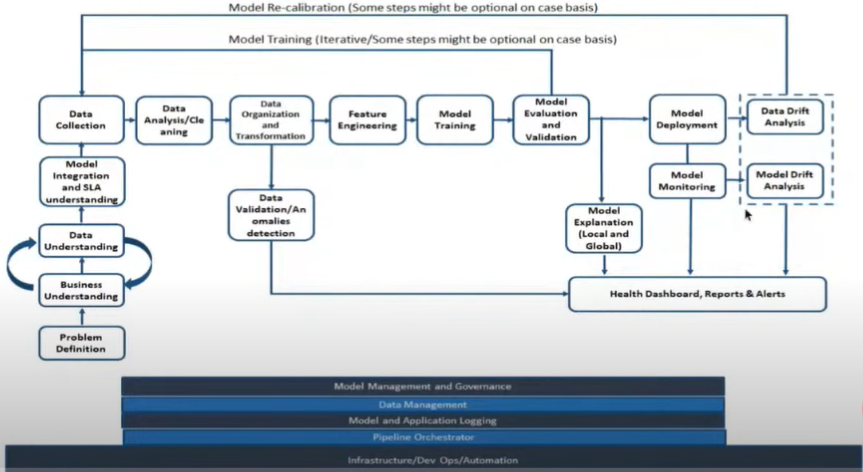
MLOps

# **An Introduction to MLOps**

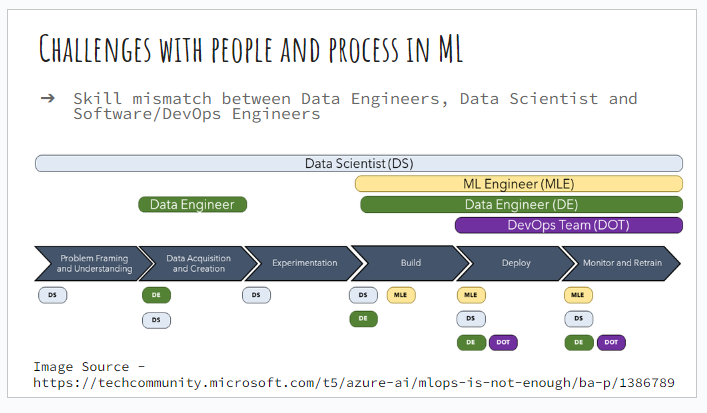
* In real world ML systems there are multiple components, ML code is just a small part of entire ecosystem.
* The ML Lifecycle contains following steps like:



* We have to track data as well as the model.
* Challenges faced during ML development
* Development, training and deployment environment can be different
* Tools, libraries, and dependencies can complicate model deployment
* Tracking and analysing experiment can become tedious to handle
* Difficult to reproduce experiment as input data changes
* ML code end up in a spaghetti jungle
* Challenges as ML in production
* Live data is not equal to training data
* Feature engineering pipeline must match between training and serving infrastructure

(There must be model tracking pipeline)

* Seamlessly scale up and scale down deployed model
* Continuous training and champion challenger model deployment
* Different technology landscape between development and deployment
* Challenges with people and process with ML
* Skill mismatch between Data engineers, Data Scientists, and software/Devops Engineers



* What is MLOps?
* MLOps is not about throwing a product and everything is fine.
* It’s a process change in an organization.
* How to develop, package the model
* MLOps in simple terms is DevOps for Machine Learning
* MLOps enables data science (data engineers and ML engineers ) and IT teams ( software engineers) to collaborate and increase pace at which ML models can be developed, deployed ,scaled, monitored and re-trained.

