Predicting Potential
Assessing cognitive ability in recruitment
Introduction

Employees with strong cognitive ability are a competitive advantage to an organisation - particularly when they are in roles that require quick learning, first-time problem solving, thinking ‘on your feet’ and dealing with ambiguity. People who score well on cognitive ability tests are more likely to develop a greater knowledge of the job more quickly, make effective decisions and successfully reason and strategise to solve problems. In fact, a landmark study\(^1\) reviewed 85 years of research and found that higher cognitive ability is linked with higher productivity and performance.

Today, with technology and globalisation advancing the complexity of the challenges we face and causing them to come at greater speed, it’s more important than ever that we attract and align talent with the cognitive demands of the organisation to ensure both its current and future success. But, for reasons we will discuss further, it’s crucial that we also fill them with people whose cognitive potential matches or ‘fits’ the cognitive demands of their roles.

“For every job ... the number one thing we look for is general cognitive ability, and it’s not I.Q. It’s learning ability. It’s the ability to process on the fly. It’s the ability to pull together disparate bits of information.”

Laszlo Bock
**former Senior Vice President of People Operations for Google\(^2\)**

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Both experience and learning potential are important factors in how effectively people deal with rapid change and advancing complexity. Experience consists of attributes that can change over time such as education, knowledge, work training and work experience, whereas learning potential is more about attributes that are stable over time such as personality traits, values and intelligence.

As a result, to succeed amidst today’s complexity and change, CEOs need to use both the knowledge they’ve built over time and their mental ability and agility to make smart, assertive decisions. Crucially, they also need employees in place across the entire organisation who have the cognitive ability to carry out these decisions - and for this, CEOs rely on HR.

Specifically, CEOs rely on their HR partners to develop a talent acquisition strategy to find smart, agile thinkers who can adapt quickly and thrive in an environment of rapid change and can also rapidly learn new skills that may be required for effective performance or advancement. In addition, CEOs look to HR to fill their talent pipelines with managers who possess high cognitive ability along with high-performing employees who are great candidates for leadership roles in the future due to their cognitive characteristics and have both the experience and cognitive potential for internal promotions and successor capability.

Rapid change, coupled with incredibly fast technological advancement, poses different challenges. For example, it’s generally not enough to simply use two to three key pieces of technology. Today’s employees must be agile enough to learn and adopt many new technologies - almost overnight. More importantly, they must harness technology to create new value for the organisation and its customers.

All of this makes HR’s challenge two-fold:

- Firstly, you need to select the right people to develop into leadership and managerial roles and also non-leadership roles that are critical to the organisation’s competitive positioning. It’s vital to avoid succumbing to the Peter Principle: promoting people until they reach a level where they are not equipped to cope with the role demands and become incompetent.
- Secondly, you need to ensure that backbone employees of the organisation have the cognitive ability to perform their jobs at a satisfactory level.

Fortunately, by effectively assessing for cognitive potential, you can meet both challenges. Focusing exclusively on cognitive potential, however, would be a major mistake.

“CEOs need to use both the knowledge they’ve built over time and their mental ability and agility to make smart, assertive decisions.”
The right mix: high potential/high fit

If you only hired the smartest, most-ambitious people you could find, you would soon have a disaster on your hands - widespread disengagement and high levels of turnover. If you filled your organisation with high-performers, for example, you could only promote a given number of them despite how brilliantly they all performed. Over time, the many who weren’t promoted would become frustrated and feel they’re not properly valued. According to a CIPD UK Working Lives study⁴ in 2019, 32% of employees believe they’re overqualified for the job they do, and 9% of workers do not feel their jobs are meaningful.

That’s why, along with having employees who have the cognitive potential to be leaders in your organisation, you also need a good supply of employees whose cognitive potential fits the cognitive demands of lower and mid-level roles, especially those where there is little or no potential for advancement. By knowing people’s potential for new learning and dealing with complexity, you can fit them into roles where they will be satisfied, challenged but not overwhelmed and feel that they are making a valuable contribution - this has a significant impact on employee satisfaction and engagement. This in turn helps you forge teams that are more satisfied, engaged and stable, creating a strong, proficient “backbone” in the organisation.

Ultimately, getting the cognitive mix just right ensures that your organisation not only has a high potential talent pool that is ready to advance, take on new learning fast and fill more complex roles, but also a ‘backbone’ talent pool that provides critical stability in roles where there is not potential for rapid advancement.

I look at the pace of change; I look at the uncertainty in geopolitics; I look at the massive dislocation and rearrangement of global supply chains — there’s no way anybody can predict what’s going to happen in five years...The uncertainty we see today is unprecedented in the last 40 years.

Spencer Fung, Group CEO of Li & Fung, Hong Kong SAR, China³

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Multi-generational workforces, training and virtual work

A combined focus on cognitive potential and fit can also help you solve other organisational challenges associated with change and increased complexity:

1. **It helps you have more success fitting multiple generations into your organisation**
   Finding and retaining quality workers is one of the well-known problems for businesses today and it’s key to acknowledge that with such stark differences between current generations, we are going to have one of the most diverse workforces ever seen – by 2025, millennials will make up three quarters of the total working population. Plus, they’re also a relatively untapped source of labour with the rate of unemployed young people more than three times higher than the figure for older generations.

   There are great benefits to hiring young people. They bring untapped passion, energy and potential and may be willing to work on contract initially, which reduces labour costs. Plus, Gen Z are being described as ‘digital natives’. Those in Gen Z who have grown up in regions with internet connectivity and easy access to mobile devices seem to take more naturally to this technology. But growing up with constant connectivity and mobile devices doesn’t necessarily translate into work skills. Therefore, the limitation here is their lack of work training and experience. With work performance largely a combination of experience and cognitive ability, it’s critical to assess candidates’ cognitive potential - which impacts how well and how quickly they’ll get up to speed and reach proficiency with their job duties and demands. In addition to helping you determine if they can succeed in a role, their cognitive potential shows you how they are likely to fit within your organisation going forward, whether they’ll be solid contributors, and how likely they are to advance to more demanding roles.

2. **It improves your training results**
   Training is important to all organisations, but it is often time-consuming and costly and some people always fail despite your best efforts. Getting better training results is of tremendous value and assessing for cognitive potential and fit delivers them. Knowing an individual’s cognitive ability is an indicator of how well they will cope with training and new learning. By identifying this upfront, training programs can be aligned with individual needs and managers can tailor their support and coaching. In roles that have a steep learning curve, significant complexity and a need for the individual to work independently, having strong cognitive capability is a differentiator. As an Oracle report noted, “A shorter time to proficiency for new hires can mean more products developed, more services delivered, more orders filled, more deals in the pipeline, and/or more marketing activity.”

3. **It helps you understand how people will respond to a virtual work environment**
   Some people succeed when working remotely, while others struggle. It’s important to recognise which people have the right cognitive fit for the demands of virtual work. By understanding workers’ cognitive potential and learning agility, you can identify employees who are fast and agile learners and who can work with less supervision - critical success factors for an effective virtual worker, especially as the percentage of remote workers continues to rise.

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Measuring **learning agility**

The Thomas Aptitude assessment, also known as the GIA, or General Intelligence Assessment is a cognitive ability assessment that provides an accurate prediction of the time it will take someone to get to grips with a new role, skill, process etc. This assessment measures what a person could potentially do, rather than their existing knowledge.

The Thomas Aptitude assessment consists of five tests of simple cognitive abilities (i.e. abilities that rely on processes such as thought, language, decision making, learning and memory). By gauging an individual’s capabilities in these five areas, you will be able to keep your people engaged in their work and your organisation with appropriate challenges suited to their strengths. The Thomas Aptitude assessment will also enable you to identify potential leaders, those that can think on their feet and the people better suited to methodical problem solving.

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<tr>
<th>Test</th>
<th>Description</th>
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<tr>
<td>Spatial Visualisation</td>
<td>This test measures the ability to create and manipulate mental images of objects. This test correlates with tests of mechanical reasoning, and assesses an individual’s ability to use mental visualisation skills to compare shapes. It relates to the ability to work in environments where visualisation skills are required to understand and execute tasks.</td>
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<tr>
<td>Reasoning</td>
<td>This test measures the ability to make inferences, the ability to reason from information provided and to draw the correct conclusions. This test assesses the ability of an individual to hold information in their short-term memory and solve problems.</td>
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<tr>
<td>Perceptual Speed</td>
<td>This test measures the perception of inaccuracies in written material, numbers and diagrams, the ability to ignore irrelevant information, the ability to recognise similarities and differences, and error checking. It tests the speed of semantic encoding and comparison.</td>
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<tr>
<td>Number Speed &amp; Accuracy</td>
<td>This is a test of numerical manipulation and a measure of basic numerical reasoning ability. It measures the degree to which an individual can work comfortably with quantitative concepts.</td>
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<tr>
<td>Word Meaning</td>
<td>This test assesses word knowledge and vocabulary. It assesses the comprehension of a large number of words from different parts of speech and the ability to identify the words that have similar or opposite meanings. It assesses the ability to work in environments where a clear understanding of written or spoken instructions is required.</td>
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**Reliability and validity**

The Thomas Aptitude assessment was developed over a period of 15 years by Dr Peter Dann in the Human Assessment Laboratory at the University of Plymouth. The GIA has been subject to rigorous scientific testing to determine its reliability and validity as a psychological assessment. Various research studies have shown that the GIA is a consistent and valid measure of trainability. The Thomas Aptitude assessment is registered with the British Psychological Society (BPS) after it was audited against the technical criteria established by the European Standing Committee on Tests and Testing, part of the European Federation of Psychologists’ Associations.
Silverlake Automotive Recycling is one of the UK’s leading vehicle recycling, dismantling, scrapping and recovery companies. Established in 1946, the family-run business prides itself on its breadth of services, competitive pricing and unrivalled customer service.

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We’ve been using psychometric assessments for 10 years and during this time the business has grown over 300%. I’m convinced that the assessments have played a major part in this growth.

Challenge
> Increase diversity across an expanding workforce
> Low productivity levels
> High employee attrition rates

Solution
> Introduced The Thomas Behaviour assessment to better understand how their candidates and current employees behave in the working environment.
> Introduced The Thomas Aptitude assessment as a measure of the amount of time it will take an employee to get to grips with their new role.
> Use both assessments as part of an objective, data-driven recruitment and onboarding processes.

Results
> Business has grown by over 300% in 10 years.
> Productivity has increased by 110% per employee.
> Improvement in attrition – 50% of employees have been with the company for between 5-10 years.
Conclusion

Talent is the fuel that drives the business engine and it’s on the top of the C-level agenda. To get the best results, HR needs to create a talent pipeline that serves your organisation’s needs, both today and in the future.

Assessing individuals for cognitive potential and fit is a powerful tool that can have a tremendous impact on talent selection and management strategies. It allows you to fill your talent pipeline with people who represent the right mix of potential and fit for your organisation’s needs both today and in the future. You can identify people – from top to bottom – whose cognitive abilities match the needs of the job, as well as some whose cognitive potential makes them good candidates for promotions when the right opportunities inevitably arise.

Once you get this mix right, your talent pipeline will help your organisation thrive for years to come.

Key takeaways

- CEOs rely on their HR partners to develop a talent acquisition strategy to find agile thinkers who can adapt quickly and thrive in an environment of rapid change and can also quickly learn new skills that may be required for effective performance or advancement – and identify those who require more time and provide them with the right amount of support.

- It’s not about hiring the best of the best because there won’t be promotional opportunities for everyone. Identifying those ‘backbone’ employees who provide critical stability in roles where there are no opportunities for rapid advancement will improve retention and employee engagement.

- It is proven that using psychometric assessments, such as Thomas’ Aptitude assessment, can help organisations measure mental agility, understand how to develop people through training, identify potential leaders who have the skills to drive change and ensure a person is sufficiently challenged in their role.
Contact us

We hope you enjoyed exploring our insights as much as we did putting them together.

You can learn more about our psychometric assessments here.

You can also explore the new-and-improved Thomas Perform here.

With it, you can distil complex data into simple insights – and make smarter choices for your people and business.

Alternatively, we'd love to hear from you.
So get in touch for a one-to-one chat on 01628 470980 or info@thomas.co.uk.