

# **Objective 1: Introduction to Business Analytics**

- **What is Business Analytics is and how these techniques represent an opportunity.**
- **Understanding data and data distribution that exists in the world makes learning about statistics critically important.**
- **Understanding statistics is a way of thinking that can help you make better decisions**
- **How the DCOVA/CRISP framework for applying statistics can help you solve business problems**

# Business Analytics

Reporting

OLAP

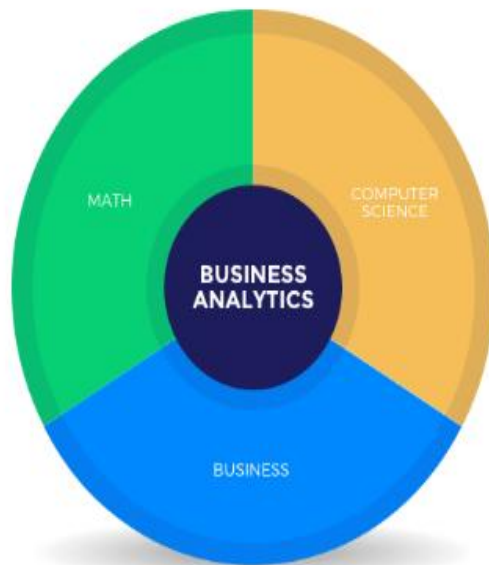
Performance  
Management

Text Mining

Data Mining

Predictive  
Analytics

Prescriptive  
Analytics

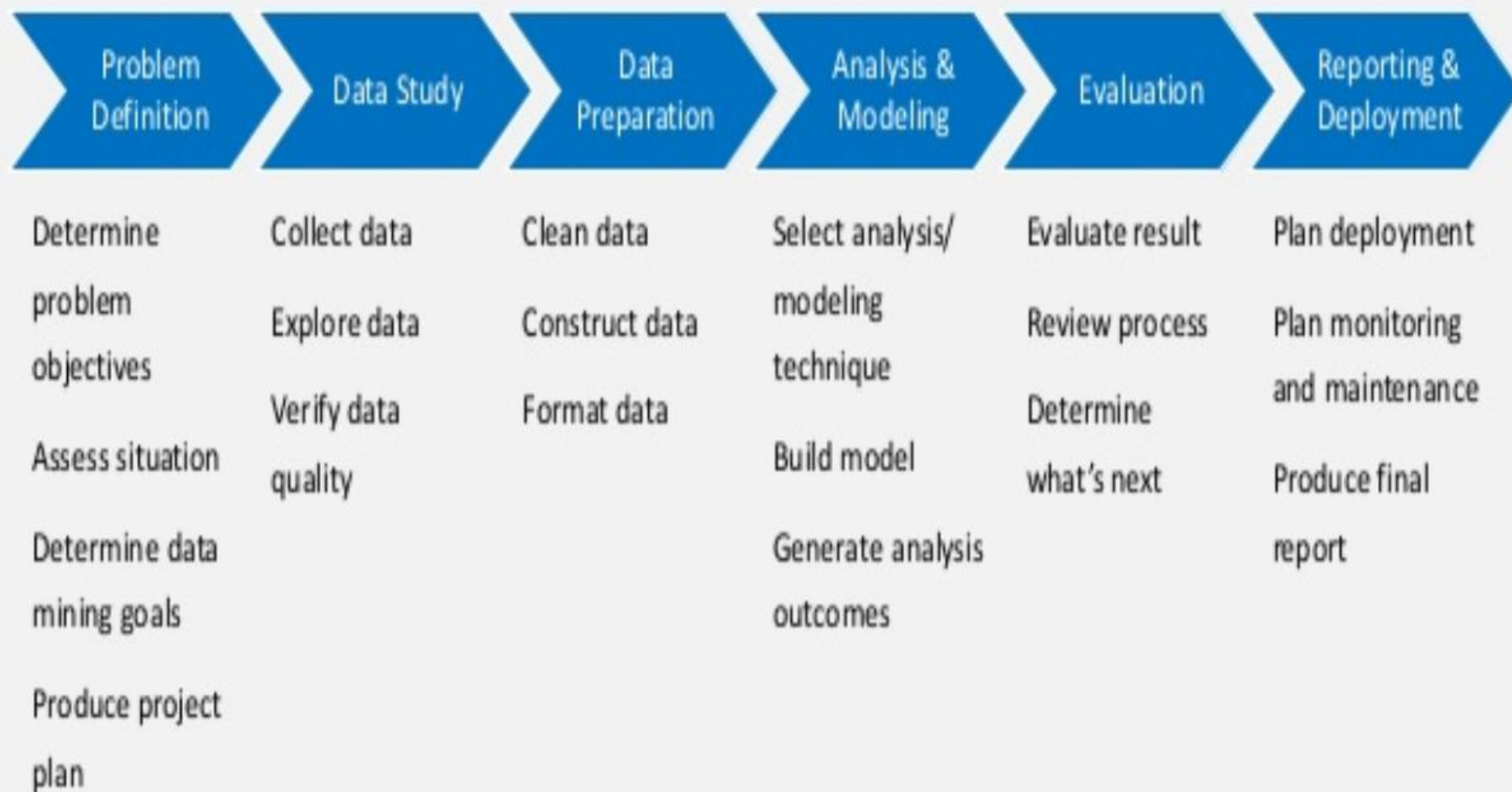


# WHAT IS A BUSINESS ANALYST?

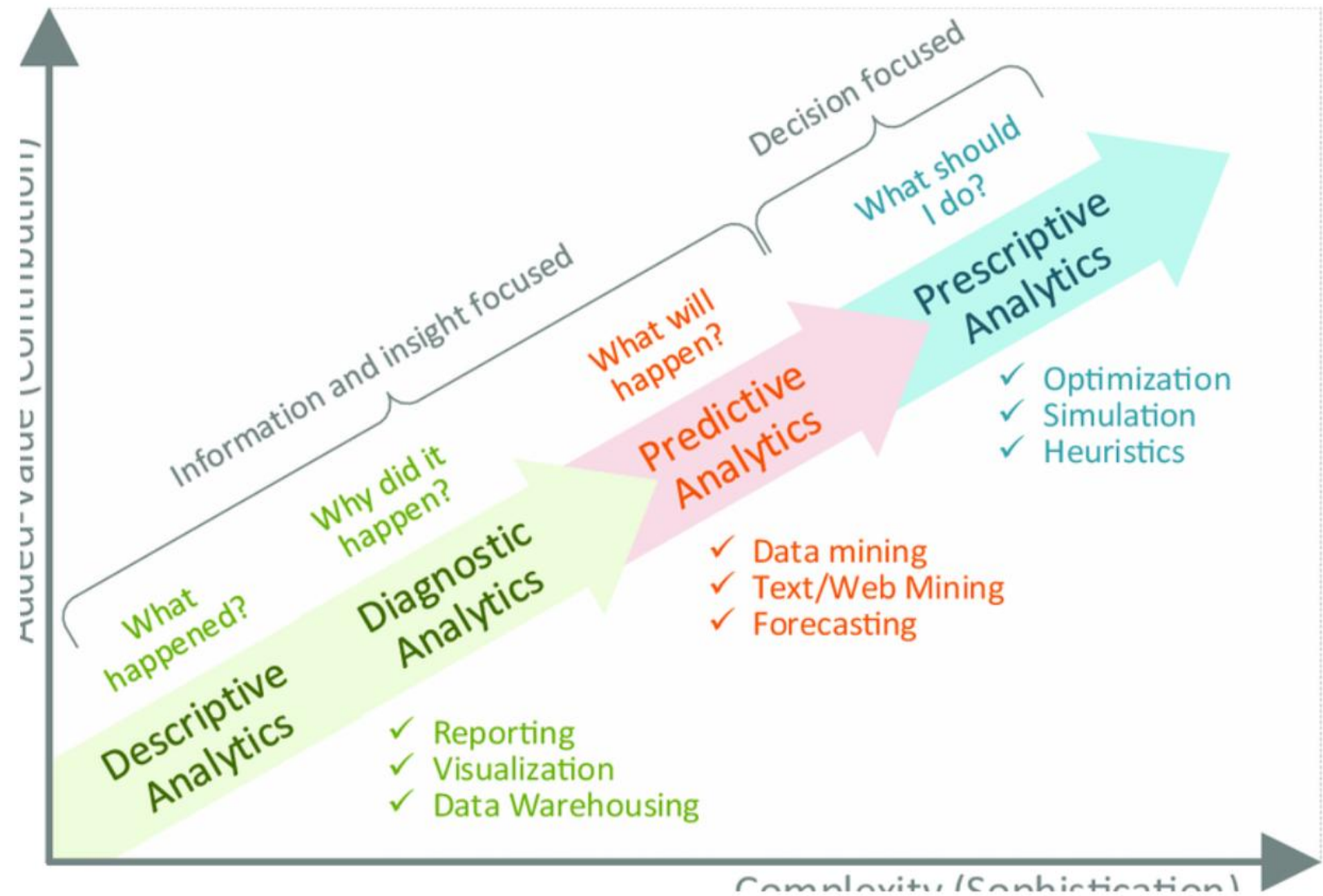
The BA articulates the underlying needs of the business and serves as the conduit through which project vision is communicated and delivered.

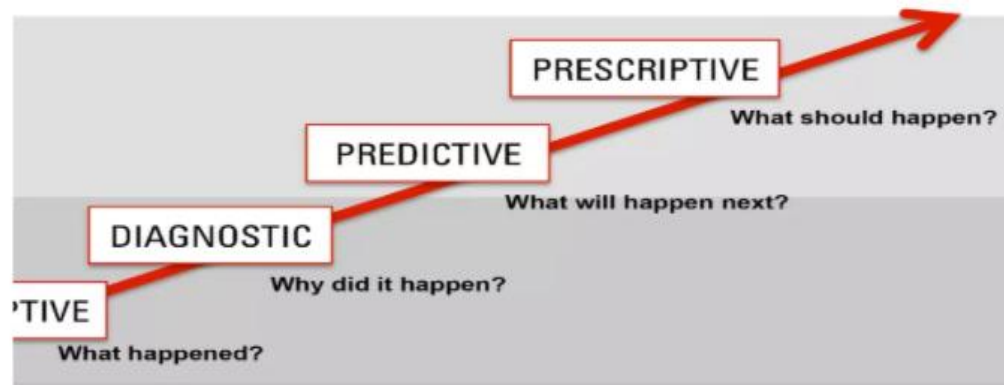


# How to execute Business Analysis?

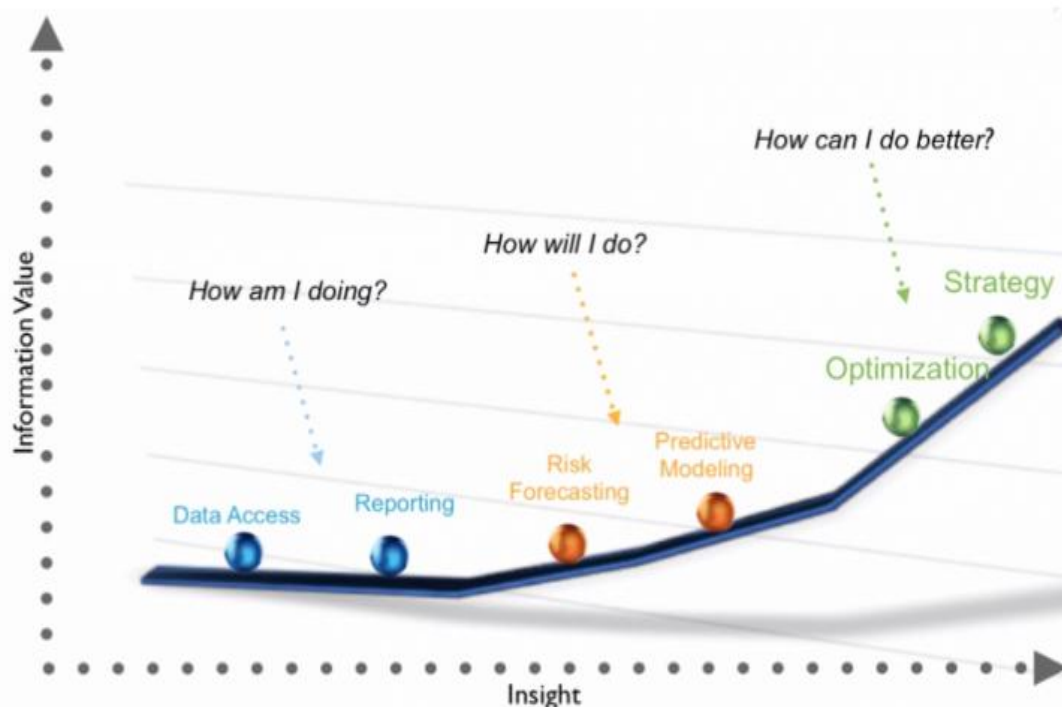








#### Level of Analytical Difficulty & Business Impact



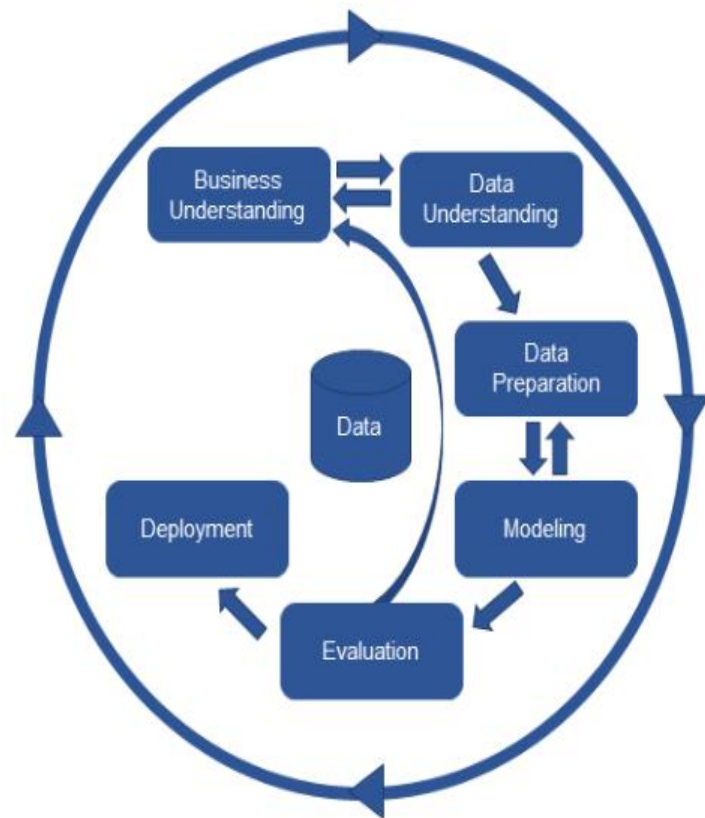
#### % (RE)INSURERS USING EACH ANALYTICS TYPE

Predictive	74%
Descriptive	71%
Diagnostic	61%
Behavioural	39%
Prescriptive	31%
Machine Learning / Artificial Intelligence	28%

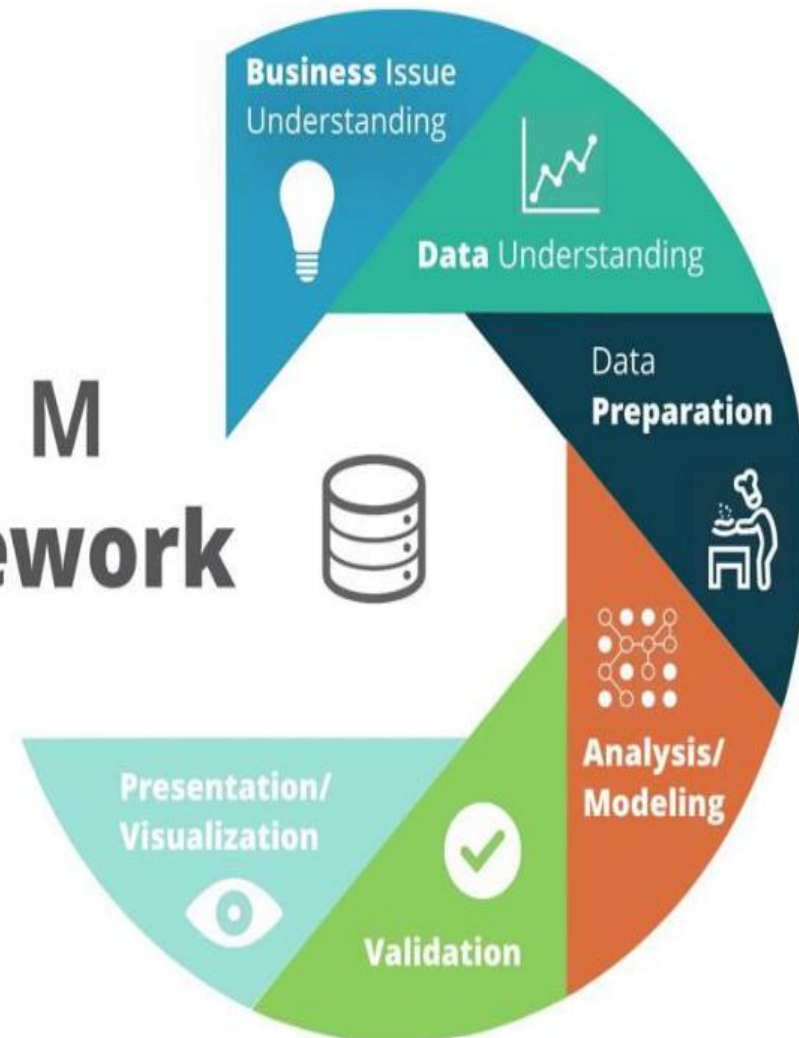
INSURANCE NEXUS: GLOBAL INSURANCE TREND MAP 2017

Levels	For Answering Questions like
Standard Report	What happened? When did it happen?
Ad Hoc Reports	How many? How often? Where?
Query Drilldown/OLAP	Where exactly is the problem? How do I find the answers?

# CRISP



## CRISP-DM Framework



- cross-industry process for data mining.
- CRISP-DM methodology provides a structured approach to planning a data mining project.

To Properly Apply Statistics You Should Follow A Framework To Minimize Possible Errors

In this course, we will use **DCOVA**

- **Define** the data you want to study in order to solve a problem or meet an objective
- **Collect** the data from appropriate sources
- **Organize** the data collected by developing tables
- **Visualize** the data by developing charts
- **Analyze** the data collected to reach conclusions and present results

Using The DCOVA Framework Helps You To Apply Statistics To:

- Summarize & visualize business data
- Reach conclusions from those data
- Make reliable predictions about business activities
- Improve business processes



*Understanding*

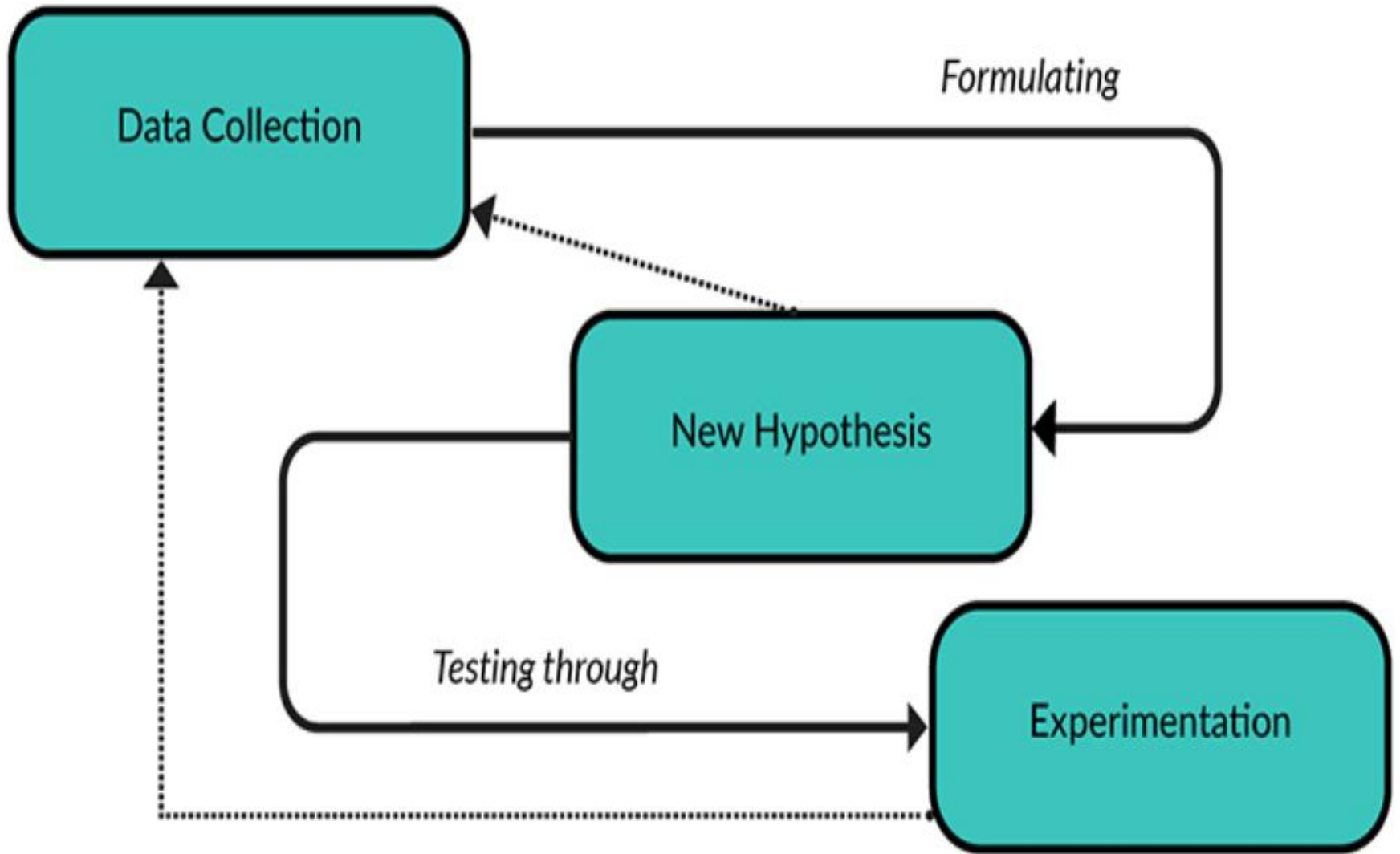
Data Collection

*Formulating*

New Hypothesis

*Testing through*

Experimentation



# Example Applications

Credit Risk Analysis

Fraud detection Analysis

Customer Behavior Analysis

Marketing Analytics

Market Basket Analysis

Financial Data Analysis

HR Analytics

Stock Market Analysis

Twitter Text Analytics & Mining