Artificial Intelligence and Recruitment

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Introduction

Since its humble beginnings in the 1950's, artificial intelligence has flourished. The technology is being applied in almost every industry to make lives easier, jobs faster and decisions more informed.

And now it has found its way into the hands of recruitment and HR professionals, solving many of the problems our industry faces.

In this guide we consider the uses, advantages and challenges of AI in recruitment, particularly the latest application of AI video interviewing.

- How is AI transforming recruitment?
- What problems can AI solve?
- What is AI-based video interviewing, and why does it matter?
- What ethical questions should we ask about AI-recruitment?

Read on to explore these questions and more. But let's start from the beginning.

" Some people call this artificial intelligence, but the reality is this technology will enhance us. So instead of artificial intelligence, I think we'll augment our intelligence. "

Ginni Rometty
CEO IBM

What do we mean by Artificial Intelligence?

Artificial intelligence (AI) or machine learning refers to intelligence from machines rather than humans. It's the mechanical replication of the systems and networks that form human intelligence: machines that think.

At the top end, we're talking about true independent thought. Not just human processes made faster and more efficient by computers. Scholar and AI expert Nick Bostrom calls this Artificial Super Intelligence (ASI)– the sort of AI you see in science fiction, where machines are fully independent and much smarter than humans.

Stephen Hawking notoriously observed, "the development of full artificial intelligence could spell the end of the human race" [i] . We're definitely not there yet.

One step down from that, and you've got Artificial General Intelligence (AGI). AGI is also known as human-level AI – and that about sums it up. AGI is machine intelligence that's able to understand and make sense of its environment as well as a human could.

The distance between super and general AI isn't huge, because the principle is the same. Machines that can go beyond human programming in an independent way. Both ASI and AGI are characterised as having achieved that leap, so they're just different iterations of the same category.

That leap is exactly what AI researchers are working on. Although AI has progressed hugely since the early Turing Test days, we've yet to develop a machine that can outreach its human masters, and generate independent thought.

> " *The development of full artificial intelligence could spell the end of the human race* "
>
> Professor Stephen Hawking

Which brings us to Artificial Narrow Intelligence – where we are today.

ANI cannot think for itself, which essentially means it can only do what we teach it. Which means application has limited context – voice recognition AI can't spontaneously learn to cook for you, for instance.

Don't let those limitations deceive you. Artificial Narrow Intelligence is still incredible, able to leverage machine power to recreate human actions on a vast scale, much faster and more efficiently.

And we can combine different ANI applications to create more comprehensive use cases. There's little limitation in terms of what ANI can actually do – we just haven't achieved that leap from human programming to independent thought and development.

Narrowness aside, the application of AI today is vast. From self-driving cars to Siri; fossil fuel recovery to Facebook friend recommendations, AI transforms every industry it touches.

That's especially the case for industries that create and use large amounts of data, because it can sift through and identify patterns much faster and more accurately than humans.

Artificial intelligence plays a central role in today's world of Big Data, transforming the vast amounts of raw information we collect into something meaningful and valuable.

That's where recruitment and HR come in.

Percentage of CEOs worried about skill shortages

72%
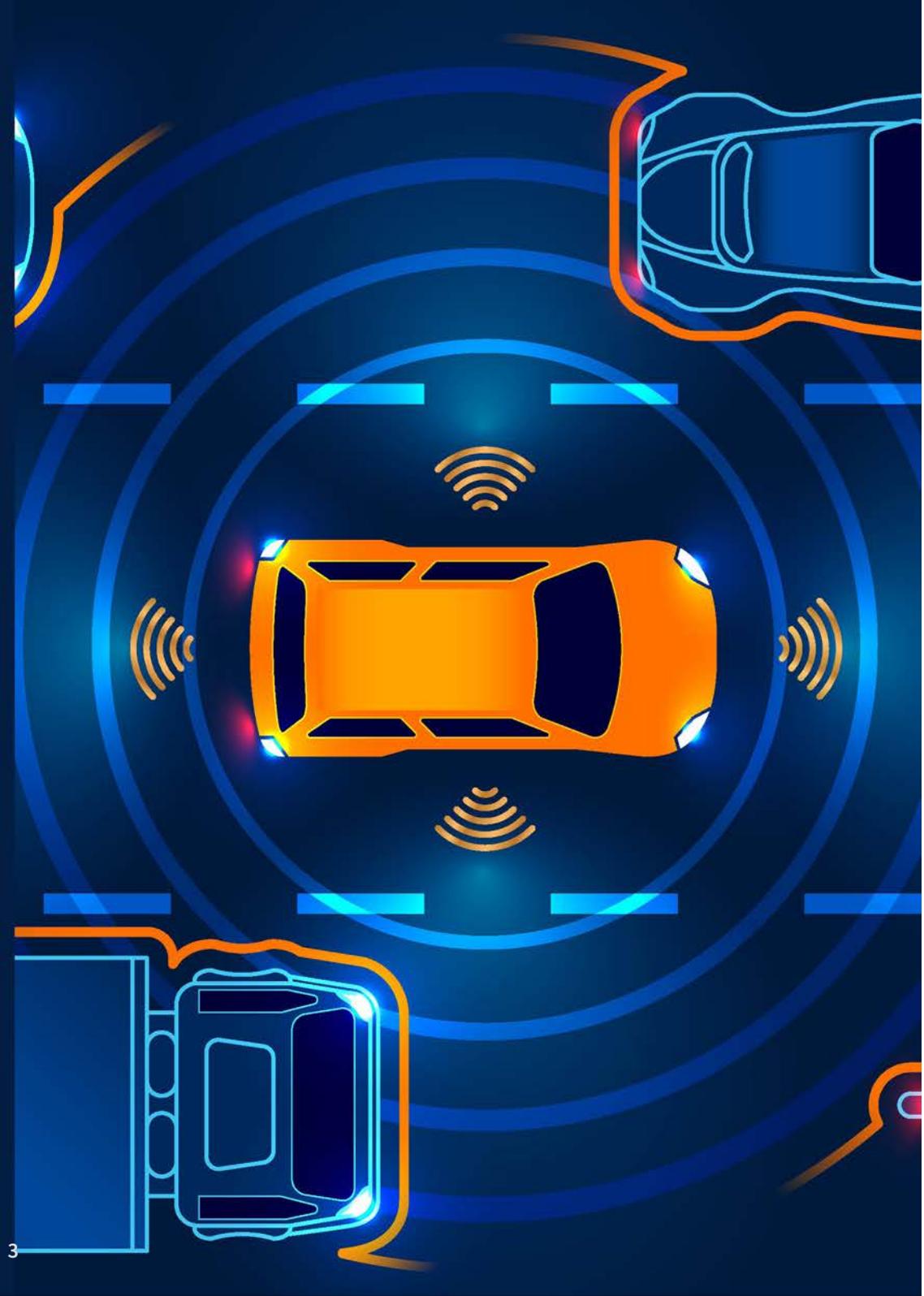
Traditional Recruitment: Plagued by Inefficiency
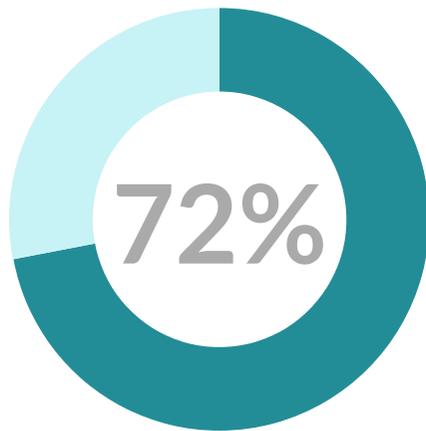
Organisations today, especially large organisations, have reams of data about candidates and employees. But that mountain of data doesn't help overcome some of the fundamental problems inherent in recruitment. And unless those organisations are data-mature – and many really aren't – then mostly that data does nothing except gather dust in the corner, overwhelming and confusing hiring teams.

We might have access to more candidate data than ever before, but that's not helping us hire. Recruitment is more time-consuming, expensive and inefficient than ever.

According to the Manpower Group's 2016-2017 Talent Shortage Survey, 40% of global employers are struggling to fill open roles – up 2% on 2015 [ii]. The PricewaterhouseCoopers 19th Annual Global CEO study concurs, finding that 72% of CEOs worry about availability of key skills [iii] .

The Bersin by Deloitte Talent Acquisition Factbook reports an average of 52 days to fill an open position in 2015, up 8% from 2011 [iv]. In the US, Glassdoor reports 5.85 million jobs were unfilled in 2016 – an all-time high since 2000 [v].

And yes – partially these figures tell the story of global skills shortages, especially in key-skill areas. In that same Manpower study, 19% of employers attributed the difficulty filling positions to a lack of hard skills. That's not an issue AI can solve, at least not directly.

But 24% identified 'lack of available applicants' as their main concern. And this isn't necessarily just a question of skills shortages. There's another story happening here, of difficult finding candidates. Of inefficiency in process.

Consider. HRTechCon report that more than half of recruiters say their biggest recruitment challenge is identifying the right candidates from a large talent pool [vi]. A 2013 ERE survey finds that each corporate job opening attracts an average of 250 resumes – but only 1.6% to 2.4% of them are qualified for interview [vii] . We're getting plenty of applicants – just not the applicants we want.

Plus diversifying candidate sources – a 2016 SHRM survey found that 84% of organisations use social media to recruit [viii]– makes recruiters' lives even more difficult. These are issues of sifting – of the recruitment process itself.

And that's only one example. There are inefficiencies throughout the recruitment cycle that reduce our ability to hire effectively. CareerBuilder research finds that 60% of job applicants have failed to complete an application process because it's too convoluted or complex, for example.

And Forbes report that 85% of applicants never hear back after submitting an application [x]. That's damning, given the Workplace Trends Candidate Experience Study that found 80% of jobseekers wouldn't reapply to an organisation that didn't get back to them the first time [xi]. Given that 99% of surveyed employers believe re-engaging past applicants would be a worthwhile way to build their talent community, you'd think we'd make more effort.

Then, when we do finally secure a new hire, there's the issue of keeping them. Retention efforts should start on Day 1 with an effective employee

60% of job applicants fail to complete application process

25% of new employees leave within 12 months

onboarding programme, but few organisations tick all the right boxes.

Harvard Business Review report that almost 33% of new hires look for a new job within the first six months of their new role – more amongst Millennials . The 2012 Allied Workforce Mobility Survey reinforces that finding, concluding organisations lose almost 25% of new employees within a year, and many other new hires never reach targeted productivity levels [xiii].

Although employee retention is a major priority for talent acquisition leaders, all accounts suggest we're not very good at it. And that has a considerable financial implication. In fact, Josh Bersin, founder of Bersin by Deloitte, believes that losing a single employee can cost up to 1.5-2X their annual salary [xv] .

The point of all these statistics is this. Recruitment and HR are plagued by inefficiencies throughout the talent management cycle, from sourcing, interviewing and shortlisting through to onboarding, engagement and retention.

This isn't for want of trying. Recruitment and HR leaders are well-aware of the need for across-the-board improvements. But until recently, that's been difficult.

Traditionally, we just haven't had the data to reliably inform decision-making at this level. We relied on qualitative data like employee assessments, management reports, interviews and questionnaires to give candidate and employee insight. Which are all useful, but they're not especially robust or reliable.

That's been changing for a while. The rise of Big Data means organisations now have at their fingertips all the information they need to streamline sourcing, drive engagement, improve retention and increase productivity.

But, as we said above, data by itself is just data. And here's where we come back to artificial intelligence, because AI has huge transformative potential for recruitment and HR, touching all these areas we've discussed.

How artificial intelligence is transforming recruitment

Although many talent departments aren't yet data-mature, there are still many tantalising examples of AI being used to fix inefficiencies, accelerate processes and improve productivity in recruitment and HR.

Candidate attraction

One of the big issues recruiters and HR professionals face is attracting the right candidates into an organisation. The result can be a dearth of candidates, or poor-quality candidates - especially with regards to cultural fit - and a lack of diversity.

The core of the issue is communication: how you present yourself and which messages you choose. Take job adverts. Read almost any advert and you'll find numerous examples of bias language. It's not that these organisations are necessarily biased, but that certain words tend to attract candidates from a certain profile. Studies show, for instance, that competitive language is often more attractive to male candidates than female.

AI can help by scanning communications and identifying potentially discriminatory language. That way, you can be sure you're only saying what you want to be saying – not implying something altogether different.

There's also considerable overlap here with AI-based marketing. In this context, AI can tell you which messages you should show to which people, and when. This has obvious implication for recruitment marketing

effectiveness.

AI is also being used to create job assistants that can help potential applicants identify the right opportunities based on their interests, skills and personality.

This sort of tool can prove especially useful for large organisations with multiple roles in multiple departments and countries. It would act both as a value-add candidate lead-magnet and help candidates self-serve into the right roles, which would reduce wasted recruitment time throughout the process.

Candidate sourcing

As we've said, sourcing qualified applicants from a large, unqualified talent pool is a major challenge for recruitment professionals. It takes a huge amount of time and there's huge scope for human error with potentially suitable candidates slipping through the net.

AI can help create the initial talent pool for recruiters to approach, by finding and rapidly analysing information from across the web. Previously recruiters had to scour myriad sources to build a potential candidate list – but AI can completely automate that process. And advanced AI tools go beyond what's immediately visible to the human eye, analysing hidden signals to build comprehensive candidate target profiles.

AI is capable of learning and extrapolating from an organisation's existing data, to create a sourcing pool of best-fit candidates based on which candidate profiles have performed well previously.

It's all about empowering recruiters and HR professionals to be more efficient, focussing your time talking to better quality candidates. That gives you a shorter time-to-hire and lower cost-per-hire.

Candidate screening

If sourcing refers to the initial talent pool, screening is about matching candidates within that pool to a given role. We're talking pre-interview still; shortlisting CVs.

Like candidate sourcing, screening is a laborious and error-fraught process. You sort through potentially hundreds of CVs, all formatted differently, most with key information missing, and phrased hundreds of different ways.

The challenge for recruiters is organising, compiling and translating these into a standardised and comparable overview of each candidate, in order to rank them in priority order to shortlist for interview.

AI can remove the screening headache by automatically finding and parsing information across the web, to create a more comprehensive candidate profile. This profile can automatically parse to your Applicant Tracking System using standardised terms, so the overall candidate pool is better for the future too – no more ATS black hole.

AI extends beyond simple keyword analysis (notoriously awful), using Natural Language Processing to understand intention, semantic difference and context. AI solutions can then analyse those profiles and rank them in suitability order in a shortlist for each role.

AI can also identify other potential roles each candidate might be suitable for, so recruiters don't miss other opportunity matches. This is especially relevant for large organisations with multiple departments and talent hubs, or recruitment agencies with many ongoing roles. AI can give you that holistic visibility the often-siloed human eye can easily miss.
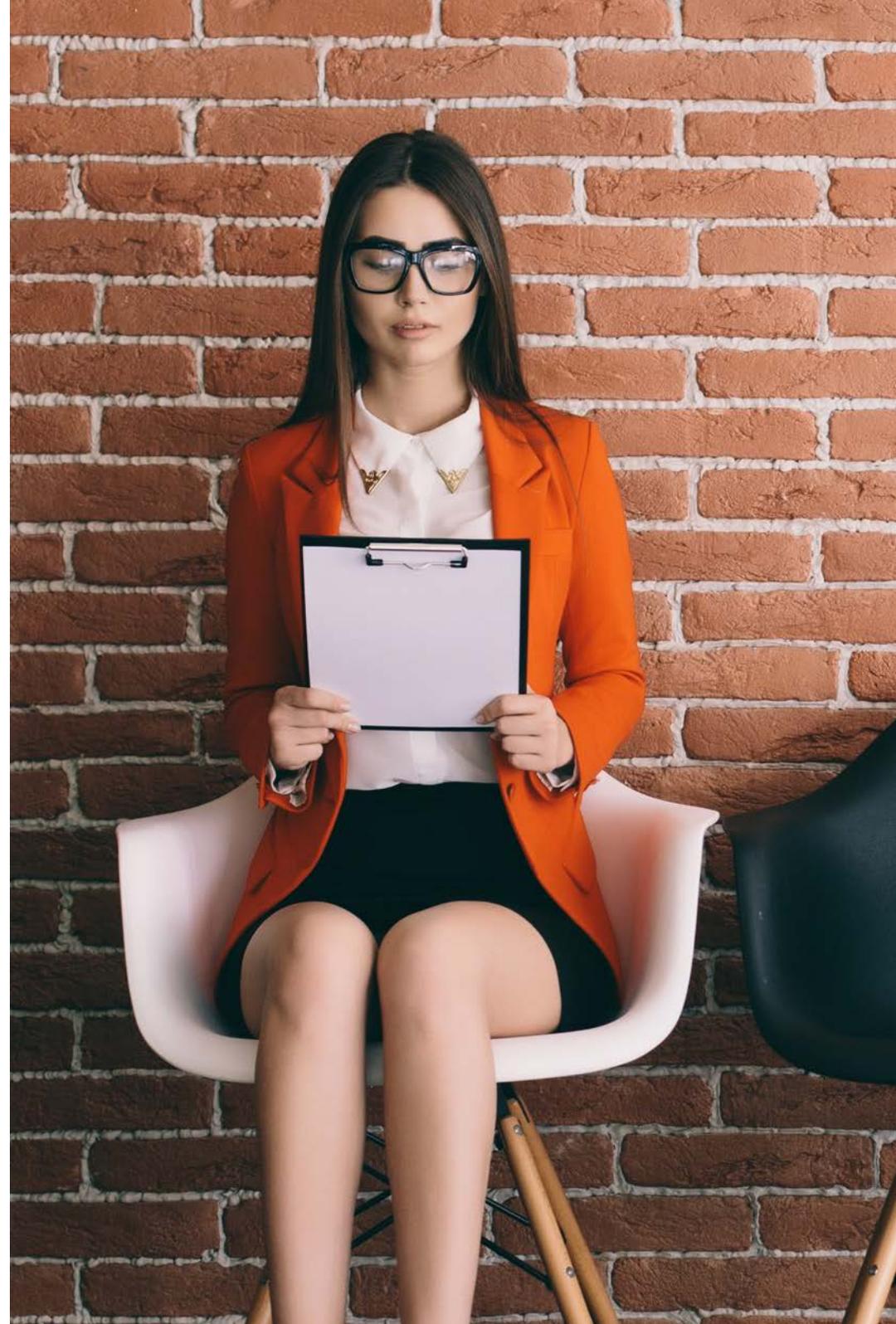
Candidate engagement

Candidate engagement during recruitment process is a huge issue. Disengagement can lead good candidates to drop-out or accept competing offers. Talent acquisition professionals know this – it's been a topic of conversation for many years. The issue is, making changes isn't simple. Hiring processes are often long thanks to multiple stakeholders and stages, and keeping candidates fully-informed is easier said than done.

That's where AI enters the frame, automating key processes like scheduling interviews and following up with candidates. This ensures the critical activities get done while freeing up recruiters to spend time on the activities – like one-to-one engagement – where they can add most value.

There have also been some interesting uses of AI to build virtual assistants, designed to streamline the recruitment process and improve engagement by actually interacting with applicants.

These bots provide instant responsiveness by answering questions, giving updates and even interviewing applicants. They leverage Natural Language Processing to understand and engage with candidates as a human would, filling the gap before a human recruiter can take the conversation forwards. And machine learning means these bots improve with every interaction.

Artificial intelligence bots like this massively improve responsiveness and speed of the recruitment process, which has a big knock-on impact on candidate engagement and candidate drop-out.

Offer management

The principle of AI – drawing meaningful insights from huge data-sets – mean the applications are theoretically endless. One potential use case is the application of AI to navigate the offer negotiation and management process.

Just as marketing is using AI to determine predicted customer value, recruiters could use AI to determine which candidates should be offered which salary, based on hidden patterns and signals from thousands of data sets.

This could eventually mean knowing exactly what to offer each candidate, not just based on salary benchmarks but based on deep understanding of what makes them tick, how keen they are to come on board, what their motivating factors will be, and so on. Organisations will know they're truly offering what a candidate is worth, without making an over-the-odds offer unnecessarily.

Employee engagement

Employee engagement isn't a simple equation, and many contributing factors impact whether employees love working with you. Perhaps that complexity is one reason we're traditionally so bad at employee engagement – with Gallup's World Poll finding that only 15% of worldwide employees are engaged at work [xvi].

AI can definitely help. One way is through AI bots, which can answer employee questions, direct to relevant information hubs and escalate to human HR professionals when needed. Responsiveness is, as with applicants during the recruitment process, a vital component of engagement. But HR departments are often overstretched which means employees sometimes don't get the attention they need. AI offers a simple remedy.

Only 15% of employees are engaged at work

15%
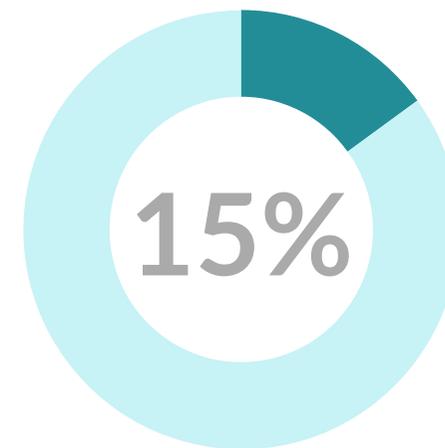
Another way is through training and development; a central driver for employee engagement. AI can identify customised training paths for each employee based on extensive internal data, and scale your training and development programme across the organisation. This has an immediate impact on employee engagement, and it also gives your employees the skills to be more effective in their role. Win, win.

AI can also pre-emptively identify employees who are likely to leave your organisation, so you can target them with retention activity. There's also a use case for succession planning, as AI can plot which skills might leave and which you'll need to hire in the future to support planned growth.

Employee onboarding

Onboarding is hugely important to employee engagement, workplace productivity and long-term retention. It helps ensure your recruitment efforts aren't wasted at the first hurdle.

AI helps you maximise the value of those initial hours, days and weeks with a proactive and valuable onboarding programme based on analysis of new employees across various areas. For instance, AI could tell you which training a new hire should receive and when, as opposed regimented and generalist sessions that sometimes achieve little. New employees will be more productive more quickly, while management get reassurance that hires are progressing as they should.

Also, consistency has traditionally been a big issue for employee onboarding, particularly for global organisations with multiple departments and offices. AI helps standardise and optimise across the business, so all new employees get the very best chance to succeed. That's good for everyone.
This isn't an exhaustive list, but the picture is clear. AI is starting to make real waves in the recruitment industry, as more and more solutions spring up to solve the deep problems faced by recruitment and HR.

One such solution – and one that's on the cusp of becoming huge – is the application of AI in video

interviewing. Let's look at why that's so exciting.

Amplifying the benefits of video interviewing with artificial intelligence

Video interviewing has become hugely popular over the past few years, with over 30% of employers regularly using video interviews during their hiring process [xvii]. Video interviewing is a faster, more efficient way to screen candidates, massively streamlining the hiring process. And mostly candidates love it, because it's a more multi-faceted, less reductive presentation than a CV.

However, one downside of video interviewing has always seemed unavoidable – reviewing videos takes time. Although you can review when and where you want, with as many other hiring managers in as many locations as you want, you do still have to review.

Especially for organisations that recruit in volume, this can represent a significant time investment. And it's still a human process – prone to human mistakes and biases.

Until now, with artificial intelligence.

Combining video interviewing with AI amplifies the benefits of video interviewing dramatically, by replacing the fallible human element with more reliable, faster and unbiased machine thinking.

As with other uses of AI, this isn't about replacing hiring managers. It's about giving them the tools to make better decisions. Think of AI as shortcutting the screening process, so hiring managers can get straight to the part where humans add value: the decision-

How AI-based video interviewing works

Confidence

Passion

Sincerity

Nervousness

Curiosity
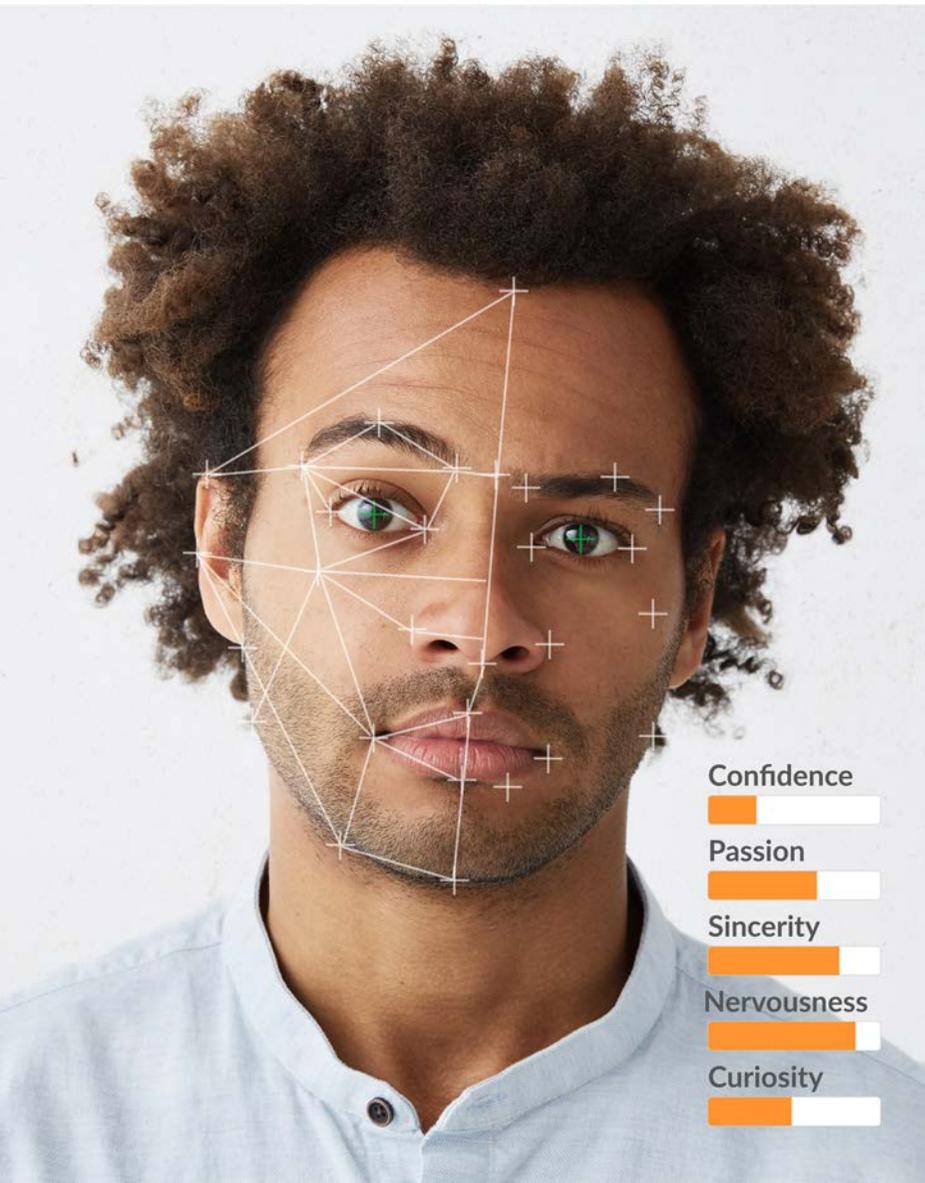
making.

Instead of hiring managers wasting time analysing the raw data (in this instance, candidate responses) to find patterns, they can spend time analysing the already-meaningful data to make decisions.

Comparing things like education, academic results and years' experience tend not to tell anywhere near a complete story about a candidate – and yet they've long been metrics we've relied on. AI-based video interviewing stems from the growing understanding that these traditional methods of candidate assessment are reductive. Poor tools to inform the all-important hiring decision.

Many organisations today try to build a more complete understanding of potential employees, constructed from multiple sources like social media, psychometric tests, work assessments and the like.

AI-based video interviewing allows us to extend this approach even further.

Imagine a video interview. For any question you ask, you get a verbal response – and then myriad other cues like tone of voice, facial expression and body language. It's often these cues that are most telling. After all, candidates can game the process by learning what to say but it's very difficult to deliver stock responses with conviction, sincerity and confidence.

As is, interviewers probably pick up some of these extra cues but it's definitely an imperfect process. You might recognise closed body language but micro-expressions probably pass you by, for example. Given the importance of these cues to the overall quality of hire, though, anything that improves our perception is a powerful tool.

And that's where artificial intelligence is transforming video interviewing. AI can read all these myriad signals, reliably and without bias, then report them back to us so we can

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make more informed hiring decisions.

Combining technologies like facial recognition, word choice assessment and intonation analysis with machine learning, AI can assess the true intent behind candidates' words to give a more complete understanding of their personality. It's about using technology to understand the thousands of cues that make up human response; not just the cues we're good at interpreting.

Micro-expressions, ticks, prejudices, fears, passions. AI is learning to assess all these things, to help you determine the true best-fit candidate – not just the candidate that interviews best.

It's about amplifying human perception, not replacing it. Augmenting our understanding, to improve decision-making.

Let's look at what that can mean for talent acquisition leaders.

AI video interviewing: Why should you care?

There are 8 key benefits to AI-based video interviewing. Here goes.

#1 – Hire better candidates

AI-based video interviewing stands to transform how organisations hire, because it lets us get deeper under the skin of candidates. We're not just what we say: almost anyone can deliver the right verbal response to a predictable series of questions. And insincerity can be clearly deceptive, because REC research finds 85% of HR decision-makers admit making a bad hire .

AI video interviewing stops the issue in its tracks, by understanding the full spectrum of cues that make up human response.

That depth of information empowers talent acquisition professionals to make better decisions about who they hire. That has a clear and substantial cost implication, not just recruitment costs but also the hidden costs of long-term productivity, employee morale, engagement and retention. REC puts the true cost of a single poor hire at mid-management level at more than £132,000, to put that into context [xix].

#2 – Faster screening and assessment

With an average of 52 days to fill each open position, recruitment today is time-consuming and costly. AI-based video interviewing can reduce that time dramatically.

You save time scheduling, managing and attending interviews, first of all. And you connect more quickly with the best candidates, which indirectly saves you time because you're more likely to find your perfect new hires more quickly, before your competitors do.

85% recruiters admit making a bad hire

85%
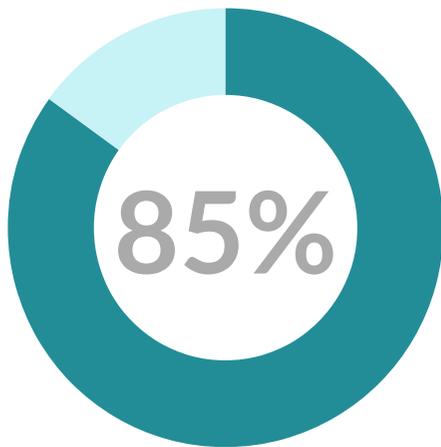
Video interviewing allows multiple stakeholders to be 'present' too, even if they're on a completely different continent, so you can condense the hiring process. No need for multiple rounds of interviews just to meet different stakeholders.

The introduction of AI into the mix saves even more time. Until now video interviewing has been limited by the need for physical review, but AI reduces that need by assessing and ranking the most suitable candidates based on your hiring objectives.

This isn't completely automatic hiring. You'll still want to review some interviews – but it means you can focus your time on the best candidates, so you can hire better people more quickly.

#3 – More consistent and more fair

Consistency is one of the big issues for recruitment professionals. How do you ensure each candidate gets the same experience of your organisation? How do you ensure you're fairly comparing like for like, unless candidates get that consistent experience? This is especially true for global organisations but it impacts even the smallest business.

Video interviewing ensures all candidates get the same questions, asked in the same ways, so you can fairly compare their responses. It also ensures each candidate – even those you don't end up hiring – gets a consistent impression of your brand.

And it ensures first-level assessment of candidate responses is conducted in a consistent way. A hiring manager might read Jenny's passion as hot-headedness one day and not another, but AI brings consistency to that process.

#4 – Eliminates human bias

This is a big one, because it drives inequality. And inequality is bad from an ethical
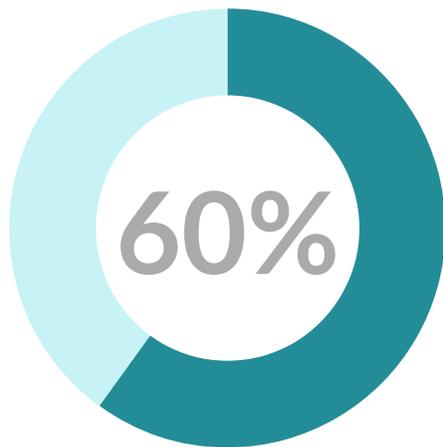
perspective but it's also repeatedly been shown as bad for the bottom line. McKinsey research found, for instance, that companies in the top quartile for racial and ethnic diversity are 35% more likely to financially outperform their peers. Companies in the top quartile for gender diversity are 15% more likely to financially outperform their peers [xx] .

AI video interviewing helps you boost diversity by eliminating human bias, which consciously or unconsciously perpetuates inequality. Even the fairest, most equality-minded professional is subject to unconscious bias. These can be triggered by the subtlest things – a facial twitch that reminds you of your father, for example. A name that reminds you of an old school bully. We're generally not aware when we make these judgements, but they fundamentally impact our decision-making.

AI video interviewing removes those biases, by analysing candidate responses in a truly objective and consistent way. And although there is an argument that AI can perpetuate existing organisational biases – if you consistently hire Oxford graduates, for example, AI might learn to prioritise Oxford graduates as better qualified – but these are more easily highlighted and eliminated than human bias. It makes the entire process of prejudice more explicit and external, so you can control it.

And that's a fantastic thing for diversity, which means it a fantastic thing for your organisation. You know you're getting the best people through the door – not the best people of any certain category.

#5 – Improve candidate experience

When 60% of job applicants leave the process because of a bad candidate experience, that's a very obvious area to work on. Video interviews tie into that, because they're not just better for hiring managers. They're much better for candidates too.

From the candidate perspective, video interviews are fast, convenient, flexible and engaging. And because a video interview takes a little more effort than the standard 'going through the motions' CV submission and telephone interview, you self-select candidates who are genuinely interested in your organisation. Which saves considerable time on your end.

60% of candidates leave the recruitment process due to a bad experience

60%

#6 – Support global workforces

More organisations are embracing an alternative vision of workforce; one that calls on freelancers, contractors and remote workers to drive business growth. These workers were once seen as add-on talent – there to get a job done, but not part of the workforce in any meaningful way. That's definitely changed.

Especially as hiring conditions become more challenging, a willingness to embrace flexible working widens the talent pool. That's fundamental to competitive differentiation.

Video interviewing ties nicely into that, allowing remote interviewing that meets candidates on their own turf, without sacrificing on depth. Video interviewing is mobile, global and flexible – so your interview process isn't a hurdle to bringing the best people on board.

#7 – Make your business more agile

Especially in large organisations, practices and processes become so far entrenched that agility is a distant dream. If business needs change, it can take weeks and months to adapt processes to that end – which stops organisations being as flexible or productive as they could be.

AI video interviewing, on the other hand, is very responsive to organisational needs. If hiring priorities change, you can easily update the assessments and algorithms used to identify candidates. So you can bring the right people into the business, right when you need them.

#8 – Enhance your brand

Employer brand is the most important tool in your hiring toolbox today. Employer brand is how you attract the best, most suitable candidates. It's how you drive engagement, and improve retention. And it's especially important in a competitive hiring market where
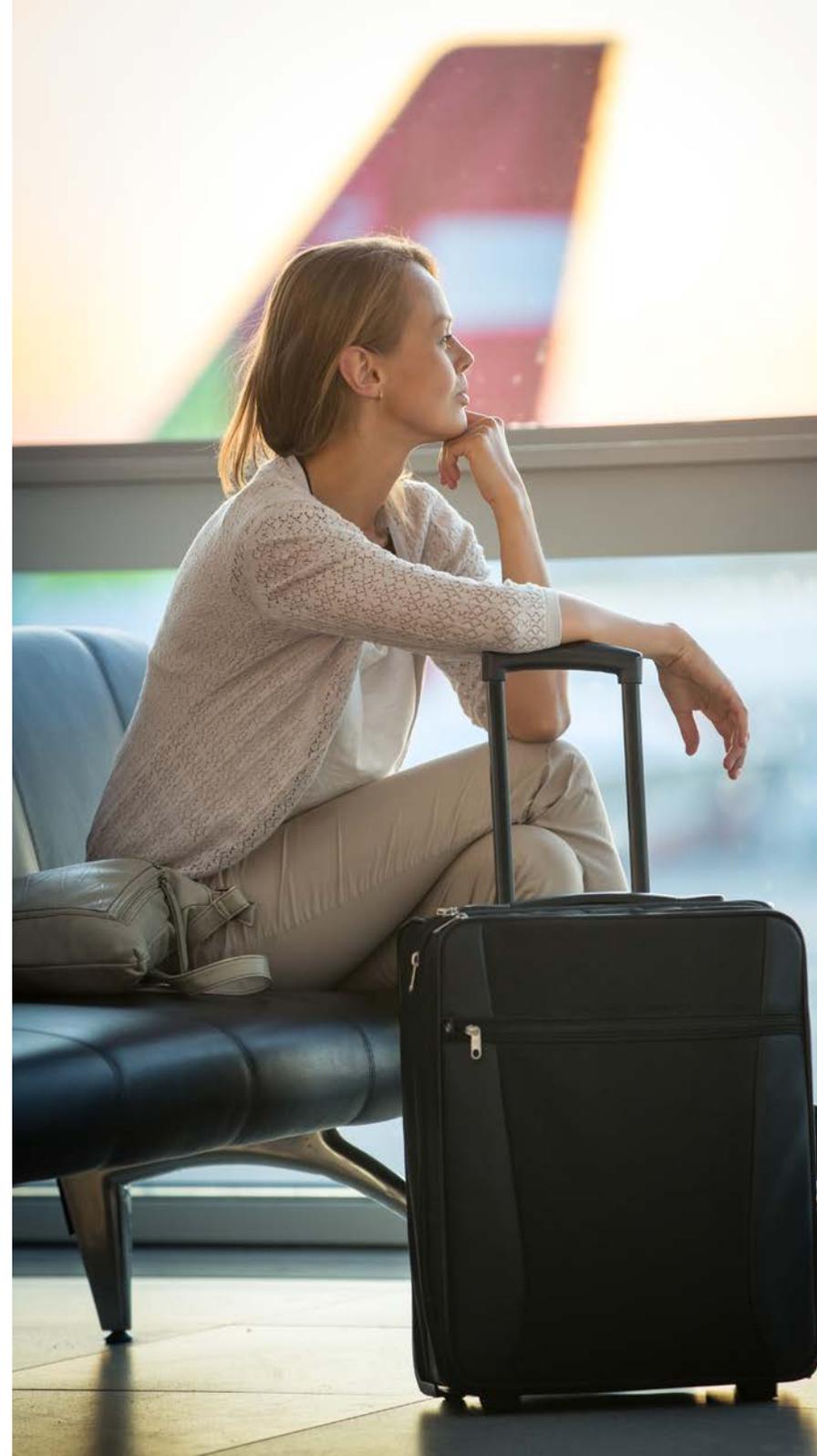
candidates have multiple competing offers and employees have little loyalty.

Video interviewing allows you to create a fully-branded, thought-out interview that displays your brand in the best (and most consistent) light. You don't leave anything to chance – like a hiring manager that's had a bad day, or Monday-morning office moods, or pushy external recruiters that give the wrong impression.

You can trust each candidate gets the best experience of your brand, and that's critical whether you hire them or not. Remember, every potential candidate is also a potential customer. Plus your candidate re-engagement pool depends on that initial first interview. Stronger employer brand means better hiring, but it also means a stronger overall brand, and a deeper long-term talent pool.

Clearly the advantages of AI-based video interviewing are many – but as with any new technology, there are some serious questions raised too.

What questions do AI recruitment and AI video interviewing raise?

Will AI make recruiters and hiring managers redundant?

This is one of the first questions people ask in any industry AI enters. There's a lot of hype about AI replacing humans. That view does hold water but only for certain industries where workers largely do repetitive, menial tasks. Some parts of HR and recruitment fit that description, but certainly not the whole.

Recruiters who don't have to sift through thousands of CVs to find a handful of qualified applicants can spend more time talking to genuinely qualified, interested candidates on a one-to-one basis.

HR professionals who don't have to spend 40-hours a month scheduling, attending and assessing first stage interviews can spend more time having important conversations with candidates that will drive genuine value for the organisation.

So no. AI won't eliminate recruiters and HR professionals. The talent management process has fundamental human elements that are unlikely to ever be replaced. But AI means making those fundamental human elements more efficient and effective, and wasting less time on the dull, inefficient elements.

Is it ethical to hire and fire based on artificial intelligence?

The ethics of AI is a big question. Which data can we collect and use about people? What permissions do we need to do so? How can we use that data without crossing ethical boundaries?

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AI-based video interviewing elicits a lot of these questions, because it feels intuitively very Big Brother-esque. Judging people on micro-expressions they might not realise they make? That's potentially a very big deal.

Although there's no simple answer, you can find precedent in the treatment of Big Data for ever-more informed ad-targeting. The issues are the same: should we use data to (theoretically, at least) deliver a better experience, or shouldn't we? And what we've decided for Big Data – that data usage is ethical as long as you get consent – can apply here too.

In other words, tell candidates what you're assessing them on, and let them opt out if they prefer. Be open about your process, and about the role AI plays – and clear that it's still a human that makes the final decision. Being transparent should be best practice throughout the recruitment process anyway.

What about AI bias?

We touched on this above, and it is an important issue. AI might not be inherently biased but it does learn from human information – which can be. If your organisation has a problem with lack of diversity, for instance, AI can learn that from your data and perpetuate the issue.

The solution to combat this is simple: awareness. Your AI programmer or solutions provider should assess your data first, to strip any clear patterns of potential bias. Identifying markers that can perpetuate bias should be stripped, like names, ages, gender and race.

Think about which data really adds value to your decision-making. There are many data points that can perpetuate bias, but they might not actually be helping our hiring decisions. Take academic background. Academic results are rarely a good predicator of success on the job, and when they are that's usually correlation, not cause. Stripping data like this would help eliminate AI bias from the get-go.

Is AI accurate enough to be impactful?

Yes and no. Hopefully this paper conveys the fact AI is still a work in progress, and we do still have a distance to go before AI is perfect, in any context. At the moment, even IBM and Google's AI speech-to-text services only run at about 75% accuracy in real world applications – which obviously isn't good enough if that's the only technology you're relying on to make hiring decisions.

But here's the thing. You shouldn't only be relying on any one thing. Video interviewing itself is a reaction to one-dimensional candidate assessment; the idea is to embrace something more multi-faceted, that can give a more holistic understanding of each candidate. Psychometric tests, verbal reasoning, competency tests – those things all have their place too. And when you combine all those sources, it matters less if one element of the process is still evolving.

AI can add real value to the hiring process, even though it's at an early stage. And that's right now. AI is only becoming more accurate every day. Plus machine learning means any AI application gets better – uniquely for you, using your data – the more you use it.

Is AI too reductive? What about gut feel?

For all our talk of objective metrics, HR and recruitment is traditionally a very qualitative industry. Most talent professionals would happily admit that hiring decisions often result from little more than "gut feel" – and many don't see this as a big issue. After all, often gut feel hires work out really well.

Except, there's an inconsistency here given the 85% of HR decision-makers who admit making a bad hire. The fact is, gut feel isn't invalid – but it is imperfect.

Often gut feel stems from our unconscious recognition of specific cues. What manifests
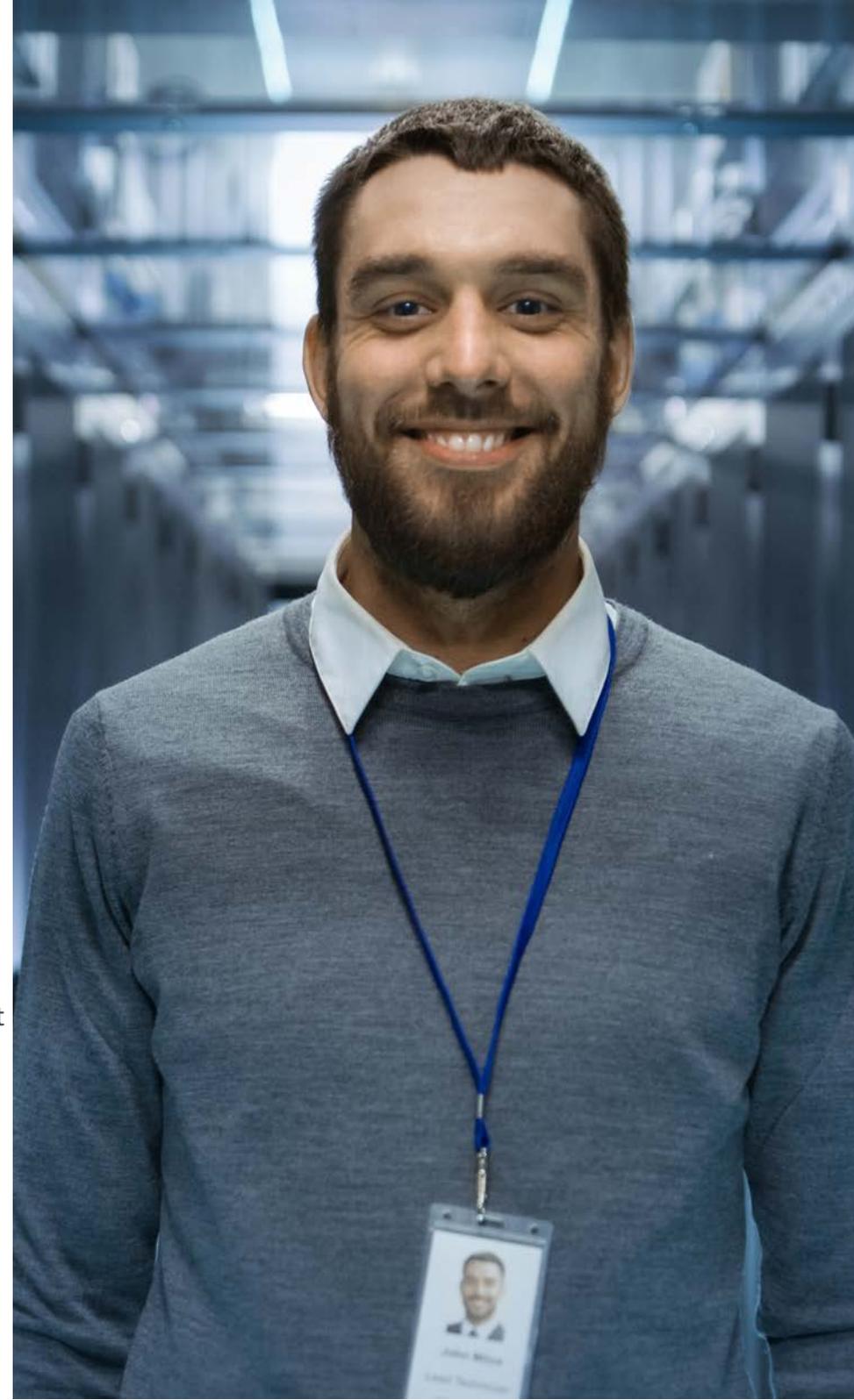
as gut feel might be our subliminal recognition of sincerity and passion micro-expressions, for example. When we hire on that basis, we get a passionate and sincere hire – that's gut feel working.

But there's obvious room for error, if we're busy, tired, stressed or bias. AI just takes that process of gut feel, and makes it into something more objective.

And remember, the crucial point here, we're not replacing human judgement. That probably would be reductive. But we're not. We're adding to human judgement with more objective insights to create a more complex, more multi-faceted understanding of candidates.

Final thoughts

Ultimately, artificial intelligence is always going to raise questions because we're navigating truly new waters. We're standing on the precipice of an exponential change so we have to rewrite the ethical, moral and regulatory rulebook that governs our behaviour.

That's true now with narrow AI, and it'll become even truer when we make that leap from human programming to individual thought with general AI and super AI.

But that's no reason to shun change. Even our narrow artificial intelligence is dramatically changing almost every aspect of recruitment, solving some of the fundamental inefficiencies, redundancies and biases in our processes.

AI-based video interviewing is one of those dramatic changes. AI video assessment makes a fundamentally subjective process objective, which makes it fairer and more accurate.

We can more easily identify the best candidates, and engage those candidates through to successful hire with a fast, convenient and valuable recruitment process. And that empowers us to make impactful hires that truly move the needle for the business.

And that's the name of the game, for recruitment and HR professionals.

About Tazio Intelligence

Tazio Intelligence is a recruitment platform that uses AI to assess, score and rank candidates for suitability to your roles, based on your unique talent profile.

The platform combines aptitude, situational and psychometric tests with advanced AI-based video analysis. Using a combination of its own proprietary algorithms and machine learning with emotion recognition analysis spun out of the MIT Media Lab, the result is a faster, more accurate and unbiased candidate assessment – so you can bring the right people into your business, more quickly.

Tazio Intelligence sets itself apart by including facial and speech recognition analysis, with proven aptitude and psychometric assessment. The Tazio Intelligence platform recognises that 93% of communication is non-verbal, harnessing AI facial recognition elements in addition to other analysis.

Although still in beta, our AI video analysis currently uses over 900 data points per second, including micro-facial expressions, speech recognition and emotion markers. In trials, we are predicting shortlisting decisions with up to 87% accuracy – and improving every day.

To find out more about implementing Tazio Intelligence to improve recruitment in your process, please contact Tom Stroud on **02922 331 888** or email him at **tom.stroud@tazio.co.uk**.

www.tazio.io

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