

## ACTIVIDAD #1

**Tipo actividad: Reading: "Strategies for Making Data-Driven Decisions"**

### Strategies for Making Data-Driven Decisions



A business with a fact-based decision-making process is in a strong position to anticipate the future and use the insights gained from data analysis to stay ahead of the competition. As Forbes reported in 2022, data-led organizations are nearly 25 times more likely to get customers than those making anecdotal decisions.<sup>1</sup> Chances of being profitable are also higher for companies that rely on facts and metrics. As a result, modern companies are taking steps to make data-driven decisions, rather than depending on gut instinct or unreliable reports.<sup>2</sup>

However, tapping into the full power of data can be challenging, especially with ever-growing volumes of information.<sup>3</sup> Read on to discover strategies for using data more effectively when making decisions. But first, understand the definition of being data-driven. It may not be what you think!

#### What does it mean to be data-driven?

The term gets thrown around, but not all companies that call themselves data-driven are. Just having great data doesn't make an organization data-driven. Being data-driven means identifying the process that the data should inform, then making sure the data is trustworthy, of high quality, and in the correct format. Once those benchmarks are met, the organization can empower its departments to use the information<sup>1</sup> by ensuring that

data processes are well defined, organized, and monitored. As a result, teams can convert data-driven insights into actionable decisions.

### **The Decision-Making Process**

According to Forbes, today's companies have access to more than enough data to make informed choices. Data is only valuable, however, if company leaders know how to use it effectively in their decision-making. Due to poor data management and usage,<sup>4</sup> businesses often miss the opportunity to use their data well. The following strategies can help:

#### **Define business objectives (or problems)**

Rather than beginning by asking what data to access, data professionals should first define what their organization wants to achieve or what problem it wants to solve.<sup>5</sup> This establishes and clarifies the context in which the data will be used.

#### **Identify the data needed**

This step involves answering two critical questions:<sup>5, 6</sup>

##### **What data is necessary to address the identified problem or achieve the identified objective?**

The data should align with the objectives of the decision-making process and be specific, accurate, and directly relevant to the problem. This most effectively informs decisions and helps avoid incorrect conclusions.

##### **Is the data already available in the organization?**

If yes, it may include information such as:

Historical records of the organization, such as project documentation and incident reports

The company's revenue data, such as monthly sales

Information from customer relationship management systems

Data collection may be necessary if the relevant details are unavailable internally. This could be done using surveys. Alternatively, an organization can buy access to datasets—such as census data, industry publications, and third-party polls—that are ready for analysis.

In order to be useful, the data must be accurate, complete, and pertinent to the challenge that the business is striving to meet. After confirming the quality of the information, the company's leaders can move on to the most critical step in making data-driven decisions:

## Data Analysis

Data analysis is the backbone of the decision-making process. Analysts can extract meaningful insights from their data and leaders can make well-informed decisions if the analysis is executed correctly. To conduct data analysis, companies use software such as Microsoft Power BI, Tableau, Qlik Sense, and Zoho Analytics.<sup>7</sup>

Common data analysis techniques include:<sup>8</sup>

### 1. Diagnostic Analysis

This technique examines why things happen to a business, using statistical methods such as:

Data mining: sorting through large datasets to identify insights and relationships

Data discovery: a technique that uses visual data exploration to reveal patterns

Correlation: a statistical method that measures the linear relationship between two datasets or variables.

### 2. Descriptive Analysis

This approach evaluates historical data to identify business changes over time. It helps organizational leaders understand what has happened and identify trends to inform their decision-making. Results can be represented in graphs, tables, and charts, among other visualizations.

### 3. Predictive Analysis

As the name suggests, predictive analysis helps business leaders anticipate what will occur. It typically involves artificial intelligence and powerful algorithms that can forecast the most suitable marketing channel, the commodity that will sell best, and the customers that are more likely to buy it.

### 4. Prescriptive Analysis

Prescriptive analysis provides deeper insights than predictive analysis. Instead of just showing what might happen to organizations, this data analysis technique helps people identify the best way to deal with or avoid a potential problem. According to a Forbes article published in 2020, prescriptive analysis is the future of data analytics.<sup>8</sup>

The insights gained through data analysis can help business leaders consider the potential outcomes of their choices. They can then make decisions based on data-driven probabilities rather than on intuition or gut feelings.

## Data Interpretation

Data interpretation involves making sense of the analyzed data and turning insights into actionable conclusions. This step is essential because raw data has value only when interpreted in the context of a problem or decision about to be made.<sup>9</sup>

For instance, interpreting data in visual contexts such as charts, graphs, and tables makes it easy to process findings, identify insights, and make informed decisions for the company.<sup>10</sup> Once organizational leaders analyze and interpret the data, they can enable their teams to access, understand, and use the information. That's how business processes and improvements truly become data-driven.<sup>11</sup>

### **Three Decision-Making Best Practices**

Best practices for making data-driven decisions include:

#### **1. Clean and organize data before analysis**

When handling multiple data sources, data can easily be mislabeled, formatted incorrectly, or duplicated. Data cleaning involves identifying and correcting errors in a dataset. This helps improve data quality, ensuring decisions are based on complete, accurate, and reliable information.

#### **2. Make data-driven decisions a team effort**

Since no human is perfect, unconscious biases may creep into data-driven decision-making. Having many peoples' eyes on the process reduces the chance of human error. In addition, collaboration encourages diverse perspectives, which can result in a more thorough decision-making process.

#### **3. Review and re-evaluate decisions**

Business environments are ever-changing, with new information, marketing conditions, and challenges constantly emerging. Thus, organizations should regularly revisit their decisions to confirm effectiveness.

**5) True, False, Doesn't say activity based on the reading text.**

Read the following statements **based on the text** and determine whether each statement is *True, False*.

1. Organizations relying on gut instinct are nearly 25 times more likely to acquire customers than data-led organizations. **TRUE / FALSE**
2. Being data-driven means having great data, regardless of its trustworthiness or format. **TRUE / FALSE**
3. Defining business objectives or problems is a critical step in using data effectively for decision-making. **TRUE / FALSE**
4. The data needed for decision-making should align with the objectives and be vague to allow flexibility. **TRUE / FALSE**
5. Data collection may involve accessing external datasets, such as census data or industry publications. **TRUE / FALSE**
6. Data analysis is not a crucial step in the decision-making process; decisions can be made based on raw data. **TRUE / FALSE**
7. Predictive analysis primarily involves evaluating historical data to identify business changes over time. **TRUE / FALSE**
8. Data interpretation involves turning insights into actionable conclusions and is unnecessary for effective decision-making. **TRUE / FALSE**

**6) Matching heading activity about the previous text.**

**Instructions:** Match each heading with the corresponding section from the text "Strategies for Making Data-Driven Decisions."

Headings	Sections
1. Definition of Data-Driven	- A. Identifying Business Objectives
2. Heading: Decision-Making Best Practices	- B. Data Analysis
3. Heading: Common Data Analysis Techniques	- C. The Decision-Making Process
4. Heading: Data Interpretation Importance	- D. Data-Driven Process Explanation
5. Heading: Three Decision-Making Best Practices	- E. Best Practices for Effective Decision-Making