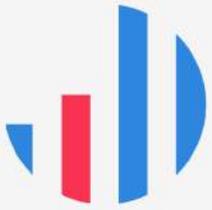


THE  
DATA  
ANALYSIS  
BUREAU

SMARTER DATA.  
BETTER DECISIONS.



UNLOCK THE  
VALUE OF YOUR  
DATA WITH OUR  
5 STEPS TO DATA  
READINESS



# CONTENTS

<b>An introduction to unlocking the value of your data</b>	<b>3</b>
<b>Identify your business challenge or idea</b>	<b>4</b>
<b>Define the business challenge</b>	<b>5</b>
<b>Formulate a hypothesis</b>	<b>6</b>
<b>Assess if you have the right data</b>	<b>7</b>
<b>Prepare for your solution</b>	<b>8</b>
<b>Where are you on your journey?</b>	<b>9</b>
<b>About the Data Analysis Bureau</b>	<b>10</b>



# AN INTRODUCTION TO UNLOCKING THE VALUE OF YOUR DATA

## INTRODUCTION

The increased volume of - and access to - data is driving digital innovation. Industry 4.0 and the Fourth Industrial Revolution is **impacting multiple industries**, from finance and healthcare to manufacturing & retail. All industries are affected and data brings advantages to all those that embrace it.

Adobe estimates that the number of firms using AI could **double from 15%** over the next 12 months<sup>1</sup>. However, whilst 86% of companies are considering implementing AI<sup>2</sup>, most are not yet ready to do so. Indeed, the market remains flooded with ambiguous data related terms, causing confusion in the nation's boardrooms.

**T-DAB** have designed this eBook for business and technical leaders wanting to take advantage of data related opportunities for their organisation and understand their data readiness.

We have outlined **five principal steps** accompanied with pragmatic guidance to start unlocking value from your data. The eBook captures the typical challenges in approaching a data project and aims to help you take **meaningful steps** to being ready to undertake your own.

We will help you understand the tools and thought processes so that you can scope your data project and then maximise the value from it.



# IDENTIFY YOUR BUSINESS CHALLENGE OR IDEA

STEP ONE



A successful data project starts with clear identification of the business challenge to work on. It then needs direction, purpose, an understanding of its value to the business, and you need buy-in. It is critical to identify these components before starting your project as they are key to delivering actual value to your business.

Each of these key stakeholders often come with their own motive and perspective:



## BUSINESS USERS

Business users identify a business need or opportunity but aren't familiar with what data they have or how to apply it.



## DATA & ANALYTICS TEAMS

Data professionals know what data there is and what models they could build with it but can't find the demand or need.



## TECHNOLOGY LEADERS

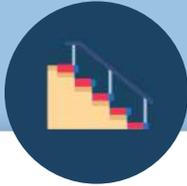
Technology leaders respond to a need from the business but don't have the data or expertise, or they recognise that their technology roadmap should include data and analytics.



### TOP TIP

Get your key stakeholders together in a discovery workshop to identify your challenge and work out an approach.

# DEFINE THE BUSINESS CHALLENGE



## INITIAL STEPS & INVESTIGATION

Before building a solution you need to investigate your business challenge and define problem statements.

Problem statements clearly define technical challenges that, if solved, will contribute to solving the business challenge.



## IMPORTANT CONSIDERATIONS

Consider where each problem effects your business, find it's origin and it's influences. Think about the impact of the problem and what is your desired outcome. Are you:

- ▶ Looking to grow your business
- ▶ Counter a threat from the competition
- ▶ Improve financial performance
- ▶ Solve an immediate operational problem



Defining the business challenge is an important part of our process as it provides the context for the need and can even outline what a conceptual data driven solution might look like.

Data driven solution concepts propose a clearly defined approach for using data to solve the problem.

Consider what makes your customers successful and what will make a difference to their business performance. Sharing data with different areas of the business can also add significant value.



### TOP TIP

There are many cases where data has improved the performance of a business and its market position. However, you need to clearly define the business challenge to make sure any time spent on developing a data solution delivers ROI.



## FORMULATE A HYPOTHESIS

### HYPOTHESIS FORMULATION

Equipped with each problem statement and, with each of their desired outcomes identified, you can begin to formulate your own project hypothesis.

The project hypothesis formulates a relationship between data and the desired outcome to be investigated and modelled as part of a **data driven solution**. It should return actionable insight when answered. Whether you are trying to **reduce costs**, **improve processes** or introduce **new services**, defining your project hypothesis is an important step to provide a well-defined focus.

The hypothesis helps steer you towards the types and amounts of data, along with the analytical techniques and technologies, required to return an actionable insight. This can help you mobilise projects more quickly, advances the overall analytical project and help form metrics to measure solution impact.



Can we...

Predict Y

using  $X_1 + X_2 + X_n$  to Z% Accuracy?



#### TOP TIP

Its important to form a clear project hypothesis to test and validate the link between data and value.

# ASSESS IF YOU HAVE THE RIGHT DATA



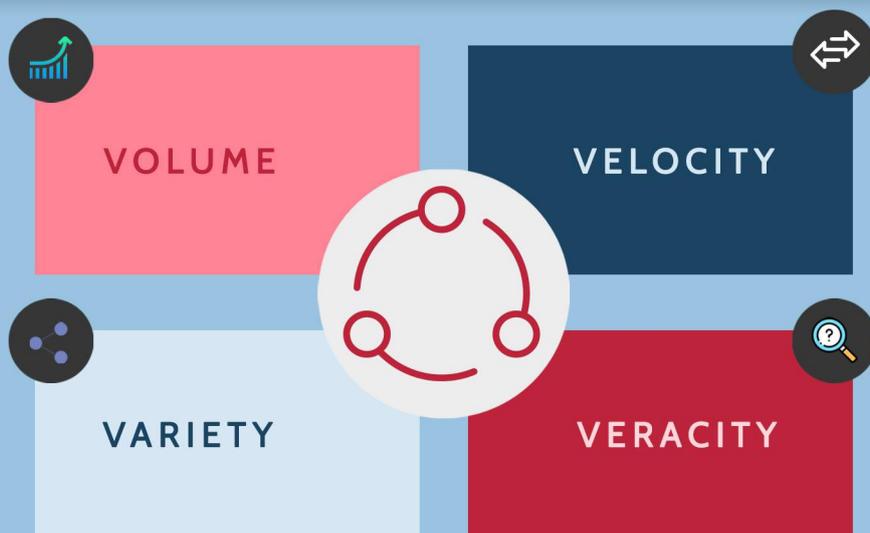
## DATA ASSESSMENT

If you've started with the business challenge and worked through the process to define your project hypotheses, you should have developed a reasonable idea of what data you need and what data could be useful.

A vital activity required at this point is to do a **data audit**. This will determine what is available and what you need to collect.

This audit will help you understand the properties of your data in accordance with the **4 V's** and the suitability of your data for your desired solution.

For example, if you want to influence the real time performance of an operational component but you are only receiving weekly updates, you would need to improve the velocity of the data feed to deliver this solution. However, you could provide simple operational reports with weekly updates.



### TOP TIP



Data preparation and readiness is key to laying strong foundations for a manageable data estate.



## PREPARE FOR YOUR SOLUTION

### PREPARING FOR A SOLUTION

Your ability to develop your own solution will depend on your approach and desired solution for your project. Whilst there are a range of tools and solutions in the market, plug and play options can often fall short of addressing the business problem and can incur additional costs to integrate effectively.

#### WITH THIS IN MIND, KEY CONSIDERATIONS INCLUDE:



Whether to buy or build in-house



Whether to run on premise or in the cloud



The availability of skilled resource



The existing technology stack

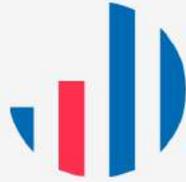
Your approach will also be influenced by the ability to store your current data and the need to collect additional data to improve your solution.

In this process, it is vital to integrate with product owners and transition solutions into the business where possible to encourage adoption. A technology agnostic approach also ensures you can utilise and augment your existing capability and tools.



#### TOP TIP

Don't lose sight of your original business challenge and project hypotheses. Integrate solutions into the business as soon as possible to test, drive and encourage adoption.



## TAKEAWAY AND CALL TO ACTION

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You should now have a good idea of how to unlock the value of your data with our **5 steps to data readiness**. Remember to use our **top tips** and work with **T-DAB** to prepare and deliver your data solution.

Identify your  
business challenge

Get your key stakeholders together in a discovery workshop to identify your challenge and work out an approach



Book a  
Discovery  
Workshop

Define the  
business challenge

Clearly define the business challenge to make sure any time spent on developing a data solution delivers ROI



Book a  
Discovery  
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Formulate a  
hypothesis

Form a clear project hypothesis to test and validate the link between data and value.



Run a  
Exploratory  
Data Analysis

Assess if you have  
the right data

Data preparation and readiness is key to laying strong foundations for a manageable data estate



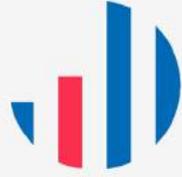
Run a  
Exploratory  
Data Analysis

Prepare for your  
solution

Integrate solutions into the business as soon as possible to test, drive and encourage adoption.



Start a  
Data Project



## ABOUT THE DATA ANALYSIS BUREAU

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The **Data Analysis Bureau** is an end-to-end data science and advanced analytics service provider that believes “**smarter data means better decisions**”.

From formulating business-led questions to exploring your data, or production to on-going expertise, we adopt a highly iterative and DataOps driven methodology to empower you to **return the most value** from your data.

Our Data Accelerator Framework is designed to accelerate your ability to make data-driven decisions through a three phase process to:

DISCOVER



BUILD



RUN

This eBook outlines an element of our discover process to help you **define your requirements**. We can also help you build a fit-for-purpose solution using the skill sets you require and run optimal data models for your business.



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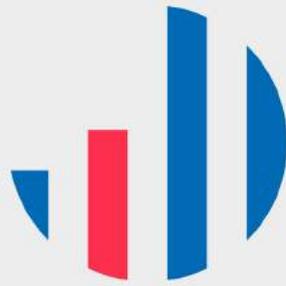
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SMARTER DATA.  
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