Artisan

FINDING AND SOURCING EMPLOYEES IN THE DIGITIZATION ERA

SEPTEMBER 2017

Leveraging the Strengths of Human and Artificial Intelligence

INTRODUCTION

To remain competitive in today's war for talent, employers and recruiters want to make sure their talent attraction strategy helps them stay one step ahead. In response, a vast array of human resources technology tools continue to enter the marketplace—promising to provide a better, faster way to find quality candidates. **But in a field where successful relationship-building is paramount, are bots and artificial intelligence the answer?**

This white paper evaluates the pros and cons of humans versus machines in the quest to source and find the most qualified candidates in the digitalization era. The findings demonstrate that the strengths of each resource complement, rather than compete with one another. Bots complete repetitive and menial tasks such as scouring the internet or filling out forms much faster than any human. Meanwhile, humans excel where machines falter: creating deep connections, observing and interpreting candidates' behavior, and making decisions.

Ultimately, leveraging man AND machine together achieves better results than either method can accomplish alone. Strategic use of artificial intelligence, combined with the personal touch of human recruiters can help companies fill open positions faster and with more qualified candidates.

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INTRODUCTION

As competition for qualified job candidates continues to grow, employers and recruiters know that attracting and retaining top employees is mission-critical. To address this challenge, many organizations seek innovative and creative ways to find and source open positions—from advertising on Snapchat to using virtual reality to draw attention to hard-to-fill positions.

Sensing vast potential in the online talent acquisition industry, technology companies have launched new products in the marketplace that use artificial intelligence and automation to support recruiting efforts.

"Hiring is one of the most explosive spaces for innovation. Artificial intelligence is the most recent trend to appear in HR tech — and one of the most promising." — TLNT.com

46%

OF U.S. EMPLOYERS FIND IT DIFFICULT TO FILL OPEN POSITIONS WITH QUALIFIED CANDIDATES

2016/2017 ManpowerGroup Talent Shortage Survey

4

This year alone, Google has launched the artificial intelligence-based job search engine Google for Jobs, as well as Google Hire, a new recruiting application. "Google jumping into HR tech legitimizes the ideas we've all been trying to champion," blogs Scott Fowle, Chief Sales Officer at SmashFly Technologies.

"Over the next few years, artificial intelligence may exponentially change the way we all gather information, make decisions, and connect with stakeholders."

— Harvard Business Review

With this proliferation of artificial intelligence and bots, you may be wondering to what extent these tools should be leveraged as part of your company's talent attraction strategy. **In this new age of recruiting, what are the advantages and disadvantages of machines versus people?**

VS.
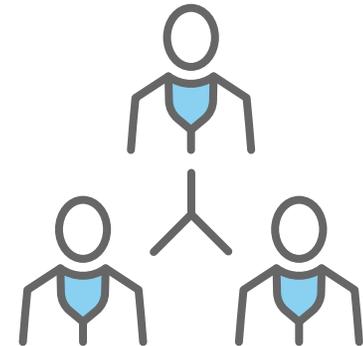
MAJOR TRENDS AND DEVELOPMENTS IN HR TECHNOLOGY

"Recruitment systems are expected to move away from mere applicant tracking to a more inclusive, marketing, brand-building, social process. Deep integration with sourcing tools, analytics, and enterprise and workflow management will happen through new tools." **– HR Technologist**

In the rapidly evolving digitization era, the new recruitment focus is neither employer-centric nor candidate-centric. According to Steve Parker of Allegis Global Solutions, who presented at the webinar Man + Machine: The Fundamentals of AI for Recruiting, the focus is relationship-centric. **With that in mind, how are recruiters using bots and artificial intelligence to connect candidates and employers?**

ARTIFICIAL:
NOT NATURALLY OCCURRING

INTELLIGENCE:
ABILITY TO THINK, LEARN, AND UNDERSTAND

BOTS:
AUTOMATED SOFTWARE APPLICATIONS

3 CURRENT TRENDS

1. **Increased use of automation to offload administrative tasks**
   Currently there's a greater focus on taking advantage of automation to reduce or eliminate time-consuming routine administrative duties traditionally fulfilled by recruiters. Managing workflow for optimal efficiency has become paramount.

2. **Chatbots in the pre-application process**
   Chatbots, an example of conversational-based artificial intelligence, have become commonplace in online customer service. Recruiters recognize that chatbots can help manage and respond to an ever-increasing volume of inquiries in the pre-application phase.

   Designed to simulate conversation on the internet with human users, chatbots work well for simple or transactional requests, such as gathering information about past job experience from a candidate.

   Chatbots can even make initial screening decisions based on data collected and communicate those results instantly to human users. With the value proposition of accelerating time-to-hire, TextRecruit's "Ari" is a customizable recruiting chatbot

TREND 1 EXAMPLES:

Using bots to schedule interviews, process resumes more efficiently, run background checks.

TREND 1 VALUE-ADD:

Helps increase the time recruiters can spend building relationships with candidates.

that uses artificial intelligence to engage candidates from a company's applicant tracking system (ATS) in a two-way text message conversation to field questions from job seekers as a screening tool.

When the volume of inquiries is high, humans can't always respond to initial questions with the same speed as a chatbot. In an era where instant information is expected, a chatbot can be an important tool to leverage.

Additionally, candidates may respond faster to queries from a bot compared with email-based queries. The CEO of Crowded Inc. claims that they're getting an 88 percent response rate in beta tests of its recruiting chatbot, which uses text messages and Facebook Messenger to reach candidates.

3. **Leveraging predictive algorithms and machine learning to assess candidates' personality traits**

Another more advanced form of artificial intelligence software that companies have begun using in the early stages of the recruiting process takes screening to the next level. AI software can analyze social media posts, video interviews, and more to assess whether the candidate will be a good fit for a specific position or company culture.

TREND 2 EXAMPLES:

Using chatbots to interact with and even screen prospective candidates online.

TREND 2 VALUE-ADD:

Speeds response to candidate inquiries as well as saving recruiter time by eliminating a large pool of candidates to a shorter list of better qualified candidates.

"Companies are using AI to assess human qualities, drawing on research to analyze everything from word choice and microgestures to psycho-emotional traits and the tone of social media posts." *– Fortune*

Koru, an AI-based assessment company, states that it is "mobilizing the 'Grit over Grades' revolution" with their online assessment tool. Using algorithms, this tool analyzes personality traits such as rigor, curiosity, and more as part of "predictive hiring."

SkillSurvey's reference checking solution helps companies get "meaningful, predictive insights on a candidate's past performance" based on a reference's answers to behavioral science-based questions.

It's important to note that AI can't replace humans when it comes to decision-making about hiring. According to Dr. Nathan Mondragon, HireVue's Chief I-O Psychologist, most AI applications are limited in their ability to replicate human reasoning.

TREND 3 EXAMPLES:

Screening and assessing candidates through video interviewing, online assessments, and social media presence.

TREND 3 VALUE-ADD:

Arms both recruiters and employers with more specific insight to help identify more qualified candidates.

But even when human recruiters are interviewing candidates one-on-one, they can leverage analytics from AI technology to structure increasingly targeted questions to elicit crucial information.

AUTOMATED SOCIAL MEDIA SCRAPING TOOLS

"AI technologies can help suggest interview questions that operationalize 21st century talent acquisition best practices so interviewers can really get a sense of the candidate's actual abilities." **– TLNT.com**

INNOVATIONS IN SOURCING, SCREENING, AND MATCHING

Automated social media scraping tools

Automated social media scraping tools can speed up the screening process by extracting information from candidates' social media sites and downloading the data into an Excel spreadsheet. Data gathered could be used to locate potential red flags or identify positive traits important to employers.
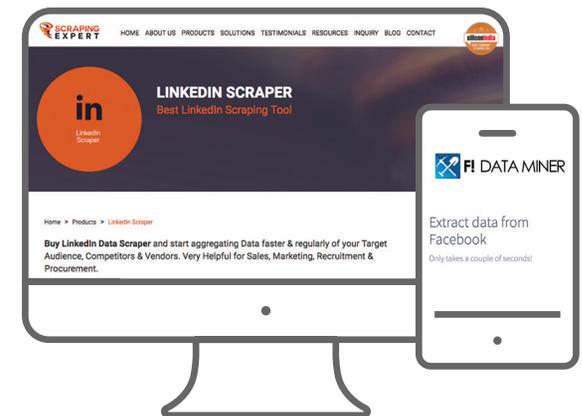
"If a candidate's LinkedIn profile shows a high level of engagement with their current or previous roles, they are likely to be engaged in their future positions as well." **– HireVue**

Fama offers a solution that can quickly unearth whether a candidate's social media presence indicates the person could pose a risk to a future employer. Using machine learning and natural language processing, Fama mines a candidate's presence on Twitter and Instagram to look for potential signs that a candidate is violent, for example.

Online simulations

Interviewed provides AI software that helps candidates experience the "reality of a day on the job" through an online simulation. Using realistic scenarios and tasks, the software presents challenging situations to evaluate how a candidate navigates them. These simulations can help prospective candidates determine if the job is right for them, as well as helping employers determine if the applicant is right for the position. Insight gained from these simulations can predict whether the applicant possesses the traits needed to be a good match with the employer.
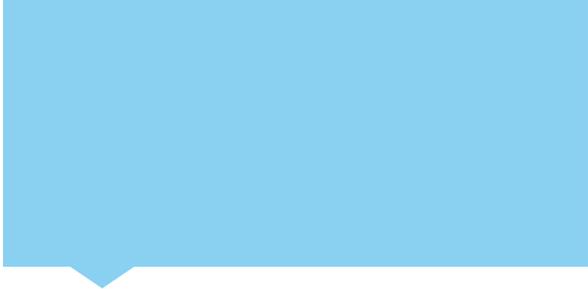
70%
OF EMPLOYERS USE
SOCIAL MEDIA
TO SCREEN CANDIDATES

2017 study, CareerBuilder.com

FUTURE DEVELOPMENTS

"Knowing and understanding your recruiting analytics can help you truly win today's war for talent." – Glassdoor

Predictive analytics will continue to reinvent how employers and recruiters assess candidates, especially as artificial intelligence accumulates more data. Additionally, we will gain more insight into the role of automation and artificial intelligence in recruiting. Google, which has its own AI research division, Google Brain, announced a research program called the People + AI Research initiative that aims to "study and redesign the ways people interact with AI systems."

AI AND BOTS: THE WORKHORSES

> "AI will likely replace tasks rather than jobs in the near term, and will also create new kinds of jobs."
>
> **— 100-year study on Artificial Intelligence**

PROS

AI and bots offer powerful advantages in the recruiting process.

Speed and efficiency: With exceptional processing capabilities, machines are ideal for mundane and repetitive tasks. Bots are tireless workhorses that can complete a large volume of simple, transactional tasks much faster than any human. From scouring the internet for candidates with highly critical, scarce skills to building an automated talent pipeline, bots are the perfect team member for assignments that would involve time-consuming legwork for a human.

Improve diversity and inclusion: To a certain extent, machines can help remove both conscious and unconscious bias from the recruiting process. When programmed appropriately, machines can be instructed to avoid specific pitfalls that humans may find hard to navigate. For example, chatbots can be programmed to ask identical questions of candidates no matter their gender or age. This can result in an improvement in diversity and inclusion.

Greater insight into candidate quality: Artificial intelligence can help gather vast quantities of data from a variety of sources that can help inform whether a candidate is a good match for a position at a particular company.

> "AI support throughout the hiring process can guide recruiters and hiring managers to make data-driven, effective choices that will yield great hires time and time again." **– TLNT.com**

CONS

It's important to recognize the limitations of these tech tools.

Inability to read and react appropriately to human emotion: Chatbots aren't able to interpret our emotions and respond appropriately—a significant drawback at a time when more people are using expressive communication when texting. According to a survey conducted by Harris Poll and commissioned by Tenor, a GIF-sharing platform, 71 percent of Americans use visual expressions such as emojis, stickers, or GIFs when texting. Texters use these images to show a variety of emotions, from empathy to frustration.

"Ninety percent of GIF searches center on emotion."

– David McIntosh, CEO of Tenor

Cannot offer human connection: Although bots and AI are able to gather information and respond to requests more quickly and efficiently than humans, these tools will never be able to offer a true human connection—something that is important to people. According to the Tenor survey, 69 percent of people who use visual expression when texting say they feel more connected to the people they frequently text/mobile

71%

OF AMERICANS USE **VISUAL EXPRESSIONS** SUCH AS **EMOJIS,** STICKERS, OR GIFS **WHEN TEXTING**

Tenor study

15

message when expressing themselves using visual expressions in addition to words. When it's important to establish a deeper connection, the convenience of a chatbot comes up short.

Not a surefire way to eliminate bias: AI and bots can only do what humans have directed them to do. For this reason, AI can only be as unbiased as humans designed it to be. Because humans create AI, there is potential for unconscious bias to be programmed into the software.

Inadequate decision-making ability: Although artificial intelligence can retrieve data as directed by humans, it can't make decisions outside of its programmed algorithm. And even then, these algorithm-based decisions can be completely wrong because they fail to detect nuances and context like humans can.

> "Machine learning isn't magic, and the truth is we have neither the data nor the understanding necessary to build machines that make routine decisions as well as human beings."
>
> **– James Hodson, CEO of the AI for Good Foundation, Chairman of the Financial Data Science Association;** *Harvard Business Review*

69%
OF PEOPLE USING
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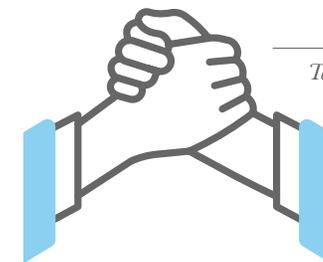
Tenor study

IDEAL ROLES FOR AI AND BOTS

Automated computer programs work well for tasks that are "rule-based" and don't require creativity or interpersonal skills.

- Build talent networks/pipelines
- Develop multichannel sourcing
- Screen best fit for a role based on resume
- Process resumes and update contacts
- Run background checks
- Check references
- Conduct standard initial screening

Artificial intelligence "will allow us to simplify multi-faceted processes by replacing the manual process of sorting and identifying complex data, key insights, and actionable plans," according to Revecka Jallad from Divisa, in a Forbes CommunityVoice™ post written by Forbes Agency Council.

HUMANS: THE RELATIONSHIP-BUILDERS

With the incredible speed and efficiency that machines bring to the table and the ongoing advancements in artificial intelligence, what can humans do that machines cannot?

> "For us to be better than technology, we have to find our inner human."
>
> **– Lynda Gratton, professor, London Business School;** *Fortune*

PROS

Interpersonal skills: Only humans can truly get a "feel" for another person—everything from detecting what motivates and inspires someone to decoding subtle, nonverbal messages as to what makes the person uncomfortable. From active listening to empathy, soft skills are important to understanding what a person needs.

When it comes to recruiting, the human touch can make the difference in a world that is becoming more automated.

> "Even when an algorithm beats human judgment, people tend to trust human judgment (especially their own judgment) better." **– HR Trend Institute**

Building relationships: Human relationships aren't built on speed and impersonal efficiency, they're built on connection. People are hard-wired to desire connection with other people. During the interpersonal phases of the recruitment process in particular, humans are needed to establish trust and connection with both candidates and employers.

Creativity: In situations requiring creative problem-solving, people beat computers hands down. Developing and sustaining a competitive talent acquisition strategy in today's fast-changing environment demands innovative, creative solutions. Computers can only create what they've been told to create; ideas originate from the human mind.

"
HUMANS ARE QUITE CAPABLE OF OPERATING IN THIS CONFUSING AND NOISY WORLD; OF READING BETWEEN THE LINES; TAPPING INTO WEAK SIGNALS; OBSERVING THE UNUSUAL AND UNNAMED; AND USING THEIR CURIOSITY, UNDERSTANDING, AND INTUITION TO BALANCE CONFLICTING PRIORITIES AND DETERMINE WHAT SOMEONE ACTUALLY MEANT OR WHAT IS THE MOST IMPORTANT THING TO DO."

— *Deloitte Review*

CONS

Along with the strengths humans bring to the table, we have natural limitations.

Slower data processing and response times: Humans can neither process data as fast nor work around the clock like machines can. In the fast-paced digitization era, people must use their limited bandwidth wisely in order to stay competitive.

Prone to bias: The human brain makes people naturally susceptible to cognitive biases. In fact, humans are wired to automatically sort people into categories and instantly apply stereotypes. *The Wall Street Journal* reports that according to research, people treat minorities differently "within milliseconds of seeing them." Whether conscious or unconscious, this bias can interfere with recruiting, leading to a potentially less diverse workforce.

IDEAL ROLES FOR HUMANS

"Human recruiters will always be required for the most important interpersonal phases of the recruitment process." **– Daxtra, a recruitment software company**

These crucial interactions include:

- Conducting one-on-one interviews after initial screening
- Meeting with clients and candidates to get a better read on whether they'd be a good fit for one another
- Persuading candidates and hiring managers that they are a match

Additionally, humans will continue to be the creative, reflective masterminds that conceive of new and better ways to connect employers with the most qualified candidates.

"
WHAT IS IT THAT WE AS HUMANS WILL DEMAND THAT WE DO WITH, BY OR FOR OTHER HUMANS, EVEN IF A COMPUTER COULD DO IT ALSO? THESE TURN OUT TO BE THE DEEPEST MOST ESSENTIALLY HUMAN ABILITIES WE HAVE: EMPATHY ABOVE ALL, COLLABORATING, STORYTELLING, SOLVING PROBLEMS TOGETHER, BUILDING RELATIONSHIPS."

— Geoff Colvin,
Fortune Senior Editor-at-Large
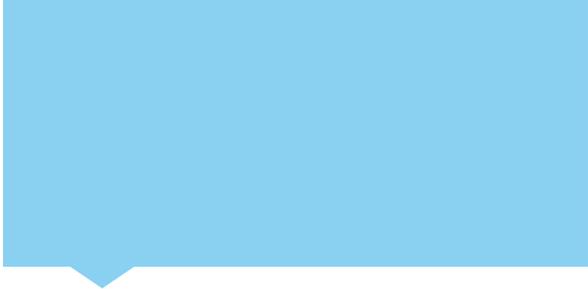
CONCLUSION

> "Humans and AI, working together, can achieve better outcomes than either alone." *– Deloitte Review*

The rise in human resources technology delivers a win-win for recruiters and clients. Artificial intelligence and automation liberate recruiters from the burden of time-consuming routine tasks so that they can focus on the area where they add the highest value: building relationships. Meanwhile, the machines can handle far more volume in a fraction of the time it would take a human to tackle.

Strategic use of artificial intelligence, combined with the personal touch of human recruiters can help companies fill open positions faster and with more qualified candidates. The value of this competitive edge cannot be overestimated in today's landscape; now, more than ever before, organizations must be fully equipped with top talent and cannot afford delays and vacancies.

In a world transformed by technology and mobile lifestyles, a thoughtful combination of "human touch" along with technology makes a difference in the recruitment experience. Artisan is a knowledgeable partner that can help you navigate the changing HR/ Recruiting landscape.

"Success, it turned out, lay not in man or machine alone, but in the hands of individuals who best knew how to optimize the abilities of technology towards a desired end."

– Quartz Creative on behalf of Deloitte

"ARTISAN TALENT IS A PEOPLE-FIRST COMPANY. WE SEE THE VALUE IN ARTIFICIAL INTELLIGENCE TO FREE UP TIME AND RESOURCES TO DO WHAT WE DO BEST AND VALUE MOST—BUILD RELATIONSHIPS WITH PEOPLE, TALENT, OR CLIENTS."

– Bejan Douraghy, CEO and Founder, Artisan Talent