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Buyer's Guide to **Technical Skills Assessment Platforms**

How to buy a technical assessment platform for your enterprise with confidence.

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Hire the right engineers, the right way.

Here's what to look for (and what to ask) when searching for a scalable technical assessment platform that will reduce time-to-hire, turnover, and build high-performing teams that drive business outcomes.



The cost of a bad hire has never been higher.

In a volatile economic environment, the impact of a bad hire is even worse.

According to [Gartner](#), in 2023 the #1 strategic imperative for HR teams is to drive better business outcomes - more revenue and more profitability. [Bad hires not only cost up to \\$240K](#) - they lose precious time for the hiring teams and impact business outcomes.

Today, more and more companies are balancing “hiring fast” and “hiring at scale” with hiring the right talent. Because of this, the number one requirement for a technical skills assessment (TSA) platform is, “Can I trust their recommendations and scores?”

For global enterprises, the legal and technology environment is challenging as well.

The rapidly changing landscape here both in North America and the EU means that your TSA platform must ensure your compliance, testing of new skills, and that cheating is prevented - (see [our post on ChatGPT](#) here).

With growing scrutiny about compliance, security, validity, legal defensibility and achieving DE&I goals, global enterprises need technical skills assessment partners who understand and can fulfill the rapidly evolving requirements of today's complex global enterprise.

Here are some **important questions to ask during your procurement process** and **top considerations for the unique needs of organizations** that need to hire *the right people, the right way.*

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Key Features of a Great Assessment Platform

Accuracy of Signal: Hire the Best with Confidence

One of the most important aspects of partnering with a technical skills assessment vendor is the accuracy of the signal - i.e. does the skills assessment truly indicate that skill, and does it test in a fair and unbiased manner when assessing that skill?

Without signal quality, technology teams risk wasting time, hiring poor fit candidates, and missing high quality candidates. Let's dig into a few dimensions of signal quality, and some things to look for in your evaluation.



Avoid mishires by focusing on the skills that matter.

According to [research from the Harvard Business Review](#), 80% of employee turnover stems from bad hiring decisions.

Content Development Process - Delivering the Most Accurate Skills Tests

To maintain the highest quality, tasks should primarily be developed by dedicated, in-house assessment science experts. Outsourced content is not robust enough to adequately test candidates' true skills. I-O psychologists are experts in developing skills assessments that are not only accurate in their scoring (see below), but don't accidentally introduce bias. This is step one to how you get the right hire – the right way.



There are several ways that bias can be accidentally introduced into technical skills assessment tests by non-expert test developers. Here are a few examples:

- 1. Test design:** The design of the test can influence the results. For example, if the test covers a too narrow definition of a skill or is poorly worded, it may disproportionately favor candidates with specific backgrounds or experiences.
- 2. Content bias:** The content of the test can also introduce bias. For instance, if the test includes examples or scenarios that are familiar only to certain demographics or cultures, it can disadvantage other candidates.
- 3. Grading and scoring:** The way the test is graded and scored can also lead to bias. For example, if the grading criteria are unclear or subjective, it may be more difficult for candidates from certain backgrounds to achieve a passing score.
- 4. Test-taker characteristics:** Bias can also arise from the characteristics of the test-takers. For example, if the testing platform does not provide assistance to those who need it (eg., visually impaired).

It's important for organizations to ensure their technical skills assessment provider addresses any potential sources of bias, and can show validation studies to support anti-bias claims.

Rapid content development and innovation

Technology is constantly evolving, and larger organizations need a partner who is proactively developing new skills assessments as new technology develops. You should ensure your TSA platform is releasing new and novel content at a high rate. Stale content is more susceptible to exposure and cheating.

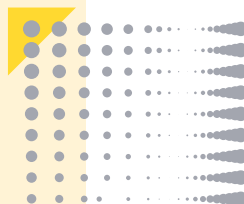
Customized assessments

A TSA platform should provide you with the option to take your job description and recommend which tasks on the platform are the best match for that job. In addition, your platform provider should be able to provide 1:1 expert review of your own developed content and a self-serve option for loading your own tests.

Self-serve content

The ability to create self-serve content is an important feature of a TSA so that teams can have the flexibility to address their unique needs. However, the ability to create custom content should not be offered to make up for a limited, aging, or vulnerable task library.

While many engineering teams have highly capable software developers, most lack the requisite experience in assessment science and bias mitigation to develop sophisticated content that accurately assess candidate skills. Furthermore, most hiring teams turn to a technical skills assessment partner to save them time, not require them to churn out coding tests.

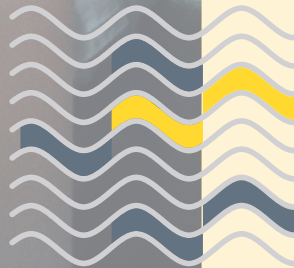


Considerations for your internal team

Do your engineering teams have the expertise and capacity to develop and maintain their own library of fair and relevant coding tasks to make up for vendor deficiencies?

What is your vendor's approach to content development?

- ? Are your tasks developed to be resistant to ChatGPT-cheating?
- ? Have you analyzed and made available to your customers the relative solvability of your content library by ChatGPT?
- ? What is the size and tenure of your content development team?
- ? How regularly is new content released?
- ? When did you last innovate new task types to keep up with the changing needs of hiring teams?
- ? Who leads your content development team? What are their background and experience? Are they a recognized expert in assessment science?
- ? Do all task content creators undergo regular bias-mitigation training? Who conducts the training?
- ? Is all new content reviewed for potential bias or culturally sensitive elements prior to release? Who conducts this review?
- ? Does the vendor have validation studies supporting their content development process - including gender bias?



Validity of the Evaluation Engine - Passing Compliance & Legal Review

Validation is the process of gathering evidence that the results of a test mean what they are intended to mean. In technical hiring, it means that the assessment is job-related, and that the candidate scores confirm whether or not they have the skills to qualify for that job.

Without proper attention to validity and its impact on the hiring process, organizations may diminish the legal defensibility of hiring practices and decisions, negatively impact fairness and candidate experience, and ultimately reduce the utility of the assessment itself.



Most large enterprises will have legal and compliance teams who require a demonstrated commitment to ongoing validation.

Make sure your vendor has both the experience as well as the documentation required to quickly pass through the legal and compliance reviews of your organization.

TSA platform vendors who serve larger enterprises must focus on validity and employ Ph.D.-level industrial-organizational (I-O) psychologists and position them in parts of the organization where they can have the greatest impact on the platform and content (e.g., within the product organization, content development team, product research team, etc.) and empower them to regularly conduct research that enhances understanding and promotion of validity, fairness, and candidate experience.

Curious about our approach to validity?

Read [our Guide to Validation](#) here.

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What is your vendor's approach to ensuring validity and proving this to your legal and compliance teams?

- ? What is the size and experience level of your I-O psychology team? What is their tenure at the organization and what department are they in?
- ? Have you published any technical documentation on your approach to gathering validity evidence?
- ? Do you study and [report on group differences](#) in assessment performance?
- ? Do you have in-house experts to conduct validation studies and adverse impact studies?
- ? Does your skills assessment framework rely on pre-made or "certified" assessments?*
- ? Does your vendor have deep experience with legal and compliance procurement review in North America and the EU?

***A note on certified assessments:** The very notion of using a canned or "certified" assessment to hire for specific roles undermines the validity of the assessment, since validity hinges on the *specific test's* ability to provide trustworthy results that a candidate will have the skills for a *specific role at your specific company*.

On the other hand, using templates as a **starting point** from which you match task-by-task content to the specific role's job description is a more valid approach and will send a more accurate (and defensible) signal of a candidate's actual ability to succeed in the role you are hiring for.



Robust Cheating Detection & Prevention

Unchecked and undetected cheating diminishes the accuracy of the signal the assessment provides. Unknowingly hiring dishonest candidates also adds additional (and very serious) security risks for companies that are public, regulated, or otherwise working with sensitive data.

Don't take a chance with your company's or candidate's data. Keep your company secure and hire the right engineers with a robust solution that still provides a positive candidate experience.

Candidate experience matters now more than ever.

[Our research](#) shows that despite the majority of TAs rating their hiring process as "good," 50% of engineers said their employer hiring processes were average – or worse.

TSA vendors should provide many visible and invisible (to candidates) ways to detect and prevent cheating. At a **minimum**, cheating mitigation measures available should include:

- ✓ Photo ID verification
- ✓ Network IP detection
- ✓ Code playback
- ✓ Leaked task alerts to trigger task retirement
- ✓ A candidate honor code

What are your vendor's cheating mitigation and detection capabilities?

- ? Are your tasks developed to be resistant to ChatGPT-cheating?
- ? Does your content library clearly identify tasks that are highly resistant to being solved with ChatGPT?
- ? Have you analyzed and made available to your customers the relative solvability of your entire content library by ChatGPT?
- ? What is the size of the solution set against which you compare candidate solutions to detect plagiarism? Will you detect plagiarism even if the candidate modifies the code?

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Clear Commitment to Data Privacy & Security

The world's largest, most complex, and secure organizations in a regulated environment require data privacy and security in every aspect of their operations – customers, employees, partners, stakeholders, candidates and all the various types of data they produce in the platforms they interact with.

Assure the security of your data. Always be sure vendors you contract with adhere to all data privacy and security regulations in every geography where you will be conducting assessments and interviewing, including GDPR, CCPA, SOC 2, and ISO 27001.

Strict Compliance with Data Security Globally

The key to finding a partner that lives up to the high standards that top global companies require is identifying a provider whose organization aligns to those values and embraces the strictest standards and beyond.

This involves what data they collect from candidates, where they store it and what they do with it. Since some savvy tech companies adhere to the letter of the law, if not always the spirit, this may not be easy to discern from Privacy Statements and Terms of Use.



How is your candidates' personal data being handled?

- ? Do you require candidates to register and create an account on your platform before being permitted to complete a hiring assessment?
- ? Do you ever make candidate data available to any other parties or vendors?
- ? If I invite my sourced candidates to use your platform, are they then available for my competitors to engage?
- ? Do you in any way share or monetize user or candidate data with any third party (example: AI Talent Intelligence Platform)?
- ? Is European candidate and user data stored in data warehouses based in Europe?
- ? Are records (images, video) of European candidates stored on European Union (EU) soil? Here's [our approach to EU data hosting and GDPR compliance](#).

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Ensure Your Success with Strategic Partnerships

Hiring managers and talent acquisition teams that form deep, consultative relationships with technical assessment providers will fare better in the complex technical hiring landscape.

A faster path to ROI and business outcomes. Buying teams that work with vendors who are experienced in navigating the procurement process or large organizations, working with engineering, compliance, legal, security, IT, and I/O teams are better primed to hit their business objectives faster than their competition.

Don't go at it alone

The quality of a strategic partnership with a vendor can be hard to evaluate from a checklist. To assess this, you will need to pay attention to your interactions at every stage of the buying process.

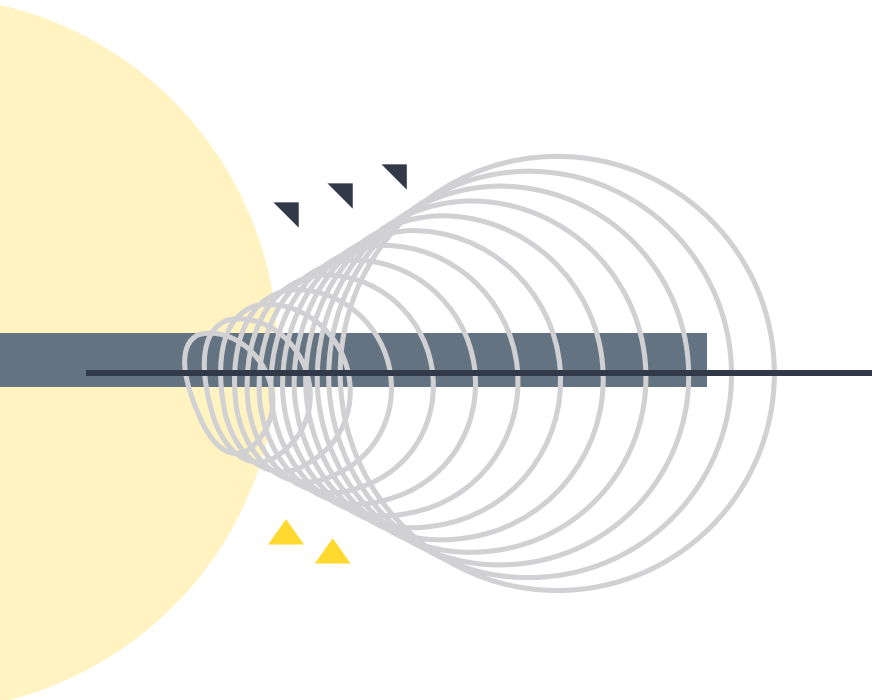
At Codility, we're committed to a "human-first" approach to the workplace.

Read [our Diversity, Equity and Inclusion Report](#) here.

Things that indicate a strong strategic partnership:

- ? Do discussions center on the unique needs of your business or industry, rather than "one size fits all" and self-serve solutions?
- ? Does the team demonstrate expertise in serving customers within your industry?
- ? Does the team support you from your region (and time zone), with native language speakers available?
- ? Who comprises the interdisciplinary team of hiring experts that support their customers?
- ? How will the vendor partner with you to help you create a technical assessment strategy that achieves your objectives?
- ? Will the partner grant access to I/O psychology, assessment engineering, and data scientist teams to assemble and validate test content outlines (i.e., blueprints), conduct local validity studies, create reporting dashboards, conduct standard-setting (i.e., set defensible passing scores/cut scores), and provide technical documentation in accordance with industry guidelines and regulations?
- ? Does the provider demonstrate a sufficiently innovative vision to help you adapt your hiring practices and remain competitive?
- ? Does the team offer creation of assessments from your job description?
- ? Does the team offer executive business reviews that cover usage, assessments used, and recommendations for better skills assessments?
- ? Do the values and practices of the provider match with those of your organization? For instance, a shared value of increasing DE&I in their organization and in STEM broadly.
- ? What is the company's forward-thinking approach to generative AI like ChatGPT? (HINT: it should go beyond detection and prevention!)

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Final Thoughts

There's a lot of choice when it comes to selecting the best technical skills assessment platform for your hiring needs. No single solution will be right for every organization and the stakes in hiring can be high.

Buyers aren't helped by the fact that in many aspects of product offering, there is plenty of parity across the major players in this industry. You and your competitors are all vying for the same top technical talent and while employers face pressures from demand outpacing supply, the cost of making a bad hire has never been higher.

Organizations with mature, compliance-focused, globally-scalable hiring practices must go beyond checking surface-level feature options. Never fear. To hire confidently, there are a few key areas to focus on during your vendor evaluation.

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Hiring the Right Way: A Checklist

Accuracy of signal. Look for expertly developed tasks created by teams trained to mitigate bias and create content highly resistant to ChatGPT-cheating.

Commitment to validity. Be wary of vendors that provide “certified” assessments that they claim are valid for hiring across jobs, settings, and companies.

Cheating detection and prevention. Look for a robust offering that keeps your company secure and still provides a positive candidate experience.

Commitment to data privacy and security. Seek out a partner whose commitment to data privacy and security is woven into the company culture and goes beyond simple compliance. Avoid platforms that require candidates to register and create a profile, or providers who share or sell data with 3rd parties.

Provide a strategic partnership. Your vendor should be an expert in technical assessment and hiring. They should surround your hiring teams with a stable of interdisciplinary experts to help you craft, execute, evaluate and when necessary, completely reimagine your technical assessment strategy.

Unique challenges require unique solutions. Vendors focused on “off-the-shelf” or “self-serve” offerings may not be prepared to offer the level of support and strategic guidance required to navigate challenges that arise.

Ready to hire the right engineers **2.5x faster**?

Get in touch with us

[Here →](#)

About Codility

One Solution for All of Your Technical Assessment Needs

The Codility Evaluation Engine is a comprehensive suite of products that'll help you hire the best developers, test programming skills, and keep them engaged with robust coding tests, interactive pair-programming sessions, and gamified coding events.

