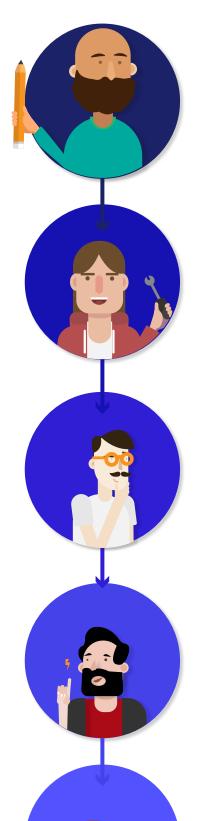
# **DATA SCIENCE**PROCESS TIPS

Data science is a repeatable process anyone can follow. In this 5-minute guide, we'll go through each step and ask some key questions you need to address to make that stage (and the entire project) a winner.



#### **IDENTIFY THE QUESTION**

• What's the problem we're trying to solve? • Have you s:poken to the person presenting the problem? • Have you researched your industry in detail, to learn about common pitfalls or problems competitors have also had? **DIG DEEPER:** Question your key stakeholders to get the real facts and reasons behind the investigation. Discover the questions to ask in Chapter 4.

#### PREPARE THE DATA

• Have you extracted (or copied) your data to ensure you're not modifying the original source and have all the data you need (from multiple sources)? • Have you transformed your data and cleaned it up to be free of incorrect, corrupt or missing data? • Have you loaded the data and done a final check that it's correct?

assurance is critical!
Cleaning the data but failing to check it's in good condition could waste all your efforts. Find out how to quality check your data in Chapter 5.

#### **ANALYZE THE DATA**

• Are you aware of the difference between analytical approaches and analytical techniques (and when to use both)? • Are you familiar with the concepts of classification, clustering and reinforcement learning? • Have you developed skills in key techniques like cluster analysis, decision tree analysis and multivariate analysis?

DIG DEEPER: Want to know not only the techniques, but the best contexts to use them? Start at Chapter 6, and then move onto Chapter 7.

### **VISUALIZE THE DATA**

• Have you assessed whether or not visualizing the data you're working will help you convey the insights or findings? • Do you have access to powerful visualization software like Tableau or Power BI that will help you gain quick insights into any prepared data you might have? • Have you built dashboards that let you observe key findings and any changes that can occur in the data?

DIP DEEPER: Check out the end of Chapter 8 for 12 ways you can visualize your data and make it easy for stakeholders to understand your findings.

## PRESENT YOUR FINDINGS

• Have you prepared the structure and gathered all the materials for your presentation? Do you know EXACTLY who you'll be presenting to? • Are you able to explain your story, findings and benefits in clear, jargon-free language? • Have you practiced your presentation to the point you know it well?

DIG DEEPER: Want to learn how to make a killer presentation and win your stakeholders over? Read about the 9 steps that cover every angle of presenting in Chapter 9.

