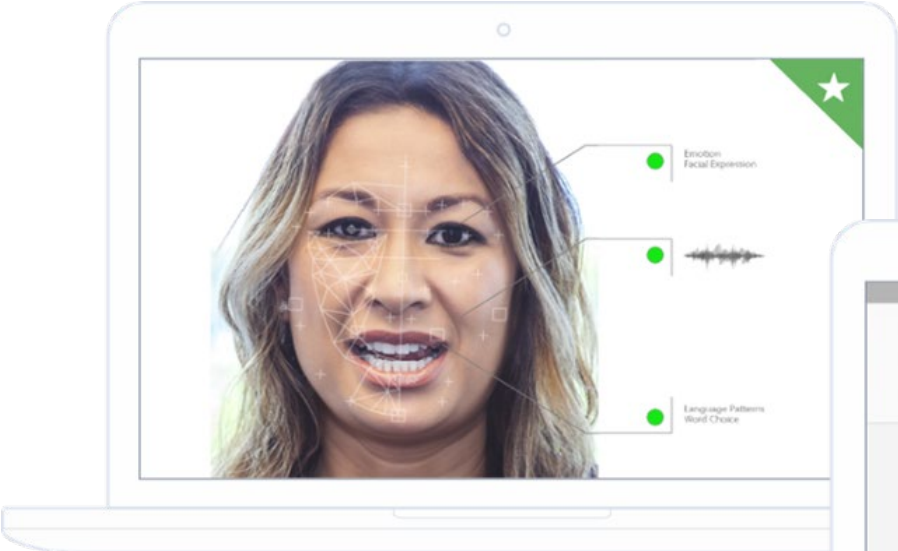
Screening / Assessments



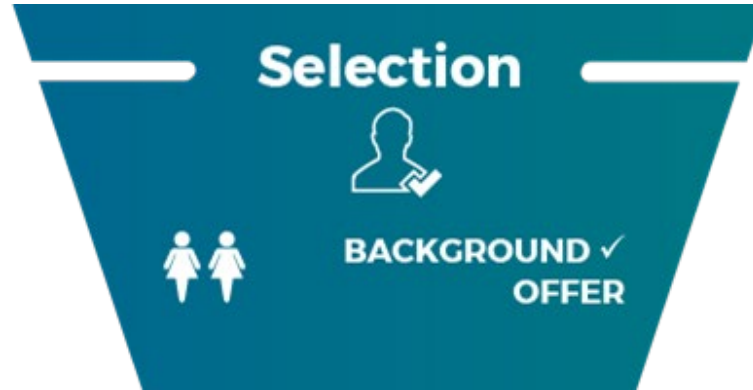
Interview: direct interactions with candidates to learn more about them



Interview / Video



Selection: final offer of employment hiring informed by background checks, negotiation



Selection / Offer

INSPIRE Search Home Notifications Profile

Job Offer Employment: Marketing Specialist

Recipient Sara Evans 🔗 📄 Status Draft Save and Preview Cancel

Salary

* Salary Basis: US Professional Annual

* Salary Amount: 100,000.00 USD Annually

Compa-Ratio: 1.12 🚩

Value	Label
\$80k	Min. For Role
\$100k	Midpoint
\$105k	Target For Role
\$110k	Max. For Role

Salary Components

+ Add Compensation

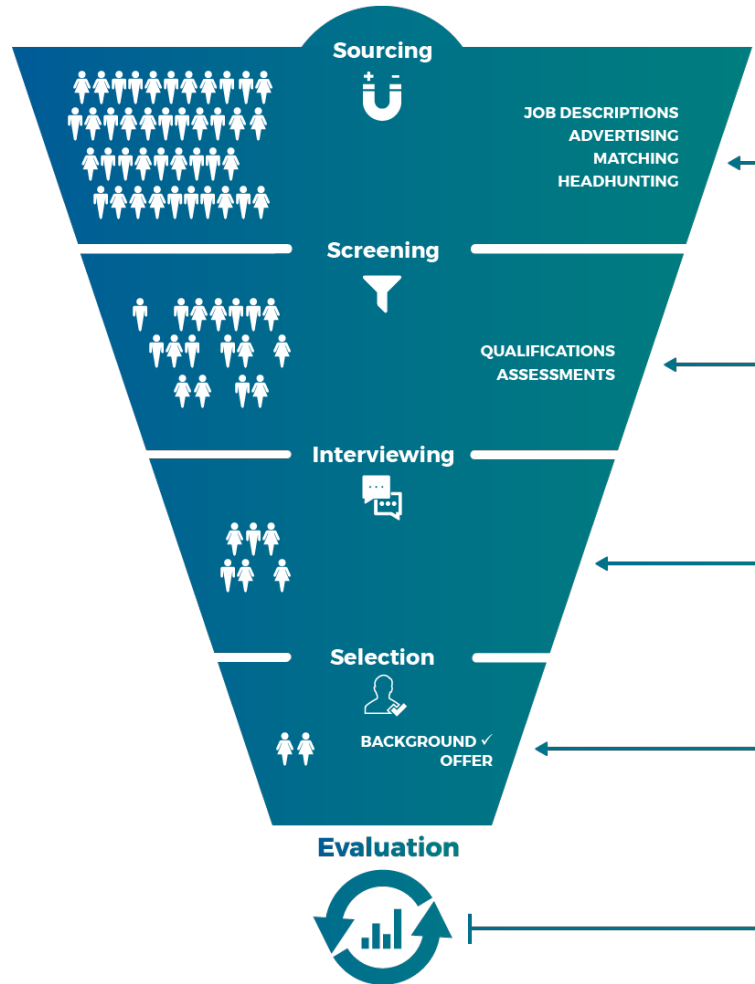
Offer Insights

83%
Likelihood to Accept

- Consider adding **stock options** for a 2% boost
- A **hiring bonus** can add as many as 10% points
- Average pay for this role in Seattle is \$120,000. Consider raising salary by \$15,000 for a 10% boost
- In the Seattle area a **transportation allowance** has been shown to raise **flexibility** by up to 5%

[See more suggestions](#)

THE HIRING FUNNEL



Reflections

Hiring is rarely a single decision, but rather a series of smaller, sequential decisions.

Reflections

While new hiring tools rarely make affirmative hiring decisions, they often automate rejections.

Reflections

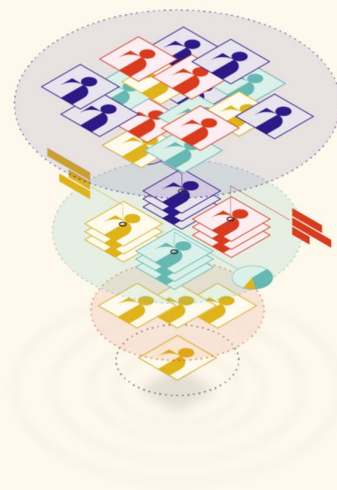
Predictive hiring tools can reflect institutional and systemic biases, and removing sensitive characteristics is not a solution.

Reflections

Nevertheless, vendors' claim that technology can reduce interpersonal bias should not be ignored.

Essential Work:

Analyzing the Hiring
Technologies of Large
Hourly Employers



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Research methods

Methodology

- Identify large hourly employers (e.g Walmart, Amazon, CVS, Walgreens)
- Complete online applications and collect digital records
- Conduct interviews with employers and technology vendors.
- Analyze findings to better understand the modern hiring process.

The online application, step by step

1. Background information and consent
2. Screening Questions
3. Work Experience and Other Qualifications
4. Demographic Information
5. PreEmployment Tests
6. Interviews
7. Final Steps

Virtually all employers use an applicant tracking system (ATS) to manage this process.









The online application, step by step

Pre-employment tests

- **Simulations** ask candidates to perform tasks or work activities that mirror the tasks employees perform on the job
- **Situational Judgement Tests** are meant to identify how an applicant would respond to a work problem or critical situation related to the job
- **Personality Tests** try to measure applicants' motivations, preferences, interests, emotional makeup, and style of interacting with people and situations

A customer/member owes \$10.51 and pays \$50.00 in cash. The change due is \$39.49.

Provide the amount owed using the smallest number of bills and coins possible.

1	1	1	4
\$20	\$10	\$5	\$1
			
1	2	0	4
\$0.25	\$0.10	\$0.05	\$0.01
			



Amazon Associate Virtual Job Tryout®

If I had to list everything I felt grateful for, it would be a very long list.

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

Most people can be trusted

a)

Most like me

b)

Somewhat like me

or

c)

Somewhat like me

d)

Most like me

It is smart to question people's intentions

I prefer a job where...

There are high performance expectations

or

I am highly compensated for my work

I am held accountable for store outcomes

or

I can have a stable, secure lifestyle

Outstanding service is provided to customers

or

I don't sacrifice my personal life to meet work goals

I am paid very highly

or

Patient and customer health are valued

Concerns

- Employers who screen out candidates based on their availability or pay preferences are likely rejecting qualified candidates.
- Background checks, which can be illegitimate and discriminatory barriers to employment, are easier than ever for employers to adopt.
- Employers offered little to no feedback during the application process.
- Employers provided few upfront details about available accommodations for applicants with disabilities.
- Employers' personality tests did not clearly measure essential functions for the specified job and might discriminate against some applicants.
- The current U.S. legal framework does not sufficiently protect job applicants.

Recommendations

Regulators must be more proactive, and modernize standards for assessing discriminatory effects of hiring selection procedures.

- The EEOC relies too heavily on individuals to file charges of discrimination.
- Proactively use (and in some cases, strengthen) investigatory and enforcement powers to study hiring technologies and initiate charges.
- Employers maintain detailed applicant data in their applicant tracking systems. More of that data—especially the impacts of assessments on protected groups—should be reported to regulators.
- Legislation/regulations should cover ~~all~~ forms of discrimination, including disability, which is often sidelined and requires more than quantitative audits to address.

Recommendations

Employers should only attempt to assess the “essential functions” for a given job, and discontinue use of personality tests in the hiring process.

- Many of the questions we answered lacked any apparent connection to the essential functions required to perform the jobs we applied to (i.e. counting change, lifting boxes). This is especially true of personality tests.
- EEOC guidance states that a “test will most likely be an accurate predictor of [] job performance...when it most directly measures actual skills and ability needed to do job.”
- Proactively consider alternatives, such as open hiring.

Recommendations

Employers should give applicants more information throughout the application process, including about the purpose of selection procedures, the reasons for automated rejections, and details about reasonable accommodations.

- Employers rarely inform applicants about the purpose of selection procedures, their performance on preemployment tests, or reasons why their application was rejected, even though hiring technologies can make these kinds of feedback easier to offer.
- Applicants should be able to improve their skills, seek reasonable accommodations, and vindicate their legal rights. This can't happen unless employers offer far more information throughout the application process. State and federal policymakers should consider ways to ensure this happens.

WARNING



**Bossware May Be Hazardous
to Your Health**



cdt CENTER FOR
DEMOCRACY
& TECHNOLOGY

<https://cdt.org/insights/report-warning-bossware-may-be-hazardous-to-your-health/>