

# From Algorithms to Employment: AI's Role in Shaping Human Resources

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You're sitting at your desk and seeing that you have 5,000 applicants from across the country. How do you comb through these applicants? Is artificial intelligence the way to go?

## History of Artificial Intelligence

Modern artificial intelligence (AI) was born of seemingly humble yet cumbersome beginnings by today's standards. Recognized as the forefather of AI, Alan Turing developed the revolutionary "bomba kryptologiczna" during WWII to crack the Nazis' Enigma code, which used ciphers that changed daily. The study of mathematical logic led to Turing's theory of computation, which suggested that a machine, by shuffling symbols as simple as 0 and 1, could simulate any conceivable process of formal reasoning, known as the "Church-Turing Thesis."

These innovative theories and models, along with concurrent discoveries in neurobiology, information theory, and cybernetics, led researchers to consider the possibility of building an electronic brain. In 1943, Warren McCulloch and Walter Pitts designed the first work now generally recognized as AI, a complete model of Turing's neural network known as "artificial neurons," which allow a machine to mimic human thought.

## Artificial Intelligence Today

Just what is AI in today's world? John McCarthy, a computer and cognitive scientist, offered the following definition at an AI conference at Dartmouth College: "It is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to methods that are biologically observable." Employers should, however, keep in mind that they are the ones feeding AI rather than AI generating information itself.

## Artificial Intelligence and Human Resources

Until the advent of the internet, most employers relied on local newspapers' classified advertisements to attract viable candidates: "Help wanted. Seeking hard worker with high school diploma; must demonstrate initiative; previous experience preferred."

The internet officially became open to the public on Jan. 1, 1983, and employers no longer had to rely on classified ads. Human resource (HR) professionals quickly realized that the internet gave them an incredible tool to reach out to many applicants that HR had never seen before; yet the increased applicant pool created problems that HR hadn't envisioned. HR managers saw an increase from 10 to 20 applicants per position to literally thousands of resumes and applications. How does an employer weed through this volume of applicants?

## AI Screening Tools

One of the first AI employment screening tools was HireVue. This system used candidates' computer or cellphone cameras to analyze facial movements, word choice, and speaking voice before ranking them against other applicants based on an automatically generated employability score. Many found that AI was nothing more than pseudoscience and a license to discriminate, largely because individuals with different cultures or different regional dialects were being rejected, not based on skill set, but on who they were.

The Electronic Privacy Information Center ultimately filed a complaint with the Federal Trade Commission (FTC) alleging that HireVue's algorithmic assessments discriminated against those whose facial expressions may be caused by an underlying disability such as Autism, Parkinson's Disease, and even depression. Similarly, the U.S. Equal Employment Opportunity Commission (EEOC) filed a complaint against iTutorGroup, asserting that the application software was programmed to reject female applicants over the age of 55 and male applicants over the age of 60.

## The EEOC's Recommendations

In 2021, the EEOC launched an agencywide initiative to ensure that the use of software, including AI, machine learning, and other emerging technologies used in hiring and other employment decisions, complies with federal laws. The EEOC opined AI that screens out applicants without engaging in the interactive process required under the Americans with Disabilities Act (ADA) is problematic.

Similarly, employers should be wary of potential adverse impact issues. Employers must assess whether a selection procedure such as AI has an adverse impact on a protected group by checking whether the use of that procedure causes a selection rate for individuals in the group that is substantially less than the selection rate for individuals in another group. In determining whether there is an adverse impact, the EEOC and courts utilize the "four-fifths rule." Under the four-fifths rule, there will be an adverse impact if the selection ratio of a protected class is less than four-fifths (or 80%) of the selection rate for the majority group.

If the use of an algorithmic decision-making tool has an adverse impact on individuals due to a protected class, then the use of the tool violates Title VII, unless the employer can show that the use of AI is "job related and consistent with business necessity."

## Yearly Audits

The EEOC also states that employers should conduct a yearly audit of their AI software to ensure there is no adverse impact on protected groups. While third-party vendors may be useful in this situation, the EEOC also

states that the employer is ultimately liable for any adverse impact, even if the third-party vendor's audit is inaccurate.

## The Takeaway

The use of AI in employment decisions is in its infancy. Regulatory agencies, legislative bodies, and judicial authorities at every level are sure to continue developing parameters and issuing guidance on this quickly evolving topic for quite some time. As with most innovative areas of law, competing and conflicting regimes are likely to emerge. While incorporating beneficial technologies is advisable in any industry, employers should exercise caution and seek competent legal advice in employing these valuable tools to avoid potentially running afoul of discrimination and other laws.

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