

THE DEFINITIVE GUIDE TO

RECRUITING AUTOMATION

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INTRODUCTION

If you've downloaded this guide, you've probably at least heard the term "Recruiting Automation." To those of us in the field of talent acquisition, this new emerging category of technology can sound simultaneously intriguing and daunting. Questions may be running through your head as disparate as: "How can I stay competitive without automating our recruiting process?" to "Will Recruiting Automation put me out of a job!?"

The good news is, you're not alone. As with any new technology, there is a learning curve to climb, but the rewards to your organization and to your own professional success are significant. The forces leading the Recruiting Automation revolution -- from historically low unemployment to technology innovations like artificial intelligence and machine learning -- are real. But so are the questions and confusion circling this emergent category.

The Definitive Guide to Recruiting Automation was developed to answer all those questions. Although Entelo, as a vendor in this landscape, has "skin in the game", we aspired to write this guide as impartially as possible so you can leverage our knowledge and expertise in this space. The guide is written to serve as a convenient, unbiased overview, providing everything from a high-level definition of what Recruiting Automation is to hands-on tips and resources to get you started. It's a one-stop-shop to help you decipher what can often be a dynamic and overwhelming landscape. So grab a cup of coffee, and dive in!

WHAT IS RECRUITING AUTOMATION?

Re·cruit·ing Au·to·ma·tion | rə'krōōt/iNG/ ,ôdə'māSH(ə)n/ | noun

Recruiting Automation is defined as a category of software technology that allows companies to automate recruiting tasks and workflows so they can increase recruiter productivity, accelerate time-to-fill, reduce cost-per-hire and improve the overall talent profile of their organization. The Recruiting Automation is a subset of Human Capital Management (HCM), a category of enterprise software-as-a-service (SaaS) used by companies to manage all aspects of their workforce -- from talent acquisition to payroll, performance management, training, succession planning and much more.

"Our people are our most important asset."

Who hasn't heard this phrase uttered by their CEO? But not every organization operates as if adding the best people to their organization is a top priority. Companies who really abide by this truism invest heavily in talent acquisition. They recognize that the best companies are comprised of the best people, and it's the talent acquisition (TA) team that has front-line responsibility with your HR organization for bringing that top talent into your organization.

Sadly, many internal recruiting teams aren't really equipped to succeed. Recruiters don't get enough credit for how dramatically the field of talent acquisition has changed in just the past decade. From job boards and social recruiting to employer branding and recruitment marketing, talent-acquisition professionals have navigated multiple waves of technology transformation in order to stay competitive in the war for talent.

Now a new set of technologies, powered by artificial intelligence (AI), machine learning and predictive analytics, are empowering talent acquisition teams to dramatically transform their recruiting process. But with these new technologies comes new learning -- demanding recruiters climb yet another learning curve. Referred to collectively as "Recruiting Automation," these new technologies range from automated assessments and diversity sourcing to chat bots and facial sentiment detection. Regardless of the technology behind the scenes, these new solutions promise to automate the more tedious aspects of the recruiting process.

By automating parts of the recruitment process that were previously performed manually, Recruiting Automation holds the promise of radically improving the productivity of your talent acquisition team. The most enjoyable part of the job for most recruiters (and probably why you got into recruiting yourself!) is the human interaction. But the reality too often for many recruiters is they spend countless hours combing through resumes, browsing online profiles, sending too many emails, and going back and forth to schedule interviews -- in other words, administrative tasks that take up most of your time!

Think of Recruiting Automation as a set of capabilities that will save you and your team time, and let you focus on what you love -- talking to candidates. There is no “one size fits all” to Recruiting Automation. Every organization is different so every Recruiting Automation solution will be different based on your internal TA capabilities, the types of roles you hire, your existing HR systems, and many other variables. As you learn more about the different Recruiting Automation options, start by understanding your own organization and what your pain points are today.



QUESTIONS TO ASK

- What will be my hiring needs this year?
- How many new hires do we expect to make?
- What types of roles do we anticipate hiring this year?
- How do we fill our open roles today?
- What is the average number of days before open roles are filled?
- What is the size of our internal recruiting team?
- Do we have enough capacity and resources to hit our hiring goals?
- How can I complement their skills and speed up our recruiting process?

HOW TO USE THIS GUIDE

Whether you're a complete newbie to the field of Recruiting Automation or consider yourself an expert on the latest innovations in talent acquisition, the Definitive Guide to Recruiting Automation is intended for all audiences. Although it is logically sequenced to read from start to finish, there are no rules against jumping around to focus on the content and learning that is most valuable to you.

Based on your familiarity with this space, here's where you may want to dive in:

- 1 You're a Recruiting Automation Newbie**
Start from the beginning, of course! You'll get a great backgrounder on the market landscape and factors driving this space, before you get into the more hands-on stuff.
- 2 You Know Enough to Be Dangerous**
So you've been to the trade shows, gotten some vendor pitches, and are starting to get your sea legs? Sounds like you're ready to start your Recruiting Automation journey, so a great place to dive in is the "Getting Started" chapter.
- 3 You Could Write This Guide Yourself**
If you consider yourself a Recruiting Automation expert already, then there's no need to wade through the stuff you already know. Jump to the "Selecting Your Solutions" section to put your knowledge into practice.

This guide was also written for a wide range of organizations. So regardless if you are a lone recruiter at a small company or a head of talent acquisition at a global organization, this guide should provide practical insights you can immediately apply to your area. Where approaches differ widely by size of organization, we have noted that accordingly. Likewise, although hiring practices certainly differ by industry and occupation, this guide is intended for companies from diverse verticals, who are hiring a wide variety of roles.

Regardless of how you navigate this guide, be sure to leverage the tips and tools in the "Resources" section at the back. This section can lead you to a bunch of additional information to get you the knowledge that you need. Enjoy!

ORIENTATION

An Abbreviated History of Hiring

For the greater part of the previous century, hiring people was a pretty straight-forward process. If you had an open job, you posted a Help Wanted ad in the classified pages of the newspaper. There weren't a lot of other forums for candidates to find open jobs, and there certainly weren't many sources where companies could find interesting candidates.

Then in the late 90s and early 2000s, we saw the first big technology disruption in the hiring process with the advent of online job boards. Now the task of posting a job went online with companies like Monster, CareerBuilder, Dice and others. Although it provided better visibility and information, the hiring process itself was largely unchanged — it was still: Post a Job, Review the Applicants, Hire the Employee. It was still predominantly for finding active job seekers.

From the perspective of the hiring manager, your candidate pool was limited to the people who happened to apply for your job. The selection process boiled down to sifting through a stack of resumes and cover letters, and scheduling interviews with a small subset of candidates. Evaluating people by anonymous paper resumes was a tedious, manual process -- prone to errors, incomplete assessments and even potential bias. It's a little hard to imagine it now, but it really wasn't that long ago.

True "recruiting" -- proactively reaching out to passive candidates who were well-qualified for your open roles -- was largely the domain of executive search firms. Sure, you would

Recruiting wasn't always a process that needed to be "automated."

hire a "headhunter" for those senior most positions, but for every other role you would simply post a job and wait for candidates to apply. While you maybe reached out to some people in your network and word-of-mouth referrals maybe steered a few candidates your way, there simply wasn't sufficient publicly-available information about candidates to rely on outbound recruiting to fill your open roles.

The rise of social media in the late 2000s changed all that. In particular, the widespread adoption of LinkedIn as the prominent professional social network now meant that candidates' profiles were easily searchable online. This trend marked the second big technology disruption in the talent acquisition space. With candidates now able to post their professional credentials on sites like LinkedIn, Dribbble, GitHub and others, not to mention the preponderance of candidate information on Facebook, Twitter and other sites, recruiters could now proactively search for candidates. They were no longer reliant solely on inbound applicants. Recruiters and hiring managers could now much more easily seek out passive candidates.

Over the subsequent decade as the war for talent has intensified, many companies have discovered that relying solely on active job applicants to fill their open roles is no longer an effective talent acquisition strategy. Most organizations have seen fewer and fewer inbound applicants, and those who are applying are less and less qualified. Although second-generation job posting sites like ZipRecruiter and Indeed are still useful for filling low-skilled or entry-level roles, those services are less useful for higher wage and more skilled jobs.

Consequently, the best companies have shifted to outbound recruiting of passive candidates to fill their open positions, even for more junior roles in their organization. Recruiting passive candidates has become the norm at many organizations.

The problem is everyone has made the same shift! Every recruiter has access to the same information on the same candidates so it's no longer an advantage. Simply sending LinkedIn InMails is less and less effective. The frustrating reality is that the greatest challenge in recruiting is no longer finding candidates, it's engaging with the right candidates — before your competition does.

Despite social sites like LinkedIn, the recruiting process is largely un-changed from the days of paper resumes. It's a tedious and mostly manual process that is time-consuming, fraught with potential bias, and, more often than not, ineffective

at actually engaging the best candidates in the interview process.

WHY?

First, it is difficult to IDENTIFY the best talent. LinkedIn and other sites have made it easier to find candidates (at least, if they have a profile on LinkedIn), but it's still incumbent on you and your team to do the leg work. Searching through LinkedIn and other online sources to find candidates is so tedious and time-consuming that the critical process of sourcing is often delegated to junior associates.

Second, it can be difficult to QUALIFY candidates. Online profiles are often spotty and incomplete, particularly for candidates suffering from recruiter fatigue. Even for comprehensive profiles, combing through blocks of text to determine if a candidate has the right skills, experience, and seniority, as well as relevant company and educational fit, can take 5-10 minutes per candidate.

Finally, and critically, it can be difficult to ENGAGE candidates. Finding a great candidate is useless if they won't engage and actually interview for your role. The best recruiters immediately assess how "get-able" a candidate may be based on their current title, tenure and company. Plus, top candidates are increasingly tuning out because they get so many solicitations.

The bottom line is that the status quo of talent acquisition just isn't working any more. There needs to be a better way to get the best candidates as fast as possible within your resource constraints. And that better way is Recruiting Automation.

FACTORS DRIVING RECRUITING AUTOMATION

Probably the single biggest driver of Recruiting Automation is the shift from inbound active applicants to outbound passive candidate recruitment described above. As any recruiter or hiring manager can attest, gone are the days of posting available positions to job boards and waiting for candidates to apply. This change has been abrupt -- really just in the last 5-10 years. But why has it become so necessary to do outbound recruiting?

What are the economic factors that are causing this sea change in our industry? Why do you feel like you and your team are overwhelmed???

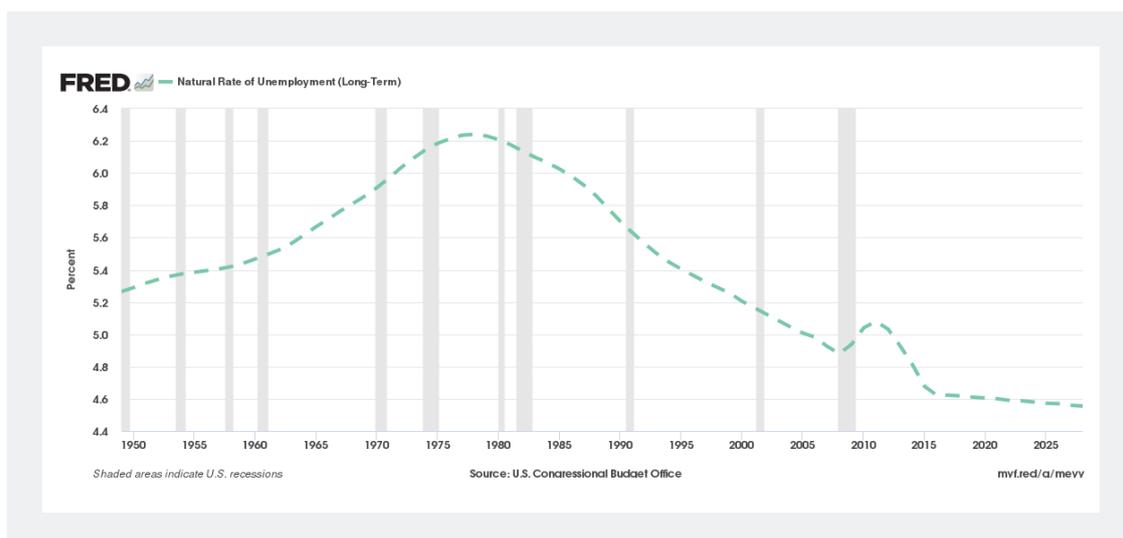
Turns out, when you step back, there are many macroeconomic factors conspiring to make hiring harder than ever.

1

Historically low unemployment

Starting around 2011 as the economy recovered from the 2008 financial crisis, unemployment in the U.S. has been on a steady downward trajectory. The U.S. unemployment rate in Q4 2018 stood at the historically low level of 3.7 percent. The following chart of the U.S. Federal Reserve's so-called "natural rate of unemployment", which accounts for frictional, structural, and surplus unemployment, illustrates just how low unemployment is in historical terms. You would have to go back before 1950 to find a tighter labor market! Further, the Fed expects the natural rate of unemployment to continue to trend down for the foreseeable future.

Natural Rate of Unemployment (Long Term)



2

More Job Openings

Inter-related with low unemployment, the number of job openings has relentlessly increased in recent years. The U.S. Labor Department recently reported a record number of 6.6 million job openings. The job creation is even more evident when compared against the number of unemployed. A Bureau of Labor Statistics report shows that the number of unemployed people per job opening is 0.9, down from a high of 6.6 unemployed people per job at the height of the economic downturn. That means there are currently fewer unemployed people than there are open roles. No wonder it's so hard to find talent!

Number of unemployed persons per job opening, seasonally adjusted



Note: Shaded area represents recession, as determined by the National Bureau of Economic Research
Source: U.S. Bureau of Labor Statistics

3

Increasing Skills Gap

While the number of open jobs is higher than ever, finding workers with the necessary skill set is becoming more difficult, particularly for technical roles. Research from the Brookings Institution found that 108 million jobs now require moderate or high digital knowledge, an increase from 45 percent to 71 percent of the workforce since 2002. The Bureau of Labor Statistics estimates there will be 100,000 new information technology workers needed per year over the next decade, while only about 60,000 people with those skills enter the workforce each year. Making matters worse, many occupations, particularly in health care, financial services and other regulated verticals, often require specific certifications and licensing.

Finding candidates with the prerequisite skills is like finding a needle in a haystack.

Beyond these macroeconomic factors, there are many behavioral drivers as well -- on both the side of the candidate and the company.

4

Opportunistic Candidates

Candidates, particularly those in high-demand jobs, are becoming increasingly accustomed to employers finding them. They can afford to be opportunistic and wait for the right recruiter to come knocking, rather than actively researching and applying for jobs. LinkedIn estimates that 70 percent of the workforce is comprised of such passive candidates who aren't actively job searching for a new job but may be receptive if approached. Add to that, MRINetwork recently found that the labor market is 90 percent candidate-driven as recruiters scramble to win the hearts of these passive candidates.

5

Competition for Talent

All of us in the talent acquisition phrase have heard the tired phrase the "war for talent", but it's also never been more true. With a finite number of qualified candidates, the reality is your company is competing for talent with huge companies throwing virtually unlimited resources at the problem. The intensification of the talent wars has led many companies to invest in technology that can help them engage with qualified talent faster.

6

Information Overload

With candidate information more readily available than ever before, the sheer amount of data about candidates is exceeding the capacity of your recruiting team to process. Most recruiters simply don't have enough time to adequately source, assess and screen candidates. Recruiting automation systems help companies analyze candidate data quickly to help them make better decisions, fast.

7

Better Technology

Another key driver has been advancements in computer science. People have been talking about how recruiting will be automated for years. However, until recently the technology did not exist at scale to transform the hiring process. Recent advances in artificial intelligence and machine learning as well as the rise of open source software and cloud computing have spurred innovation that makes the promise of more efficient and productive recruiting teams a reality.

CHALLENGES WITH PASSIVE CANDIDATE RECRUITMENT

"The fundamental playbook of talent acquisition itself has changed forever"

NN Srinivas, Head of Recruitment North America

Cognizant

So now that we've level-set about how we got here and the reality that talent acquisition has shifted to outbound passive candidate recruitment, what do we do about it? Many TA leaders intuitively know that the recruiting process has fundamentally changed, but are less confident about how to realize that change within their organizations. Unfortunately, many talent acquisition teams were not really designed to do outbound recruiting at scale. In fact, many organizations have structured their team, processes and even compensation incentives around processing inbound job applicants.

But if you simply get more volume, more disqualified applicants, more noise -- all as a result of spending more and more money to "promote" your own job listings -- are you really achieving your ultimate goal of hiring the best people?? Or are you just creating more work for yourself? "More" definitely does not always mean "better."

However, shifting gears to effectively execute on outbound recruiting is easier said than done. In many cases, this pivot

requires a substantive re-thinking of the people, processes and technologies needed. A change that is not only daunting but incredibly difficult, and fraught with potential career risk.

As TA teams shift to emphasize outbound recruiting, the demands on recruiters to work faster, smarter, and better to win top talent intensify. Frequently, leadership can under-estimate the implications of this new approach on their organization -- leading existing TA managers to feel overwhelmed. The biggest challenges of passive candidate recruitment include:

NOT ENOUGH TIME

Entelo conducted a recruiting trends survey that found recruiters spend 13 hours/week (almost two full days!) just to source candidates for a single role, on average. Sourcing candidates is an often-overlooked time sink for recruiters. With most recruiters sourcing multiple roles concurrently, they often have no time remaining to actually interface with candidates.

NOT ENOUGH RECRUITERS

While some organizations have built out internal talent acquisition teams of hundreds, even thousands, of recruiters, not every company has the luxury of throwing people at the problem. Mandates to increase passive candidate recruitment oftentimes don't come with accompanying increases in recruiting team headcount. [Our recruiting trends survey](#) found 33% of companies lack the resources they need to hit their hiring goals.

NOT ENOUGH CANDIDATES

Even with adequate recruiter coverage, it can still be incredibly hard to generate enough candidate pipeline. The demands of outbound recruiting and scarcity of certain candidate profiles mean there often simply aren't enough active candidates to fill your open roles.

47%

of recruiters say they cannot find enough qualified candidates.

NFIB Small Business Economic Trends

NOT THE RIGHT TECHNOLOGY

People outside of the talent acquisition field can often naively assume that searching LinkedIn is all the technology needed for successful passive candidate recruiting. But finding a profile on LinkedIn is really just the start of the hard work. Recruiters then need to engage, assess, schedule, interview, negotiate, and, ultimately, hire the candidate. And many TA teams don't have any technology to help them with these subsequent steps of the recruiting funnel.

OVER-RELIANCE ON EXTERNAL RECRUITERS

Many TA organizations, grappling with their internal resource constraints, turn to external, third-party recruiters to fill their passive recruiting needs. Although agencies, freelancers, staffing firms and RPOs can all be part of a sound recruitment strategy, they can also balloon expenses and substantially increase cost-per-hire. And, if not well-managed, can create confusion in your candidate experience.

NOT ENOUGH HIRING

At the end of the day, your talent acquisition team has a clear hiring goal. Given these constraints around time, budget, technology and candidate pipeline, many recruiters simply can't hit those hiring goals. According to TEK Systems, HALF of recruiters expect to miss their hiring timelines.

Talent acquisition teams need a better approach. Given these challenges, it's no wonder TA teams are turning to Recruiting Automation for help. Automation technology has been helping other departments in your organization scale for decades. The same artificial intelligence, machine learning, and predictive analytics that are helping marketing teams target new leads and sales teams manage customers can now be applied to candidate recruiting as well.



QUESTIONS TO ASK

- What is your current team and what are their skill sets?
- What have you benchmarked as the necessary time required to recruit for one role?
- Given that benchmark, how many roles can your team reasonably recruit per year?
- How does that capacity align with your hiring needs?
- What is your current TA technology stack? How integrated are those components?
- Do your recruiters all follow the same practices and process?
- What is the average days new positions are open before being filled? Are there significant variances in days-to-hire by role?
- What are your cumulative costs of external recruiters? Is that a sustainable level of spend?
- Do you have individual departments, teams or hiring managers circumnavigating your internal recruiting team and engaging third-party recruiters directly?
- What is your mechanism for gathering feedback from your hiring managers?
- What feedback has been provided by hiring managers and how are you addressing it?

UNDERSTANDING THE RECRUITING AUTOMATION TECH STACK

Recruiting Automation as a concept refers less to a single system and more to a range of technologies used by companies looking to increase their competitive advantage in hiring. These companies recognize that the “status quo” way of hiring simply doesn’t work as well as it used to in an of age of hyper-competition for top talent and are looking to achieve better results, in a shorter amount of time and often with fewer resources relative to the goals they are trying to achieve.

Understanding which solutions are the best fit for your organization requires an understanding of the various Recruiting Automation “tech stack” -- or assemblage of software solutions that are right for you. Examples of Recruiting Automation technologies can be found throughout the recruiting funnel, from initial candidate sourcing to the final hiring decision. Some of the categories within recruiting automation are as follows:

CANDIDATE SOURCING AND ENGAGEMENT

Companies like Entelo, HiringSolved, Hirtual and others automate the process of identifying and engaging with passive candidates. These companies leverage cutting-edge technology to aggregate and analyze data about candidates’ skills and experience then match them to job opportunities. These solutions also automate candidate outreach and follow-up to increase engagement.

DIVERSITY & INCLUSION

Another area touched by recruiting automation, companies in this space are applying machine learning to help recruiting teams meet their D&I goals. This includes everything from automating the diversity sourcing process (Entelo, Seekout.io, HiringSolved) to eliminating opportunities for unconscious bias throughout the recruitment process (Entelo, Textio, Interviewing.io, TapRecruit).

CANDIDATE SCREENING AND EXPERIENCE

Companies like Mya, Olivia (Paradox), AllyO and others leverage intelligent chatbot technologies to automate candidate screening, applicant status updates, and other aspects of the candidate experience, helping companies to provide a streamlined, consistent and scalable interface to individuals considering employment opportunities.

INTERVIEW SCHEDULING

Companies like Clara Labs, GoodTime.io, Calendly, and X.ai are automating the scheduling process. These companies offer the promise that one of the most tedious parts of the hiring workflow, scheduling candidates for interviews, can be largely automated via their technology.

ASSESSMENTS AND INTERVIEWING

An area of tremendous innovation is around evaluation of candidates for employment fit. Companies like HackerRank and TripleByte administer software coding tests, helping companies to identify top developers. Companies like Koru and Pymetrics help companies test for non-technical attributes that lead to better hires. HireVue, Convey.IQ and others are allowing for automation through video interviewing.

BACKGROUND CHECKS

As recruiters converge on an offer, confirming a new hire's background is a critical step in the process. Checkr, HireRight, GoodHire and Intelligo are leading vendors in automating background checks.

CANDIDATE RELATIONSHIP MANAGEMENT (CRM) / RECRUITMENT MARKETING

Companies like Smashfly, Avature, Beamery, PhenomPeople, Yello and others help companies maintain relationships with candidates on an ongoing basis (vs. simply when applicants are in an active interview process).

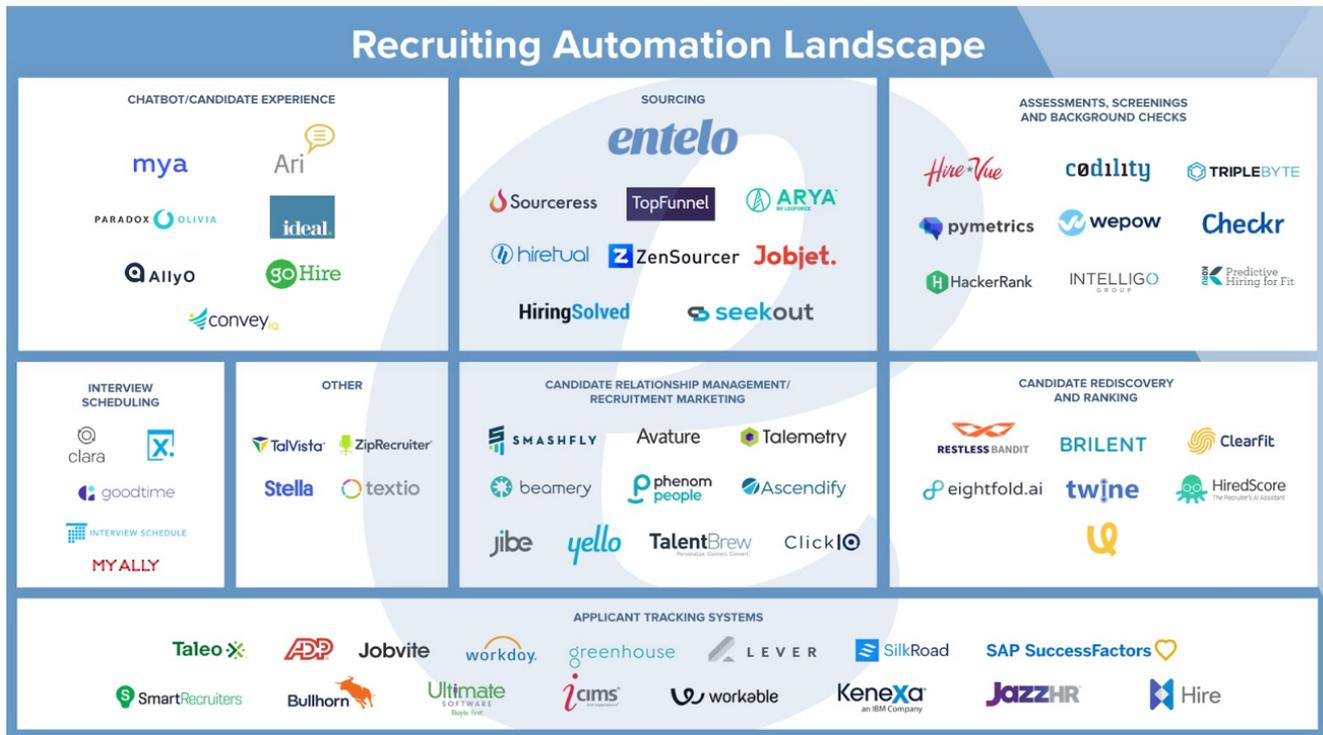
APPLICANT TRACKING SYSTEMS (ATS)

Once a candidate becomes an applicant for a specific job, applicant tracking systems are used to manage the interview process. Not all ATS software leverages intelligent technology, but the more modern vendors heavily leverage artificial intelligence and machine learning to automate the process and improve both the candidate and recruiter experience.

CANDIDATE REDISCOVERY

A newer breed of companies offer the possibility that AI and machine learning can help companies better understand who has applied for their jobs and help them to uncover good fit candidates who might be already present in their ATS or CRM. Some of the companies doing interesting work in this space include RestlessBandit, HiredScore and Volk Science.

The following vendor landscape depicts these different sub-sectors within the Recruiting Automation category and some of the vendors mentioned. The software solutions you select as part of your organization’s Recruiting Automation stack will vary depending on your needs, and you may very well elect to implement these solutions in stages to spread out the change management, technical implementation, and budget required to roll these solutions out.



To see a full size version of this vendor landscape, please visit <https://www.entelo.com/recruiting-automation/landscape/>

DECODING THE BUZZWORDS

As followers of the HR tech space, you know there are a lot of vendors using similar language and creating a lot of confusion. There are literally hundreds of vendors pitching some form of “AI this” or “machine learning that.” As they throw buzzwords at you left and right, we’re sure you’re just as sick of it as we are - so we thought we’d take a minute to take some of the mystery out of these buzzwords. With this simple cheat sheet, you’ll find the tech terminology isn’t as complicated as it seems.

ARTIFICIAL INTELLIGENCE - AI

Perhaps the most used and abused buzzword in recruiting today is “AI”. All the phrase refers to is software programs that are able to perform tasks that are more conventionally performed by human intelligence, such as analytical thinking, language recognition, cognitive perception, decision-making, and other functions. Given the wide use of this term and wide range of functions performed, the best way to understand what is meant by the term in a specific context is to dig into the specific human intelligence the AI logic is designed to perform.

BIG DATA

The phrase “big data” refers to large data sets or databases that are used for data analysis. Typically, the accuracy of data analysis is improved the larger the data set is being analyzed. If you remember your high school statistics class, the more data you have, the higher your “statistical significance”. In the world of recruiting, the amount of candidate data available has exploded in recent years -- enabling analysis across literally millions of candidate profiles and billions of data points.

BOOLEAN SEARCH

Let’s take the “boo!” out of Boolean! All this term refers to is a method for searching a data set that limits the results by defining the relationships between key words. Boolean searches combine keywords, such as “Java developer”, with operators (modifiers including AND, NOT, OR, etc.), such as “AND San Francisco” to deliver the most relevant search results. While Boolean searches can be long, the basic structure is as simple as a Google search.

CHATBOTS

A chatbot is a variant of AI in which a computer program simulates a human conversation, typically using text-based interactions (e.g. text messaging, email, web chat, instant messaging) but also through auditory voice-based interactions. If you’ve ever clicked to chat with a customer service person on a website, chances are you’ve had a conversation with a chatbot. Applied to recruiting, chatbots can be a useful and automated way to communicate with candidates.

DATA NORMALIZATION

This term refers to the process of organizing data in a database, or “normalizing” the data, so that it follows a common structure and definition. By conforming data to a set of so-called normal forms helps improve the quality of the data as well as identify and eliminate data redundancies. Data normalization is highly useful if you are working with a large number of candidates.

MACHINE LEARNING

Machine learning refers to a method of artificial intelligence that uses statistical techniques and human feedback to enable the program to "learn". By incorporating the feedback loop, the system can iteratively improve its ability to perform an intended task, such as selecting candidates who are a good match for a specific role, without explicitly programming that logic.

NATURAL LANGUAGE PROCESSING

Another sub-discipline of AI is natural language processing, including speech recognition and language understanding. This field of computer science focuses on software-based understanding of human languages, either text or auditory, and can be leveraged to analyze large amounts of language-based data.

PREDICTIVE ANALYTICS

Predictive analytics is a useful discipline of statistical analysis to make predictions about future events. It includes techniques such as data mining, regression analysis, and predictive modelling of historical data to make probabilistic estimates, or scores, of what outcomes are most likely in unknown events -- such as the likelihood of a candidate to be receptive to a new job opportunity, or a candidate's long-term success in a given role.

SOFTWARE-AS-A-SERVICE (SAAS)

SaaS, also referred to as "cloud computing", simply refers to any software that is run through a web browser without needing to be downloaded and installed on a computer. Most modern business applications are designed as SaaS software and paid for in a monthly or annual subscription to access the service.

UNSTRUCTURED DATA

Unstructured data is information, often in the form of text-based document, that is not organized in a specific or pre-defined way. Although it may contain discrete data such as dates or statistics, it can be difficult to determine the exact meaning of the data (e.g. is a date a birth date or a graduation date). In recruiting, the ubiquitous types of unstructured data is the resume or online profile. Although each may follow a general format, the information must be parsed into a more structured format to be useful to software systems.

GETTING STARTED

With the previous section as orientation (and for those of you joining in here), you're getting psyched to take the plunge into Recruiting Automation. As you embark on this journey, this section is intended to help you plan for what's ahead -- laying the groundwork for your Recruiting Automation strategy and building the case within your organization.

Tasks to Automate

Any discussion of "automation" must start with the simple question: what do you intend to automate? There are many steps that constitute the larger recruiting process. Automating those steps to improve your overall efficiency may make more sense in some areas rather than others. So it's important to take stock of your particular, and ideal, recruiting process with an eye towards automation.

Every organization is unique, but the following tasks are common ones and serve as prompts to reflect on what the recruiting process looks like in your business.

SOURCING

Any outbound recruiting process necessarily starts with the identification of appropriate candidates for your open roles. Because this part of the process often involves research, it can be easy to underestimate how manual and time-consuming candidate sourcing can be. Recruiters report spending more than 13 hours per week sourcing for a single role, so streamlining this task has the potential to dramatically reduce time-to-hire and increase productivity. A variety of Recruiting Automation solutions can help companies automate the process of identifying passive candidates that have the skills and backgrounds they need.

QUESTIONS TO ASK

- How does your organization source passive candidates?
- How much time does it take a recruiter in your organization to research a new role?
- What data about candidates are available to your recruiters?
- Are the sources you use sufficient? Or do you find candidates in other sources?
- Of the people you've hired, have you analyzed the source of those candidates? Which sources perform the best in terms of hiring?

OUTREACH

Once desirable passive candidates have been identified, the equally laborious process of actually reaching out to those candidates is the next step. Convincing candidates (especially if they're not familiar with your company and are not actively looking for a role) to actually engage can be difficult. As information about candidates has become more ubiquitous, many of the best candidates are literally getting inundated with recruiter solicitations -- so much that they often tune out LinkedIn and other platforms. Getting through requires persistence, but persistence requires a lot of time. Several vendors offer the capability to automate email outreach as well as follow ups. Using these tools, recruiters can increase their candidate coverage and spend their time selling the candidate on the job once they've already been hooked.



QUESTIONS TO ASK

- How does your recruiting team engage with candidates?
- Which channels (email, phone, text, social media) do you use to engage candidates?
- How do you obtain passive candidate's personal email address?
- What is your response rate to candidate outreach emails?
- Have you seen response rates to LinkedIn InMails decline?
- Do you know which email templates are most effective at getting a response?
- How many messages does it typically require before getting a response?

ASSESSMENT

Once a recruiter has successfully engaged with a passive candidate, the next step typically involves a first phone call or other assessment process to determine initial fit. Resumes and online profiles can often be incomplete or vague, so interacting directly with candidates to assess their skills, experience and interpersonal traits is critical. This process of candidate assessment and screening requires a high degree of human judgement and can feel like one of the most difficult steps to automate.

However, several companies provide capabilities that replicate these human processes, and potentially even increase objectivity and reduce unconscious bias in assessing people.



QUESTIONS TO ASK

- What questions do my recruiters use to screen candidates?
- How do we know we are asking the best questions to assess candidate fit?
- How effective is our screening process in selecting candidates likely to advance in the interview process and ultimate hire?
- How much time do our recruiters spend screening candidates?
- How many of our assessments are handled by phone, email, in-person or other means?
- Are there any differences in the percentage of candidates from under-represented groups pre- vs post-assessment?
- Is there the possibility bias, including unconscious bias, could be impacting our candidate assessments?

SCHEDULING

The back-and-forth logistical dance of scheduling candidates for interviews often begins in the Assessment stage. The scheduling burden can really intensify, however, as a candidate comes in for in-person interviews, requiring the coordination of several interviewing managers each with their own busy schedule. This largely administrative task can be one of the most tedious activities that Recruiting Automation can take off of your plate.



QUESTIONS TO ASK

- Who handles interview scheduling at your company?
- What is the time lag between deciding to interview a candidate and actually hosting the interview?
- How many people do you have candidates typically meet with in a first/second/final interview?
- What is the experience of your candidates? Have you surveyed them? Do they feel interviews are scheduled in a timely manner?

UPDATING

Frequent communication with candidates as they proceed through the interview process is one of the biggest determinants, and potential detractors, to the candidate experience. If your recruiters aren't communicating the status and next steps to candidates frequently enough, it can frustrate the candidate -- or worse, they may disengage with your company if it feels unresponsive. Various communications platforms can help automate next steps and applicant status updates to help companies scale and streamline great candidate experiences without over-tasking their teams. These tools can also help standardize the candidate experience so all potential hires receive the same standard of attention.

QUESTIONS TO ASK

- 
- Who is responsible for updating candidates about the process? Recruiters? Hiring managers?
 - How do you ensure you are communicating to candidates in a timely manner?
 - What feedback (e.g. via candidate surveys, Glassdoor reviews, etc.) have you received about the candidate experience at your organization?
 - How proactively do you communicate “bad news” (e.g. a decline) to a candidate?
 - Do you capture a record of candidate communications for audit or compliance purposes?

NURTURING

The right candidate is out there, but they may not be ready for an interview or an exact match for a current opening. Over time, companies can build a candidate roster that numbers into the thousands or more, and nurturing relationships with those candidates can often be the fastest path to filling a new position in the future. To help warm keep candidates warm, a variety of vendors offer “candidate relationship management” (or CRM) capabilities to continue communication and segment and target segments of candidates.



QUESTIONS TO ASK

- How many applicants do you have in a month/year? Or per open position?
- How do you capture a record of your interaction with past candidates?
- Do you have a mechanism for easily segmenting your past applicants and messaging them about new opportunities?
- How do you keep information about past applicants accurate and current?
- Do your recruiters know when they reach out to passive candidates if that person has been an applicant to your company in the past?
- Do you have a candidate newsletter, employee branding events, employee blogs or other information or events you regularly communicate to candidates?
- If a candidate or applicant is not hired for a particular role, do you have a way of re-discovering that candidate for future searches?

INTERVIEWING

The actual interview process is both the most critical and the most personal aspect of the recruiting life cycle. While media likes sensationalizing a future where candidates interview with robots, the reality is this part of the process is probably the furthest from being automated with AI. Further, for many recruiters, face-to-face interviews with candidates are what they hope to spend more time on if they can off-load more mundane tasks with Recruiting Automation.



QUESTIONS TO ASK

- Are we discovering enough in the screening process to make our interviewing efficient?
- Do your recruiters establish clear interview panels for every open role?
- Does every interviewer in your panel know exactly what questions and topics they should cover?
- How do you capture feedback from interviewers and ensure it is objective?
- Do you have a candidate scoring mechanism? Do your interviewers use it consistently?
- How do you capture feedback from candidates? Does that feedback get shared with hiring managers and other interviewers

- How do you protect against possible bias, either conscious or unconscious, in the interview process?
- How could we streamline our interview process both for candidates and interviewers?

HIRING

The moment your recruiting process all leads up to is extending an offer to a candidate. As rewarding as it is to fill a role, the actual hiring of a candidate is another labor-intensive step for recruiters -- involving negotiation of compensation, background checks, paperwork, offer letter signatures, notifications of runner-up candidates and much more. Several solutions, from electronic signature to onboarding checklists, can help automate aspects of the hiring process.

QUESTIONS TO ASK

- 
- Do your internal recruiters handle the full hiring process? Or is it handed off to another HR person or hiring managers themselves?
 - How do you ensure consistency of the hiring experience for candidates?
 - How much time do the varying steps of the hiring process require?
 - Do you have a clear communication and re-engagement process for candidates who were not extended an offer?

The above stages of the recruiting process are high-level, but can serve as a starting point for identifying where there are opportunities to improve efficiency.

In general, look to leverage Recruiting Automation to offload the parts of your process that are more labor intensive and require less human judgement. With the routine tasks taken care of by technology, recruiters have the opportunity to become strategic experts in their roles. Just like sales automation tools like Salesforce.com didn't replace sales people, recruiting automation won't eliminate recruiters. In fact, recruiting automation has the potential to add value to recruiters' roles within organizations and, at the end of the day, make their jobs more focused, productive and fun.

KNOWING WHEN TO INVEST

When should you invest in recruiting automation?

If your team is having trouble hitting goals or scaling the recruiting processes you've put in place, it's time to focus your efforts on developing a recruiting automation strategy.

Below are some good questions to ask yourself when deciding if recruiting automation is the right move for your organization.

- Are your recruiters overwhelmed with the number of reqs on their plate?
- Do your recruiters spend a significant portion of their time on administrative activities?
- Are open reqs sitting unfilled for extended periods of time?
- Is your average time to hire above the benchmark for companies in your space?
- Do you rely on outside assistance (RPOs or agencies) to fill your reqs?
- Do you have a proven strategy that you would like to scale?

OVERCOMING CONCERNS

Many hear the term “automation” and fear their jobs may become obsolete, though typically the opposite is true. Companies using recruiting automation to augment the capacity of their talent acquisition team report that they are much more efficient and freed up to spend more time on the critical face-to-face human aspects of recruiting.

What are common misconceptions about recruiting automation?

Recruiting automation means we won't need recruiters anymore. This is perhaps the most common misconception about recruiting automation. Just as Sales automation didn't eliminate the need for salespeople and marketing automation didn't eliminate the need for marketers, recruiting automation won't eliminate the need for recruiters. If anything, higher-skilled workers like recruiters will benefit from automation as it will make them more productive and productivity gains lead to higher compensation and more empowerment within the organization.

Recruiting automation systems will reinforce bias in the hiring process.

Unfortunately, traditional manual recruiting processes can be fraught with bias (as this University of Chicago study attests). Recruiting automation can help companies to reduce and/or eliminate bias in their hiring processes by alerting them to situations where unconscious bias may be involved. In addition, recruiting automation can help to minimize bias in candidate sourcing systems (e.g., basing a judgment about a candidate on something like their photo on LinkedIn) through anonymization and other techniques that shield a recruiter from non-relevant information.

Recruiting automation systems will be poorly received by recruiters.

While the fear of “the robots are coming for our jobs!” is understandable, the reality is that most of the things that will be automated in recruiting are the low-value, tedious and manual tasks that most recruiters don’t enjoy doing. Very few people got into recruiting to manually update spreadsheets, craft intricate Boolean strings to find candidates or go endlessly back and forth with candidates trying to nail down perfect interview times.

When you automate low-level and tedious work, recruiters can spend more time on high-value and more enjoyable work. For many recruiters this means spending more time actually interacting with candidates, focusing on the candidate experience and building their employer brand.

QUANTIFYING THE BENEFITS

These tools can significantly impact recruiting teams’ productivity. Because productivity increases, teams using recruiting automation technology often drive down their time-to-hire and cost-per-hire as well. Given that the average time to hire in the U.S. is 42 days, and the average cost per day of an unfilled position is \$500 a day, any improvement in time to fill is a moneymaker for an organization. When recruiting teams use recruiting automation tools they can reduce their time to hire between 7 to 15 percent, which add up to major savings for companies and increased efficiency for recruiting teams.

What are the benefits and ROI of recruiting automation?

Recruiting automation is commonly known for the time savings and efficiency gains it brings to modern recruiting departments. However, recruiting automation can bring numerous other benefits. Chief among those is providing talent leaders with much-needed insight into which recruiting programs are working and which aren’t. In addition,

recruiting automation and the accompanying analytics these systems can offer provide talent leaders with the metrics they need to speak confidently to the C-suite about the recruiting team's impact on the growth of the business.

PRODUCTIVITY SAVINGS

Recruiting automation technologies excel at eliminating inefficiencies from talent operations. By instituting recruiting automation capabilities, companies can expect to achieve an increase in recruiting staff productivity between 10 and 50 percent!¹ The biggest boost, of course, will come to companies transitioning from labor-intense or manual recruiting systems or processes.

FASTER TIME-TO-HIRE

The average time it takes to fill a given position in the United States is 42 days, according to SHRM's 2017 Human Capital Benchmarking Report.² Companies who enable recruiting automation reduce time to hire by between 7 and 15 percent, or 4.5 days per role on average. When multiplied by the cost per day of an unfilled position – \$500 average³ – and the number of reqs per recruiter per year – 40 average⁴ – the savings in vacancy costs reaches \$90,000 per recruiter per year.

HIGHER QUALITY CANDIDATES

The recruiting automation process helps ensure that all the best-fit candidates were identified and engaged in the recruiting process, resulting in better quality hires and a higher performing organization.

Shifting Your Recruiting Approach

As AI changes everything from how we drive to what we watch and even how we turn the lights on when we get home from a long day -- it's also changing the way we work. Sales and marketing teams have been onto the secret of AI for years, augmenting their workflows with automation which allows them to scale their efforts to achieve loftier goals and produce a higher quality of work than ever before.

As standard best practice, for example, marketers regularly monitor email open and click-through rates – in fact, 85% do. Yet, a majority of recruiters don't know or track email open or click-through dates and of those who do, more than 1 in 3 (37%) do so manually. Like marketers, recruiters' demands are quickly scaling, despite slower-growing resources and bandwidth.

Now, with the emergence of recruiting automation, the time has come for recruiters to experience this same revolution and shift their recruiting approach. The vast benefits of recruiting automation have become clear to today's talent acquisition leaders. Going forward, the most successful departments will be those that capitalize on the immense capabilities of the most advanced talent acquisition (and retention/engagement) systems afforded by recruiting automation.

Staying in step with your company's competitors and recruiting the best talent on the employment market is going to be much more realistic for those recruiters working with the transformative resources of automated recruiting programs.

UPLEVEL YOUR TECHNICAL PROWESS

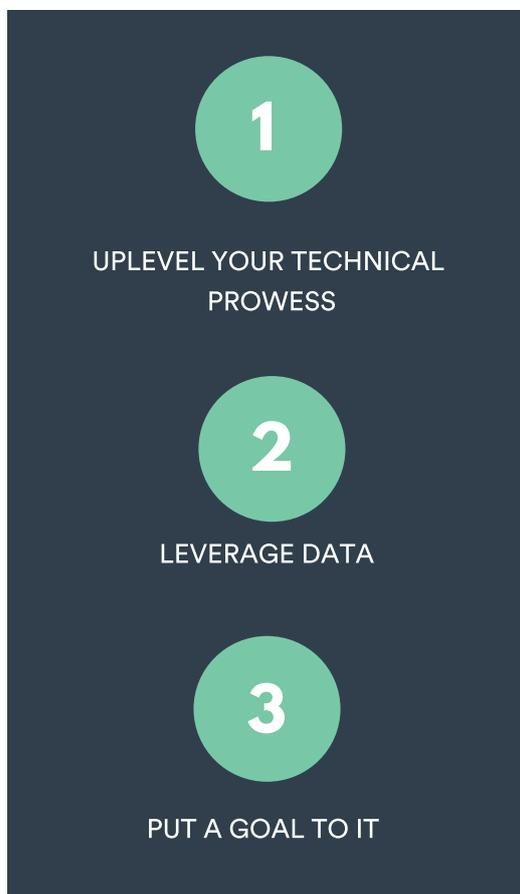
Technology won't replace recruiters, but recruiters who don't become technology enabled will be replaced. However you and your team learn best, start learning how to use recruiting automation tools. Take courses, attend webinars or ask the more tech savvy coworkers to help others develop specific skills. Taking time out of your busy schedule can be difficult, but it is critical to your future as a recruiter - or as a leader - that you're constantly keeping pace with the industry and expanding your skill set. Doing so also makes you much more valuable to your company and will certainly get you noticed as a leader on your team.

LEVERAGE DATA

Most recruiting automation tools do more than help recruiters check things off of their to-do list. These tools also gather rich data that can be used to improve and optimize the way a company hires. From diagnosing problems in your interview process to doing more targeted and strategic outreach. Using data to inform hiring strategy is what will make recruiting teams invaluable partners to the business.

PUT A GOAL TO IT

The best way to guarantee you'll get to something is set a goal around it. This will solidify recruiting automation adoption's place on your team's road map. As you're setting your goals for the upcoming quarter, try to bake in any of the following:



- Build a presentation to get CHRO buy in for recruiting automation tools
- Demo 3 recruiting automation products
- Purchase and implement 1 recruiting automation tool

However you decide to do it, adaptation is essential. Recruiting teams that don't keep pace will be less productive, and ultimately less effective. To take on the challenges recruiters are up against, you and your team will need to break the status quo and embrace the changes the future of recruiting holds.

CREATING AND IMPLEMENTING A SUCCESSFUL STRATEGY

At this point, you likely have some idea of the key areas in your recruiting process that can be automated. You've also likely realized that determining which of these areas to start off with will be one of the most difficult decisions you'll make.

Before hopping into demo after demo and overwhelming yourself with the seemingly endless options, you need to have a specific and measurable goal in mind. That starts by defining what your ideal recruiting process looks like – then you can work backwards to identify the measurables and tools you will need to get you there.

Defining Your Ideal Recruiting Process

In an ideal world we would easily uncover the best-fit candidate, reach out right as they gear up for a new job search, and have them signing their HR papers before our competitors can say “impressed by your background!” For the purpose of this exercise, however, an ideal recruiting process is one that solves for a persistent and hindering pain point in a measurable way.

As an example, for companies who lack diversity (pain point), an ideal recruiting process would lead to a more representative pool of candidates at the top of the recruiting funnel (metric #1) and influence overall representation throughout the organization (metric #2). Below we've put together some of the most common metrics, their associated pain points, and questions that will help you determine where in your current process this roadblock occurs. Using this insight, you can work backwards to design your ideal recruitment process!



TIME-TO-HIRE

Lengthy or drawn out candidate lifecycle.

Where are your recruiters spending the most time (sourcing, screening, interviewing, etc)? Are candidates getting “stuck” at a certain stage of the process?



COST-PER-HIRE

Cost of attaining talent is exceeding recruitment resources.

Where are the most resources and budget dedicated? Consider both internal and external resources leveraged throughout the process... How do the cost of each resource compare to the total compensation recruited?



DIVERSITY

Lack of diversity especially within specific areas of the organization.

Are there opportunities for bias to be introduced within the hiring process? Are your recruiters presenting an equitable and representative pool of candidates to their hiring managers? Is the interview process fair and inclusive?



QUALITY OF HIRE

Hires are not checking all the boxes, underperforming on the job.

Where is quality dropping off within the hiring process? Is quality lacking in the candidates being sourced? Do recruiters struggle to engage with those top candidates? Are high-performers dropping out throughout the interview process?



RETENTION / TURNOVER

Number of employees departing company exceeds hiring capacity.

What are the reasons cited for departures? Are there departments with particularly high turnover? Are there particular qualities shared amongst exiting employees? How are these tied back to specific recruiting initiatives such as diversity and inclusion, quality of hires, interview process?

CHOOSING THE RIGHT RECRUITING AUTOMATION SOLUTIONS

Now that you've defined your ideal recruiting process and the specific areas you aim to automate, you're ready to build out your AI tech stack! There's a ton to consider when deciding which tools best align with your initiatives and what works for one company may be ill-fitting for another.

To help get you thinking about what will be most important for your organization, we put together the following checklist to consider in your evaluations.

For a more comprehensive Recruiting Automation Vendor Checklist, [click here](#).

CUSTOMER SERVICE

- What kind of customer success support is offered?
- Is their support only self-service or do they have additional capabilities?

COST

- Are there hidden costs? Or is the pricing model clear and transparent?
- Do they offer contractual flexibility?

TALENT

- Who are the people that work at the organization, what types of organizations have they worked for and serviced?

AI & MACHINE LEARNING

- Are these buzzwords? What exactly do they automate?
- Do they hold any patents tied to ML/Artificial Intelligence?

SECURITY

- Do they meet critical security and compliance requirements? (e.g. GDPR)
- How do they keep customer data safe?
- Do they have vulnerability testing measures in place?

FUNCTIONALITY & INTEGRATIONS

- Can they demonstrate successful similar deployments?
- Do they have a trial program?
- Do they offer secure API integrations?
- Can I configure the solution to meet my needs?

CONCLUSION

The reality is if you haven't embraced recruiting automation thus far, then you are already behind the curve. For your organization, this means missed hiring goals and a diminishing quality of hire. For you, this means falling behind in a profession that has been completely redefined.

No matter where you choose to start or which tools you put in place to uplevel your recruiting process, what's most important is a willingness to be an early-adopter. Along the way you will discover what tools work best within your recruitment strategy, but the practice itself of trying out new technologies will allow you to stay ahead of the curve.

But wait, school's not out just yet! With a continuously evolving industry and a labor market constantly in flux, it's your job to be a career-long student of recruiting automation— seeking out new technologies, new processes, and new strategies to understand how they can solve for your hiring challenges.

At the same time, embracing change is key to success. Understand how to manage change at the team and organizational level and how to get buy-in from every stakeholder. Most importantly, you can't manage what you can't measure. Know why you are adopting a new tool and be sure to put a goal to it.

RESOURCES

WHERE CAN I GO TO LEARN MORE ABOUT RECRUITING AUTOMATION?

At Entelo we're committed to helping to support this emerging category through educational resources and online community. In addition, we host events on the topic of recruiting automation including the upcoming Recruiting Automation Summit.

Here are some additional resources you might find helpful:

- [Recruiting Automation for Dummies e-Book](#)
- [What is Recruiting Automation](#)
- [Recruiting Automation Vendor Landscape](#)
- [The Entelo Blog](#)
- [Podcast: Hiring on All Cylinders](#)
- [Recruiting Automation Vendor Checklist](#)

About *entelo*

Entelo builds AI and automation software to help modern recruiters identify, qualify and engage with top talent. Today, approximately 700 customers of all sizes and industries trust Entelo to provide their talent acquisition teams with higher candidate engagement, actionable insights and increased productivity. The leader in recruiting automation, Entelo helps organizations like Cisco, Genentech, Lyft, Netflix, NASA Jet Propulsion Laboratory, Northrop Grumman and Target build their teams. To learn more about the Entelo recruiting automation platform, visit www.entelo.com. Find out about open roles at Entelo and subscribe to the Entelo Blog for insight and updates on the talent acquisition industry.

SOURCES

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GENERAL SOURCES

- U.S. Bureau of Labor Statistics
- FRED - Federal reserve Economic Data
- Entelo Research
- NFIB Small Business Economic Trends

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