

AI AND THE FUTURE OF TALENT

# Seven steps to implementing AI in talent acquisition

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if (copyto_user(grouplist, group_info->blocks[i], len))
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nlist, group_info->blocks[i], len))
```

# Innovation with purpose



**Lee Gudgeon**

Managing Director,  
Reed Talent Solutions

**When I started working in recruitment two decades ago, I never imagined the positive impact technology would have on our sector. Data has moved from filing cabinets to the cloud and processes once meticulously recorded on paper are now automated.**

Looking ahead, experts believe the impact of AI will go beyond anything we have seen to date. I tend to agree. And my experience so far gives me reason to be optimistic about the fourth industrial revolution.

In this eBook, we will look at the capabilities of current tech on the market, and explain how to approach implementing AI within your talent acquisition. We hope that this will give you a roadmap – to help you navigate the planning stages, make the right decisions and set you on the path to success.

But, for now, I want to give our readers some advice for the future: be positive. There will be fundamental changes to the way we work, the types of people we're looking to hire and the skill sets future workforces will need to be equipped with. But organisations have always

been able to adapt. And ultimately, the promise of AI is that it will make our lives better. When implementing this tech for talent acquisition it's important to deliver results for the organisation and help people find work that's right for them.

Does it mean a four-day workweek in the future? I certainly hope so.



# AI is no longer a work of science fiction

**Most of us use AI every day. It helps power the apps on our smartphones, and improves our lives as we travel around and make purchases.**

- Netflix uses machine learning to recommend TV shows we like.
- Facebook uses deep learning to recognise and tag users in photos.
- Apple uses natural language processing to understand voice commands given to Siri.
- Uber uses predictive analytics to put enough drivers on the roads.
- Tesla uses robotics to pilot fleets of self-driving cars.





# And it's changing talent acquisition

Technology that exists today is already being used to improve:

- Sourcing
- CRM & candidate experience
- Screening & pre employment vetting
- Interview & assessment
- Onboarding

// We're using AI in the onboarding process, the selection process, in scheduling and also for enhancing job profiles. So, while I'm interested in what's coming down the line, at the moment I'm really excited about using what we have on a day-to-day basis. //

Michele Smith, Client and Engagement Director, Reed Talent Solutions

35%

of talent leaders and hiring managers say that AI is the top trend impacting how they hire.



# But what counts as AI?

## And how is it used?

To help differentiate between the various branches of AI, here are some of the commonly used terms, with examples of how each is being used within talent acquisition.



**Artificial intelligence (AI)** is a broad term for a range of technologies that are capable of performing tasks that normally require human intelligence.



**Robotic process automation (RPA)** automates logical processes, and is a stepping stone to more intelligent automation via machine learning.

**RPA is applied in tasks like:**

- Collecting and storing information in an ATS
- Interview scheduling



**Machine learning** is a subset of AI, where the tech improves itself as it's exposed to data – without the need for human intervention.

**Machine learning is applied in tasks like:**

- Detecting anomalies in CVs
- Personalising content for applicants



**Predictive analytics** is the science of using statistical techniques (including machine learning) to analyse data and predict future outcomes.

**Predictive analytics is applied in tasks like:**

- Predicting trends in the recruitment market
- Determining what makes candidates successful

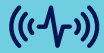


**Deep learning** is an evolution of machine learning, where the tech is able to process and abstract from complex data.

**Deep learning is applied in tasks like:**

- Enhancing job descriptions through skills matching
- Matching candidates to jobs

## But what counts as AI? And how is it used?



**Natural language processing (NLP)** is a subset of AI that overlaps with machine learning, where the tech is able to intelligently process human language.

NLP is applied in tasks like:

- Pre-qualifying applicants in automated interviews
- Engaging candidates through chatbots



Finally, **general AI** is the mature state in which AI doesn't just do what it's told, but reasons like a human and decides what to do for itself.

Most experts believe we are decades from general AI.





# Opportunities and challenges

There are a wide variety of benefits to implementing AI within talent acquisition. Some of the most frequently touted reasons are its ability to help businesses move faster, be more objective and provide a better candidate experience.



## **Increase speed**

Hilton reduced time to hire by 88% by using HireVue video assessments to pre-qualify applicants.<sup>2</sup>



## **Reduce bias**

Johnson & Johnson increased qualified female applicants for STEM roles by 14% by using Textio to remove bias from job ads.<sup>3</sup>



## **Improve candidate experience**

L'Oréal delivered an improved hiring experience with 92% of candidates engaging with chatbot Mya during the recruitment process.<sup>4</sup>

What's more, simple RPA applications can improve accuracy and productivity, without needing a great deal of technical skill or disrupting legacy systems.



However, there can be downsides – such as the cost of implementation, flaws in the underlying data or lack of buy-in from the top.



### Cost

74% of organisations **do not have the budget** to support digital transformation in talent acquisition.<sup>5</sup>



### Discrimination

Amazon scrapped its AI recruiting tool for showing **bias against female applicants**.<sup>6</sup>



### Lack of buy-in

Only 26% of organisations that have introduced AI report **true commitment to AI initiatives** from their senior leaders.<sup>7</sup>

That's why it's essential to weigh up the pros and cons, and have a clear plan for success before starting to implement AI within your talent acquisition.





# The need for a roadmap

**Digital transformation is a tall order. And while plenty of people are discussing the possibilities and opportunities to come, there's a lack of practical advice on the best place to start for those who are considering implementing AI – particularly those responsible for talent acquisition.**

That's why Reed Talent Solutions developed this guide, to help you navigate the planning stages and set you on the path to success for your talent acquisition program.

## **In the following section you'll find:**

- A step by step guide to implementing AI in your talent acquisition function
- Advice on choosing the right place to start
- A range of technologies on the market today
- Details of our experience helping clients integrate AI
- Advice on how to secure buy-in from others in your organisation

We hope this helps you make the right decisions for your organisation. And if you'd like to speak to an expert, we're always on hand to discuss your needs.





# Seven steps to implementing AI

// The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency. //

Bill Gates,  
Founder, Microsoft

## One: familiarise yourself with the technology

When it comes to shaping talent acquisition for the future, understanding the tech is essential to making the right choices – those that drive efficiencies, mitigate risk, and get the results you want.

There's a huge range of AI recruitment tools on the market and the industry is evolving rapidly. So much so, according to Forrester, the global market for RPA alone will reach \$2.9 billion by 2021.<sup>8</sup>

It can sometimes be challenging to cut through the noise, so we've put together a list to illustrate just a small portion of what's available on the market today.

62%

**of talent leaders**  
do not have a clear  
understanding of AI.<sup>5</sup>





## Seven steps to implementing AI

**ENGAGE Talent** uses AI and predictive analytics to add insight to talent market research and predict candidates' readiness to change jobs.

**Textio** is an augmented writing tool that uses natural language processing to suggest improvements to writing that make it more engaging and bias free.

**XOR** is an AI chatbot capable of engaging with candidates to automate tasks like pre-qualification and interview scheduling.

**HireVue** is a video interviewing and assessment platform that uses machine learning to evaluate and pre-qualify applicants.

**Pymetrics** offers a series of cognitive and neurological tests, designed to assess a range of traits in applicants without bias or discrimination.

**Zoho Recruit** is an end-to-end platform that uses AI to parse CVs, match skillsets to vacancies and automate recruitment workflows.

**IBM Watson** offers a range of solutions including AI-driven candidate and market insights, chatbots and applicant sentiment analysis.

## Checklist

- ✓ **Swot up!** Research the latest recruitment tech on the market and understand the opportunities and challenges of each
- ✓ **Find evidence** of their best use in similar businesses – will this work for you?
- ✓ **Compare** the feature lists of competing tech providers – who offers the best solution for your needs?



## Two: identify the use case

Once you are familiar with the technological capabilities, spend some time thinking about your talent acquisition function to figure out what role AI might be able to play.

Generally speaking, there are three areas where AI can provide benefit:

### 1. Predictive models to improve the quality of decision making

If your objective is to improve the quality or quantity of candidates, think about which areas of your talent acquisition function could benefit from technological augmentation.

AI can power predictive models that might include talent market mapping, advanced candidate sourcing or assessing applicants' suitability for a role.

### 2. Real-time, personalised experiences to drive engagement

If your objective is to provide a more engaging candidate experience, think about what's causing applicants to drop off during the application process at the moment. AI can provide experiences that might include gamified assessments, chatbots to answer candidate questions or personalised content about the application process.

// Look at how you are using technology today during critical interactions with customers – business moments – and consider how the value of those moments could be increased. //

Whit Andrews, Vice President and Distinguished Analyst, Gartner

### 3. Automation of manual processes to save time and money

If your objective is to save time or money, think about which recruitment processes could be completed more efficiently through automation.

AI can automate manual processes that might include early interactions with candidates, entering applicant details into an ATS and interview scheduling.

**Not all processes are a good fit for AI – often a human touch remains the best option. Remember: the devil is in the detail, so take time to thoroughly consider your organisation's specific needs.**

## Le Clair's "Rule of Five"

Forrester analyst Craig Le Clair identified that, generally speaking, processes are suitable for automation if they involve:

- No more than five decisions
- No more than five apps
- No more than 500 clicks

## Checklist

- ✓ Conduct a detailed situation analysis for your organisation
- ✓ Have a clear idea of your existing challenges and end goals
- ✓ Decide which area of benefit would be most relevant for your needs

## Three: assess your data

The success or failure of AI implementation depends heavily on having robust data and infrastructure. Whether you're teaching a bot to carry out a process or having an algorithm fine tune itself through machine learning, data inputs must be carefully selected, prepared and applied.

And if your data is spread across multiple platforms – as is often the case, with legacy systems a common challenge – you'll need to think carefully about how those platforms are integrated.

46%

**of recruiters** say they lack the data to make smarter decisions.<sup>9</sup>





## Case study: Royal Mail

**£30m**  
in savings

**99%**  
fill rate across  
all positions

**Royal Mail asked Reed Talent Solutions to overhaul its applicant tracking system. The iconic institution was struggling to manage the huge number of applicants excited to join its ranks.**

We examined the existing ATS, and found that it was split between three different systems. Transferring data cost time, money, and energy. So we developed a unified platform to generate time, process and cost efficiencies.

The result? Customer experience was more compelling and candidates could track their application from first contact to first day on the job. Today, successful applicants who want to work at the Royal Mail only wait eight days from sending their application to starting a new job. Previously it was 15.

Since the start of the project, the new platform has contributed more than £30 million in savings and a fill rate of 98% across all positions.



## Seven steps to implementing AI

As well as assessing the state of your current data, it's important to consider the skills required to progress on your AI journey. Data literacy should be a core skill not just for those who create the tech, but also those who use it.

While IT and data departments will be responsible for having a deeper technical knowledge of the solutions being implemented, talent acquisition teams will need to be sufficiently data literate, to understand the outputs and help the tech evolve in line with the business needs.

### Checklist

- ✓ Map out your existing data systems and look for any potential challenges consolidating them
- ✓ Check in with your data controller and data team to get their take on the situation as it stands
- ✓ Make sure you are up to date on legislation like GDPR to see if there are any compliance issues to take into account

// We are always going to need a human touch to make sure AI is in tune with the outputs we need, and is changing as the business evolves. What works now for a company might be very different in 12 months' time. //

Michele Smith, Client Engagement  
Director, Reed Talent Solutions

## Four: have the future in mind

Many organisations are just starting out on their AI journey. For those organisations, automation is often the first step. And while it's sensible to start small, it's important to think big.

**RPA** – robotic process automation, in which automation is run without human intervention – is already a step on from RDA – robotic desktop automation, in which automation requires a human to start the operation.

Both of these are process-driven ways of mimicking human actions (scheduling an interview, for example). They are also stepping stones on the route to data-driven ways of simulating human intelligence (preparing a shortlist of relevant candidates for a role, for example).

It's important to consider both the quick wins that can drive immediate value, and more complex AI applications that will be required for sustainable long-term growth.

72%

**of employers** expect that some roles within talent acquisition and human capital management will become completely automated within the next 10 years.<sup>10</sup>







Balancing lofty goals and quick results is key to creating an effective AI strategy that keeps your talent acquisition function moving forward.

For the short term, it's best to think about how AI will augment human intelligence rather than replace it. So talent leaders need to think about the skills that are required to get the best out of the tech.

We've already covered the importance of data literacy in the previous section. And as AI moves from pilot stage to a wider rollout, your organisation will need to invest in skills around specific AI technologies, data governance and analytics.

But it's not just technical skills that will be required. **McKinsey Global Institute predict social and emotional skills will account for a quarter of hours worked by 2030<sup>11</sup>**. As talent acquisition teams supplement their skills with new technology, these soft skills will be essential to retaining the human touch.

// There's definitely going to be an element of structural change within the workforce. So organisations need to think about how to manage those workforce changes as they come down the line. We need to think about the future and assess the skillsets in need. //

Daniel Youds, Solutions Director,  
Reed Talent Solutions

## Top 10 soft skills of the future<sup>12</sup>:

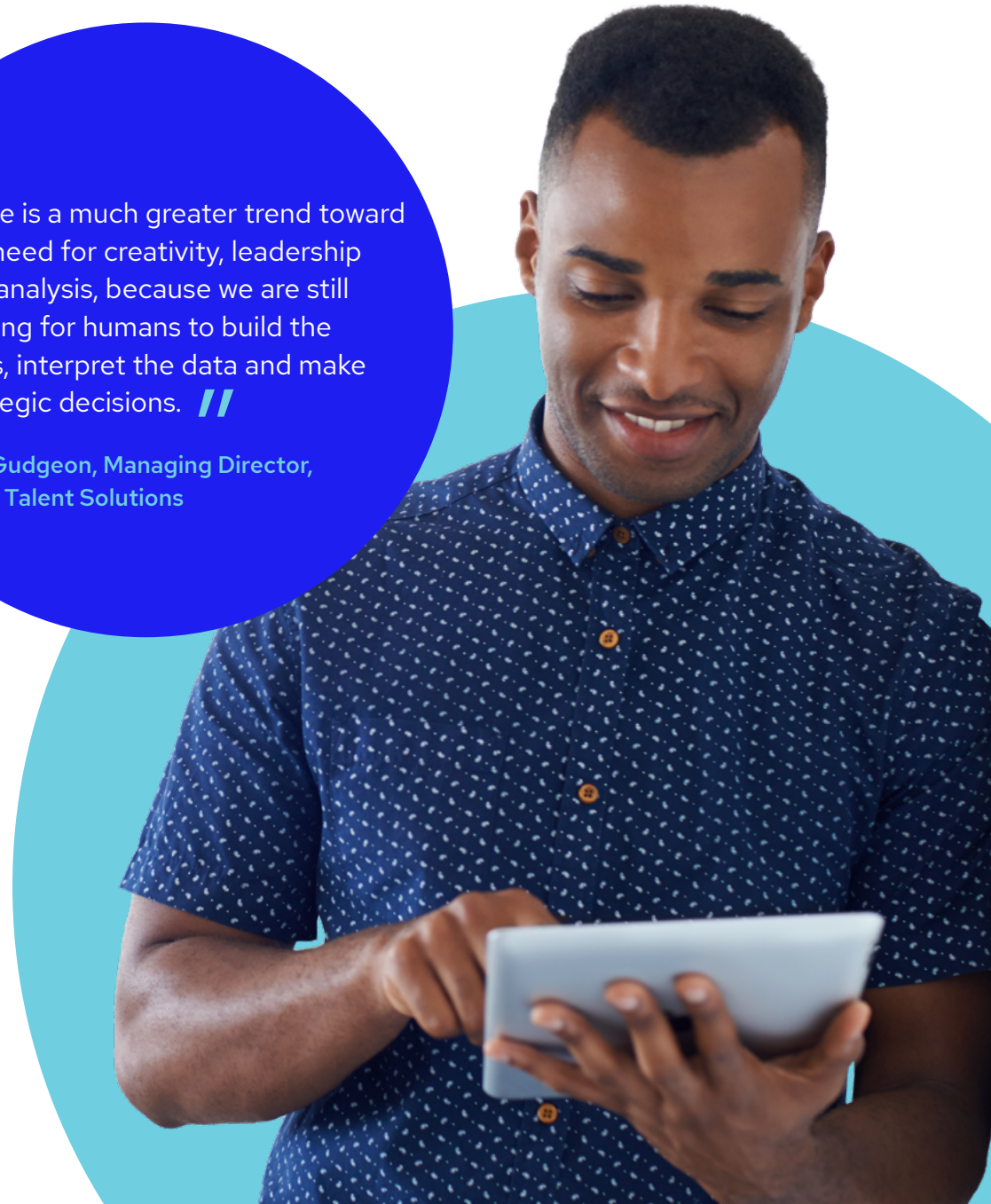
1. Complex problem solving
2. Critical thinking
3. Creativity
4. People management
5. Co-ordinating
6. Emotional intelligence
7. Judgement and decision making
8. Service orientation
9. Negotiation
10. Cognitive flexibility

## Checklist

- ✓ Picture how you want your talent acquisition to look 2, 5 or 10 years from now
- ✓ Think about what skills your organisation might need in order to reach that point
- ✓ Lead by example – what skills would you need to nurture in yourself?

// There is a much greater trend toward the need for creativity, leadership and analysis, because we are still looking for humans to build the tools, interpret the data and make strategic decisions. //

Lee Gudgeon, Managing Director,  
Reed Talent Solutions





## Five: partner with an expert

The steps we've covered so far will stand you in good stead for realising your AI ambitions. And while it's completely possible to go solo, it's often valuable to partner with an expert to provide support and knowledge along the way.

Reed Talent Solutions has delivered digital recruitment transformation for countless clients. Our knowledge about the latest AI recruitment solutions means we can help with any of the following:

- Automated sourcing that scans the web and rich online data to find high quality candidates that match your role criteria
- Job advertising tools that use machine learning and natural language processing to assess gender balance and diverse language in job adverts
- Chatbots that automate elements of the recruitment process including screening, interview scheduling and onboarding for a better candidate experience
- Video interview that uses AI across audio and visual inputs (pitch, tone, pace and language) to assess candidate fit
- Talent pool and CRM that uses AI and machine learning for improved candidate engagement
- Automated scheduling of interviews or shifts for time saving efficiencies

Choosing a trusted and reputable partner to guide you through the process can be make or break for the next section...





## Case study: [Financial services client]

150

phone interviews  
booked within  
3 hours

100%

of roles filled within  
21 working days

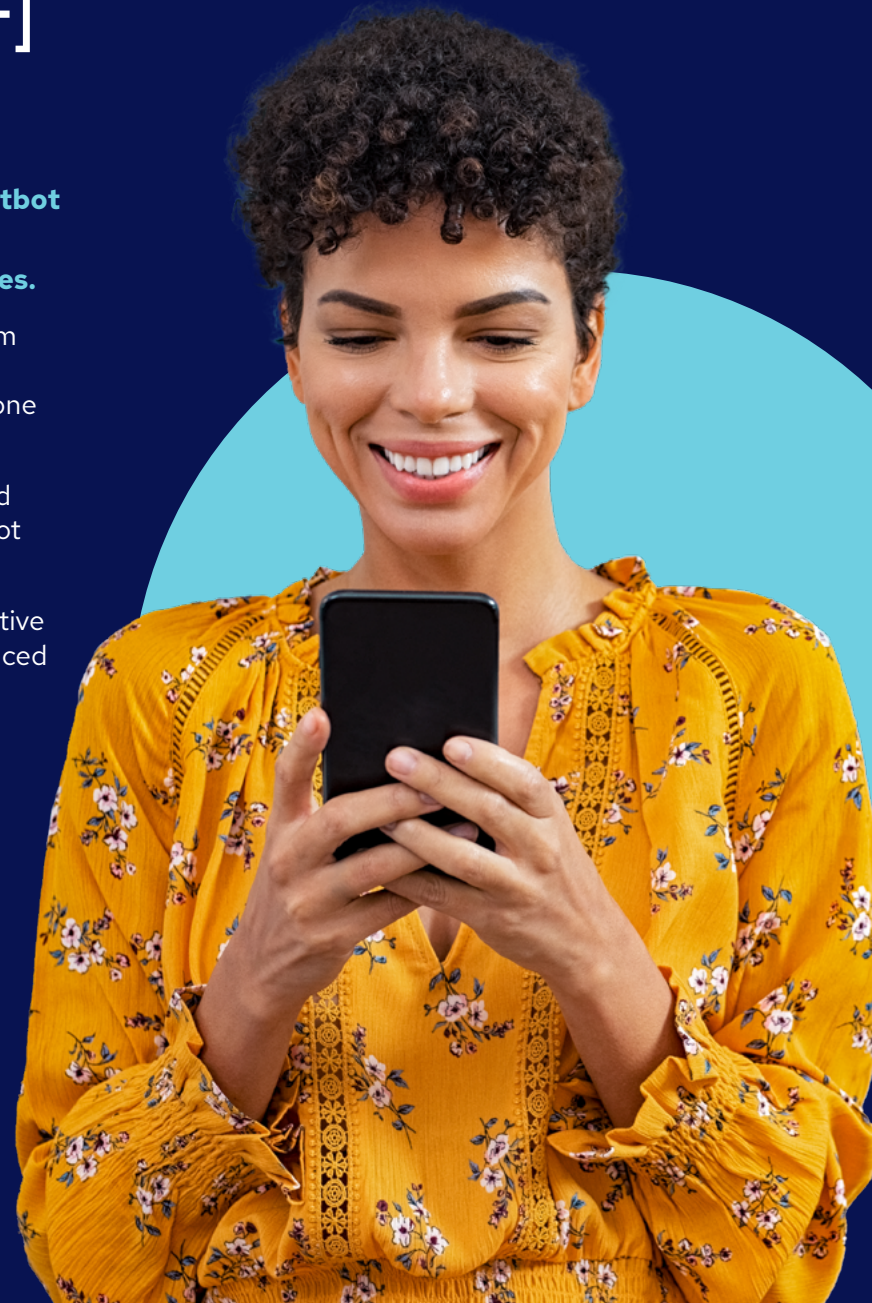
**Reed Talent Solutions recently introduced an AI chatbot to support candidate interaction during a volume recruitment campaign for a client in financial services.**

We engaged 300 candidates using the tool, enabling them to interact with us at a time that suited them, assess their suitability for the role via a pre-screen and book a telephone interview slot.

Over half of the candidates completed the interaction and booked a telephone interview within 3 hours of the chatbot being sent.

Candidate feedback on the tool has been universally positive and the increase in engagement and responsiveness reduced drop-off throughout the recruitment process.

This meant we were able to fill 100% of the roles within 21 working days, significantly reducing time to hire.



## Six: gain c-suite buy-in

With a range of competing interests at play, it's crucial to construct a solid business case to gain buy-in from others around the top table.

If you're clear about the tech, your use case and the state of your data – and hopefully have a partner on board to support – you're off to a great start. Here are a few more tips for gaining executive buy-in.

### **Make sure you're clear on the outcomes you expect.**

And consider whether you're aiming for softer outcomes – such as better interactions with candidates – or hard ROI – such as impact on the bottom line. Financial ROI is important, but bear in mind that this will take longer to achieve.

### **Focus on augmenting human input in the first instance, rather than replacing it.**

The majority of the technology available today is designed to supplement workers. And you'll need to think about how to gain wider organisational buy-in. Framing AI as something that's there to help, rather than replace, is a good way to start.

35%

of organisations are struggling to identify suitable use cases for AI.<sup>13</sup>

Digital transformations are

3.1x

more likely to be successful when the management team establishes a clear change story.<sup>14</sup>





## Seven steps to implementing AI

### Start small, but think big.

The opportunities afforded by AI are vast and it's worth thinking on a grand scale. But Rome wasn't built in a day, and digital transformation is never easy. Make sure to start off with something that's easy to grasp and quick to garner results.

We've supported many of our clients with integrating chatbots into their talent acquisition function. Chatbots are an ideal starting point, because they're quick to implement, work hand-in-hand with human input and deliver measurable outcomes in a short timeframe.

## Checklist

- ✓ Make sure your proposal is watertight
- ✓ Bring all your research – if you've followed the previous steps you'll be prepared already
- ✓ Consider what type of outcome you're expecting – is it financial ROI or a softer outcome?





## Seven: execute for success

Once you've got buy-in for your plans, it's time to start implementing. But with other priorities, unforeseen issues and existing workloads to contend with, it's important to consider how AI will fit into day-to-day running – and make sure your execution plan reflects this.

**So it's best to think about executing AI implementation like this:**

### 1. Focus on one AI project at a time

Unless you're a Google or a Microsoft, pick one thing to start with and do that well. Focus is what will help you keep staff engaged, keep the project on track and gain clarity over the impact it has on your business.

### 3. Have executive sponsorship

You may have got buy-in for the idea from the rest of the c-suite, but make sure that they're engaged in progress towards its implementation. Talent acquisition impacts the whole organisation. It's vital executives have a stake in the project and can help remove any roadblocks if required.

Only  
**28%**

**of companies** piloting  
AI projects make it past  
the planning stage in  
the first year.<sup>13</sup>

### 3. Consult your workforce

It's crucial to take your workforce on the journey with you too. 58% of workers feel they aren't given the opportunity to influence how technology is used in their workplace<sup>15</sup>. So you should take a consultative approach that takes impact on employees into account.

Drive employee engagement and address any apprehensions by providing clarity and continuous communication.

### 4. Execute with a cross-functional team

Think about all the stakeholders you'll need to engage to achieve success – whether they're from human resources, procurement, IT or operations. And make sure you have a skilled, cross-functional project team working towards the same goal.

Finally, make sure you celebrate success early and regularly. The road to full AI implementation is long and full of bumps. But it's an exciting journey, and it's important to share that excitement with your project team, stakeholders and the wider organisation.



## Checklist

- ✓ Collaboration is key – engage stakeholders early for input and support
- ✓ Outline project team members and their roles and responsibilities during the implementation process
- ✓ Consult your workforce, as they will have unique insight which is invaluable in implementing successfully

# Interested in implementing AI in your talent acquisition?



## Speak to our expert

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### Sources

- 1 <https://business.linkedin.com/talent-solutions/blog/trends-and-research/2018/4-trends-shaping-the-future-of-hiring>
- 2 <https://www.hirevue.com/customers/hilton-cuts-time-to-hire-with-hirevue-pre-hire-assessments>
- 3 <https://www.fastcompany.com/90205539/moneyball-for-business-how-ai-is-changing-talent-management>
- 4 <https://www.loreal.com/media/news/2018/oct/mya-systems>
- 5 <https://www.apituderesearch.com/wp-content/uploads/2019/01/EFW-2019.pdf>
- 6 <https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-womenidUSKCNIMK08G>
- 7 <https://www.mckinsey.com/featured-insights/artificial-intelligence/ai-adoption-advances-but-foundational-barriers-remain>
- 8 <https://www.forrester.com/report/The+RPA+Market+Will+Reach+29+Billion+By+2021/-/E-RES137229>
- 9 [https://cdn2.hubspot.net/hubfs/202646/Recruiting%20Automation%20Trends%20Report%20\(Final\).pdf](https://cdn2.hubspot.net/hubfs/202646/Recruiting%20Automation%20Trends%20Report%20(Final).pdf)
- 10 <https://resources.careerbuilder.com/recruiting-solutions/talent-acquisition-automated-by-2027>
- 11 <https://www.mckinsey.com/featured-insights/future-of-work/skill-shift-automation-and-the-future-of-the-workforce>
- 12 <https://www.weforum.org/reports/the-future-of-jobs-report-2018>
- 13 <https://emtemp.gcom.cloud/ngw/globalassets/en/information-technology/documents/trends/ai-business-case-ebook.pdf>
- 14 <https://www.mckinsey.com/business-functions/organization/our-insights/unlocking-success-in-digital-transformations>
- 15 <https://fabians.org.uk/majority-of-workers-have-no-say-on-new-workplace-technologies/>



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