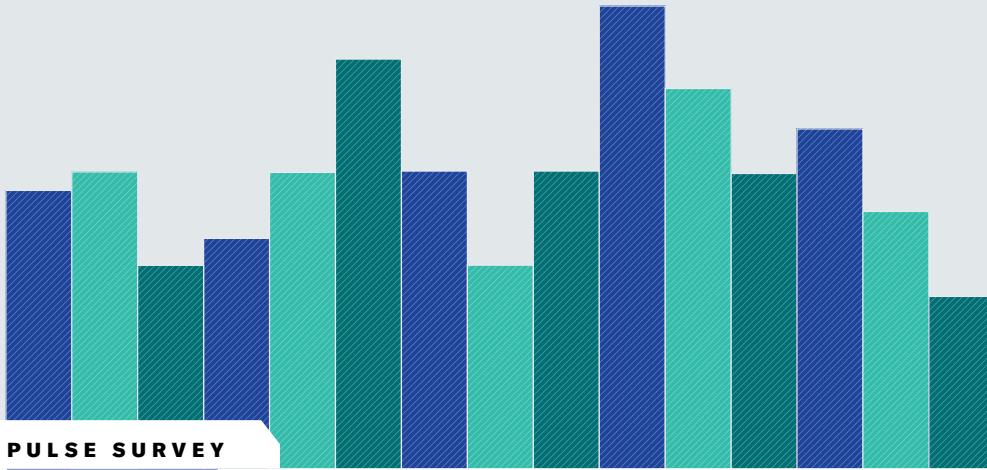




**Harvard
Business
Review**

ANALYTIC SERVICES



Transforming Talent Acquisition Through the Power of Automation and Artificial Intelligence



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Aaron Matos
CEO and Founder
Paradox

The Next Generation of Recruiting and HR: Technology that Works for Us, Instead of Giving Us More to Do

I started my career as an HR practitioner nearly 30 years ago. I believed then, as I still do today, that if you get the “people thing” right, you can build teams that change the world. Without great recruiters and HR leaders, there’s no business—or at the very least, not a very good one.

When I talk to business leaders, they almost universally agree. They tell me: “People are our most important asset.” And yet, their actions and investments don’t back it up.

As this report shows, recruiting and HR teams are overworked and underproductive. They still spend hours every day on menial, repetitive tasks—and in software systems that haven’t changed much since the early 2000s. Their budgets get slashed first. And they’re often last in line when it comes to digital transformation. The world has changed, but how recruiting and HR teams get work done still looks a lot like it did when I started my career 30 years ago. It’s time to stop the madness.

As ChatGPT has exploded in popularity, we’ve all woken up to the idea that technology and AI isn’t a threat or a burden—it can be the secret to unlocking superhuman productivity. It can be something that makes work easier and faster—taking on the mundane, so people are freed up to do more meaningful, productive work. It can be something that removes all the bloat and friction from recruiting and HR, so those functions can get back to the people work they’re great at.

Let me share an example. Recently, I was talking to a TA executive at a large Fortune 500 company whose recruiters were spending hours every evening manually

scheduling interviews. Often, they’d do it while making dinner for their kids and in between tucking them in for bed. The work got done, but at a personal cost—and often slower than it should have.

Then, this company implemented technology that could completely automate the interview scheduling process. In one click, a recruiter could schedule dozens of interviews instantly (instead of manually scheduling one-by-one) by simply asking a conversational assistant to schedule the interviews for them. The impact? The company’s recruiters could get back to the important stuff—talking to candidates, coaching hiring managers, having dinner with their families—and the business saved millions of dollars in operational costs. A win for the recruiter. A win for the candidate. A big win for the business.

And that’s just one example of one task. Imagine if we expand this thinking to other parts of the recruiting and hiring process. What else is overly bloated? Where else is your team wasting time and money? How easily could it be automated?

This is the future—and I believe it will completely transform how we work, getting work done for us, instead of adding more and more to our plate. It won’t require months of learning, because it’ll be as simple as having a conversation. It’ll get recruiters, HR professionals, and anyone involved in the hiring process back to the stuff we’re great at again, so the business can hire the best people and build the best products...faster.

Transforming Talent Acquisition Through the Power of Automation and Artificial Intelligence

People are every organization's greatest asset, and having the right mix of skills and experience is key to sustained business success. Over the past three years, talent acquisition (TA) has been impacted by significant events—an enduring talent shortage, changing workplace standards and attitudes, and new technologies that have the potential to transform the hiring process. As a result, the battle for people is fiercer than ever.

Companies recognize the critical importance of TA. To explore the state of talent acquisition in organizations today, in November 2022 Harvard Business Review Analytic Services conducted a global survey of 326 respondents familiar with their organization's talent acquisition process. The survey found that 91% agree that having strong TA is necessary for long-term business success, and 68% say that TA is one of the top strategic priorities for their organizations. Despite these strong sentiments surrounding TA, however, many companies are still falling short in hiring the individuals they're seeking: just 28% say their organization is extremely or very effective at hiring the talent it wants. **FIGURE 1**

"There's the recognition that organizations need critical talent to grow the business; otherwise, they're dead in the water," says Brian Delle Donne, president of Talent Tech Labs, a New York City-based independent research and advisory firm focused on talent technology. "But that recognition isn't always translated to the organization in a way that's actionable. Talent acquisition continues to be a largely reactive function, through no fault of their own, with systems that have little consideration for creating great experiences for the candidates or hiring managers."

Several challenges plague TA programs, the survey finds. These issues include dissatisfaction among executives with the speed of their hiring

HIGHLIGHTS



97% of those whose organizations have automated steps in the talent acquisition process report that such automation has been valuable to some extent in improving this process.



63% report that their organization has automated parts of the talent acquisition process.



38% say the cost of automation technologies is a barrier to adoption for their organization—the most common hurdle cited.

Due to rounding, some figures in this report may not add up to 100%.



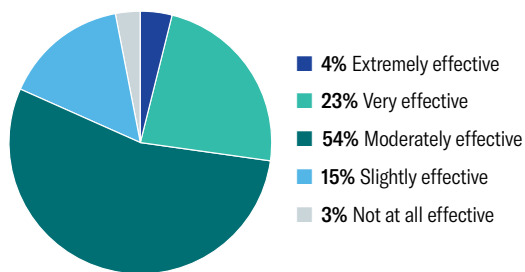
“There’s the recognition that organizations need critical talent to grow the business; otherwise, they’re dead in the water,” says Brian Delle Donne, president of Talent Tech Labs.

FIGURE 1

Tepid Efficacy

Almost three-quarters of organizations are only lukewarm about their hiring effectiveness

How effective is your organization at hiring the talent it wants?



Base: 326 respondents. Not shown: 0% Don't know.

Source: Harvard Business Review Analytic Services survey, November 2022

process, lackluster experiences for both candidates and hiring managers, and limitations due to basic or outdated tools and technologies.

Surmounting these challenges and cultivating a more effective TA organization may require companies to explore applications of artificial intelligence (AI)—including AI chatbots, such as ChatGPT—and automation, both of which are technological ways to accelerate hiring, improve hiring experiences, and streamline TA processes.

“What stands in the way of optimizing talent acquisition is the human factor,” says Anna Tavis, clinical professor and academic director of New York University’s human capital management department. “When processes are done manually, you don’t get speed, and that’s what’s slowing down the entire TA operation,” she says.

Automation is also freeing up hiring managers and recruiters for more value-based work, says Jeffrey Lackey, CEO of JKL Advisors, a Boston-based talent acquisition and technology consultancy. “Automation gives us the ability to eliminate the administrivia that goes into recruiting so we can refocus the human relationship on human-related issues,” he says.

In today’s ultracompetitive environment with skyrocketing demand for top talent, executives must consider abandoning legacy viewpoints, processes, and technologies in favor of those that reframe TA in light of today’s critical and evolving talent needs. This paper will explore the process and technology challenges that TA programs are facing and the role of automation and AI in overcoming these obstacles. It will highlight what successful TA programs do differently and discuss the steps that organizations can take to become more effective talent acquirers in the future.

Ripe for Improvement

Talent acquisition has experienced tremendous change over the past several years, from talent shortages that have made it difficult for employers to find and hire the right candidates to new expectations among job seekers regarding the manner in which they want to work, whether it involves how they work or whom they work for. The impacts of this volatility are evident in executives’ dissatisfaction with certain areas of their current TA processes.

The speed of hiring is one area of concern. Nearly half of respondents (48%) say they are somewhat or very dissatisfied with the speed of the hiring process, from application to final offer, the survey finds. FIGURE 2 Challenges with speed were also highlighted among the 63% of respondents who somewhat or strongly agree that the process of hiring a new team member is too time-consuming. Speed—particularly in cases of high-volume hiring for positions in retail, fast-food, call center, or trucking sectors—is critical, Delle Donne of Talent Tech Labs says. “Churn is high; the hiring manager needs a role filled immediately, and the moments to catch these potential candidates with a post or ad are fleeting,” he says.

Respondents also express dissatisfaction with the ease of the process for hiring managers/recruiters (31%), the overall experience for hiring managers (31%), and the overall experience for the candidate (26%). Lackey says one factor causing dissatisfaction with the experience among hiring managers is the volume of tedious, low-value tasks. “Many hiring managers are bogged down with so many administrative responsibilities like paperwork and scheduling that it takes away from where they could be having more of an impact—like spending more time with people or on strategy,” Lackey of JKL Advisors says.

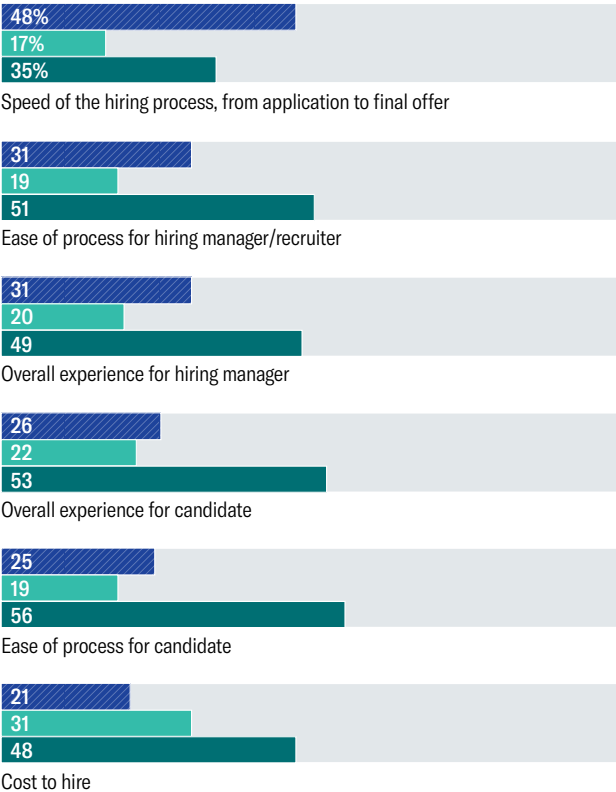
FIGURE 2

The Hiring Blues

Overall, respondents aren't enamored with their talent acquisition processes

How satisfied are you with the following aspects of your organization's current talent acquisition process?

- Somewhat or very dissatisfied
- Neither satisfied nor dissatisfied
- Somewhat or very satisfied



Base: 300 to 326 respondents, varies by row and excludes "don't know"

Source: Harvard Business Review Analytic Services survey, November 2022

Addressing challenges with the candidate experience from application through onboarding is crucial, New York University's Tavis says. "There's causation—not just correlation—in the experience of those very first touchpoints for the candidate," she says. "It effectively determines engagement levels, levels of longevity, the commitment and performance of the candidate, and a lot of other factors downstream. Companies took that for granted before the Great Resignation."

TA executives understand the important role that experience plays in hiring. **Ninety-one percent agree that the quality of**

the hiring process directly impacts the quality of the talent an organization can recruit. Small wonder, then, that companies such as Compass Group spend time assessing the quality of their hiring processes and the time and effort managers dedicate to them.

At the food service and support services company based in Charlotte, N.C., which hires about 150,000 hourly workers a year, the hiring process was tedious—for both candidates and recruiting managers, says Shay Johnson, Compass Group's vice president of TA. "The job posting process was slow and clunky, and managers constantly had to help candidates through the application process because it was cumbersome and there were a lot of required fields," he says.

After investing in a series of technologies that included adding a mobile-first application option, chat and text-to-apply options, and automation capabilities, the organization was able to reduce the time to apply from between 10 and 15 minutes to just 3.5 minutes, Johnson says.

"The whole process is so much simpler and more streamlined, which has helped managers save time and focus on getting right to interviewing and offering. Recruiters get to focus more on sourcing and attracting and keeping an eye on which jobs need additional applicants or focus on critical accounts or hard-to-fill markets," he says. "We can be a lot more strategic and consultative to the business and to that manager who needs to hire versus just spending the whole day posting jobs and doing tech maintenance behind the scenes."

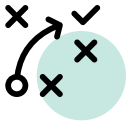
Technology Shortcomings Hamper Progress

Executives recognize that the technology used in TA is critical—particularly in the areas of candidate and manager experience, according to the survey. Eighty-three percent of respondents agree that the tools a company uses for TA have a substantial impact on the candidates' recruitment experience, and 84% say the same with regard to the hiring manager's recruitment experience.

These tools and technologies that organizations use in TA, however, **aren't meeting the expectations of a majority of their users. Under half (44%) say they are satisfied with the tools they use for TA.**

Much of the dissatisfaction with technology stems from legacy TA technology that promised innovation but failed to deliver on it, Delle Donne says. "This created confusion among the buyers [that] really paralyzed people's ability to make smart decisions about what effective technology could actually do for them," he says. "[The pandemic] really accelerated the awareness that technology has to be deployed in smarter ways."

Indeed, the tech stacks that organizations use for their talent acquisition process vary in modernization. **Only 26%**



“We can be a lot more strategic and consultative to the business and to that manager who needs to hire versus just spending the whole day posting jobs and doing tech maintenance behind the scenes,” Shay Johnson, Compass Group’s vice president of talent acquisition.

of respondents use a primary talent acquisition platform that is modern, while 24% use a primary talent acquisition platform that is basic or outdated. Twenty-two percent use a mix of mostly modern individual talent acquisition tools but do not have a primary platform, while 17% use a mix of mostly basic or outdated individual talent acquisition tools and do not have a primary platform. Eight percent do not use any digital tools for talent acquisition.

Respondents whose organizations use a more modern tech stack for talent acquisition are at least 11 percentage points more likely than those with an outdated tech stack to be satisfied with every area of the TA process, from speed and ease of the hiring process to the overall experience for hiring managers and candidates, according to the survey. Despite this advantage, organizations are still not paying enough attention to TA technology, given that less than half (44%) agree that their organization has put real effort into digitally transforming its recruitment process.

Delle Donne says that when his consulting teams look into a client’s enterprise technology stack, it’s easy to see how much forethought was put into TA tech investments, which ultimately affects the company’s willingness to make future investments.

“We can tell right away whether an investment was fully thought through or whether [the client] invested reactively because of a trending piece of technology or they heard about a new innovation from a peer and jumped on it,” Delle Donne says. “The latter really has not helped TA technology adoption in general because many of those deployments have not succeeded. That makes the decision makers who have the purse strings somewhat skeptical about spending more money on these things without more evaluation and understanding.”

TA groups need better solutions, and executives acknowledge the importance of investing in order to achieve them. Ninety-two percent agree that organizations in their industry must invest resources in TA in order to remain competitive. Among the capabilities they wish their organization’s recruitment tools could do better or could do more of include applicant screening/assessment (46%), applicant management/communication (39%), data analytics (36%), and better integration (34%). **FIGURE 3**

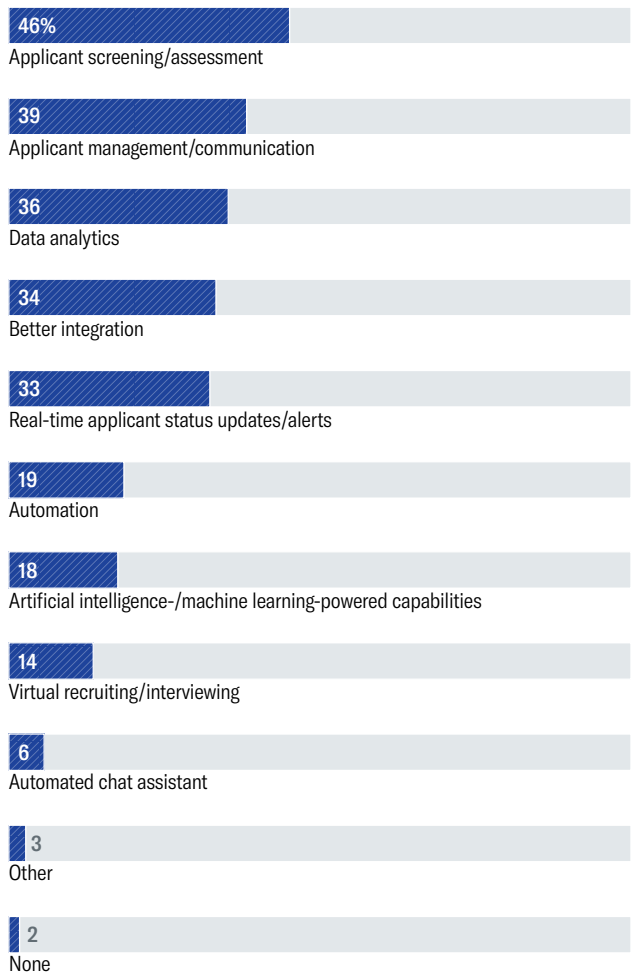
Many of these areas, Lackey notes, are prime examples where automation and AI capabilities can make a difference

FIGURE 3

Most-Desired Recruitment Tools

Organizations express wanting tools to better manage their applicants

What capabilities do you most wish your organization’s recruitment tools were better at or had more of? [Select up to three.]



Base: 326 respondents. Not shown: 0% Don't know.

Source: Harvard Business Review Analytic Services survey, November 2022



92%

agree that organizations

in their industry must

invest resources in

talent acquisition (TA)

in order to remain

competitive.



Around half (52%) of respondents say their organization has automated a couple of steps or areas of the TA process, while more than a third (37%) say their organization has yet to automate any steps or areas of their TA process.

because the processes can be repetitive, data-intensive, and time-consuming. Automation and AI, however, ranked as the sixth and seventh most-wished-for capability at 19% and 18%, respectively, indicating two possible areas ripe for investment and potential.

Revolutionizing Talent Acquisition Through Automation

At U.S. Xpress, a trucking and logistics company based in Chattanooga, Tenn., applicants for trucking jobs must complete a lengthy application and orientation process through the U.S. Department of Transportation, says Jacob Kramer, senior vice president of talent acquisition. Part of this hiring process involved the company's TA support staff scheduling transportation and making hotel reservations for their candidates for the orientation period, he says.

"We have drivers [applying from] all over the United States, and we need to get them to these orientation sites. If they ran into trouble along the way—like their hotel was sold out upon arrival or they were missing their airline ticket—they'd have to call a human being in our offices to get it straightened out," he says. "But these support people were only available between 8 a.m. and 5 p.m., Monday through Friday. If you needed to reach someone after hours, you were likely out of luck or delayed."

To alleviate this burden on the candidate, U.S. Xpress applied automation to multiple steps within its system that moves drivers through these application and orientation processes, including travel logistics, Kramer says. In addition, U.S. Xpress extended the hours of operation for support staff to answer questions 24 hours a day, seven days a week.

"We didn't want the driver to have to be burdened with these things, and automation was able to streamline those processes," he explains. "Today we're at more than one million total interactions that have been automated between the driver and our systems."

Kramer says that automating processes has helped the organization hold its own in an ultracompetitive field while improving the candidate experience. "Truck drivers are in such high demand that if they have trouble with one part of the hiring process, they're going to turn around and answer one of 25 other offers from carriers that are ready to fly them

out and take them to orientation," he says. "If we're able to make a difference in this one area for the candidate, we have a better chance of landing them."

TA organizations are beginning to dabble in automation, the survey finds. Around half (52%) of respondents say their organization has automated a couple of steps or areas of the TA process, while more than a third (37%) say their organization has yet to automate any steps or areas of their TA process. **FIGURE 4**

The reasons organizations have not automated more of their TA processes are varied. Respondents cite the cost of automation technologies (38%), recruitment/HR leadership not having the digital background/mindset needed to initiate more TA automation (33%), difficulty making the business case for investing in TA automation/unclear ROI (33%), uncertainty over what the best technologies/solutions are for TA automation (32%), and recruitment/HR leadership not considering TA automation a priority (30%).

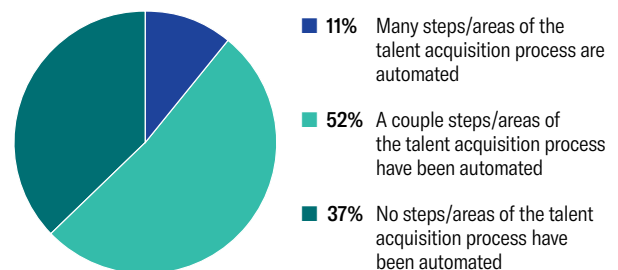
These results make it clear that there isn't a standout reason why organizations have not automated more of their TA processes. Rather, automation adoption in TA

FIGURE 4

Automation Adoption

TA organizations are beginning to adopt automation

To what extent would you say your organization's current talent acquisition process is automated?



Base: 322 respondents, excluding "don't know"

Source: Harvard Business Review Analytic Services survey, November 2022

processes is inhibited by a variety of factors. Despite these barriers, organizations that have adopted some level of automation have seen significant returns, such as the 97% who say that automation has been valuable (either extremely, very, moderately, or slightly) in improving their organization's TA process.

Although the payoff is obvious, Delle Donne says the best way to approach automating new processes is to identify the best areas of opportunity. “The key with [implementing] automation successfully is looking at what parts of the process are highly repetitive in nature where there’s no intellectual reasoning required,” Delle Donne says. “That’s where automation can have the biggest impacts—removing people from mundane, repeatable tasks and doing it faster and more accurately. That business case is pretty easy to make.”

At Compass Group, Johnson says the organization is optimistic and excited about the potential that automation has to revolutionize its TA function. For example, it’s exploring applications of automation that could seamlessly move candidates through the hiring process without manager intervention until the interview stage.

“When candidates apply and meet the minimum or initial requirements for a role, our system can read the hiring manager’s calendar availability and interview preferences and automatically invite the candidate to self-schedule their interview,” Johnson says. “Imagine applying in just a few minutes, completing a 90-second assessment, and moments later getting a text inviting you to schedule your interview with a click of a button. Up to this point, the hiring manager hasn’t had to take any action. Instead, they can dedicate their time to more impactful work and let the system manage tens of thousands of candidates through an automated experience each week.”

AI’s Potential in Talent Acquisition

Organizations are also using AI in TA to improve and enhance processes, Delle Donne says. These uses include applications where the AI can create matches—such as a job to an applicant’s resume—as well as follow-ups with a candidate if an application isn’t fully completed, or personalization as part of passive candidate nurturing, which involves maintaining relationships with individuals who are not actively seeking new job opportunities.

CVS Health, which saw more than 10 million applicants a year during the pandemic, uses AI in many of these ways, including passive applicant nurturing, Lackey says. “Mining that volume of data to find the right person for the right job felt like a monstrosity of a task,” he says. It partnered with a provider of a tech solution to parse that data and used AI to surface qualified individuals who hadn’t recently applied for a position. During outreach, the AI would identify itself as a



“Automation gives us the ability to eliminate the administrivia that goes into recruiting so we can refocus the human relationship on human-related issues,” Jeffrey Lackey, CEO of JKL Advisors, says.

recruiter for a business unit—a level of nuance that otherwise wouldn’t be possible without use of the technology.

CVS Health also used applications of AI to address speed issues and to improve the candidate experience. During Lackey’s tenure at CVS Health, the company grew its total revenue, jumping from the 12th-ranked U.S. corporation based on total revenue to fourth. It was during this period that his TA group would sometimes be flooded with candidates, he says.

“We had the AI send a message to candidates a few times that essentially said that we were sorry for the slower turnaround, that they were among some of the most amazing and qualified individuals, and we couldn’t wait to talk to them,” he says. “The inbox for these messages was flooded with thank-yous from people who were so grateful because they hadn’t heard anything from other companies’ recruiting departments.”

The potential for conversational AI in TA is significant, Lackey says. If an applicant is exploring jobs in the early morning hours and has a question, for example, the likelihood that a recruiter is ready to take a call is slim.

“But what if you have this natural language processing chatbot that’s programmed with 1,000 different questions it can answer for you—it could help you find the right position, discover what type of positions match your background based on your LinkedIn profile, help you figure out the application process, and even schedule you to talk to a recruiter or hiring leader as a next step, all before you leave the chat,” he says. “That probably feels pretty good.”

Taking Action

As TA organizations work to address process and technology challenges, as well as the barriers and opportunities that exist in automation, and to explore the possibilities of AI, they should keep several considerations in mind.

Listen first. Identify top recruiters and hiring managers and ask them what they need to improve processes and technology,

Lackey says. “Oftentimes, we listen to the lowest performers complaining, and we try to wrap technology around them to make them adequate,” he says. “That’s the biggest mistake you can make as a leader. Instead, engage your top performers by wrapping them with processes and technology that take them higher.”

Use data. Gaining visibility into the TA organizations’ data is essential for making well-informed decisions about recruiting strategy, Delle Donne says. “Many organizations have done a decent job at getting the information into a place where it’s actionable and visible, but you don’t want it just sitting with the analytics team,” he says. “This information should be in the hands of managers and decision makers in the form of dashboards that are easy to use and act upon so you can measure the impact the software is having on the outcomes you’re trying to achieve.”

Consider organizational readiness for change. “People are being hired, people are being promoted, and people are being let go,” Delle Donne says. “Your organization needs to be in a place where they’re ready to embrace the change that new technology will enable to make it successful—the absence of good change management leads to potentially good software lapsing into vaporware because it doesn’t get utilized.”

Examine separate TA solutions carefully. TA executives should look at the TA process holistically and temper the urgency to solve problems with separate solutions, Delle Donne says. “It might still take separate point solutions, but if you’re looking at it in the totality of the whole process, you’ll make better-informed decisions about compatibility, which will allow for much better user experiences with those tools.”

Seek the right technology partner. Just as important as the technology you’re investing in to improve TA efforts is the vendor you choose, Johnson says. “You want a partner that’s really focused on building great solutions now—and into the future,” he says. “Consider how they can or can’t adapt with you and respond to current and future business challenges.”

Champion the ROI. TA managers must be able to justify the cost of new TA technology to the C-suite by tying it to the intended ROI, Kramer says. “Throwing technology against

the wall to see what sticks is really expensive. You need to justify the return, whether it’s a lower cost per hire, more hires, better-quality hires, or attrition,” he says. “Then you have to be able to get everyone rallied around it in order to actually deliver that return to the business.”

Identify an owner of the new tech. For TA technology to succeed, TA organizations need someone to own it, Tavis says. “You can’t just have someone to integrate the technology and be done with it—you need someone who can do that, provide feedback, make adjustments, champion adoption, and co-design the change process for their organization.”

Conclusion

Organizations understand the importance of talent acquisition, the need to invest in this function, and the role it plays in long-term business success. Nevertheless, many TA groups are experiencing challenges that, if left unresolved, threaten their organization’s ability to hire effectively, retain its workers, and plan for its future workforce.

Among the process challenges in TA that organizations must address are the speed of the hiring process, the ease of the hiring process, and the overall experience for both hiring managers and the candidate. The causes of dissatisfaction with these areas include tedious administrative tasks dealt to hiring managers, clunky application processes, and outdated and ineffective tools and technologies that further inhibit them from effectively addressing inefficiencies.

To improve the speed and ease of the hiring process and the overall hiring experience for managers and candidates, TA organizations should consider areas where automation and AI can make an impact. Successful TA organizations are using these technologies in a variety of ways, including to streamline applications, accelerate and improve the hiring process, target new and existing candidates, and enable hiring managers and recruiters to focus on more value-based work.

“Leaders have recognized the competitive nature of attracting and hiring the best talent. By taking a closer look at their priorities, their processes, and their technologies, this focused attention is making a difference in their hiring outcomes,” Delle Donne says. “For some companies, getting this properly balanced has been a challenge, but it’s far from impossible—it is, in fact, a necessity.”

METHODOLOGY AND PARTICIPANT PROFILE

Harvard Business Review Analytic Services surveyed 326 members of the Harvard Business Review audience via an online survey fielded in November 2022. Respondents qualified to complete the survey if they were familiar with their organization's talent acquisition process and their role was involved in that process.

Size of Organization

22%
10,000 or more employees

25%
1,000–9,999 employees

13%
500–999 employees

26%
100–499 employees

13%
50–99 employees

Seniority

38%
Executive management/
board members

42%
Senior management

16%
Middle management

4%
Other grades

Key Industry Sectors

13%
Manufacturing

11%
Business/
professional services

10%
Technology

All other sectors
less than 10% each.

Job Function

28%
General/executive
management

20%
HR/training

All other functions
less than 8% each.

Regions

52%
North America

18%
Asia Pacific

17%
Europe

8%
Latin America

5%
Middle East/Africa

1%
Other

Figures may not add up to 100% due to rounding.



Harvard Business Review

ANALYTIC SERVICES

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