

The steps to enabling AI and machine-assisted decision making, task automation, and business optimization in your organization

## Formulate a question

Determine a business question or thesis for which the answer is data-driven. It can be a single instance – “Should we make this investment?” or an ongoing question: “Is our factory operating safely?”



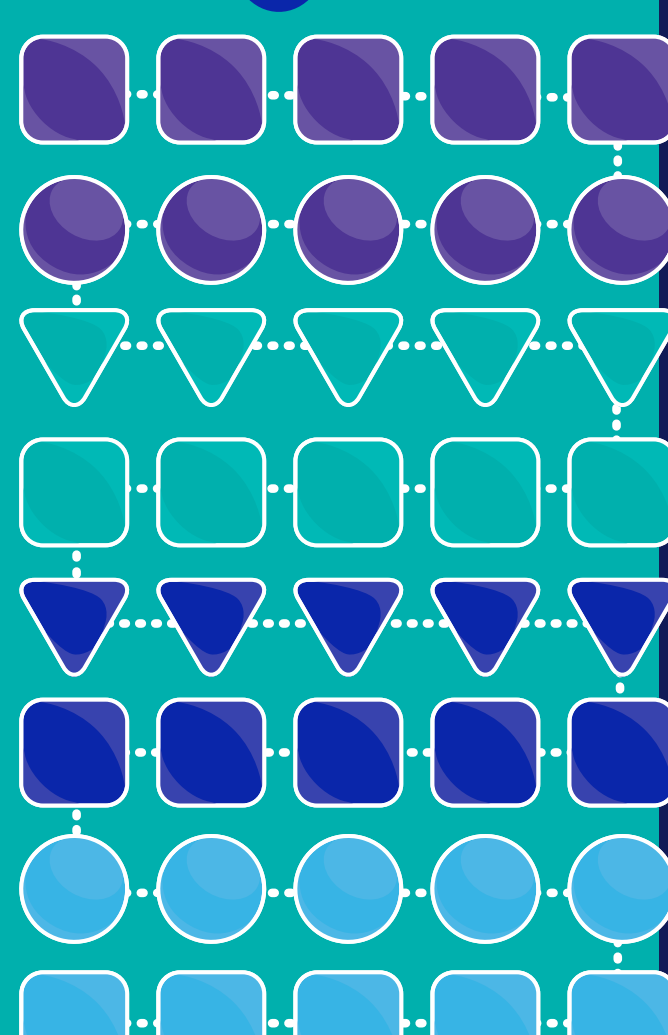
## Acquire any data

Access all data you think you need to answer the question – structured or unstructured, one-time or continuous streams. This will likely include a diverse range of data sources and types, not just databases and spreadsheets but email, chat, social media posts, images, IoT sensor feeds, and more.



## Process, merge and prepare the data

Combine, federate, and store data from multiple sources and formats, in ever-larger quantities. This presents unforeseen challenges: How do you combine a Tweet with a weather forecast? How do you merge a spreadsheet with a sensor’s temperature output? Your AI and analytics system needs to be able to reconcile the differences.



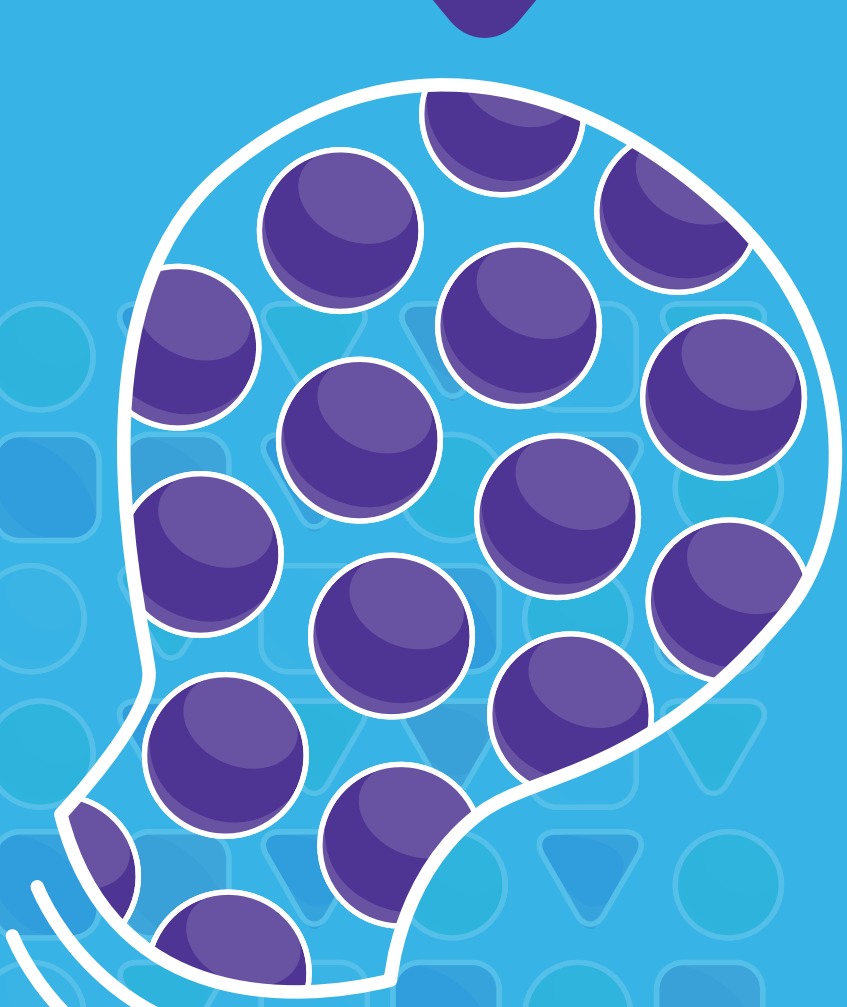
## Learn from the data

Model the data, apply machine learning, and train your system to classify information, recognize patterns, uncover trends, predict behavior, and identify correlations, disparities, even sentiment. Make sure your AI and analytics system has the capacity and horsepower to process immense amounts of data as efficiently as possible.



## Deliver insight

Let the system draw conclusions, predict outcomes, and make recommendations. Then share these findings. Your analytics system should allow for easy self-service access by non-data scientists, both to refine and update questions and distribute answers.



## Take action

Act on the insights the system delivers: Make just the right offer at just the right time. Replace mechanical components right before they wear out. Restock inventory ahead of predicted demand surges. Your system should communicate smoothly with your systems of engagement so that they can automatically act, with no need for you to keep making decisions on the same questions.

