

Today, the cloud ecosystem looks very different from what it did previously. The growth of cloud services allows users to choose from a variety of storage, compute, and deployment options. As an example, if I want to run a Spark program, I can choose from at least four different options in **Microsoft Azure**. The real question is, if all four options are running **Apache Spark**, then why are these options even required?

Important Note

The array of options available on the cloud are not limited to compute only: the same variety exists for data collection, infrastructure deployments, and pipeline orchestration services.

Here are some of the reasons why several options for performing similar kinds of operations in data engineering are available on Microsoft Azure:

- **Ease of use:** The ease of use of a service is a key factor in deciding which option to use. As a data engineer, you may code the entire **ETL** program yourself or opt for a service that can auto-generate and invoke the code for you after creating a visual workflow.
- **Data engineering team skills:** The skill level of the data engineering team plays a very important role in deciding which option to choose. Teams with skilled data engineers typically tend to choose services where data workflows need to be coded from scratch. Doing so offers engineers complete control over their programs, as well as any other dependencies.
- **The desired level of administration and monitoring:** Having a skilled data engineering team does not automatically mean that the same team will be involved in administering and monitoring the operations. The choice of service may need to be adjusted, depending on who will be managing it in production.
- **Self-serve analytics:** These days, the concept of self-serve analytics is on the rise. This means that end users are getting more and more involved in creating **ETL/ELT** workflows. For this specific set of users, the ability to create a drag-and-drop workflow in a few clicks is extremely desirable.

Important Note

The idea of self-serve analytics is gaining a lot of popularity these days. Self-serve analytics enables fast-paced delivery of end user analytical goals.