

COGNITIVE DISSONANCE SERIES:

THE REAL IMPACT OF ARTIFICIAL INTELLIGENCE ON TALENT ACQUISITION



WORLD'S LEADING RECRUITER ENGAGEMENT PLATFORM







THE TIGHTENING OF RECRUITER RESOURCES



The U.S. unemployment rate remained at a 50-year low of 3.6% in May 2019, while nonfarm payrolls that month increased by 75,000. The expected jobs growth for May was 180,000 marking a noted slowdown.¹ In spite of this small growth, the number of open roles is still staggering with most recruiters facing overwhelming lists of job reqs. In addition, many employers are imparting steep requirements on select roles such as ensuring they align with company goals and weighing heavily on such values as diversity.

All of that, combined with the ever-increasing pressure to decrease time-to-fill puts recruiters in more than a tight spot. To help combat this, an ever-increasing number of those in talent acquisition (TA) are integrating some form of artificial intelligence (AI) within their recruiting strategy.



In fact, 91% of U.S. job candidates feel that applying for jobs is more efficient when technology, including AI, is a part of the process.²



COMMON PERCEPTIONS (AND MISPERCEPTIONS) OF AI IN TALENT ACQUISTION

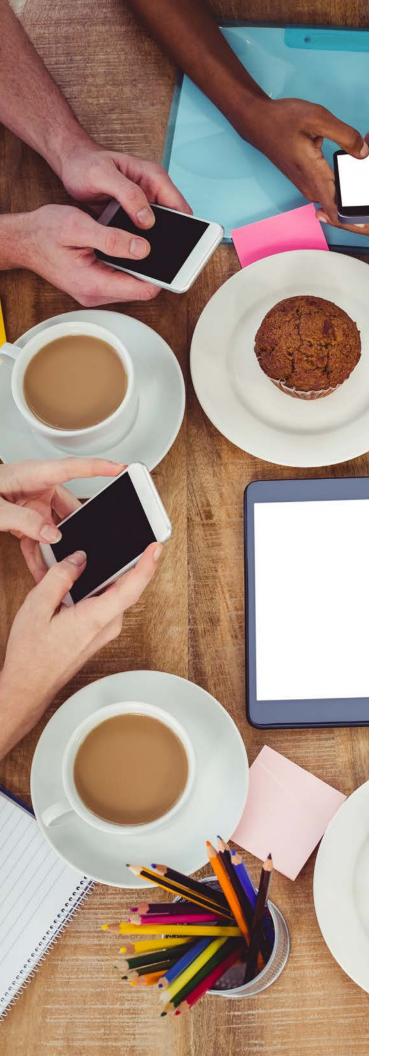


HELPS ALLEVIATE RESTRICTED RESOURCES

As talent acquisition expands in many organizations to be a key stakeholder impacting core business initiatives, it becomes even more high-touch. To offset some operational burdens AI is incorporated to automate mundane and low-level tasks.

In addition to freeing up some time for those in TA to focus on higher level tactics, data procured from AI processes can provide an expansive data set for decision makers to make more informed calls on pertinent issues.

Some AI tools manage interview scheduling while others can reduce time spent on sourcing by identifying and ranking candidates. For example, auto-generated coding challenges can be used to prioritize technical candidates.





Utilizing a virtual assistant can also prove valuable and act as the first point of contact for applicants. This assistant can track each point of communication between the candidate and the company moving forward. Branding and messaging are common challenges for employers and increasing the stickiness of the career site is paramount. In addition to a solid virtual assistant, there are AI solutions that focus on targeted messaging and effective job postings.

Chatbots are an aspect of AI that can help answer basic questions and screen candidates early on. Other online assessments such as psychological profiling and using gamification to draw out candidate soft and hard skills can be used once the candidate passes the first level of screening. Pitney Bowes stated that technology helped reduce time to fill for some roles by 10% or nine days.³

ALLOWS THOSE IN TA TO TEND TO HUMAN SIDE OF HIRING

The process of looking for a job can have the candidate feeling as though they are in an emotionally vulnerable position. The act of accepting a job offer or being rejected from a potential role can impact the trajectory of their life. Technology, no matter how advanced, cannot replace the impact of human connection in such delicate situations. Emotional intelligence is a complex barrier between human and machine interaction. We are already seeing that soft skills including compassion and empathy are high on the list of employers and will continue to be a valuable, sought after skill especially in the hiring process.

Employers hiring college graduates rank these soft skills as their **top three most in-demand talents**:⁴







Further, when candidates and employers work with recruiters the ideal situation is that a solid level of trust, loyalty, and teamwork is built. Utilizing AI as a tool to give recruiters more time to focus on human relationships is key here. The majority of workers, 69%, feel that AI should not be included within some hiring tasks including choosing new hires (40%). One-third of job seekers feel that AI cannot accurately assess the candidate's honesty about their experience or qualifications while being interviewed.⁵

JOB TAKEOVER & THE KNOWLEDGE GAP

A whopping 93% of employers in the U.S. and U.K. see AI as a priority for their business and have projects planned around it.

Just over half (51%) admit that their staff is lacking talent in the AI space with 41% of U.S. organizations and 73% of U.K. firms stating as such. Coding, programming, and software development are top areas in need of AI skills in addition to data visualization and analytics. Almost 60% of employers are considering talent from other organizations while 49% are looking at talent from universities.⁶

Per a recent survey, a paltry 12% of employees are concerned that AI will have a negative impact on their job as 39% feel that new technologies could actually have a positive impact by increasing their productivity. The other 49% don't see a change in their job due to AI at all.⁷

Some workers may be welcoming to the addition of AI to their role but quickly realize they are lacking the skills to properly integrate.

Almost half (47%) of employers believe that integrating such new technology will require their employees to learn new skills.

An overwhelming 82% of managers see getting their workers adequately trained as a challenge.⁸ Almost 70% of employers are investing in upskilling their existing employees with the intention to retain their role.⁹



REALITIES OF AI'S USE IN TALENT ACQUISITION

GOAL: MACHINE LEARNING USING STATS FOR CANDIDATE SOURCING & PREDICTIONS

An Al tool can be integrated as early on in the process as helping to write the job description. Once a recruiter identifies a task, such as selecting candidates for roles, and enters it into the Al system the tool goes to work. The search will begin via various candidate databases and sites. Due to machine learning, the system may not need any further information as it can systematically tell what degree is required, average salary, etc. Public information for each candidate can be aggregated from multiple sources such as resumes, LinkedIn profiles, social media, and their own personal websites and can sort through such data to make ranked recommendations of which candidates to consider.

The recruiter can then opt to have the AI tool notify them when the candidates respond and potentially send out pre-interview questions to get the process going. This aspect can help weed out those that do not match up. At this early stage that info could be salary expectations, their willingness to relocate, etc. Scheduling the interview can also be taken care of via the AI tool including calendar invites for available days and times.





CHALLENGE: STILL SHOWS BIAS

Any way you slice it, the code for AI algorithms is created by humans and looks to see what worked in the past to predict what happens in the future. Is what worked accurate or are there implicit biases that the AI algorithm is then now based on? AI leverages algorithms to work its magic, and it can seem magical as once programmed they seem to take on a life of their own. As the algorithm gathers data it constantly learns...and makes decisions or recommendations based off of those learnings.

Intelligent algorithms have been used for years, but there is still a broad lack of understanding around them that contributes to the lack of transparency and accountability.

This has become a severe challenge with complex intricacies as algorithms show bias on multiple levels, including when used within talent acquisition where a main goal is to eliminate such bias. Bias against gender, age, race, etc continue to flourish when leveraging AI; the very aspects that many thought AI would conquer.

A headline-grabbing example of bias via AI was a project from Amazon. The company had spent years on making a system to automate the recruitment process. The system would look at a database of resumes and recommend top candidates. A list of resumes going back ten years of people applying to jobs at Amazon was fed into the AI system. As the tech industry is dominated by males, most of the resumes were from men. Due to this, the system began to prioritize resumes from men over those from women. Resumes that mentioned words like 'women's' such as pertaining to women's universities were downgraded. On the flipside, resumes that included words such as 'executed' and 'captured' were highlighted as they were seen more in resumes from male engineers. Despite the team's attempts to eliminate such bias, they were unable to do so ending in the elimination of the project before it was rolled out for use.

Aware of such bias issues, Facebook last year announced they are testing a tool called Fairness Flow. This system, first targeted at matching candidates with jobs that are advertised on their platform, would identify bias with race, gender, and age via machine-learning algorithms.

While alarming in some cases, it's easy to see how algorithms could grow such biases.

As AI tools are designed to identify patterns, those patterns are then incorporated regardless of fairness.

These systems are only as good as the data they are fed and many simply reinforce human biases. Only when humans step in are such biases minimized, even still, total elimination is near impossible, at least at this point in the advancement of such technology. Unlike humans who can learn through trial and error and course correct to become better employees, a machine continues to make decisions based on the dataset supplied, regardless of the degree of faultiness.

Another example is when Microsoft used a chatbot to learn from and engage with users on Twitter. After only a few hours after it went live, the bot actually learned how to be as offensive and rude as the other Twitter users. The bot was removed that same day. Since algorithms are not transparent, some biases are baked in and difficult to ascertain.

Al, at an advanced level, is tough to know how it works as it uses so many points within the coded algorithm. Secure data points are protected so you won't know what if any hidden parts of complicated algorithms are proxies for race, gender, socioeconomic status, religion, etc.

It's not enough to know that an AI model works. We have to know how it works. Bias has been a concern in science long before machine learning came long. The stakes are clearly higher in AI.¹⁰

> - SUNDAR PICHAI CHIEF EXECUTIVE AT GOOGLE



GOAL: SOCIAL ENGINEERING AI GETS THE RIGHT OPPORTUNITY IN FRONT OF THE RIGHT PERSON

Focusing on understanding people, their motivators, and how best to communicate with them is key in talent acquisition. Social engineering is at the core of AI, the science of skillfully routing a person in a direction of action. For example, finding and engaging potential candidates to then guide them down the desired path, or funnel. The goal via AI is to identify the right candidates, match them to the right opportunity and then pass the baton off to the recruiter to develop the relationship, understand their motivators, cultivate their interest, and finally, close the offer with a resounding yes.

CHALLENGE

Utilizing artificial intelligence within AI is best in scenarios where prioritization is critical to success.

When tasks must be prioritized for time, AI can swoop in and assist in managing and increasing output. For example, in an employment landscape that is an 'employer's market' where ideal candidates are actively looking for their next opportunity and are all waiting to accept your offer with bated breath. Conversely, at low unemployment you're looking at first ensuring the hiring manager realizes the reality of the current market and the fact that they will have few candidates to choose from. Then, it can be an uphill battle to get the right candidate to take action at the right time. In this scenario, there are not hundreds of candidates per role to muddle through in which AI can help sort and organize. It's just not a problem that needs such a solution.



HOW TO MOLD AI TO YOUR TA STRATEGY

5 STEPS FOR AI SUCCESS IN TA



1 Identify Business Objectives

Integrate Technology into What You're Already Doing

Proceed with Caution and Integrate AI in Piece Parts

- Build Algorithm and Test for Bias
- Share Benefits While Mitigating Risks

KEY POINTS TO CONSIDER FOR A SOLID AI SOLUTION

While women make up more than half of white—collar employees, they make up only 4.6% of executives.¹¹

Increasing the number of women and diverse workers within the technical field is one way to help reduce bias in AI.

Doing this provides expanded perspectives and additional fail safes that could assist in training AI to more accurately reflect the current reality. Having a diverse AI team can also help, as if the group is similar in traits and backgrounds, bias has a better chance of seeping in unnoticed. Women only represent 12% of leading machine-learning researchers currently.¹²

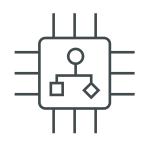


To help remove bias in hiring when leveraging AI, consistency is key. The entire organization and the whole recruitment process from end-to-end needs to use the right AI solution each and every time. Recruiting teams and hiring managers must be educated on using AI to reach diversity goals. A recent survey found that 63% of talent acquisition professionals found that AI has impacted the recruiting process at their organization and 69% felt that AI as a sourcing tool has helped them to find higher-quality candidates.

Building the algorithm to generate fair and balanced results as well as ensuring recruiters and hiring managers analyze the data and take action on insights gleaned from such data in an honest and transparent manner is critical for success. Digging deeper into the data provided by AI, such as how many candidates made the cut for recommendation, who was selected, why and how they were selected, as well as who interviewed them, and the outcome of those discussions is key.

Building in accountability, responsibility, and neutrality at the start, when first creating the code will help alleviate challenges down the road.

Otherwise, the process is starting with a faulty algorithm and the data output will be useless. For example, IBM has come up with a three-level ranking system in order to test data for bias. The three labels it assigns the AI system that it tests are if the system is not biased, if it inherits the bias of its data/training, and/or if it carries the potential to have data bias even if it starts out as bias-free. It's not a perfect solution, but it's certainly a step in the right direction.¹³



Some organizations are attempting to limit bias in AI by assessing applicants based on specific data, skills, and abilities while constantly monitoring the AI tools as they go. For example, removing names from resumes and creating a profile and scoring the candidate based purely on data such as skills match and resume quality as compared to other candidates. Further, some AI tools will employ virtual reality filters to change a candidate's voice or appearance during the interview process.

Artificial intelligence can prove to be an extremely valuable tool within talent acquisition, and we will keep our finger on the pulse of this exciting technology.

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