

Glossary

Data Analytics

Terms and Definitions



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