





# NAVIGATE FROM THIS MENU



INTRODUCTION



**HUMANOSTICS** - KEY CONTACT

PI CA INTRO

SCIENCE

DEFINING/MEASURING g

**HOW DOES IT WORK?** 

WHAT DOES IT MEAN?

**REPORTS** 

FEEDBACK MODEL

**FEEDBACK** 

SET TARGET - MANUAL

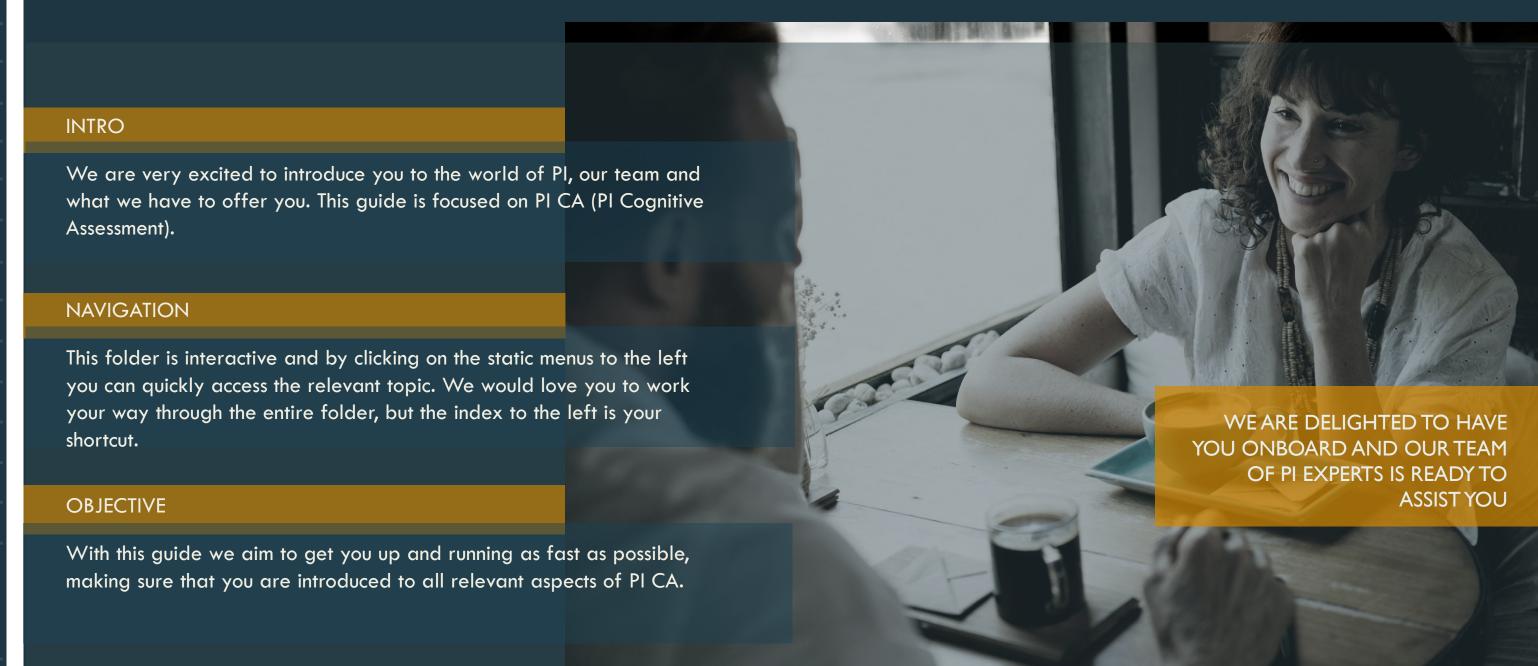
SET TARGET - WITH PI JA

GUIDELINES

**CONTACT DIRECTORY** 

# HUMANOSTICS"

# INTRODUCTION



HUMANOSTICS - KEY CONTACT



PI CA INTRO

**SCIENCE** 

DEFINING/MEASURING g

**HOW DOES IT WORK?** 

WHAT DOES IT MEAN?

**REPORTS** 

FEEDBACK MODEL

**FEEDBACK** 

**SET TARGET - MANUAL** 

SET TARGET - WITH PI JA

**GUIDELINES** 

**CONTACT DIRECTORY** 

#### OUR TEAM — MEET THE PI EXPERTS

Founded in 2009, Humanostics consists of a team of dedicated and passionate PI experts. Our unique expertise within recruitment, personal development, establishing the right teams and organisational analysis and development, takes offspring in distribution rights to market-leading assessment tools, which this guide will tell you a whole lot more about.

We are located in Hellerup, Denmark, and apart from Denmark we operate in Norway, Poland, Iceland, Luxembourg, UK, Ireland, Benelux, Germany, Australia, Hong Kong and South East Asia.

#### WE PROUDLY PRESENT THE TEAM



Managing Partner +45 6066 9721



Senior Consultant +45 2293 2327



PERNILLE FLENSTED-JENSEN IMAD BELKACEM +45 5387 0535



+45 5386 0535



**Customer Relations** +45 2938 1404



MORTEN LØKKEGAARD Chairman of the Board

**WE LOOK FORWARD TO WORKING WITH YOU AND ETABLISHING A** LONGLASTING **PARTNERSHIP** 













**HUMANOSTICS** - KEY CONTACT

PI CA INTRO



**SCIENCE** 

DEFINING/MEASURING g

**HOW DOES IT WORK?** 

WHAT DOES IT MEAN?

**REPORTS** 

FEEDBACK MODEL

**FEEDBACK** 

**SET TARGET - MANUAL** 

SET TARGET - WITH PI JA

**GUIDELINES** 

**CONTACT DIRECTORY** 







#### PI COGNITIVE ASSESSMENT (PI CA)

The cognitive test, measuring the individual's ability to attain new knowledge on the job, the degree of turnover from experience, problem solving, adaptation and discernment based on complex information.

Completion Time: 12 minutes Completed by: Candidates Languages available: 64



#### PI BEHAVIORAL ASSESSMENT (PI BA)

The psychometric personality profiling tool, measuring the individual's motivational drives and work-related behaviour associated herewith.

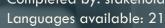
Completion time: 5-10 minutes. Completed by: candidates, existing employees. Languages available: 68



#### PI JOB ASSESSMENT (PI JA)

The online questionnaire helping you define the role and the associated personality profile and cognitive capacity matching this job, i.e., a person who will be motivated and thrive in this job.

Completion time: 10-15 minutes. Completed by: stakeholders for the job



### BRIEFCASE ASSESSMENTS (COMPETENCIES)

#### LEADERSHIP PERFORMANCE INDEX (LPINDEX)

360 assessment consolidating input from self, manager, peer and direct reports. Available for Leading Others, Leading Leaders, Functional Leaders and Business unit leaders. Completion Time: 20-25 minutes.

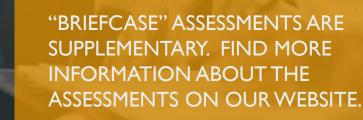
Completed by: Leaders. Languages available: 16

#### **SELLING SKILLS ASSESSMENT TOOL (SSAT)**

Selling skills assessment evaluating the sales force providing individual and company-wide insight into strengths and areas of growth within the 5 aspects of all selling processes. Open, Investigate, Present, Confirm, Position.

Completion time: 20-25 minutes.

Completed by: Existing sales force. Languages available: 13



HEAD

BRIEF







**HUMANOSTICS** - KEY CONTACT

PI CA INTRO

**SCIENCE** 



**HOW DOES IT WORK?** 

WHAT DOES IT MEAN?

**REPORTS** 

FEEDBACK MODEL

**FEEDBACK** 

**SET TARGET - MANUAL** 

SET TARGET - WITH PI JA

**GUIDELINES** 

**CONTACT DIRECTORY** 



#### PI COGNITIVE ASSESSMENT (PI CA)

The PI Cognitive Assessment was developed in 2010 by CEB Valtera for Predictive Systems Pte. Ltd. and became a part of The Predictive Index suite in 2015. PI CA is a cognitive assessment tool that measures an individual's general cognitive ability (referred to as g) and primarily serves as an assessment tool in recruitment and talent management processes.

METHODOLOGY: PI CA is a speed test (12 minutes) which consists of 50 multiple-choice questions from three content categories (verbal, numerical, and abstract reasoning) and nine subcategories. The sum of the scores from the three categories represents the PI Cognitive Assessment score, which is a measure of g (general cognitive ability). PI CA employs a linear-on-the-fly testing (LOFT) design, which is marketed as a "dynamic assessment design". LOFT is a computer-based test format where items are randomly selected from predetermined subsets (or buckets) every time a test is issued, resulting in unique combinations of the questions.

The three common standard methods applied to evaluate speeded assessment are: Reliability, Validity and Fairness.



**Reliability** – The consistency across testing instances (test-retest) and the unidimensionality of the assessment (Principal Axis Factoring). Test-retest studies reveal an acceptable level of the coefficient of stability (r= around 0.75) and PAF analyses reveal unidimensionality which translates to 1 component (g/PI CA score) as the optimal number to extract from the responses to all of the nine subcategories of questions.







Validity – Does the assessment measure what it intends to measure (construct validity) and does it predict what it is supposed to predict (criterion validity)? Construct validity studies (comparing PI CA to Wonderlic, Cubiks, Raven etc.) demonstrate solid evidence that PI CA measures what it intends to measure. Criterion-related validity is demonstrated by studies revealing that cognitive assessment scores (like PI CA score) are associated with a number of positive outcomes (performance at work, training ability etc.) and the predictive value of g in job performance increases with job complexity. When seen in isolation, a cognitive test score is the construct with the most predictive value in terms of successful job performance.



Fairness – Does the assessment measure members of the population the same way and are there any risks of adverse impact when using the assessment? In employment settings large differences in average scale scores across demographic (protected) groups can result in lower rates of selection of ethnic minorities, women, or older applicants. This is what is referred to as adverse impact. Studies demonstrate that PI CA does not produce adverse impact based on gender, age, or race.









**HUMANOSTICS** - KEY CONTACT

PI CA INTRO

**SCIENCE** 

DEFINING/MEASURING g

**HOW DOES IT WORK?** 

WHAT DOES IT MEAN?

**REPORTS** 

FEEDBACK MODEL

**FEEDBACK** 

**SET TARGET - MANUAL** 

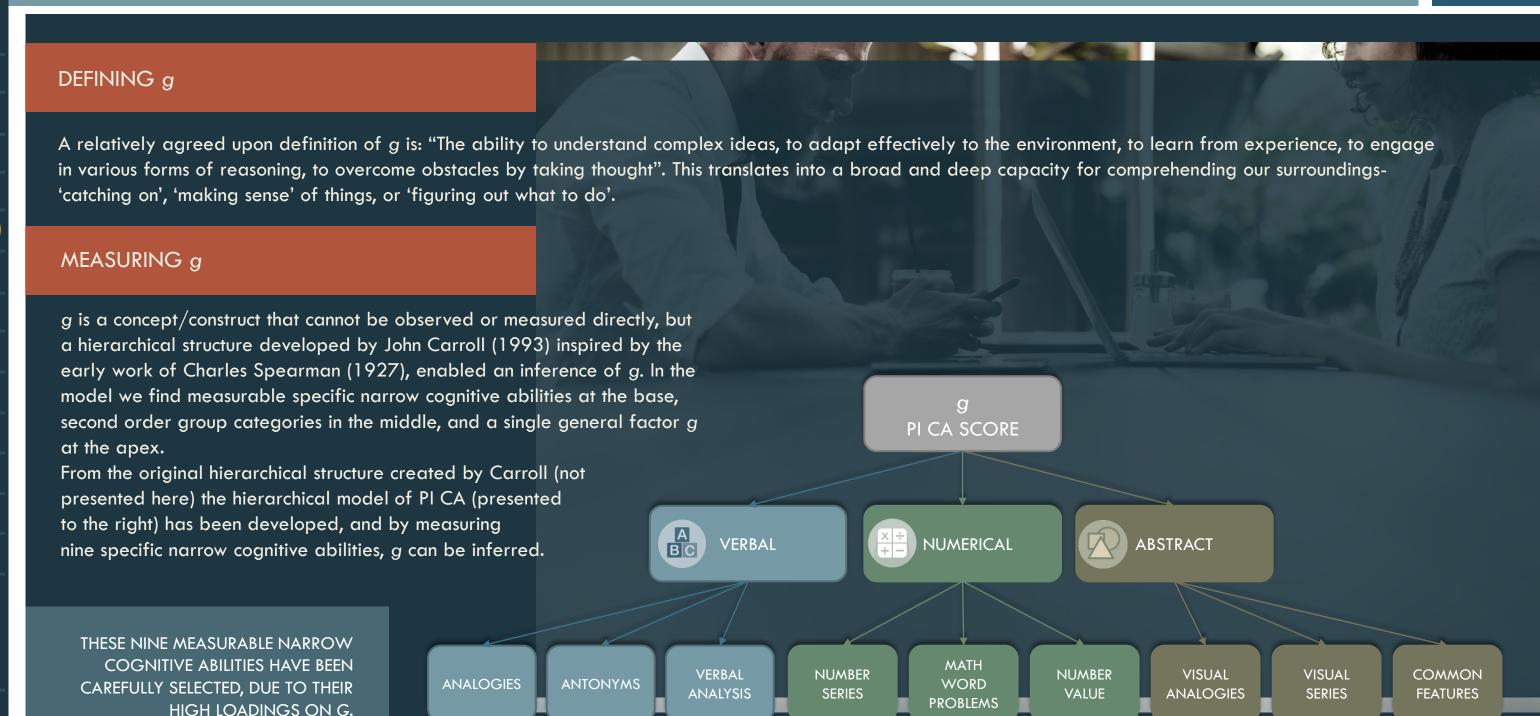
SET TARGET - WITH PI JA

**GUIDELINES** 

CONTACT DIRECTORY



# DEFINING THE 'GENERAL COGNITIVE ABILITY' (g)





**HUMANOSTICS** - KEY CONTACT

PI CA INTRO

**SCIENCE** 

DEFINING/MEASURING g

**HOW DOES IT WORK?** 



WHAT DOES IT MEAN?

**REPORTS** 

FEEDBACK MODEL

**FEEDBACK** 

**SET TARGET - MANUAL** 

SET TARGET - WITH PI JA

**GUIDELINES** 

**CONTACT DIRECTORY** 



# HOW DOES IT WORK?

PI CA METHODOLOGY

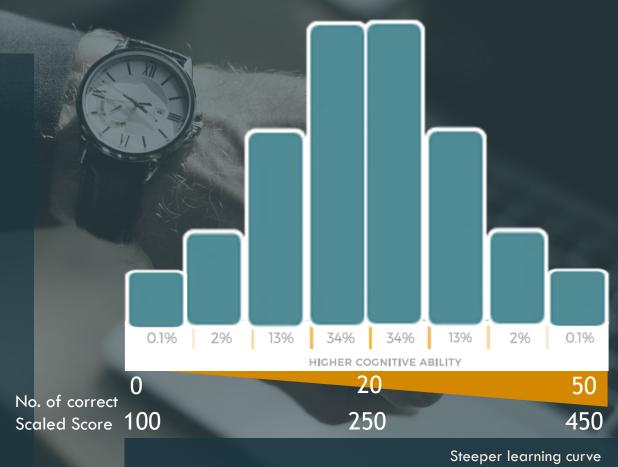
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The PI CA presents the assessment taker with 50 questions (verbal, numerical, and abstract) in random order and with varying difficulty degree. The assessment taker has 12 minutes to complete the assessment, and the objective is as many correct as possible within the timeframe.

The assessment is completed online and should be completed in an undisturbed setting, and must be completed in one sitting. The introduction email to the assessment taker provides this information.

The invitation email contains a link to a <u>prep test</u> (20 items -4:48 minutes) and the assessment taker is presented with 3 'rehearsal' questions after which the 12 minutes <u>assessment</u> is initiated. After 12 minutes the assessment closes down automatically.

The result is presented as a scaled scale from 100-450 with an average of 250. The score represents the no. of correct answers. The higher CA score, the greater cognitive capacity to expect and the higher cognitive stimulation required to engage the individual.



Better at problem-solving

Better at transferring job knowledge

Better at combining and selecting relevant information

Better at handling numerous and various activities simultaneously

**BEST PREDICTOR** 



#### INTRODUCTION

**HUMANOSTICS** - KEY CONTACT

PI CA INTRO

**SCIENCE** 

DEFINING/MEASURING g

HOW DOES IT WORK?

WHAT DOES IT MEAN?



**REPORTS** 

FEEDBACK MODEL

**FEEDBACK** 

**SET TARGET - MANUAL** 

SET TARGET - WITH PI JA

**GUIDELINES** 

**CONTACT DIRECTORY** 



PI CA greatly improves your odds of selecting individuals who catch on quickly, figure things out on their own, and are able to meet or exceed performance expectations.

The general cognitive ability is an expression of:

- How fast learning can take place
- ❖ The degree of turnover from instruction and experience
- Processing new information
- Problem-solving
- Adaptation
- Discernment based on complex information

Flatter learning curve Finds problem-solving difficult Poorer at transferring job knowledge Poorer at combining and selecting relevant information Poorer at handling numerous and various activities simultaneously

#### **TRAINABILITY** 'Cognitive Abilities is the single best predictor of individual The link between g and positive outcomes, such as job performance and career progression - the last 100 years performance is founded in the concept 'trainability'. of accumulated science shows that, all other things being A person with a higher level of g is trainable in the equal, smarter people do better.'

Thomas Rasmussen, Ph.D., Industrial and Organizational Psychology Author of Data-Driven HR - A Practical Guide for Leaders & HR

Former Head of Assessments in Maersk Former VP Assessments & Psychometrics, Royal Dutch Shell GM People Analytics, Insights & Experience, National Australia Bank:



250

sense of being able to acquire more complex skills and

trainability enables them to attain the necessary skills

needed to perform or succeed as such. This is why g

matters in numerous aspects of life, including the ability

work more proficiently with those skills. Their

to succeed professionally.

100

Steeper learning curve Better at problem-solving

450

Better at transferring job knowledge

Better at combining and selecting relevant information

Better at handling numerous and various activities simultaneously









**HUMANOSTICS** - KEY CONTACT

PI CA INTRO

SCIENCE

DEFINING/MEASURING g

HOW DOES IT WORK?

WHAT DOES IT MEAN?

**REPORTS** 



FEEDBACK MODEL

**FEEDBACK** 

SET TARGET - MANUAL

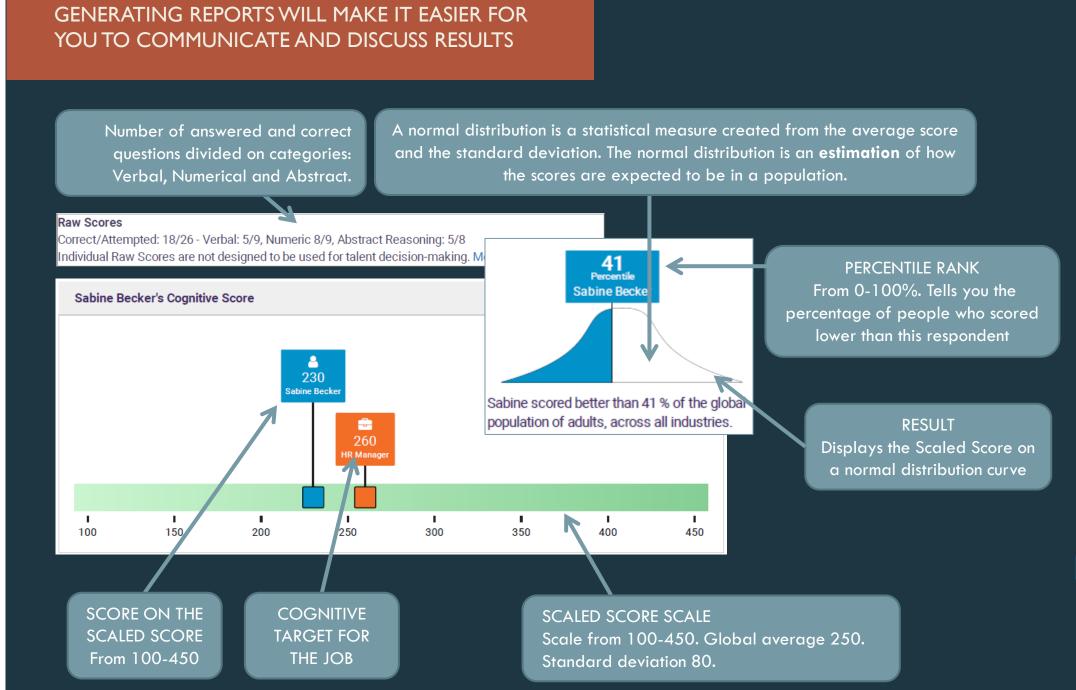
SET TARGET - WITH PI JA

GUIDELINES

**CONTACT DIRECTORY** 



# **REPORT**



### SCALED SCORE

	SCALED	SCORE	<b>E V</b> :	S. RAW	SCORE	
Scaled	Raw			Scaled	Raw	
Score	Score	Percentile		Score	Score	Percentile
100	1	1%		310	26	77%
100	2	1%		320	27	81%
100	3	1%		330	28	83%
100	4	1%		340	29	86%
100	5	1%		350	30	88%
110	6	2%		360	31	90%
120	7	3%		370	32	92%
130	8	4%		380	33	93%
140	9	6%		390	34	94%
150	10	8%		400	35	95%
160	11	10%		410	36	96%
170	12	14%		420	37	97%
180	13	17%		430	38	98%
190	14	21%		440	39	98%
200	15	26%		450	40	98%
210	16	31%		450	41	99%
220	17	36%		450	42	99%
230	18	41%		450	43	99%
240	19	46%		450	44	99%
250	20	54%		450	45	99%
260	21	57%		450	46	99%
270	22	61%		450	47	99%
280	23	66%		450	48	99%
290	24	70%		450	49	99%
300	25	74%		450	50	99%

REMEMBER YOU CAN USE ALL REPORTS - AT NO ADDED COST



**HUMANOSTICS** - KEY CONTACT

PI CA INTRO

**SCIENCE** 

DEFINING/MEASURING g

HOW DOES IT WORK?

WHAT DOES IT MEAN?

**REPORTS** 

**FEEDBACK** 

FEEDBACK MODEL



SET TARGET - MANUAL

SET TARGET - WITH PLJA

**GUIDELINES** 

CONTACT DIRECTORY



# FEEDBACK MODEL

5-STEP FEEDBACK MODEL – KEEP IT SIMPLE

Step I

Step 2

Step 3

Step 4

Step 5

#### INITIATE

the feedback with: How was the experience? What was your strategy?

Asking these questions tells you if you can trust the result, as disturbances or the like are very likely to be mentioned here. It also allows for a discussion of how the assessment taker reacts to time pressure, how they approached the assignment etc.

#### **PROVIDE**

a short summary of what the assessment measures. Pl Cognitive Assessment measures learning ability and reflects how fast an individual will obtain the necessary knowledge in the job to successfully master the job.

It tells you how well the individual handles complexity and deals with decision-making based on complex information. Problem solving and adjustment abilities are also important aspects of job success measured by the assessment.

#### PRESENT

the result. Don't hesitate – the candidate is interested in the result. Reveal the Scaled Score and explain that the scale goes from 100-450 with an average of 250. If preferred you can elaborate by the number of questions answered and the no. of correct (also on category level, if you like).

How to deliver a below average result?

We suggest you use phrases from the next slide.

#### COMPARE

the result to the reference group. The easiest way is to use the percentile. Reveal the percentile (you scored as well as or better than x% of the population). Another way to present a result is to say if the score is in the upper or lower 50% compared to the global norm. Explain that very few people respond to all 50 questions (on average 28).

#### **EXPLAIN**

how the PI Cognitive
Assessment Scaled Score is just one of several factors taken into account. The score is never to be considered in isolation, but as a part of a holistic evaluation including personality, experience, skills, motivation, values, cultural fit etc.

MAKE INTERNAL GUIDELINES ABOUT HOW YOUR COMPANY SHARES RESULTS/REPORTS

**HUMANOSTICS** - KEY CONTACT

PI CA INTRO

**SCIENCE** 

DEFINING/MEASURING g

**HOW DOES IT WORK?** 

WHAT DOES IT MEAN?

**REPORTS** 

FEEDBACK MODEL

**FEEDBACK** 

**SET TARGET - MANUAL** 

SET TARGET - WITH PI JA

**GUIDELINES** 

**CONTACT DIRECTORY** 



# **FEEDBACK**

You can choose to translate the CA score into words by using phrases like the ones presented below.

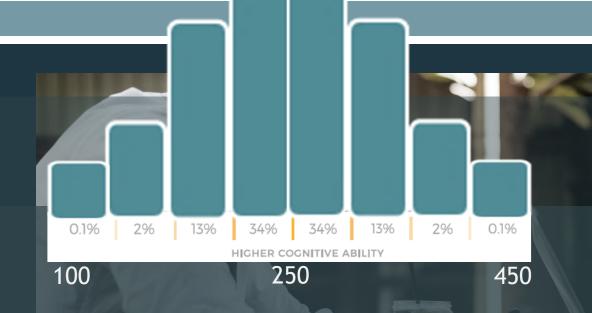
The 'Tips' sections are for internal reference.

### 100-210 (BELOW AVERAGE)

People with lower scores are likely to adapt better to jobs and environments which match their experience, knowledge and skills. They take more time than others to acquire new knowledge and to familiarise themselves with new tasks or changes in the environment. They perform well in habitual tasks and can solve familiar problems of less complexity and problems that do not require abstract thinking.

They can handle variety in the job but need time to absorb new knowledge and/or to adapt to new situations.

Tip: Understand how much knowledge and experience is required for the individual to be able to overcome and handle new problems independently. Allow gaining new skills with experience and time.



### 220-280 (AVERAGE)

People with average scores are likely to be able to adapt to a changing environment with a certain degree of variety. They can handle operational and specialised tasks requiring a certain amount of knowledge and complexity. They are expected to learn quite quickly and are suited for jobs that require a relatively fast learning capability and comprehension of new situations. They can process complex problems/challenges in the job at an average pace and will be able to handle and process tasks simultaneously. Tip: Provide an environment that leaves room for development as the individual becomes acquainted to the role/tasks.

### 290-450 (ABOVE AVERAGE)

People with higher scores can be expected to be capable of acquiring large amounts of new and complex knowledge at high pace and to understand the broad and deep implications of changes in a job content and environment. They react very quickly to stimuli and changes and adapt very well to new conditions. They can handle a great deal of complexity in the job and are expected to have a very steep learning curve. They can process complex problems/challenges in the job at high pace and will be able to handle and process numerous tasks simultaneously.

Tip: People with higher CA scores tend to enjoy complex assignments/tasks and need a challenging environment to keep their motivation high.



**HUMANOSTICS** - KEY CONTACT

PI CA INTRO

**SCIENCE** 

DEFINING/MEASURING g

HOW DOES IT WORK?

WHAT DOES IT MEAN?

**REPORTS** 

FEEDBACK MODEL

**FEEDBACK** 

**SET TARGET - MANUAL** 



SET TARGET - WITH PI JA

GUIDELINES

**CONTACT DIRECTORY** 

## SET TARGET SCORE - MANUAL

The research behind g is clear – the higher general cognitive ability the greater chances of success in terms of mastering cognitively challenging aspects of the job.

So what is the ideal scoring range for a particular job?

250 (average) is your starting point.

- Ask yourself: How complex is the job?
   High complexity = Aim for higher than average:
   Low Complexity = Lower than average.
- 2. You may decide to adjust the target range ref. the three boxes to the right.
- 3. If the job is a manager or director-level role, consider adding points to the target range.
- 4. If the position is executive-level (VP or above) consider adding additional points to the target range.



Steeper learning curve

Better at problem-solving

Better at transferring job knowledge

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#### Consider LOWERING your target range if:

The work environment is very stable with few unexpected situations or changing demands. The job does not require the candidate to learn new information, is very tactical with heavy routine and repetition, doesn't require working with memorisation, thinking strategically, or long-term planning.

#### Keep the target range if:

The work environment is relatively stable but changes are occurring that require adaptability and learning of new information. The job tends to balance routine and novelty in tasks, requiring some work with analysing/understanding data, a mix of tactical, strategic thinking, and planning.

### Consider RAISING the target range if:

The job requires the need for constant and rapid learning of new information; the ability to quickly "figure things out" with little structure or guidance; tends to have very little routine or repetition, requires mastery of analysing/understanding data; involves complex problem solving, and long-term strategic planning. The work environment is changes constantly and will often require adaptation to changing demands and ambiguity.







# SET TARGET SCORE - WITH PI JOB ASSESSMENT

INTRODUCTION

**HUMANOSTICS** - KEY CONTACT

PI CA INTRO

**SCIENCE** 

DEFINING/MEASURING g

HOW DOES IT WORK?

WHAT DOES IT MEAN?

**REPORTS** 

FEEDBACK MODEL

**FEEDBACK** 

**SET TARGET - MANUAL** 

SET TARGET - WITH PI JA



**GUIDELINES** 

**CONTACT DIRECTORY** 



IN PLIOB ASSESSMENT STAKEHOLDERS ARE ASKED TO EVALUATE THE JOB COMPLEXITY, I.E. THE COGNITIVE CAPACITY REQUIRED IN THE JOB

- 1. Pl Job Assessment contains a section covering the behavioural aspects of the job followed by e section asking the stakeholder(s) to give input to the complexity of the job.
- 2. Administrators will be able to see all individual stakeholder inputs.
- 3. This allows the administrator to facilitate a discussion with the stakeholder(s) to gain consensus on what is required in the job in terms of motivational drives and cognitive capacity.



2. Individual stakeholder inputs

1. Cognitive items in PI JA

**Behavioral Instructions** 

3. Agreed cognitive job target



In each of the following categories, please indicate the level of ability required to succeed in the job role. Keep in mind that most jobs will require basic, intermediate, and advanced ability at some point in the job; focus on a vilities that will be required for success MOST OFTEN. Remember: "Basic" abilities will be common in most jobs, "Intermediate" will be less common, and "Advanced" will rarely be necessary for most jobs.

#### Memorization remembering information

### Basic

Frequently memorizing a few pieces of information and/or

#### Intermediate Frequently memorizing

multiple details and/or

#### None

Frequently memorizing large amounts of information and/or data.

Advanced

### This job does not

### Planning and Organizing

creating plans or structure

#### Basic

Majority of time spent planning tasks and goals for the day.

#### Intermediate

Majority of time spent planning multiple tasks and goals spanning days or weeks.

#### Advanced

Majority of time spent planning multiple tasks and goals spanning months or years.

#### None

This iob does not require planning.

# RECRUITMENT GUIDELINES – ONSITE / OFFSITE ?

INTRODUCTION

**HUMANOSTICS** - KEY CONTACT

PI CA INTRO

**SCIENCE** 

DEFINING/MEASURING g

HOW DOES IT WORK?

WHAT DOES IT MEAN?

**REPORTS** 

FEEDBACK MODEL

**FEEDBACK** 

SET TARGET - MANUAL

SET TARGET - WITH PI JA

GUIDELINES



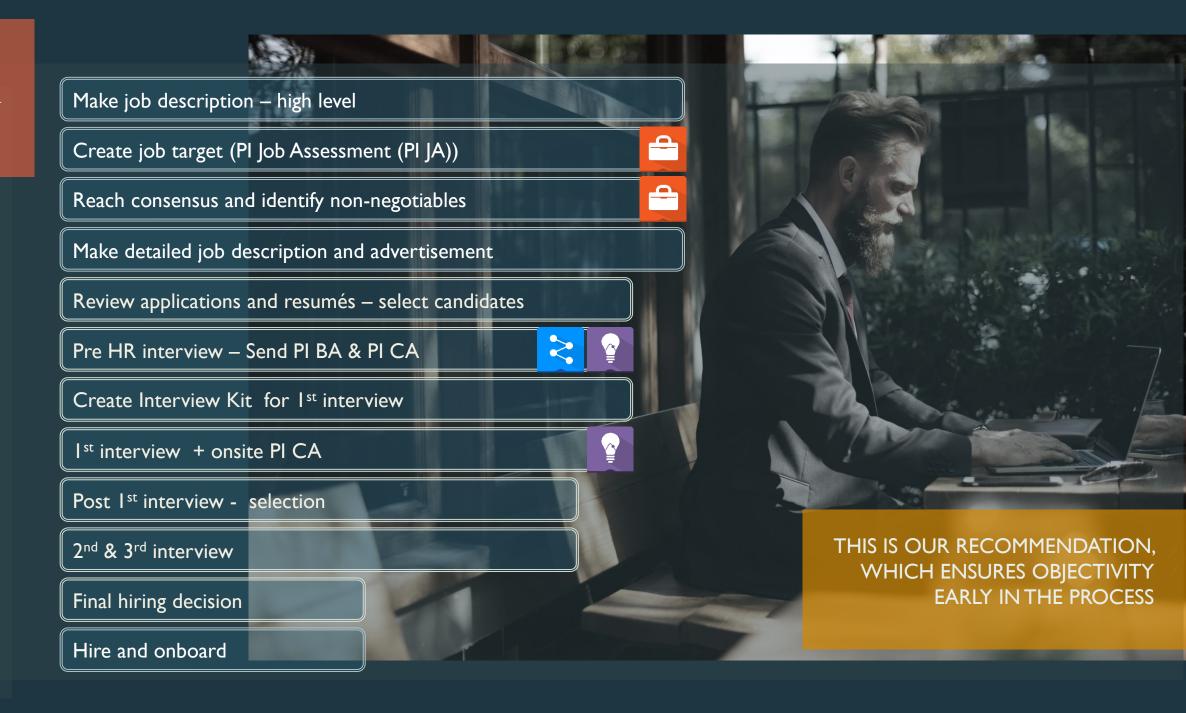
**CONTACT DIRECTORY** 

WHAT DOES THE IDEAL RECRUITMENT PROCESS LOOK LIKE IN YOUR COMPANY?

The process presented here is our recommendation supported by the PI software.

Applying assessments early in the process ensures objectivity and administering an onsite CA helps you validate the 1<sup>st</sup> assessment result and eliminates the possibility of cheating.

Create your own internal guidelines for administering assessments.





REMEMBER THAT YOU NEED TO FIND OUT WHAT WORKS FOR YOU

# CONTACT DIRECTORY

INTRODUCTION

**HUMANOSTICS** - KEY CONTACT

PI CA INTRO

SCIENCE

DEFINING/MEASURING g

**HOW DOES IT WORK?** 

WHAT DOES IT MEAN?

**REPORTS** 

FEEDBACK MODEL

FEEDBACK

SET TARGET - MANUAL

SET TARGET - WITH PI JA

GUIDELINES

CONTACT DIRECTORY





