

# Glossary

## Data Analytics

### Terms and Definitions

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## A

**Action-oriented question:** A question whose answers lead to change

**Analytical skills:** Qualities and characteristics associated with using facts to solve problems

**Analytical thinking:** The process of identifying and defining a problem, then solving it by using data in an organized, step-by-step manner

**Attribute:** A characteristic or quality of data used to label a column in a table

## B

**Business task:** The question or problem that data analysis resolves for a business

## C

**Cloud:** A place to keep data online, rather than a computer hard drive

**Context:** The condition in which something exists or happens

## D

**Data:** A collection of facts

**Data analysis:** The collection, transformation, and organization of data in order to draw conclusions, make predictions, and drive informed decision-making

**Data analysis process:** The six phases of ask, prepare, process, analyze, share, and act whose purpose is to gain insights that drive informed decision-making

**Data analyst:** Someone who collects, transforms, and organizes data in order to draw conclusions, make predictions, and drive informed decision-making

**Data analytics:** The science of data

**Data design:** How information is organized

**Data-driven decision-making:** Using facts to guide business strategy

**Data ecosystem:** The various elements that interact with one another in order to produce, manage, store, organize, analyze, and share data

**Data life cycle:** The sequence of stages that data experiences, which include plan, capture, manage, analyze, archive, and destroy

**Data science:** A field of study that uses raw data to create new ways of modeling and understanding the unknown

**Data strategy:** The management of the people, processes, and tools used in data analysis

**Data visualization:** The graphical representation of data

**Database:** A collection of data stored in a computer system

**Dataset:** A collection of data that can be manipulated or analyzed as one unit

E

F

**Fairness:** A quality of data analysis that does not create or reinforce bias

**Formula:** A set of instructions used to perform a calculation using the data in a spreadsheet

**Function:** A preset command that automatically performs a specified process or task using the data in a spreadsheet

G

**Gap analysis:** A method for examining and evaluating the current state of a process in order to

identify opportunities for improvement in the future

H

I

J

K

L

**Leading question:** A question that steers people toward a certain response

M

**Measurable question:** A question whose answers can be quantified and assessed

N

O

**Observation:** The attributes that describe a piece of data contained in a row of a table

P

**Problem types:** The various problems that data analysts encounter, including categorizing things, discovering connections, finding patterns, identifying themes, making predictions, and spotting something unusual

## Q

**Query:** A request for data or information from a database

**Query language:** A computer programming language used to communicate with a database

## R

**Relevant question:** A question that has significance to the problem to be solved

**Root cause:** The reason why a problem occurs

## S

**SMART methodology:** A tool for determining a question's effectiveness based on whether it is specific, measurable, action-oriented, relevant, and time-bound

**Specific question:** A question that is simple, significant, and focused on a single topic or a few closely related ideas

**Spreadsheet:** A digital worksheet

**Stakeholders:** People who invest time and resources into a project and are interested in its outcome

**Structured thinking:** The process of recognizing the current problem or situation, organizing available information, revealing gaps and opportunities, and identifying options

## T

**Technical mindset:** The ability to break things down into smaller steps or pieces and work with them in an orderly and logical way

**Time-bound question:** A question that specifies a timeframe to be studied

## U

**Unfair question:** A question that makes assumptions or is difficult to answer honestly

V

**Visualization:** (Refer to data visualization)

W

X

Y

Z