



*A business case with a multinational consulting firm.*

# Artificial Intelligence

Out-predicts Traditional Assessments on  
Job Performance

# Executive Summary

A top consulting firm, a member of the elite group collectively known as the “Big Four”, asked for a better method of predicting candidates’ job performance. Their goal was to reduce the amount of human labor required for the hiring, saving valuable time in the process.

Candidates for internship positions in the Audit, HR and Finance departments participated in a parallel application study. Each candidate completed both Seedlink’s digital interview and the company’s pre-existing standard online test. By using PeopleInsights, Seedlink’s artificial intelligence technology, the company was able to:

- *predict applicants’ fit to hiring criteria with 87% greater accuracy than the standard online testing tool*
- *reduce candidates’ time spent by more than 10 fold*

# Challenge

## **Soft Skills were difficult to detect.**

Compared with “hard” or quantifiable criteria, “soft” competencies (such as Learning and Re-searching, Analytical Capability, Inter-personal Communication, and Resilience to Pressure) are challenging to identify, yet these skills represent crucial aspects of a candidate’s job performance.

The conventional hiring method is heavily reliant upon review of the information presented in each applicant’s CV. This form of screening is an excellent way to compare candidates’ hard skills, but usually falls short when it comes to assessing their soft skills. Qualified applicants who could be a great fit for the company culture are turned away, simply because their intangible aptitudes cannot be accurately reflected on a sheet of paper.

## **Standard online testing was time-consuming and inflexible.**

Prior to their collaboration with Seedlink, the company was already using an online testing tool designed specifically to evaluate each candidate’s personality and job fit. Unfortunately, their test took each applicant over two hours to finish and had to be completed in a single session...test takers were not able to save their progress, then log out and come back later. As a result, many candidates left the process unfinished.

## **Structured tests were easy to manipulate.**

The company’s online testing tool used structured questions, such as multiple-choice format, to evaluate candidates. The questions had not been updated in a long time, which made it possible for applicants to cheat the test by asking previous test takers for their answers.

## **Screening the large volume of CVs was time-consuming.**

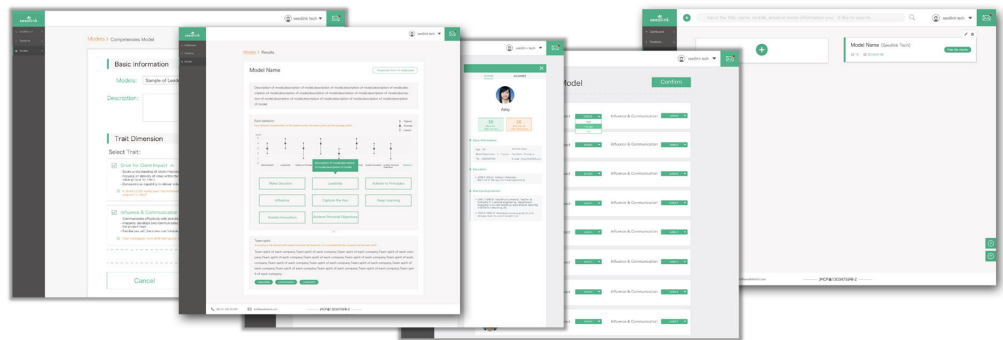
On average, the company could expect to receive more than 3000 CVs for a similar internship position. Out of these 3000-plus applicants, the staff in HR had to narrow it down to just 1000 that would go on to complete the online test. The sheer volume of applications, compared with the limited human resources available for the task, added unnecessary time to the hiring process and significantly decreased the efficiency.

# Solution

The company decided to incorporate PeopleInsights into its hiring process, applying the algorithm during the initial screening and interview stage.

## PeopleInsights combines machine learning and natural language processing to detect soft skills.

*The software measures the language of candidates to identify future job performance.*



Research has shown that language usage and behavioral traits are highly correlated with one another. PeopleInsights works by analyzing the language patterns people use on a subconscious level. This process makes it possible to discover valuable insights regarding the type of personality traits and soft competencies the respondent possesses. The table below shows how Seedlink's method outperforms all other assessment methods.

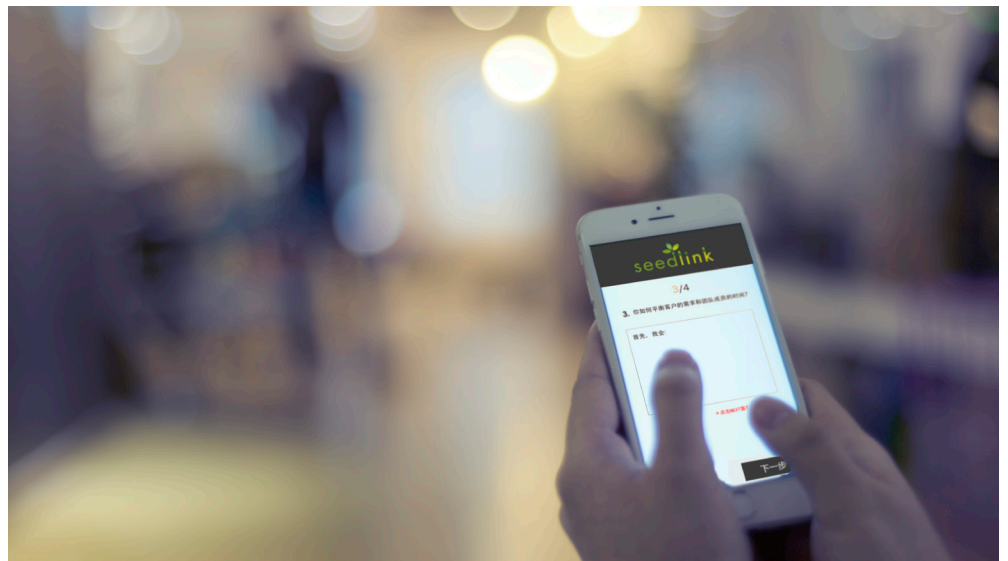
Validation for Job Performance of Different Predictors	
Selection procedures/predictors	Validity(r)
<b>Seedlink PeopleInsights</b>	<b>.60 - .82</b>
Employment interviews (Structured)	.51
Job knowledge test	.48
Integrity tests	.41
Employment interviews (unstructured)	.38
Assessment centers	.37
Biographical data	.35
Grade point average	.34
Job experience	.18
Interests	.10
Years of education	.34
Graphology	.02
Age	-.01

# Solution

## **The simpler process is easier to finish and more user-friendly compared to the standard online test.**

Unlike the online test the company uses, Seedlink's digital interview asked candidates only three open-ended questions. Each response required no more than 100 words, and the whole process took ten minutes to finish.

*The software measures the language of candidates to identify future job performance.*



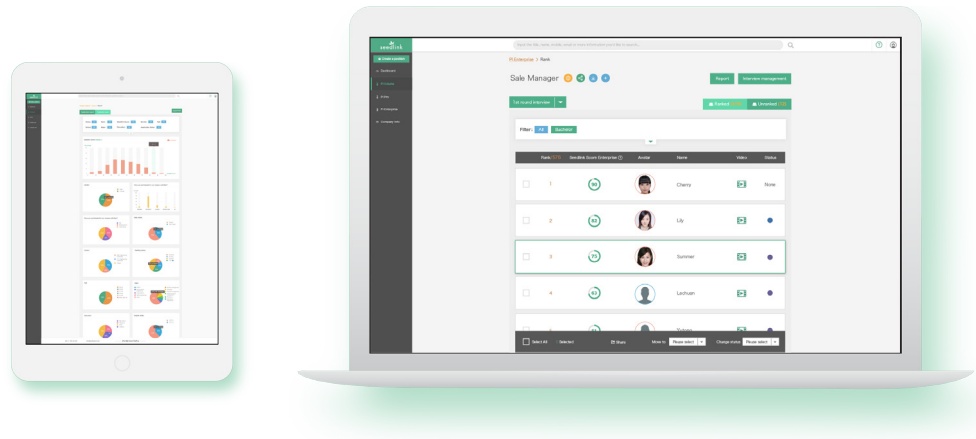
Candidates were able to complete the digital interview in one sitting, saving them a great deal of time and energy. The software interpreted the language data and provided in-depth analysis.

## **Open-ended questions are harder to manipulate.**

Since the software utilized an unstructured method of open-ended questions, there was no such thing as a "correct answer." Instead, the answers were used to assess the candidates' personal styles of communication. In other words, it was impossible for candidates to cheat the test. The only way they could complete the test was by answering the questions in the way that felt the most natural to them.

# Solution

**The software makes it possible to rank the applicants much faster.**



*The software measures the language of candidates to identify future job performance.*

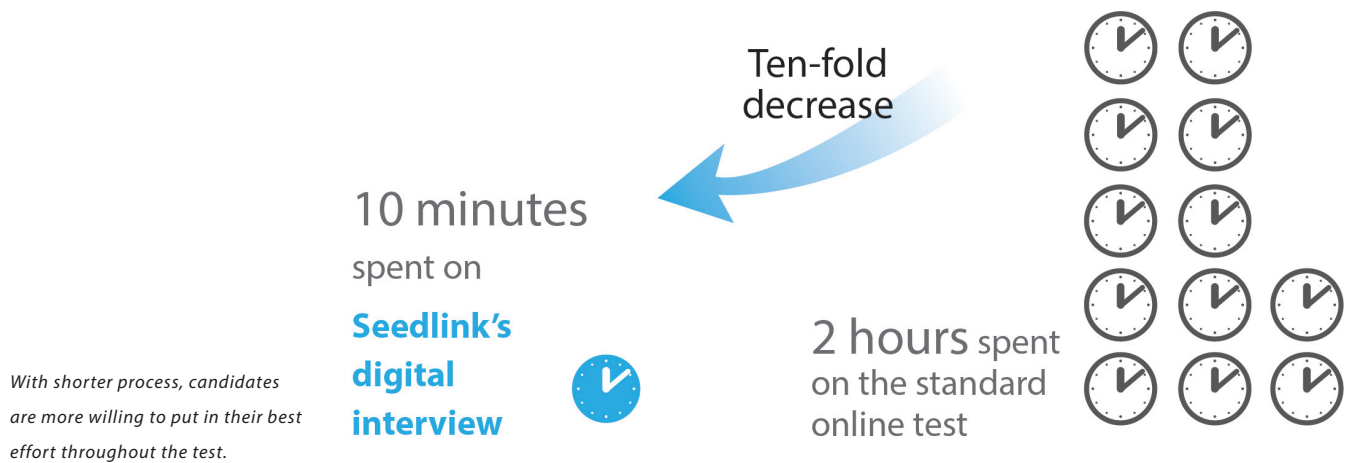
By analyzing each candidate's competencies, the system provided an automatically generated ranking of all the candidates. Managers from HR only needed to look at the rankings in order to decide which candidates should be selected for interviews and which ones could be eliminated from further consideration.

*In order to validate the reliability of the technology, the company ran another parallel process of testing using their conventional hiring methods including the previous online test.*

# Outcome

## Candidates' assessment time was reduced more than tenfold.

After logging in to the PeopleInsights system, candidates just needed to answer three open-ended questions in order to finish the test. It took only ten minutes from start to finish. This was a drastic change from the company's former online test, which required candidates to spend two uninterrupted hours completing it.



With a more user-friendly application experience, more candidates were able to finish the entire process. As a result, the company ended up receiving a higher number of completed applications. The higher quality of information they were able to extrapolate from the answers provided HR with deeper insights about the applicants, and the hiring process was significantly improved.

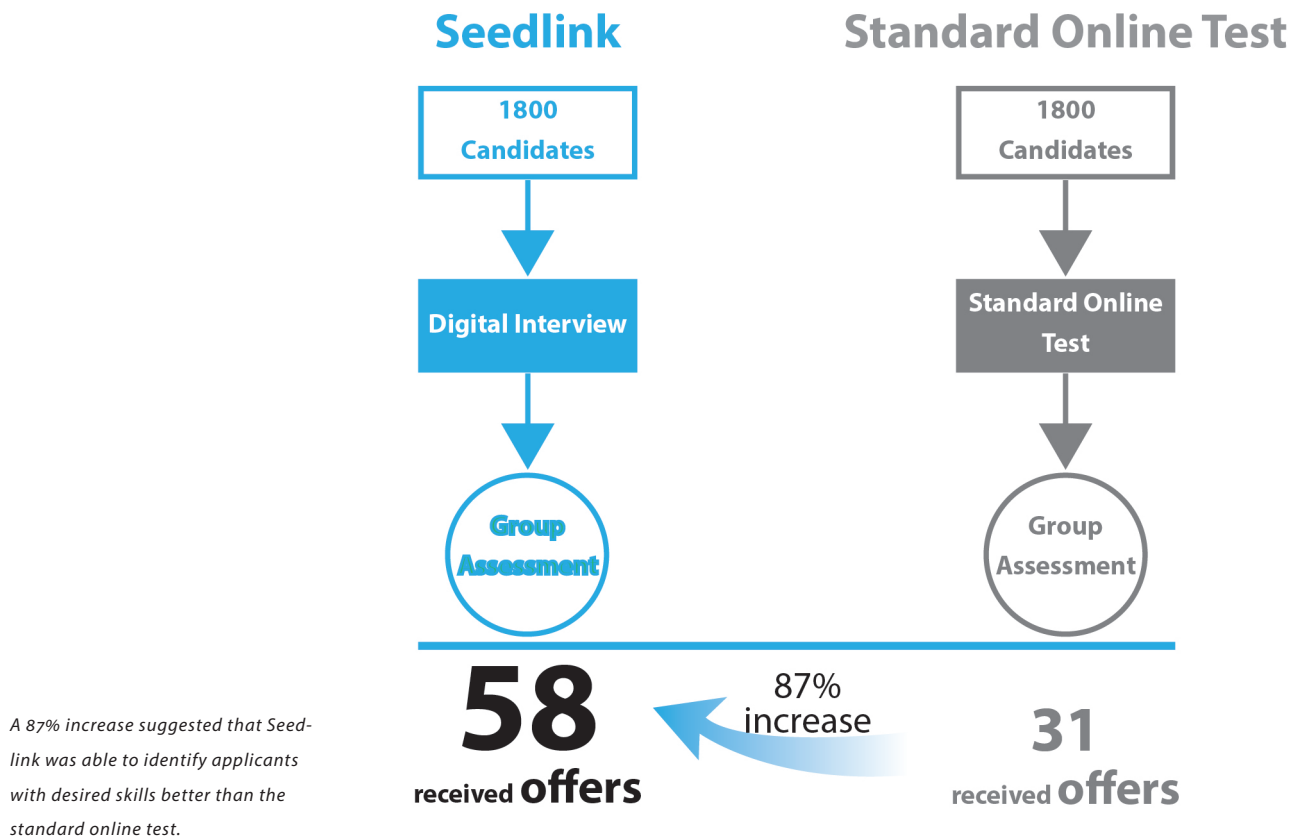
## The software predicted candidates' performance and soft competencies with 87% greater accuracy than traditional methods.

Seedlink software analyzed the language data gathered from candidates based on four desired competencies:

- Learning and Researching
- Analytical Capability
- Inter-personal Communication
- Resilience to Pressure

# Outcome

Applicants were then ranked according to their aptitudes in these aspects. In terms of accuracy, the technology out-performed the standard online testing tool the company had used for years.



A total of 1800 candidates were evaluated using both Seedlink's test and the company's standard one. The top ranking candidates from each of the two methods were then invited to participate in a formal Group Assessment. Among the applicants recommended by Seedlink, 58 received a job offer; conversely, only 31 of those recommended by the standard online test were ultimately offered a job. ■



## *People Science*

*Mapping patterns of success.*



*Want to know more? Contact us!*  
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