# Why data-driven decision-making is a super power for leaders

Event Summary
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Data without context is just numbers on a page.

**94%** of companies agree that data and analytics are essential to business growth...

...but **63%** can't gather the insights they need from data before it becomes outdated.

We're going to show you the **3 ways** that business leaders can turn data into business results.





A special sauce is often necessary to help Big Data work best: the judgement of humans.

- 'Everybody Lies' bySeth Stevens-Davidowitz





### We need to contextualise data science to drive business results

The world's data is growing at an explosive rate, but the value that most companies generate using that data is not. This does not mean that to be a successful professional you have to become a data scientist. It means that in order to be a professional, you need to understand the methods of data science and data-scientific research, grasp how data is turned into action, and be able to think strategically about how to use data to create value for your business.

Successfully turning data into business value requires a critical, but often missing, ingredient: business leaders who can apply their expertise and business acumen to help prioritise and frame the problems that data science can be employed to solve.









Making data science useful requires business decision-makers who can frame problems for data science teams.

Cassie Kozyrkov
Chief Decision Scientist at Google



### The Data-Driven Decision-Making Program

This is where BTS' Data-Driven Decision-Making (DDDM) program comes in. The experience is built around the data-driven decision framework, BTS' point-of-view on how to turn raw data into business value. After an initial introduction to the framework, leaders experience a business simulation where they practice applying the data-driven decision-model to isolate the signal from the noise in the data to solve a series of business challenges. Interspersed throughout this experience are knowledge sessions focused on overcoming cognitive traps and using data to tell stories that drive action.



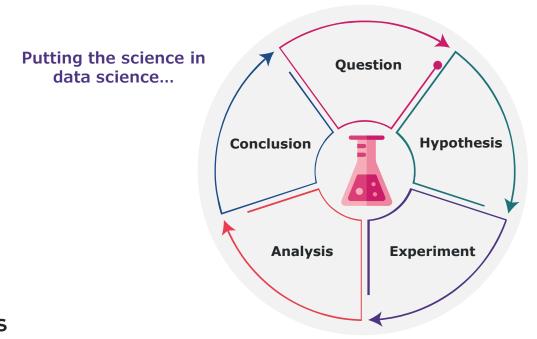
#### The Data-Driven Model for Business Leaders

#### **Program Outcome/Learning** 2000 What decision What new What kind of Gather & Analyze Communicate Apply Take analysis will do I want information do Prepare the Data Results Judgement Action to make? I need to make get me that Data the decision? information?

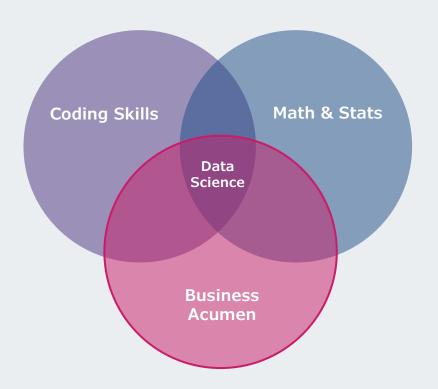


### **DDDM Program Objectives**

- A repeatable process to maximise the success of any datadriven endeavour, starting with key steps required to frame a business problem as a data science problem
- The awareness required to avoid the cognitive traps that often derail data analysis
- Techniques for compelling storytelling with data that inspires action and drives execution



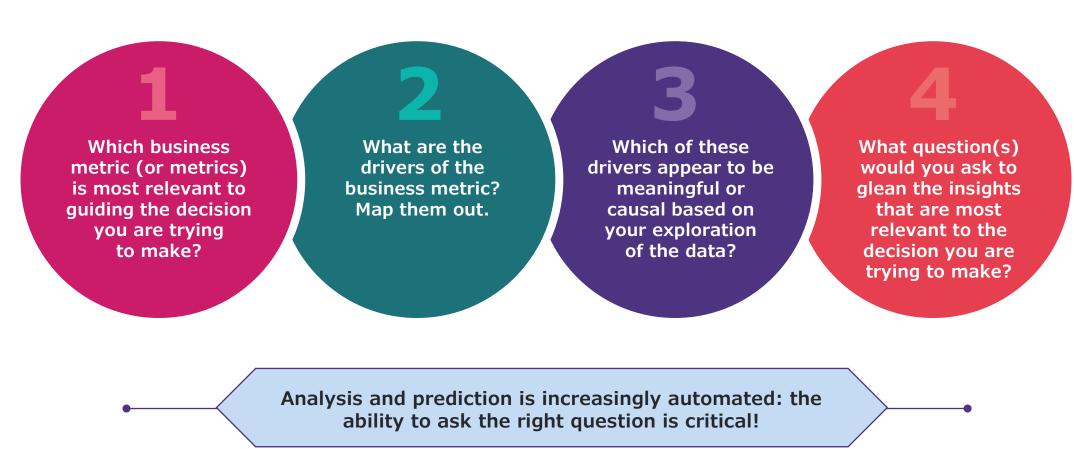
### Data Science Venn Diagram: BTS definition of data science





## Frame a Business Problem: Question framing uses business context to maximise the success of any data-driven decision

We introduce a repeatable and systematic process to frame business problems as data science problems...





#### Program data simulation platform

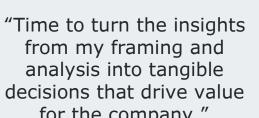
#### Using a real-world data set to apply the DDDM framework

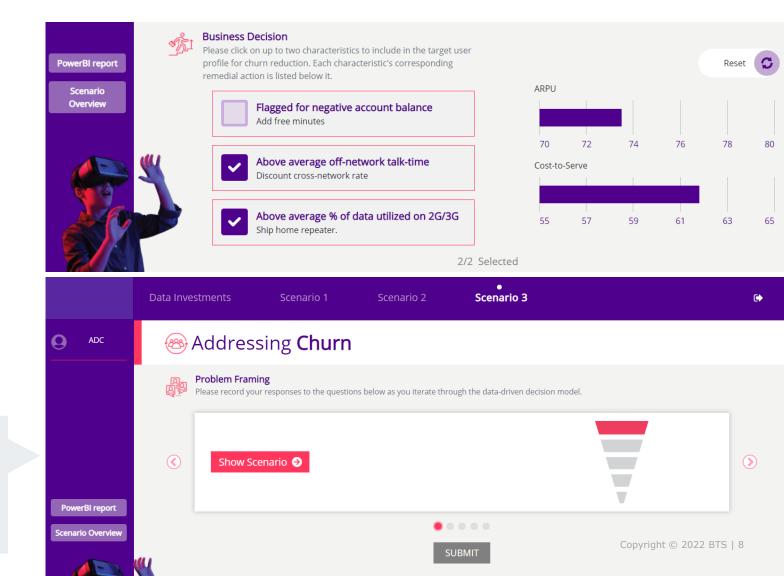
Business leaders practice applying the data-driven decision-making model to isolate the signal from the noise in the data, converting raw data into decisions that drive business value.

The simulation is built on BTS' world-class simulation platform, leveraging the capabilities of **Microsoft PowerBI** for the visualisation and analysis of the large quantities of data corresponding to each business challenge. It is available as both an off-the-shelf and fully customised experience.

In this way, leaders learn data science while also getting hands on experience with cutting edge data visualisation platform.

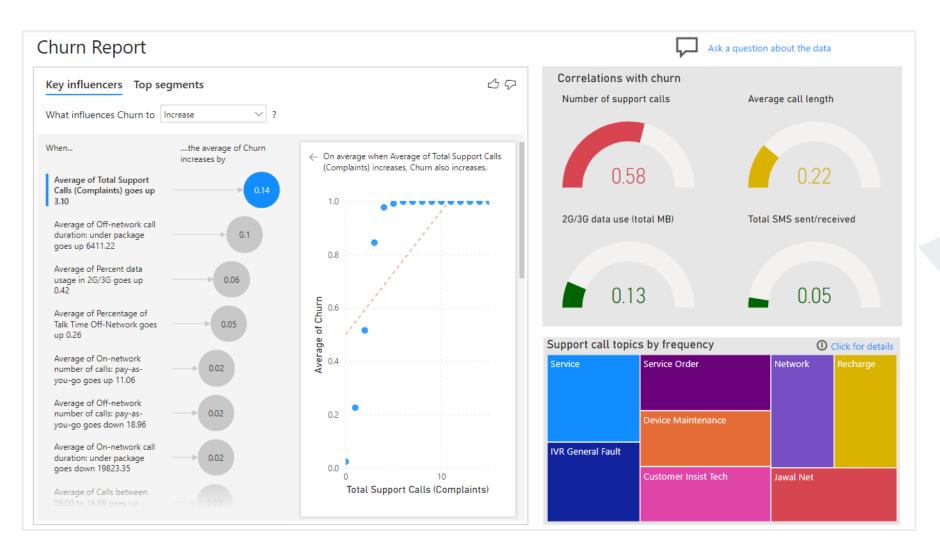
> from my framing and analysis into tangible decisions that drive value for the company."







## Cognitive Traps: We use data-based scenarios to identify and avoid the traps we fall into when interpreting trends



"Based on my question-framing, it's a lot easier for me to identify the data points that I should be focusing on."







## Overcoming cognitive traps during analysis

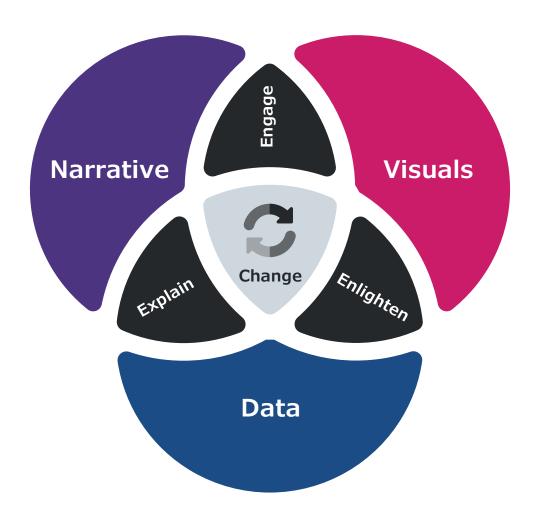
Our ability to make data science useful is impaired by glitches in the mental models we all use as humans.

To prepare leaders to deal with this, we explore the different types of mental traps, as well as the situations in which they each come into play.

Rather than merely 'teach' participants what these biases and glitches are, the participant are later able to confront them in safe, simulated moments that arise during the business simulation.

We also discuss how to help people understand, care about, and take action on data analysis findings by teaching.

### Storytelling with Data: We look at how to create change with the right combination of data, visuals and narrative





#### **Storytelling and Communicating with Data**

Doing successful analysis alone does not lead to better outcomes. Getting better outcomes depends on compelling people to make or change their decisions. Compelling people to make or change decisions depends on our ability to communicate insights to those who make decisions.

This program session can be modified to re-enforce any models that might already exist in your business. It teaches how to share the results of data science projects to decision makers who may or may not be familiar are not familiar with the language of data science, but who want evidence of analysis and data.

Key focusses are how to craft, visualise and deliver data-analytic stories that provide compelling context, insight, and analysis.







# Strategy made personal

