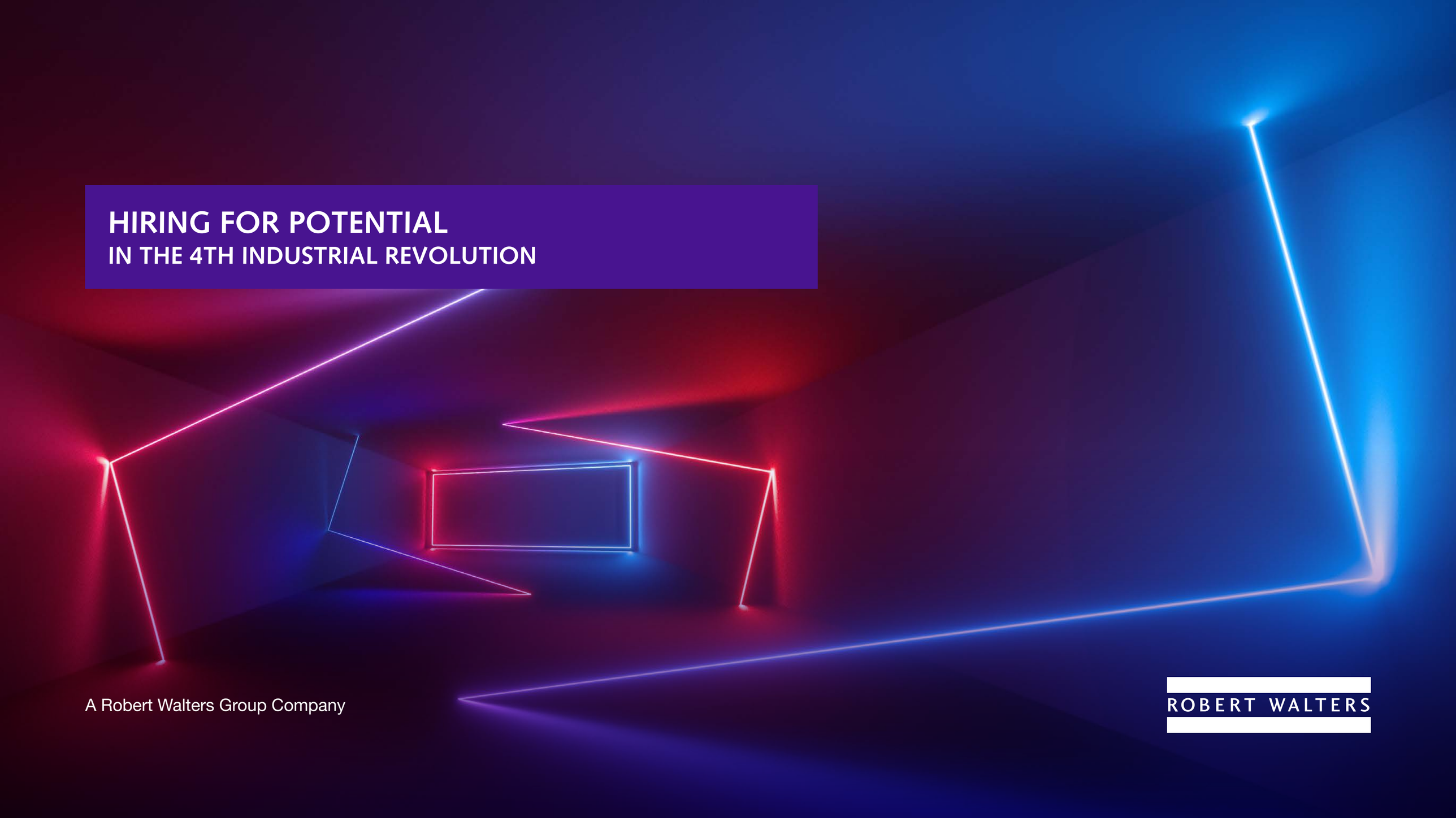
HIRING FOR POTENTIAL
IN THE 4TH INDUSTRIAL REVOLUTION



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ROBERT WALTERS

Introduction

Whilst it is Covid-19 which has transformed the way the world has lived, worked and played in 2020, the longer term impact on our lives is likely to be the commencement of the fourth industrial revolution. In short, the Fourth Industrial Revolution describes the blurring of boundaries between the physical, digital, and biological worlds. This revolution is already having a profound effect on the way we work and in turn, how we resource our organisations in a time where skills will become outdated soon after they are learned, where colleagues will be a mix of human and robots and where the one guarantee is that the pace of change will be unprecedented.

In this e-guide we will explore the impact of the 4th industrial revolution on talent acquisition and how your organisation can future proof itself by hiring for potential rather than current skill set.

Contents

The four industrial revolutions

In order to navigate the Fourth Industrial Revolution, we need to understand the first three.

The First Industrial Revolution was the transition from an agricultural economy to new manufacturing processes. Using the increasing adoption of steam and water power, it moved manufacturing from hand-made methods to mechanical processes, led to the rise of the mechanised factory system, and to unprecedented population growth.

The Second Industrial Revolution saw the rapid industrialisation of manufacturing processes and technology. With the expansion of the telegraph, railroad and electrical networks, and the development of production lines and factory electrification, it ushered in a new era of industrialised globalisation.

The Third Industrial Revolution (also known as the Digital Revolution) saw mechanical and analogue electronic technology give way to digital electronics. With the mass production of computers, mircoprocessors, and mobile phones, and the birth of the Internet, it is often called the Information Age.

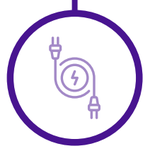
The Fourth Industrial Revolution is happening right now. Its defined by the blurring of boundaries between the physical, digital, and biological worlds. It's a fusion of advances in artificial intelligence (AI), robotics, the Internet of Things (IoT), 3D printing, genetic engineering, quantum computing, and other technologies.

1784

Industry 1.0

Mechanisation, steam, power, weaving loom.

1870



Industry 2.0

Mass production, assembly line, electrical energy.

1969

Industry 3.0

Automation, computers and electronics.

Now

Industry 4.0

Cyber Physical Systems, internet of things, networks.

What the fourth industrial revolution means for talent acquisition and HR

Predicting the impact of innovation on jobs is more of an art than a science – and art at which futurologists have proven far from adept.

We have seen that automation can increase rather than decrease the demand for a service. The first ATM launched in 1967, and yet the number of bank tellers increased from 300,000 in 1970 to 600,000 in 2010. Google Translate launched in 2006, but the number of people employed in the translation and interpretation industry doubled between 2010 and 2017.

Therefore, the role of HR is increasingly not to identify which roles are being eroded, but to explore the more nuanced approach – how jobs will subtly transform over time as more tasks become automated and more new skills are needed to undertake the new requirements of a role. New Artificial Intelligence (AI) technology, such as Australia-based Faethm, can support HR and business leaders predict not only how their existing workforce will be impacted by automation, but also identify the transferable skills that current workers have that may make them highly suited to one of the new breed of job types created by automation.

The transition from each industrial revolution, from the first to the current one, has posed significant challenges for people, businesses and society. The current revolution poses old as well as new challenges for both business leaders and HR/Talent Acquisition professionals, including:

- How do we reskill our current employees?
- How do we identify which employees are suitable for which jobs of the future?
- How do we win the battle for in-demand talent when other companies are hiring the same people?
- How can we be more creative in the way we assess the value and skills people bring to our business?
- How do we find talent that is comfortable working alongside robots?
- How do we find talent that is productive now but will remain so in a fast-changing world?

There is no ‘silver bullet’ to solve each of these quandries, but the common theme that runs through these challenges is understanding not only what an employee can do for your business now but what they are capable of doing in the future.

Hiring for potential

The pace of change in todays world means that no professionals skill set is future proof. Common recruitment theory suggests you hire someone who is capable of doing the job straight away, to ‘hit the ground running’, but what if the functions within the job they have been recruited for are very different a year or even six months later. Their specific experience is no longer their strongest asset.

Hiring for potential means playing the long game, looking for candidates who can grow and develop into more complex and challenging roles as the business world evolves.

Experience can only go so far in determining the value that an employee will contribute. By getting to know your candidates during the recruitment process and hiring for potential, you are taking the first step in making a long-term investment in your company’s success.

Assessing for potential

Understanding someones potential is quite different to reading a CV or an checking an applicants references, a systematic approach needs to be applied that provides you with metrics that can be benchmarked.

Assessment methodologies and technology have been in common use in the recruitment and staffing industries since the use of psychometric testing for the screening of recruits during World War One. Fast forward to 2020, and assessment for recruitment is used by over 80% of the Fortune 500 companies in the US and over 75% of the Times’ Top 100 companies in the UK.

Technical skills assessment boomed in the latter years of the Third Industrial Revolution (the widespread use of automation, computers and electronics), with the adoption of multiple-choice assessment and technical screening tests. However, it is the emergence of assessments focusing on future potential, rather than just current skills, that make it essential to view assessment with a new lens as we enter the latest industrial revolution.

In this eGuide, we explore how an emerging ‘new breed’ of assessment technology can help you, as business and HR leaders, to identify, nurture and retain the talent you need for the future of work.

“Hiring for potential means playing the long game, looking for candidates who can grow and develop into more complex and challenging roles as the business world evolves.

The new breed of assessment technology

The assessment technology landscape

The assessment technology landscape has evolved continuously, but a ‘new breed’ of assessment vendor began entering the market from 2005 onwards. Assessment technology vendors offered tools that transcended skills and psychometric assessment, to offer a more holistic understanding of the make up or ‘fingerprint’ of a candidate.

In this increasingly crowded assessment ecosystem, assessment can be broadly subdivided and categorised as follows:

IT/Technical assessment

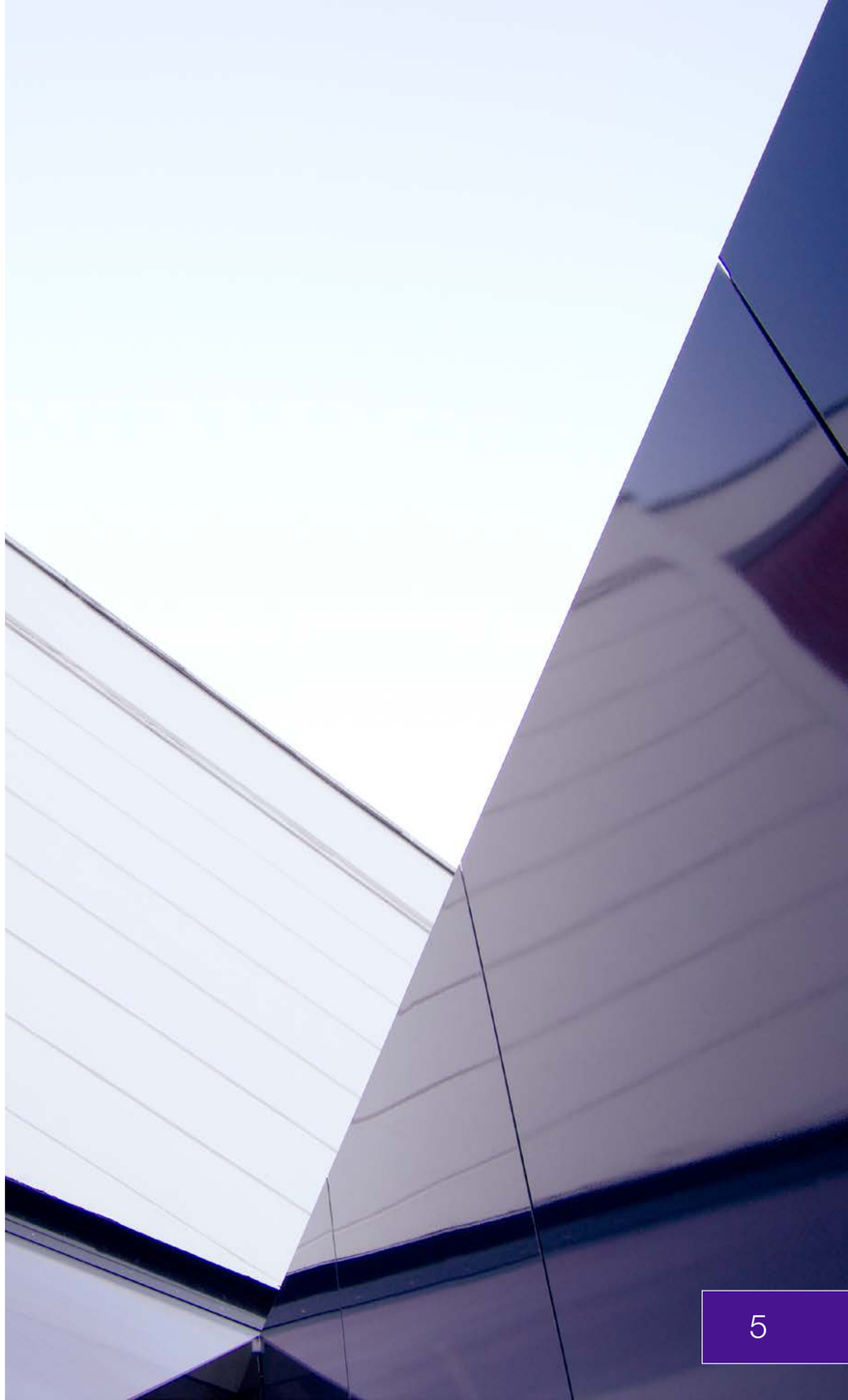
Focusing on technical knowledge (often via multiple-choice questions) and technical ability (via challenges or work-based scenarios). Advanced vendors allow assessors to not only see the candidate’s response but also to understand how candidates reach their conclusion, giving insights into how they approach problems and construct their thought process.

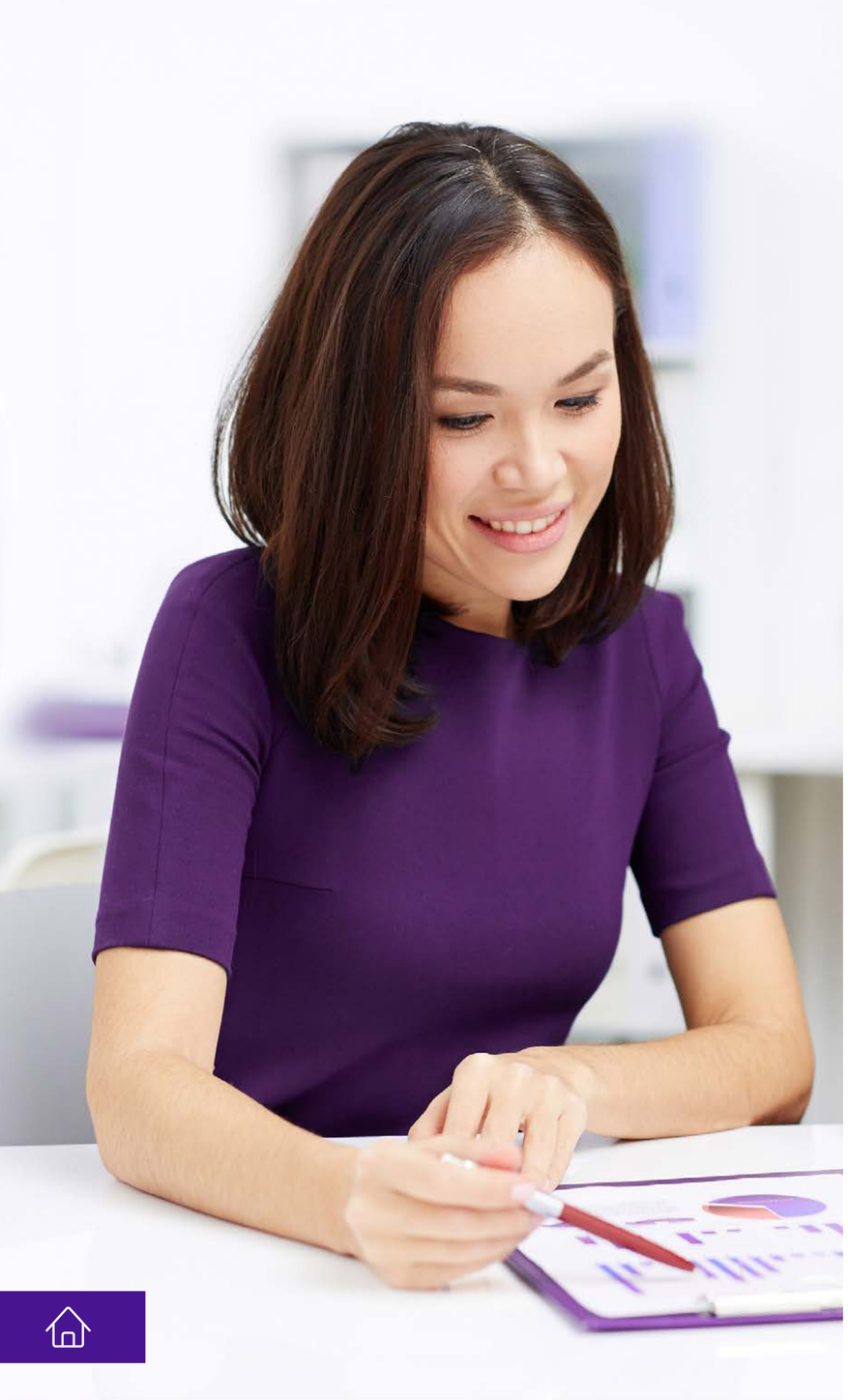
Workplace skills assessment

Understanding a candidate’s ability to do the job for which they are applying is not a new challenge. What are called ‘in tray exercises’ have been central to assessment centres for decades. However, increasingly sophisticated technology allows recruiters to recreate highly realistic workplace scenarios, such as voice assessment for recruitment at contact centres.

Game-based assessment

The gamification of assessments involves the application of game-playing principles to the assessment process. Rather than answering multiple-choice questions or written tests, participants play a digital game which assesses them on potentially thousands of data points. The fun nature of the games often drives high response rates. This, combined with credibility with psychologists, has resulted in widespread adoption in recent years.





Culture fit assessment

Often misunderstood, cultural fit is the congruence of a candidate's core values, behaviours and goals with your company culture. Culture fit assessment aims to match candidates with the same values and preferences as your company (or the values and preferences you want your company to have in the future). Popular with high-growth and pivoting companies, critics question whether this approach can perpetuate bias.

Video assessment

Our relationship with video changed at the end of 2005 with the explosion of YouTube, which suddenly allowed us to interact with video on demand. One-way video (where a candidate answers questions directly to a camera which is recorded and shared with the recruiter) and two-way video (live interviews, essentially video conferencing) became possible in the early- to mid-noughties, but bandwidth and cultural hesitations delayed adoption until the 2010s onwards. Covid-19 provided another step-change in adoption.

Psychometric assessment

Also known as aptitude tests, psychometric assessments test a candidate's cognitive ability or personality. These are popular with employers aiming to predict potential and assess a relatively wide range of skills, from cognition, knowledge and personality.

Legacy assessment

This category is a 'catch all' for more traditional assessment vendors and methodologies, including standard multiple-choice questions. It also often includes verbal and numerical reasoning. These assessments often benefit from being proven (and therefore validated and verified), as well as having broad libraries, allowing companies to deploy a single assessment provider for all role types.

Experiential assessment

Traditionally, assessment aimed to understand and assess a candidate's skills, abilities and traits. As companies increasingly battle for in-demand talent, there has been a shift towards using assessment also as a way of engaging with candidates and advocating the company's employer brand. An example of this is using Virtual Reality (VR) technology, which to date lacks compelling validity and verification but resonates with and inspires candidates.

Language proficiency

Increased globalisation, nomadic workforces and offshoring have resulted in increased use of language assessment. Non-native language speakers have been given language ability tests for many years. However, since 2015 increasingly sophisticated technology has enabled assessors to not only understand a candidate's vocabulary and comprehension, but also their oral communications skills, including accent and discourse skills (sharing and linking ideas coherently).

Assessment technology landscape

pymetrics
TESTDOME
LYTMUS
cut-e
HackerRank
ARCTIC SHORES
indeed
HireVue
hackajob
Codility
psycruit
hackerearth
ACCELERATE.io
GOOD&CO
Saberr
Work well together.
ThriveMap

Covid-19 accelerates assessment and redeployment of skills

Few industries remain unaffected by the coronavirus pandemic. The use of video exploded, not only as a communication tool but as an interviewing platform, as both job seekers and hiring managers stayed at home in quarantine. Other online assessment platforms that enable remote skill assessment, such as Codility and Aspiring Minds, have enjoyed growth during the period of lockdown and quarantine. However, it is the redeployment of skills which highlights the importance of hiring for potential.

For instance, Resource Solutions pivoted its offering to support the onboarding of healthcare professionals for the UK's National Health Service (NHS) by redeploying 50 recruiters. This new service required the process, case and stakeholder management skills needed for recruitment, but also enabled Resource Solutions to support their community at a critical time, when recruitment activity was reduced.

Burberry, the luxury fashion house, transformed its trench coat factory to become a significant manufacturer of Personal Protection Equipment (PPE), again utilising the current skills of their employees to reflect current needs.

"To emerge stronger from the COVID-19 crisis, companies should start reskilling their workforces now. They should craft a talent strategy that develops employees' critical digital and cognitive capabilities, their social and emotional skills, and their adaptability to future change."

Faye Walshe, Director of Innovation, Robert Walters Group

How to balance human instinct and tech validation in assessment

As assessment technology evolves, the question arises of whether human instinct and judgement is still needed. If assessment technology can help filter candidates, can we remove humans from this selection decision entirely? The reality of the future workforce is that companies need human instinct, to complement robots and artificial intelligence – and they need it now more than ever.

The skills you need to future-proof your business are hard to measure with technology alone

Creativity, empathy and curiosity are arguably the most important skills for the workforce of the future. Paradoxically, they are also the hardest skills to assess using assessment technology. Anti-cheat technology can flag plagiarism, but it is not yet sophisticated enough to grade the uniqueness and creativity of a candidate's answer. It is at this stage that you need to introduce your recruiters and hiring managers to bring instinct and human judgment.

Flawed science?

As an ever-increasing volume of assessment vendors compete for business, product enhancements have emerged, such as facial expression technology to measure candidate performance. These products often appeal to buyers, acting as a USP for vendors, but rights groups are increasingly questioning the validity of these innovative solutions.

Ethical and legal challenges

Increased awareness of personal data and automated decision making has resulting in new data laws in both Europe (GDPR) and the US (California Consumer Privacy Act). The result has been employers choosing to blend assessment technology with human interaction.

"Recruitment remains very much a people business. The people we hire may be recruiters, data scientists or Java developers, but we typically need them to be able to listen to and tell stories, as well as understand emotions. We have deployed video interviewing, enabling us to reduce our experience requirements and hire for potential, resulting in a more diverse talent pool. We do not utilise automated decision making or AI in this process, as our research suggests this disadvantages under-represented talent."

Sally Martin, Global Head of Talent Acquisition, Resource Solutions

Assessment in action: Case Study

Arctic Shores

Arctic Shores is a game-based assessment vendor, whose solution combines neuroscience, AI and gaming technology. The science-based games focus on an individual's potential rather than a specific current skill, enabling employers to hire talent with the ability to evolve and pivot as their role changes over time.

Resource Solutions piloted Arctic Shores with one of their asset management clients, focusing on the assessment and selection of talent at graduate level.

The process

1. **Desk-based research**
   competency frameworks, vision/mission statements and job descriptions were sent to Arctic Shores for analysis.

2. **Workshops**
   a workshop was hosted with both high-performing graduates on the existing graduate scheme, as well as all managers of the graduate scheme.

3. **Stakeholder**
   Interviews were held with senior-level leaders.

4. **Validation**
   for validation purposes, 50 graduates were required to complete one assessment.

The result

83%
found completing the assessment was enjoyable

77%
agreed that the assessment reflects positively on the client's brand.

73%
of candidates felt more excited to work for the client after completing the assessment

74%
found the test more relaxing than other traditional assessments.

Assessment in action: Case Study

Codility

Codility software allows employers to assess a candidate's programming ability through automatically scored coding tests that can be completed remotely. Traditionally, assessment of a candidate's coding ability was completed during the face-to-face interview, following the phone screening phase. Using Codility, HR and hiring managers are able to create bespoke tests that match the required skills in the job description. These bespoke tests can be tailored to assess how an individual will perform immediately – but, crucially, they also allow employers to hire based on potential, because rather than requiring 'right' or 'wrong' answers, they allow hiring managers to watch how a coder or developer approaches a problem.

The process

After a candidate completes their test, an automatically generated summary is sent to the hiring manager and HR team. Candidates who score well have their code and CV reviewed and are invited on-site for an interview. Candidates who do not perform well are rejected. However, if a test score is borderline and the CV is strong, a phone interview can be arranged to confirm if they should be rejected or progressed.

A core difference between Codility and other testing software is that Codility requires a candidate to submit their code while solving a real-world programming problem. Other testing tools ask candidates to simply answer multiple-choice questions. Codility automatically scores correct code as well as its performance.

Codility saves time, replacing the need to have a technology expert review CVs and screen applicants by phone. Tests are administered by the recruiter, once a CV is received and all candidates are given the chance to take a test. This not only reduces unconscious bias at CV review stage, but also gives candidates who might not be able to craft a well-written CV the chance to demonstrate their skills.

The results

Technology managers were keen to establish whether Codility can save time by omitting the phone screening stage. They also wanted to prove if it could accurately remove the same proportion of candidates that phone screening does; or, better yet, remove a higher proportion of candidates, making the process even more efficient.

The results clearly demonstrated that both areas were able to remove a higher proportion of candidates after the first stage of the process using Codility – up to 7.1% more. Overall, 4.8% more candidates were removed after the initial stage than in the previous year.

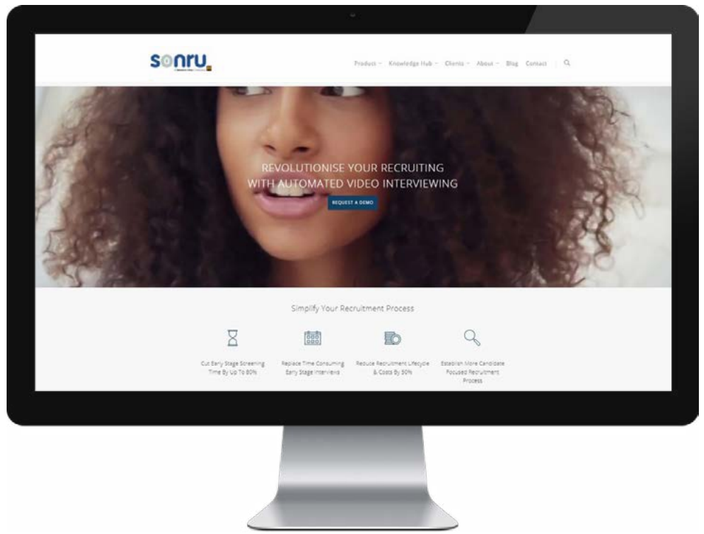
Your action plan for meaningful change

Our top tech picks…

Best for broadening your talent pool and hiring for potential:

Sonru (now a Modern Hire company)

In the overcrowded video interviewing market, Sonru impresses by offering a simple product that works, minimises bias and risk, and offers best-in-class customer service. Sonru offers one- and two-way video interviewing solutions and, if needed, integrates with your applicant tracking system. The lack of AI decision-assisting technology minimises risk and ensures unbeatable ‘up time’.



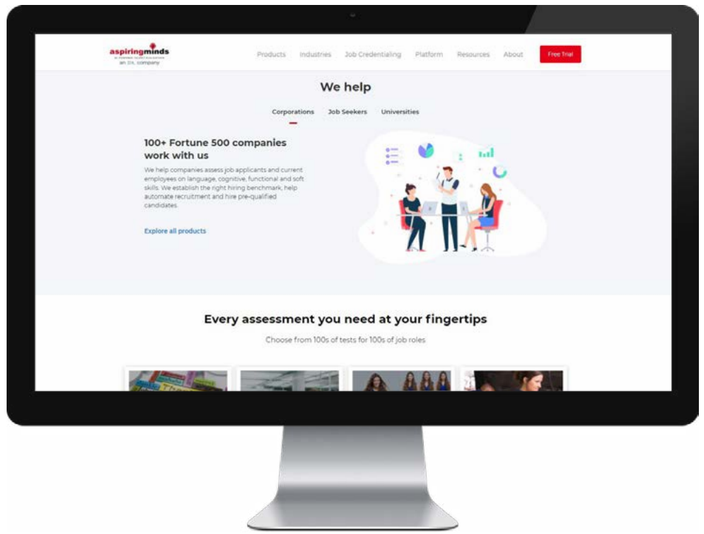
“Video is the perfect platform to select talent based on potential. When hiring for my team, I recently asked applicants to explain and critically analyse their favourite piece of technology. The successful candidate actually chose to analyse their hair straighteners. This didn’t show current knowledge of relevant technology for the role, but it enabled her to show her potential”.

Tom Lakin, Senior Innovation Manager, Robert Walters Group

Best for assessing workplace skills in action:

Aspiring Minds

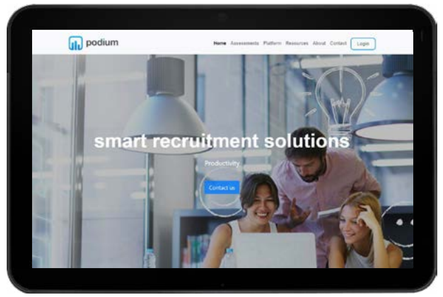
Aspiring Minds is an AI-powered suite of assessment and interviewing tools that allows companies to set real-life work challenges for candidates to complete. Our clients love that candidates can be assessed for both voice and non-voice competencies, all on one platform. Aspiring Minds was acquired by SHL in 2019, resulting in a credible, trusted and innovative all-in-one vendor.



Best for predicting your next top performer:

Podium

Podium assessments aim to give organisations a deeper, more meaningful insight into their people, while providing an assessment experience that showcases their corporate identity. Podium blends psychometrics and machine-learning models to produce highly predictive assessment models.



“When using Aspiring Minds the accuracy in predicting quality hires was breathtaking. Within weeks of running the initial pilot for a client, the correlation between scores and quality of talent increased”

Edyta Prazuch, Innovation Analyst, Robert Walters Group

About Robert Walters

Robert Walters is a global, specialist professional recruitment consultancy.

Over the last 35 years the business has grown and so has our ambition. We now operate across 31 countries and employ over 3,700 people. It's a powerful success story built on the strength of our people. Organisations rely on us to find high-quality professionals for a range of specialist roles. Professionals who are looking for a new role, whether it's on a permanent, interim or contract basis, trust us to find them their ideal job.

Our core recruitment disciplines are:

- Accounting & Finance
- Business Support
- Financial Services
- Human Resources
- Legal, Compliance & Risk
- Manufacturing
- Sales & Marketing
- Supply Chain
- Technology

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