THE POWER OF
AI IN TALENT ACQUISITION

This report was sponsored by Pando Logic, a Veritone company.
INTRODUCTION:

AI has changed the way work gets done. The labor shortage, increased recruiter turnover, and remote work have accelerated the demand for AI in talent acquisition. According to Aptitude Research, 63% of companies are investing or planning to invest in AI solutions this year compared to 42% in 2020. Companies are looking for ways to improve overall efficiency, lift the administrative burden, and create a simpler process for recruiters and candidates.

But the benefits of AI extend beyond efficiency and the tactical elements of talent acquisition. When used correctly, AI impacts quality of applicant, Diversity, Equity, and Inclusion (DEI), and overall experiences. In addition, it enhances the human side of talent acquisition and offers a support system for companies looking for smarter ways to attract, recruit, and hire talent.

The challenge most companies face is that AI is misunderstood in talent acquisition. TA buyers are not always clear about how to navigate the changing landscape. Some providers do not take an ethical approach to AI, while others offer little more than automation. In talent acquisition, the state of AI is messy. But companies that are committed to laying the foundation for AI will see long-term improvements in their overall strategy.

Based on data collected in 2022, this report will look at the current state of AI in talent acquisition, provide insights on the impact of AI, and provide recommendations for companies at any stage of their AI journey.
This report will help answer the following questions:

- How is AI defined?
- What are the challenges and misconceptions with AI in talent acquisition?
- How are companies adopting AI?
- What are some of the applications of AI across talent acquisition?
- How important is ethical AI?
- What value does AI bring to talent acquisition?

Aptitude Research conducted the research cited in this report in January and February 2022.

**Quantitative Research:** 382 North American responses of Talent Acquisition Director Level and above across all industries and with 1000 employees and above

**Qualitative Research:** A series of interviews with companies to understand their strategies for automation

**TOP FINDINGS**

1. **Transparency is Critical:**
   
   Only one in two companies are satisfied with trust and transparency from their AI provider. Many providers use “black box algorithms” that are not transparent or shared with employers. AI solutions should be fully transparent on how their information is used and how decisions are made. Transparency should include why candidates are targeted, shortlisted, ranked, and assessed. AI must also be transparent about where it gets data. Some providers scrape social media profiles without candidate consent while others have tried to use facial recognition. Transparency needs to include how data is used but also where data is collected.

2. **AI is Still Misunderstood:**
   
   Fifty-two percent (52%) of companies define AI as automation rather than intelligence and machines capable of learning and logic. Automation and AI are not necessarily interchangeable. Automation takes on the tactical burden of talent acquisition, allowing humans to focus on strategic elements while AI supports tactical and decision making. Intelligence in AI and data science means it gets better and smarter with more input. This misunderstanding of AI is the number one reason companies are hesitant to invest.
AI Can Improve the Recruiter Experience:

Most recruiters are not resistant to AI and do not believe that it will lessen the candidate experience. This study found that recruiters embrace AI to be more efficient and provide a better candidate experience. Forty-two percent (42%) of recruiters believe that AI will help them become more strategic in their jobs. As recruiters face burnout and increased turnover on TA teams, AI can provide a support system to improve the workload of recruiters.

The Value of AI is Beyond Efficiency:

Although efficiency was the top benefit of AI identified by 44% of companies, AI plays a more strategic role in talent acquisition. For example, it can improve recruiter and candidate experiences, provide dignity and respect through more consistent communication, and reduce bias in hiring decisions.

Ethical AI is Not the Same as Compliance:

The role of ethics in AI is the most important consideration in AI, and it is often the most ignored. Companies are looking for a quick fix to their recruitment challenges and looking at solutions that will save time and money without understanding the long-term implications of building a fair and equitable recruitment process. With adverse impact and upcoming European regulations, companies must look at ethical AI in the hiring process and ask difficult questions to determine which providers will hold up.

Adoption of AI is Highest in Sourcing and Recruitment Marketing:

This study found that the top use cases for companies interested in AI include recruitment marketing and sourcing. According to Aptitude Research, 77% of companies are interested in using or currently using AI to support sourcing efforts. AI can help companies personalize candidate communication, target the right talent, match the right candidates to jobs, and personalize content.
DEFINING AI

It is difficult to discuss TA tech without addressing the amplification of AI solutions over the past few years. Providers across all areas of talent acquisition seem to be leading with a message around AI. Companies are increasing their investment in TA technology, and AI is impacting everything from recruitment marketing to onboarding new hires. But, as the demand grows, confusion around the basic definition of AI persists.

For many companies, AI is misused and misunderstood. Aptitude Research found that 52% of companies define AI as automation of talent acquisition activities (with or without AI), and only 42% define AI as capable of perception, logic, and learning. Furthermore, automation and AI are not necessarily interchangeable. Automation takes on the tactical burden of talent acquisition, allowing humans to focus on strategic elements while AI supports both tactical and strategic initiatives.

The most significant difference is that AI gets smarter the more companies use it. For example, in banking and accounting, automation to detect fraud includes identifying fake accounts, while AI includes learning and detecting patterns of fraud.

Figure 2 outlines some of the differences between automation and AI without automation.
**Technology that does automates activities without the need for human behavior.**

<table>
<thead>
<tr>
<th>Definition</th>
<th>Technology that becomes smarter with use.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Automatically run campaigns</strong>&lt;br&gt;<strong>Chatbot with loaded questions</strong></td>
<td><strong>Historical data to predict the performance of campaigns</strong>&lt;br&gt;<strong>Conversational AI with intelligent assistance</strong></td>
</tr>
<tr>
<td><strong>Automated matching based on keywords</strong>&lt;br&gt;<strong>Automated workflows</strong></td>
<td><strong>AI matching with skills inference</strong>&lt;br&gt;<strong>Intelligent workflows</strong></td>
</tr>
<tr>
<td><strong>Automated interview questions</strong>&lt;br&gt;<strong>Automated assessment invites</strong></td>
<td><strong>AI-driven interview questions and feedback</strong>&lt;br&gt;<strong>Deep learning of assessment data to predict performance and understand candidate insights</strong></td>
</tr>
</tbody>
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**Efficiency**

**Outcome**

**Efficiency Experience**
AI comprises subsets that include machine learning (ML) and deep learning (a subset of ML). Machine learning allows companies to use structured data to predict outcomes. On the other hand, deep learning allows companies to use unstructured data and free-form text and speech to provide more accurate information and insights. Using deep learning and unstructured data gives organizations a competitive advantage. It means that a system is not just programmed to perform a specific task. Instead, it can learn independently.

**DEBUNKING AI MYTHS**

With the confusion around the basic definition, not every company embraces AI in talent acquisition. Aptitude Research found that the number one reason some companies are hesitant to invest in AI is that they do not know enough about it (44% of companies). Although awareness around AI has improved, it is still the most significant barrier to investment. Without a way to clearly articulate the value of AI, it can be challenging to get senior leader support. Additionally, only 12% of companies stated that a lack of trust impacts AI decisions, and only 4% of companies stated they fear AI will replace the role of recruiters (compared to 16% in 2020).

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**Figure 3: Misconceptions Around AI**

- Don't know enough about AI: 44%
- Senior leaders don't support AI: 17%
- We don't trust AI: 12%
- We think it will hurt the candidate experience: 9%
This lack of understanding around AI has created misconceptions that impact talent acquisition:

**MYTH**  
**AI Hurts the Recruiter Experience:**

Forty-two percent (42%) of recruiters stated that they believe AI would improve their jobs. Recruiters today are overworked and need support with both tactical and strategic elements of talent acquisition. With new responsibilities, burnout, and competition for talent, AI presents a support system and resource to help recruiters manage their workload and feel more confident in talent acquisition decisions.

**MYTH**  
**AI Removes the Human Element:**

AI does not take away the human element of talent acquisition. It has the potential to enhance it. AI frees up time for HR and recruiters so they can focus on more strategic elements. It learns more about candidate behavior, provides recommendations, increases personalized communication, and offers consistent communication. Through AI, candidates receive communication that managers and recruiters are often too busy to provide. Companies that use AI and define it as machines that learn about candidates are twice as likely to improve the candidate experience.

**MYTH**  
**AI Introduces Bias:**

Some companies believe AI can contribute to bias or introduce bias since humans develop it. If used correctly, technology and automation can help companies reduce bias and encourage greater humanity in the hiring process. It is important to consider the data that providers are using and starting with the hiring process, the hypothesis they are using in their algorithms, and the data's transparency. Technology, unlike humans, can be trained to reduce bias, so it is critical to look at providers’ visibility into the algorithms and methodologies they use to reduce bias.

**MYTH**  
**Not All AI is the Same:**

Investing in AI presents risks, but the reality is that investing in the right providers brings value. Every individual uses AI in their personal lives to inform decisions around day-to-day activities; AI can also provide the same assistance in professional lives. A few examples of personal uses of AI include:

- **NETFLIX**  Recommendations on movies and shows
- **Amazon**  Recommendations on purchases
- **Alexa**  Personal assistant driven by AI
- **Waze**  AI-driven traffic navigation
- **Facebook, Instagram, Twitter, YouTube**  AI-driven recommendations on who to follow and what to buy
ADOPTING AI

Every company is at a different stage in its talent acquisition technology journey. Some companies are just getting started with AI, while others are strategically looking at expanding their use of AI across talent acquisition. Although companies increase their interest and investment, most companies are still immature.

Currently, 54% of companies are not using AI or do not realize they are using AI in talent acquisition. As companies evaluate their maturity, they should consider the following questions:

- What are areas of talent acquisition most impacted by recruiter and candidate experiences?
- What goals do companies have for improving talent acquisition?
- Do companies have the time and resources to support AI solutions?
- What areas are already driven by AI?
- What are the benefits of using AI?
Companies that are successful in their AI journeys share several characteristics, including:

01 **Starting Small:** Companies that take a long-term approach were more likely to implement a strong foundation of AI. Being iterative allows companies to adopt solutions more effectively and stay agile to changes in expectations.

02 **Creating Change Management Strategies:** The lack of change management was a significant barrier to adopting AI. Companies need to stay prepared with the right resources and communication in place.

03 **Building Trust and Transparency:** One in two companies do not have trust or transparency with the AI solutions. Trust and transparency are the framework for a successful approach to AI. Companies must trust the providers and trust the data.

04 **Ongoing Adoption:** AI does not stop once the technology is adopted. Companies need to invest in continuous improvement to continue to drive results post-implementation.

05 **Ethical AI:** One key focus for this report is ethical AI and ensuring that AI drives a fair and equitable experience.
Understanding AI Across the Talent Lifecycle

AI is not a point solution or a separate investment. Instead, it is a strategy for informing decisions, improving efficiency, and creating a positive experience. Its applications extend from recruitment marketing efforts to onboarding. It leverages data throughout the entire candidate experience and provides intelligent workflows to move the right candidates along in the process more effectively. This study found that the top use cases for companies interested in AI include recruitment marketing, sourcing (AI matching), and assessments (see Figure 5).

AI matching is not meant to remove humans from talent acquisition but rather empower them to make better, more informed decisions. With communication as the most critical competency in sourcing teams, AI allows sourcers and recruiters to focus on building meaningful relationships with the right talent. According to Aptitude Research, 77% of companies are using or evaluating the use of AI in some way to support sourcing efforts (see Figure 6).
Companies hesitant about AI have different models to consider, and human expertise plays a critical role in sourcing and decision-making. Even many AI-driven sourcing providers offer some combination of technology and human expertise. AI can help companies personalize candidate communication, target the right talent, match the right candidates to jobs, and make decisions on talent that will predict performance. But AI plays a role across all areas of talent acquisition. Figure 7 highlights some of the applications of AI across attraction, recruitment, and hiring.
The Power of AI in Talent Acquisition

**ATTRACTION**

AI provides value in this phase, insights into the right content and automated messages to attract the right talent. AI supports both tactical and strategic initiatives. It can also help provide the right personalized communication and information to candidates to keep them informed about the employer. De-gendered job descriptions and debiased job descriptions can help to reduce bias in the process as well.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Impact of AI</th>
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</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>Quickly convert talent when communication is consistent and personalized; Predict spend for advertising</td>
</tr>
<tr>
<td>Experience</td>
<td>Save recruiters’ time and provide personalized experiences to candidates</td>
</tr>
<tr>
<td>Quality</td>
<td>Target the right talent</td>
</tr>
</tbody>
</table>

**RECRUIT**

AI and intelligent workflows ensure that the right candidates are moving along in the process of being dispositioned at the right stage. Candidates during this phase will receive consistent and personalized communication about their status and what they can expect moving forward. AI will ensure that candidates receive prescreening questions, provide interview self-scheduling, and offers realistic job previews through assessments. Companies can offer the right workflows and ranking of candidates through AI-powered analysis.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Impact of AI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>Move the right candidates through the process</td>
</tr>
<tr>
<td>Experience</td>
<td>Save recruiters’ time and provide immediate answers to candidate questions; Provide a fair and inclusive process</td>
</tr>
<tr>
<td>Quality</td>
<td>Understand candidate in a more relevant way</td>
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</table>

**HIRE**

During the final stage of the recruitment process, AI enables smarter decision-making, reducing bias and eliminating gut decisions. AI-driven assessments can provide candidate insights that include potential and learnability to predict performance. The AI-driven interview process provides insights to support better communication, a positive experience during onboarding, and socialization into company culture.

<table>
<thead>
<tr>
<th>Outcome</th>
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</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>Reduce the number of interviews; Personalize the assessment process improve time to offer</td>
</tr>
<tr>
<td>Experience</td>
<td>Provide every candidate with consistency and fairness in the hiring process</td>
</tr>
<tr>
<td>Quality</td>
<td>Understand candidate insights beyond experience, including potential, performance, and learnability</td>
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</table>
The most obvious benefit of AI is efficiency. Fifty-five percent (55%) of companies identified efficiency as the top benefit (see Figure 8), while 48% stated quality of hire. Companies often turn to solutions to help improve recruiter productivity, reduce time to fill, and manage applicant volumes. But, the value of AI extends beyond efficiency and includes enhancing the experiences of recruiters and candidates, reducing bias in decision-making, and improving quality of hire.

**Figure 8: Benefits of AI**

<table>
<thead>
<tr>
<th>AI Improves...</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency Of Talent Acquisition</td>
<td>55%</td>
</tr>
<tr>
<td>Quality Of Hire</td>
<td>48%</td>
</tr>
<tr>
<td>Candidate Experience</td>
<td>32%</td>
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<tr>
<td>Our Dei Efforts</td>
<td>31%</td>
</tr>
<tr>
<td>Conversion Rate</td>
<td>29%</td>
</tr>
<tr>
<td>Recruiter Productivity</td>
<td>24%</td>
</tr>
<tr>
<td>Recruiter Experience</td>
<td>23%</td>
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</table>

AI improves more than tactical recruitment. It brings benefits that include the human and strategic side of talent acquisition. Aptitude Research identified four pillars of candidate experience that are influenced by AI:

**Inclusivity:** How can AI reduce bias early in the process so that talent acquisition is consistent and fair?

**Transparency:** How can AI provide transparency into how data is used and decisions are made?

**Trust:** How can AI and quality data build trust and confidence between employers and candidates?

**Communication:** How can AI provide candidates with consistent communication and personalized feedback and coaching?
Create a Process to Continually Test for Bias: AI solutions must have a hypothesis in place to reduce bias. They must continually test that hypothesis as they collect new data.

Interrupt Bias Early: Certain attributes in a resume can introduce bias into the talent acquisition process early. Companies need to remove those attributes and interrupt bias early in the process. Blinded screening and blinded interviews can help companies apply an equal experience to all candidates.

Use Objective Data: Companies tend to decide on candidates based on the resume or those attributes they recognize. Without objective data, not every candidate will get a fair opportunity.

Ensure Transparency: Data transparency is the ability to easily access and work with data no matter where it is located and that the data reported is accurate. Transparency of data becomes even more critical when evaluating AI solutions and capabilities. Aptitude Research found that when data is transparent, it increases the trust in talent acquisition leaders, hiring managers, and senior leaders. With data transparency, 84% of talent acquisition leaders stated that they trust the data, and 78% of senior leaders trust the data.

Start with Quality Data: Companies need to start with quality data. Without a clear vision or strategy for data management, companies do not clean up their data or check for accuracy often enough. One in two companies is measuring data accuracy and data quality once a year or longer. Many of the recruitment activities and systems are dynamic and change constantly. Companies should build a practice for measuring quality more frequently and defining the metrics for quality.

Carefully Evaluate Providers: With startups and new providers entering the TA tech arena, companies must carefully evaluate providers to see which will be the best strategic partner.

Personalize the Communication: Candidates that receive communication should include personalized messaging that can help inform their journey. Some examples may include personalized content for target audiences to learn more about an employer, personalized assessment questions, and personalized feedback for candidates who may not be receiving an offer.

Leverage Conversational AI: Companies need to engage with candidates on platforms they use in their personal lives. One in four candidates is not comfortable with video as a form of communication, and email is ineffective in many cases. Intelligent chat or conversational AI can engage with candidates because it continually learns more about the candidate and builds a relationship that results in more meaningful communication. Companies that leverage conversational AI are three times more likely to improve the candidate experience.

Provide Consistent Communication: Every candidate should receive communication from an employer at different stages in their journey. AI can ensure that every candidate is engaged even when they are not moving forward in the process. Currently, 67% of companies state that they only send a standard email when rejected.
AI can help companies match talent to jobs, but it must be used ethically. Ethical AI is the most critical consideration of AI matching and the biggest differentiator between providers. Unfortunately, not every provider is committed to ethical AI or providing transparency to companies on the data they are using, the algorithms they develop, or the methodologies used. Ethical AI is a broad topic. The Data and Trust Alliance established safeguards for companies evaluating providers and the World Economic Forum established a toolkit for HR professionals. Providers committed to ethical AI are often involved in these initiatives and committees.

The topic of ethics in AI raises questions about humanity in the talent acquisition process. Companies must consider ethical AI as they evaluate providers and understand if products operate transparently, are backed by explanations, describe their methodology, and frequently publish their data (see Figure 9). In addition, addressing ethics in AI builds confidence with employers and candidates who want to understand how their data is being used.

Figure 9: Considerations for Ethical AI

- AI Products Must Operate Transparently: 51%
- AI Products Must Be Backed By Explanation: 49%
- AI Should Describe Methodology: 45%
- AI Should Publish Data: 36%

Source: Aptitude Research, Talent Acquisition Foundation Survey, n=411
The responsibility of ethical AI is not always on the provider. Companies have an obligation to ensure the ethical use of these solutions. Aptitude Research found that companies are taking more responsibility for their use of AI by seeking outside expertise, legal counsel, and ethics committees.

Unfortunately, not every provider today upholds ethical AI – resulting in bias in the hiring process and data and decision-making that cannot be trusted.

Companies and buyers committed to ethical AI are looking at stand-alone providers, while companies focused on efficiency AI tend to look at their ATS providers or sourcing providers. Different providers have different motivations for including AI. ATS providers do not typically charge separately for these capabilities but, in return, are not questioned and held accountable for their AI methodologies. Buyers are not looking for transparency; they are looking for a simple tool.
AI is transforming how companies attract, recruit, and hire talent. While it presents some risks in talent acquisition, the benefits to efficiency and overall experience are significant. As companies mature in their adoption of AI, they must carefully consider providers committed to ethical AI and transparency.

Companies looking to adopt AI or optimize their investment should consider the following:

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**Consider the recruiter experience:**
Recruiters embrace AI to be more efficient and provide a better candidate experience. Forty-two percent (42%) of recruiters believe that AI will help them become more strategic in their jobs. As recruiters face burnout and increased turnover on TA teams, AI can provide a support system to improve the workload of recruiters.

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**Understand the role AI plays in reducing bias:**
If used correctly, technology and automation can help companies reduce bias and encourage greater humanity in the hiring process. It is important to consider the data that providers are using and starting within the hiring process, the hypothesis they are using in their algorithms, and the data's transparency. Technology, unlike humans, can be trained to reduce bias, so it is critical to look at providers’ visibility into the algorithms and methodologies they use to reduce bias.

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**Connect with other areas of the business:**
AI is widely adopted in other areas of the business. TA and HR leaders can connect with marketing or sales or operations to understand how AI is being used, what risks can be avoided, and what to consider when evaluating providers.
PandoLogic is the leading recruitment marketing and conversational AI platform in North America. Serving the world’s most recognizable brands, PandoLogic utilizes advanced AI technology to transform the future of recruiting. PandoLogic’s flagship product, pandoIQ, is an AI-enabled talent acquisition platform that empowers employers to reach the right candidates on the right sites for the right price. Making more than 7,000 micro-decisions per minute, pandoIQ automates and optimizes the complexities of job placements at scale and precision levels previously unattainable.

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