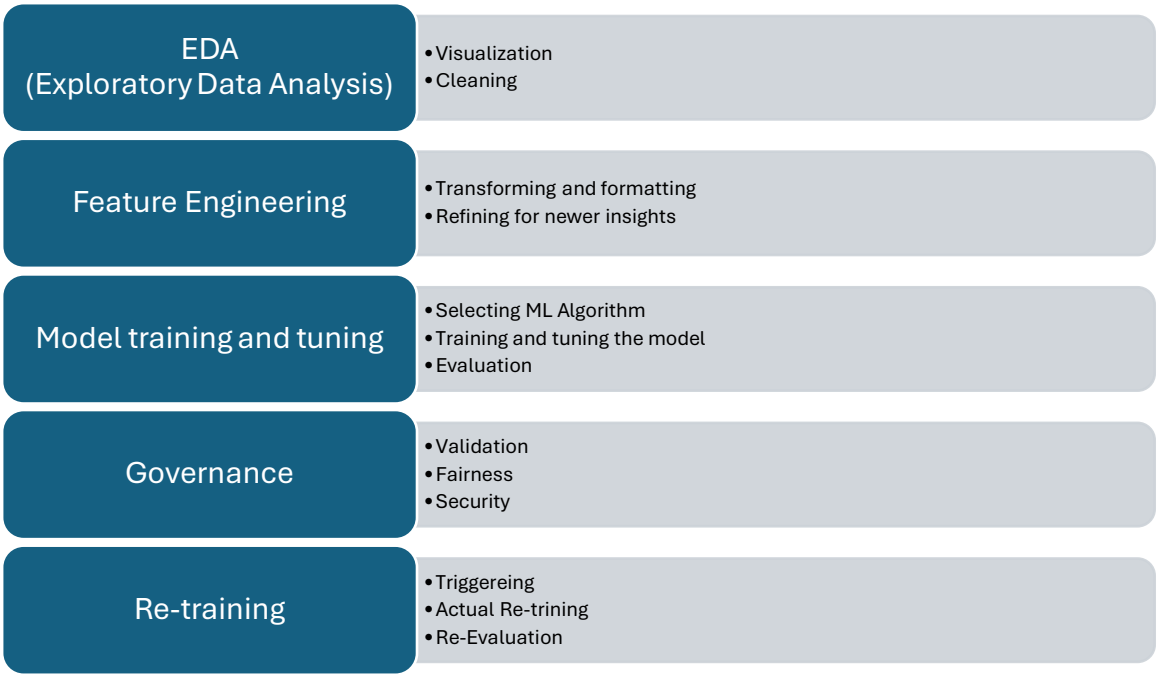
Why ML Ops?

1. Less chances of error
2. Ease of scalability
3. Collaboration
4. Increased efficiency
5. High reliability
6. Cheap to execute

Key Components:



AWS

1. **Amazon SageMaker**

   Building, training, and deploying ML models.

2. **AWS Lambda**

   Serverless compute service for running code

3. **Amazon CloudWatch:**

   For monitoring the performance of ML models in production

4. **AWS Glue:**

   ETL service

5. **AWS Step Functions:**

   Manages the steps involved in creating ETL pipelines

GCP

1. **Vertex AI:**

   platform for managing the ML lifecycle

2. **BigQuery:**

   Manages data warehouse for large-scale data analytics**Cloud Functions:**

3. **Cloud Storage:**

4. **Kubeflow:**

   Managing ML workflows on Kubernetes.

Azure

1. **Azure Machine Learning**

   Building, training, and deploying machine learning models

2. **Azure DevOps**

   Automating build and release pipelines

3. **Azure Kubernetes Service (AKS)**

   Managed Kubernetes for deploying and managing ML models

4. **Azure Blob Storage**

   Object storage for datasets, models, and versioning of model artifacts.

5. **Azure Functions**

   Serverless compute service for automating tasks