

# Cognitive Bias Test

MEASURING HIDDEN THINKING

Report for Respondent 1, of Example Co Ltd

Created 30<sup>th</sup> November, 2016



## Introduction to the Cognitive Bias Test

We all have cognitive biases. They are persistent and systematic corruptions in our thinking – and there are around 150 of them. The Cognitive Bias Test (CBT) which you have taken draws on decades of experience in helping bomb-disposal operators to deal with the effects of cognitive biases on their decision-making. This work led to methods of identifying which cognitive biases a team and the leader may have; it also influenced the strategies used when helping senior executives to deal with bias in the business context.

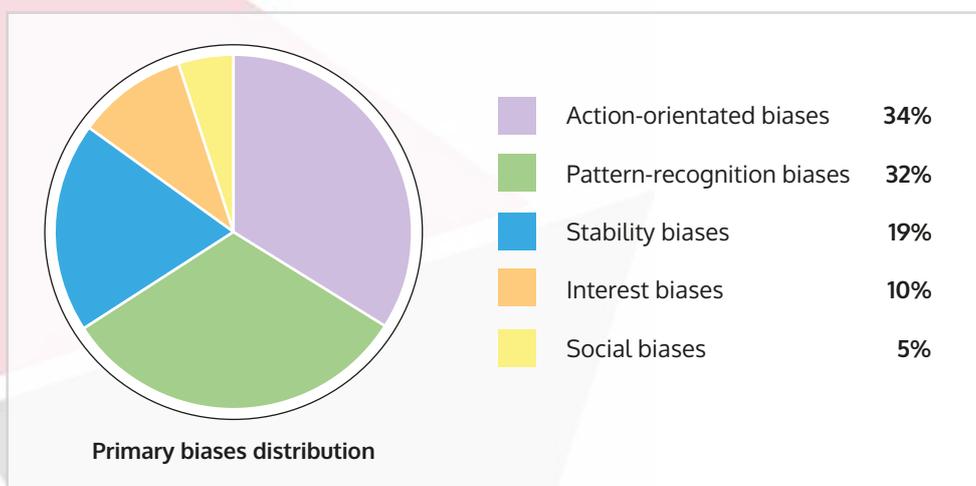
Research by Lovallo and Sibony<sup>1</sup> showed that there were five main areas of cognitive bias with the most impact on business decisions. The Cognitive Bias Test has 60 questions which test for cognitive biases in each of these five business-related areas. One set of these questions tests for your own, internal, cognitive biases. Another set of questions tests your view of the biases of your colleagues on the team – or the external cognitive biases. The latter results are then aggregated with the views of the other team members to produce results for the whole group

The questions are designed on a true/false basis – intended to force an answer which indicates the likelihood of the bias existing. The questions allow for strong agreement and disagreement to be recorded – and these responses are given additional weighting when the bias is calculated.

The cognitive biases of the group are calculated as an average of all external bias responses. These data are also used to measure some of the biases in individual responses. Your view of each of the group's biases is compared with the average view, with any significant difference between the two indicating an oversensitivity (or undersensitivity) to questions on that particular type of bias. If the discrepancy is statistically significant (i.e. outside of the SD1 range), a weighting is then applied to your individual bias result in that area. In short, the average group result is also used to test for, and reduce the effects of, your biases, when answering questions.

Senior leaders in a wide variety of organisations have taken the Cognitive Bias Test. The bulk of these (>90%) has been from large commercial companies, with the remainder from government service. All senior leaders have at least one highest-scoring category of biases, known as their primary biases. These are not distributed evenly among the five categories of bias.

Primary biases are distributed among the leaders surveyed as follows:



Further information on cognitive biases and their measurement can be found at: [www.CognitiveBiasSolutions.com](http://www.CognitiveBiasSolutions.com)

1. *The Case for Behavioral Strategy* by Dan Lovallo and Olivier Sibony; McKinsey Quarterly, 2010



# Cognitive Bias Test Report

Cognitive biases are distinct from unconscious biases. Both are subconscious, but unconscious biases start from quick judgements of people – which can lead to stereotypes being formed. These, in turn, give rise to prejudice. Cognitive biases are persistent corruptions in our thinking which affect almost all of the pathways between personality and behaviour. The pathways model can help to put this into context. Further details of the pathways model can be found at: [www.CognitiveBiasSolutions.com/understanding-cognitive-biases](http://www.CognitiveBiasSolutions.com/understanding-cognitive-biases)

We all have these cognitive biases. They drive the tendency to acquire and process information through our likes, dislikes and experiences. They are the product of mental shortcuts, or simple rules of thumb, helping us to deal with complexity and ambiguity in a way that is good enough to get us through. As such, they are usually beneficial in ‘tactical’ leadership situations.

However, they can be a severe hindrance to strategic leadership.

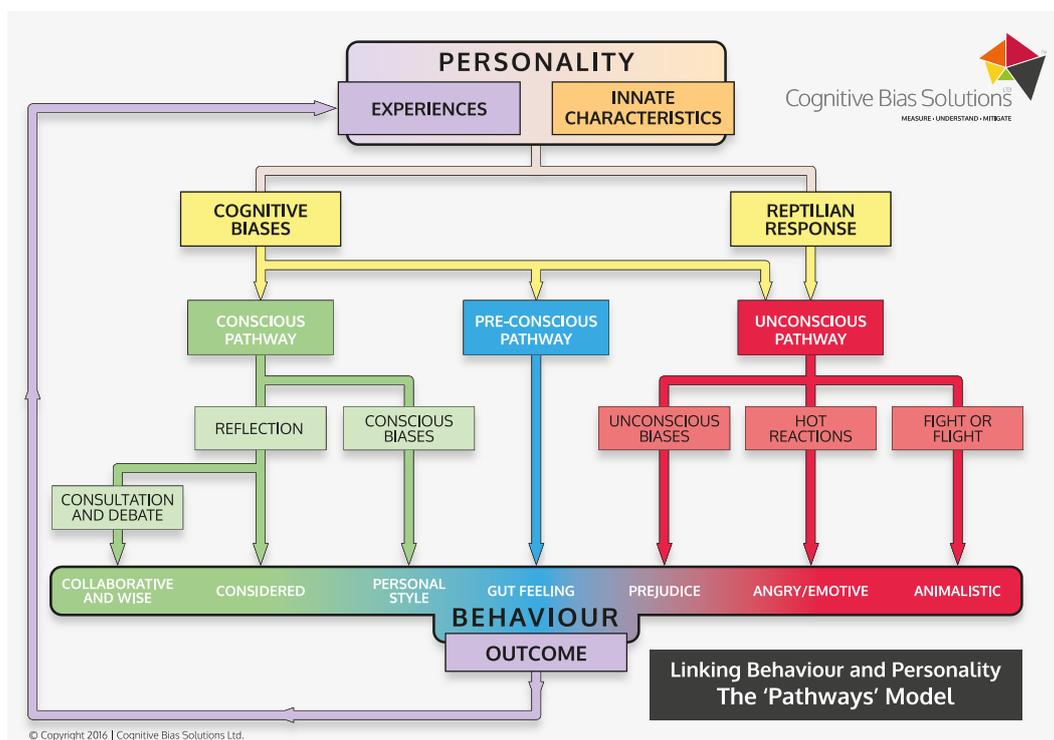
Strategic leaders create the

conditions for success. They set the direction by changing the organisation’s internal culture and systems so that they match the external environment – now and in the future. Strategic leaders then make sense of what is emerging and steer the response. Cognitive biases disrupt these three stages because:

1. they cloud our judgment of both the external environment and the internal culture and systems of the organisation.
2. when making sense of what is emerging, they filter our perceptions, so that some facts can be downplayed or even ignored, while assumptions may be mistaken for facts.
3. when responding to what is emerging, they restrict the range of options considered.

Further context on the competencies of strategic thinkers can be found on page 10.

Finally, one warning before you look at the results (overleaf) of your CBT: the test measures cognitive biases, not behaviours. As such, an absence of action-orientated cognitive biases, for example, does not mean that you cannot take action. It means that the data indicate that corruptions in your thinking do not appear in that area – whether you have this bias or not, you will be equally capable of taking action. To take another example, an absence of social biases does not mean that you can or cannot get on with your colleagues – it means that the data indicate that you do not have corruptions in your thinking in that area of cognitive biases.



# Your Results

## Results for Respondent 1

All participants took the Cognitive Bias Test. The results are shown in the three colour-coded charts, with black representing an exceptionally strong cognitive bias – then red, amber, yellow and green showing reducing levels of cognitive bias.

Although the charts indicate the precise data from your responses, the patterns in the data are more important than the absolute numbers. In particular, you need to understand your own primary cognitive biases and how your view of the team's cognitive biases compares with the team's view.

Respondent 1 – the data indicate that your primary cognitive biases are Action-orientated biases, coupled with strong pattern-recognition biases and moderately strong stability and interest biases. The drawbacks of social biases would be much less of a challenge for you.

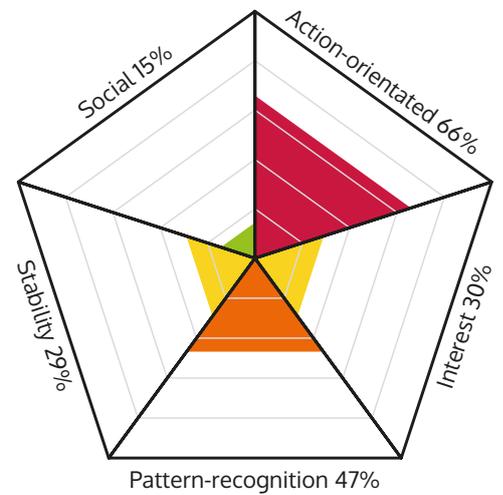
Your view of the cognitive biases of the team, as a whole, is shown in the middle bias map. This is a reasonably close fit with the results from your colleagues (the bottom bias map), apart from Action-orientated biases – these appear to form a blind spot.

While you do underreport stability biases, the data otherwise indicate that you understand the culture of the team reasonably well – in four of the five areas of cognitive bias.

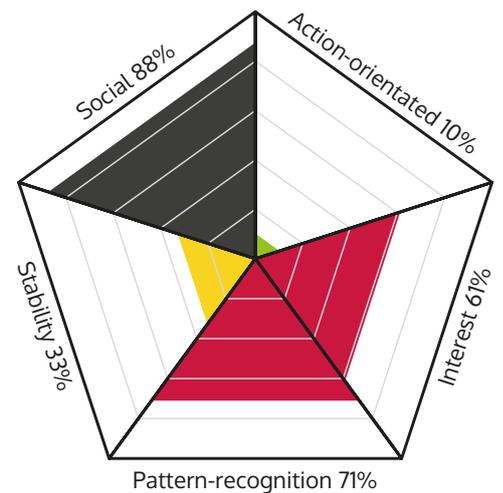
The data also show that you are an outlier on social biases for this team. This indicates that you will be more willing to be controversial during debates where your own biases are not triggered and will challenge the group to think differently.

In the workshop, we will be concentrating on techniques to mitigate the negative effects of cognitive biases. Some of the techniques we will develop together will be useful for the whole leadership team, while others will be useful individually.

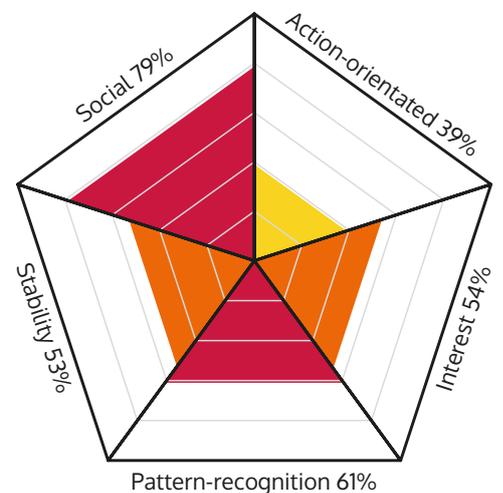
In preparation for our workshop later this month, please review the benefits and drawbacks of the biases identified by the survey (see the following pages of this report), and give some thought to specific techniques that could be used to overcome the drawbacks that the data indicate.



Your individual cognitive biases



Your view of the group's cognitive biases



The team's view of the group's cognitive biases

## Action-Orientated biases

These help us to get things done, yet can drive us to take action less thoughtfully than we should.

### Benefits:

- Things get done quickly.
- A bias towards action and optimism is an attractive leadership trait.
- It is often equally attractive in subordinates (leading to a reinforcing cycle of bias between leader and subordinate).
- Good in a crisis, disaster or business-continuity scenario.
- Can encourage creativity and free thinking, particularly if combined with a 'permission to fail' culture.

### Drawbacks:

- On a strategic level, thinking is clouded, driving us to take action less thoughtfully than we should. This is caused by overconfidence.
- On a tactical level, this bias drives us to take credit for events, when this is not strictly justified.
- It also drives us to neglect the role of chance.
- It tends to reduce team cohesion and effectiveness.
- It can lead to team burn-out.
- There is often a lack of future focus in the team.
- Training and development tend to suffer.
- The bias drives the need to do something, even when doing nothing would be best.

Mitigating Action-Orientated Biases	
Actions I can take as an individual	Actions we could take as a team

# The benefits and drawbacks of the five areas of cognitive biases

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## Interest biases

These arise in the presence of conflicting incentives, including monetary, non-monetary and emotional ones.

### Benefits:

- They can be helpful in independent teams in multinational corporations. Actions that make sense locally, but may not be completely aligned with the corporate aims, will be taken.
- They can drive innovative discussion about corporate goals.
- They can drive brand loyalty in the team.
- They can attract strong talent, as the bonus culture is often strong.

### Drawbacks:

- They can lead to teams pursuing objectives that are not in the organisation's interest.
- They often drive inappropriate attachments to legacy products or brands.
- They can drive silo mentality across the team.
- They tend to encourage a short-term approach to the business.
- They can indicate inappropriate emotional attachments in the team.

Mitigating Interest Biases	
Actions I can take as an individual	Actions we could take as a team



## Pattern-Recognition biases

These allow for rapid decisions through recognising patterns, even where there is none...

### Benefits:

- Pattern-recognition is driven by experience. Experienced executives can see problems in the patterns of a situation, where others will miss them.
- They can also see opportunities.
- The ability to spot patterns also drives good coaching and mentoring.
- Decisions tend to happen faster.
- It can be empowering for team members, particularly if coupled with secure leaders.

### Drawbacks:

- These biases lead us to ignore conflicting evidence.
- They lead to false analogies.
- They cause us to be overly convinced by a glib, yet coherent, narrative.
- They drive us to judge people's merits on past actions, rather than a sober analysis of their likely ability to deal with the current situation.
- There tends to be a lack of contingency plans.
- They can be particularly dangerous when using 'big data', where patterns can often be found to justify almost any course of action.

Mitigating Pattern-Recognition Biases	
Actions I can take as an individual	Actions we could take as a team

# The benefits and drawbacks of the five areas of cognitive biases

## Stability biases

These create a tendency toward inertia in the presence of uncertainty.

### Benefits:

- They stop us from 'rocking the boat' or upsetting people for no reason.
- They stop us from fiddling with those things (such as systems), which are not broken.
- They allow us to choose to do nothing, when this is the best course of action.
- They can give a strong, singular sense of purpose, so that the organisation does not become 'blown off course'.
- They encourage a reliance on history and tradition within the team, which can have benefits for team spirit and improve retention of talent.

### Drawbacks:

- They can cause us to stick to an initial position and discount contradictory evidence. This leads to insufficient adjustments of subsequent estimates. The organisation gets left behind the competition.
- They can cause us to be overly risk averse.
- They can cause a sentimental attachment to historical costs which clouds judgment of future courses of action.
- They tend to hamper innovation, causing the status quo to appear more attractive than it really is.
- Particularly at lower levels, they tend to retain more mediocre talent, rather than top talent.
- When change is eventually forced on the organisation, it tends to be costly and painful.

Mitigating Stability Biases	
Actions I can take as an individual	Actions we could take as a team



## Social biases

These arise from the preference for harmony over conflict.

### Benefits:

- They drive us to seek consensus, when decision-making.
- They assist in building and maintaining harmonious teams.
- They can significantly reduce stress in individual senior executives.
- The team will have a reduced tendency to silo mentality.
- It is easy to cascade down ideas and initiatives.
- Implementation of decisions tends to be fast.
- They tend to breed loyalty and cohesion within the team.

### Drawbacks:

- They tend to breed groupthink. Consensus is sought at the cost of a realistic appraisal of alternative courses of action.
- Innovative ideas tend to be suppressed.
- Effort can be wasted in guessing the intention of the leader, rather than taking independent action and reporting on what is going on.
- Succession of the leader is frequently an issue, unless very carefully managed.
- While implementation can be fast, decision-making can be slow.
- There tends to be a lack of team accountability.
- There is a risk of the team becoming satisfied with mediocrity.

Mitigating Social Biases	
Actions I can take as an individual	Actions we could take as a team



	E	Y	Y?	No	Comments
<b>I understand and can mitigate my cognitive biases and those of the senior leadership team.</b>					
I can map my cognitive biases in the 5 main areas.					
I understand the cognitive biases of my colleagues/peers on the senior leadership team.					
I know how to mitigate the effects of these cognitive biases.					
<b>I understand my strategic role, i.e. to create the conditions for success by changing the internal culture and systems to meet the external environment, now and in the future.</b>					
I spend about 30% of my time understanding the people and culture in my organisation.					
I quickly sense challenges and opportunities in the external environment.					
I can articulate how conflict and opportunity can be addressed by clarifying what must be kept, lost and created.					
<b>I can see the connections that matter, in both the internal workings of the organisation and in the external environment.</b>					
I have a clear concept of the whole, rather than an in-depth knowledge of one of the parts.					
I constantly test and refine the models I create of the organisation and the external world.					
I can synthesise and simplify, i.e. create clarity out of complex and seemingly disconnected details.					
<b>I provide a sense of direction through a cogent view of the future.</b>					
I search for the unusual or something different.					
I understand assumptions, use them wisely and constantly test them.					
I can resist distraction and see things through, yet I do not let one decision necessarily dictate future decisions.					
<b>I seize opportunities as they emerge.</b>					
I can feel the winds of change, often through insights from my own diverse interests.					
I intentionally look at things from a different perspective.					
I relish contact with staff and customers – discussions often reveal opportunities.					
<b>I am comfortable with uncertainty and experimentation.</b>					
I generate a hypothesis, test it, make sense of what is emerging and steer the response.					
I understand that data are for analysis rather than creativity.					
I understand basic probability and apply it to the data which I analyse.					

E: Exemplary    Y: Yes    Y?: Yes, but...    No: means No



### My commitments

To help the team make better strategic decisions, I will:

1: \_\_\_\_\_  
\_\_\_\_\_

2: \_\_\_\_\_  
\_\_\_\_\_

3: \_\_\_\_\_  
\_\_\_\_\_



# Cognitive Bias Solutions<sup>LTD</sup>

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