## **PROBLEM SOLVING**

### INTERMEDIATE

RECOGNISING PROBLEM SOLVING BIASES



**SKILL ADDRESSED:** Problem Solving

**LEVEL OF CHALLENGE:** Intermediate

**TITLE OF ACTIVITY:** Recognising problem solving biases 

## **INTRODUCTION TO THE SKILL**

Despite problem solving being a process we would deem highly rational, it is often plagued by behavioural biases which hinder our ability to maximise efficiency and minimise costly mistakes. Behavioural biases are unconscious beliefs or ways of thinking, which affect our decisions and make us deviate from rational choices. By understanding biases, we can understand the mistakes we are prone to make. Think of it as a safeguard that prevents you from committing some of the most common errors. This aspect is crucial because while the problem might initially appear straightforward, succumbing to underlying biases can unexpectedly transform it into a convoluted challenge.

In this challenge you will be able to see how different biases may affect various functions, such as finance or sales. With this in mind, let us view what this challenge has to offer us!

# THE CHALLENGE

As more and more time passes in your company you notice some biases taking place in your daily work routine:

- a. The IT department is trying to find the best file syncing system. Due to the sheer number of services and custom solutions available the department is having trouble making a decision.
- b. The product designer ignores historical sales and only takes into account the short term trends.
- c. The data analyst is well read and believes that their hypothesis applies to the current problem the company is investigating. The analyst only searches and finds data supporting their view.
- d. The financial officer reacts moderately when more profit is generated. However, whenever costs occur you observe them overreact.

You decide to learn more about the bias that can affect problem-solving by doing some independent research!





## STRUCTURE

These resources regarding biases will help you understand what problems the functions above are facing. Which do you find the most interesting? You can click on the resources to learn more about the biases you are about to use:

- 1. <u>Prospect theory</u> suggests that people make choices based on perceived gains and losses rather than objective outcomes. It is suggested that people are loss averse. Think how this applies to a problem with risk factors.
- 2. <u>Choice overload</u> refers to the inability of making a decision when there many alternatives which seem equally good. It is similar to entering an ice cream store and being unable to choose a flavor when all look tasty.
- 3. <u>Availability</u> bias takes place when people forget the big picture in favor of data, which is directly available at that moment.
- 4. Have you noticed that people tend to research or read something, which are in accordance with their views? This is what is called, in behavioral science, <u>confirmation bias</u>.

Which biases apply and how do they affect each department in the scenario? Can you think of the ways these biases affect the problems that each actor in the scenario is trying to solve?

In addition, once you match and develop the biases according to the problem each actor is trying to solve, you can view how these biases can be combined, as they are not mutually exclusive. Can one irrational thought create another?

### **DEMONSTRATION AND EVALUATION**

It is great to see your progress! Did you experience any of these biases in your own thought process? Everyone does at some point as we all share similar cognitive structures. While there are many cognitive biases to explore in the realm of behavioural science and behavioural economics, the ones you have encountered here are most relevant to problem solving. They teach us that the severity of problems can often be the creation of our own doing when the implementation is done through an irrational filter.





If the solution to the problem generates more problems, this does not constitute problem solving but rather a form of burden sharing among different departments or across different points in time. Of course, all biases can apply to all departments of a business. Do you think, however, that certain professions have cultures, which are prone to certain biases, affecting their problem solving skills? If so, what could be the biases related to your own vocational orientation or choices?

In addition, it is important to consider the potential preliminary measures to stop biases from taking over. It could be something as simple as writing everything on a piece of paper to clear your mind or even drafting an internal company policy.

Are you ready to take the quiz for this section?







# **INTERFACE**















Co-funded by the European Union "The European Commission's support of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission can not be held responsible for any use which may be made of the information therein." Project Number: 2021-1-DE02-KA220-000034783