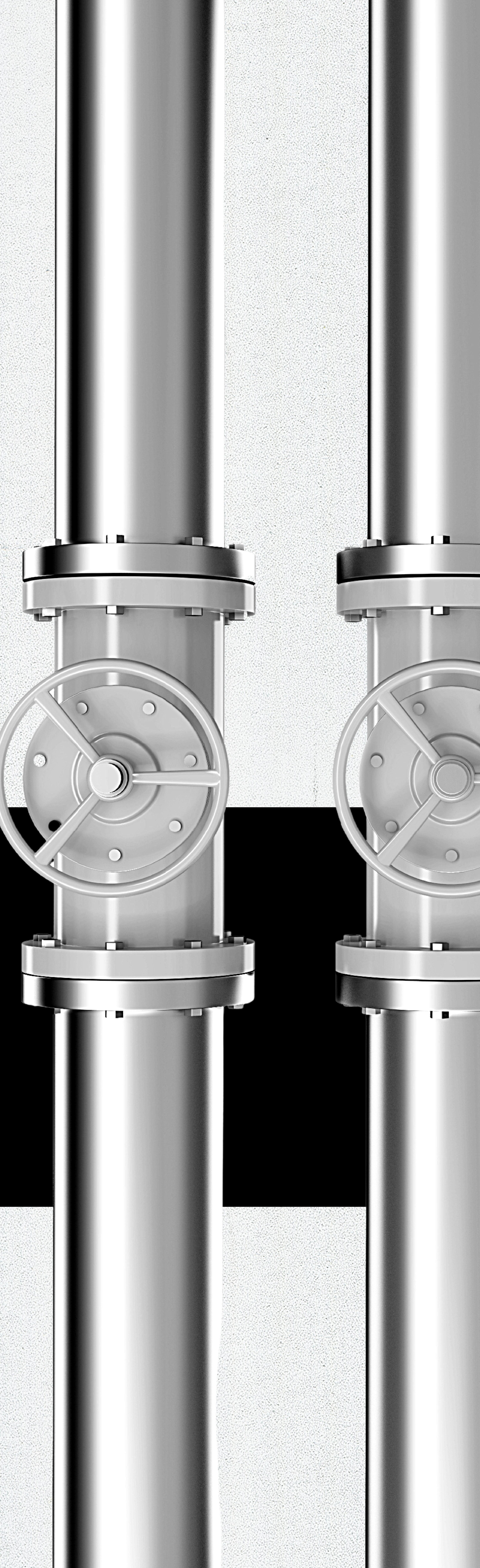


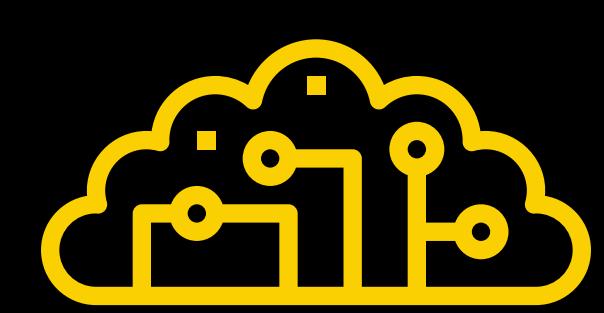
01

LEARN HOW TO BUILD MACHINE LEARNING PIPELINES

Demo →

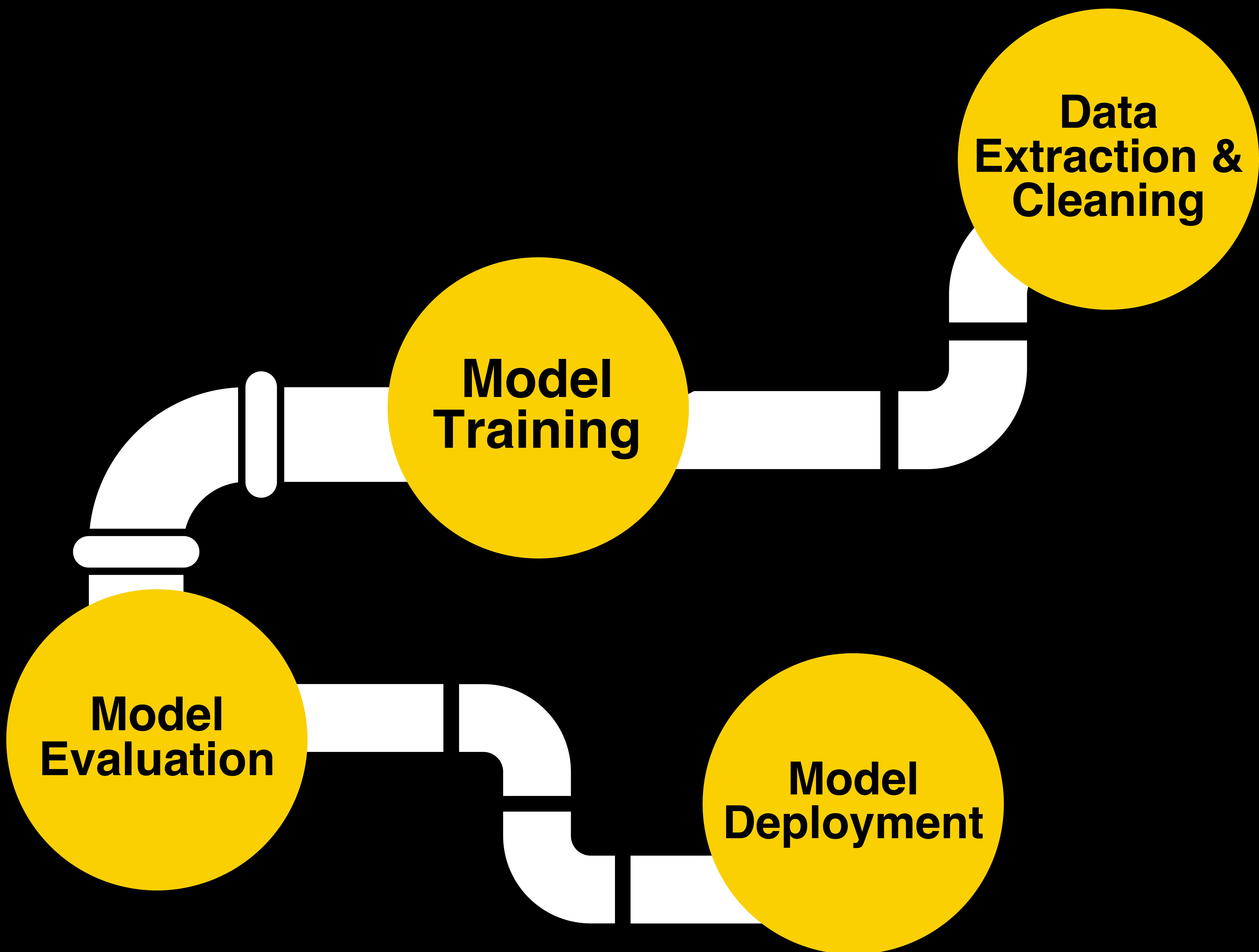
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What is ML pipeline?

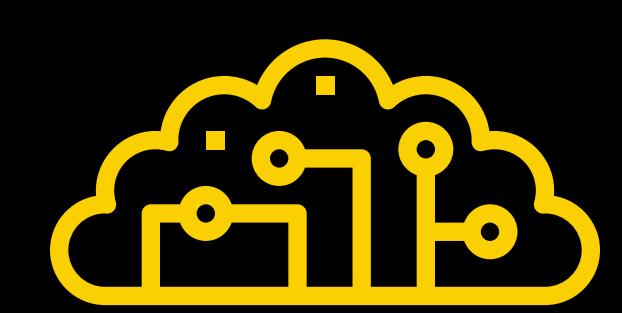
A machine learning pipeline is a way to automate the ML workflow. Machine learning pipelines consist of multiple sequential steps that do everything from data extraction and preprocessing to model training and deployment.





Monolithic architecture

In a main system, all the tasks would be run together in a monolith. This means the same script will extract the data, clean and prepare it, model it, and deploy it. We will be facing problems when we try to scale a monolithic architecture.



Problems without ML pipelines

When we try to deploy multiple versions of a model, then we have to run the whole workflow multiple times, even though few steps are identical. Even if we change a bit of data or code in the workflow, we need to update all the scripts, which is time consuming and creates room for error.

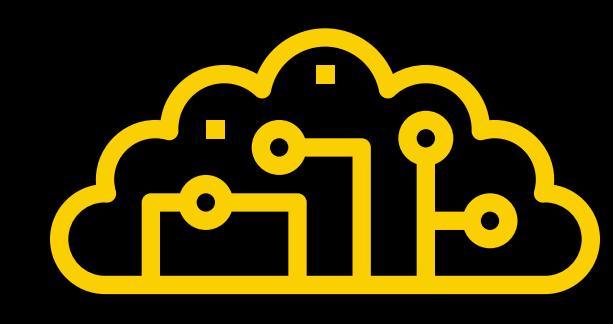


Solving the above problems

With ML pipelines, we only run parts of the workflow when you need them, and cache or store results that you plan on reusing. We can simply update the original code and all the instances of that code will be updated. So by using ML pipelines we can get models from into production quicker and making managing machine learning models easier.

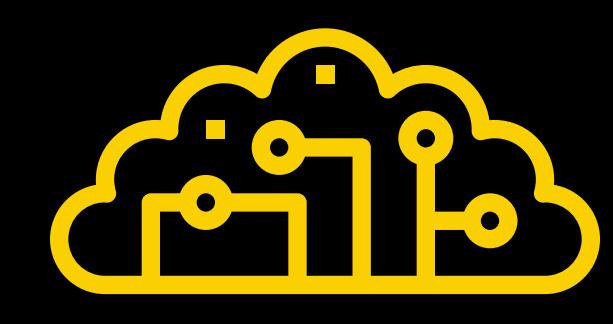


Pipelines are not one-way flows. They are cyclic in nature and enables iteration to improve the scores of the machine learning algorithms and make the model scalable.



Advantages of ML pipelines

- Easy debugging
- Replaceable code
- Code readability
- Less human intervention
- Avoid data leakage
- Consistency and reproducibility



Demo Time

Video link in comments and
code link in video description



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**DO YOU THINK ML
PIPELINES ARE IMPORTANT?
LET'S DISCUSS BELOW**



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