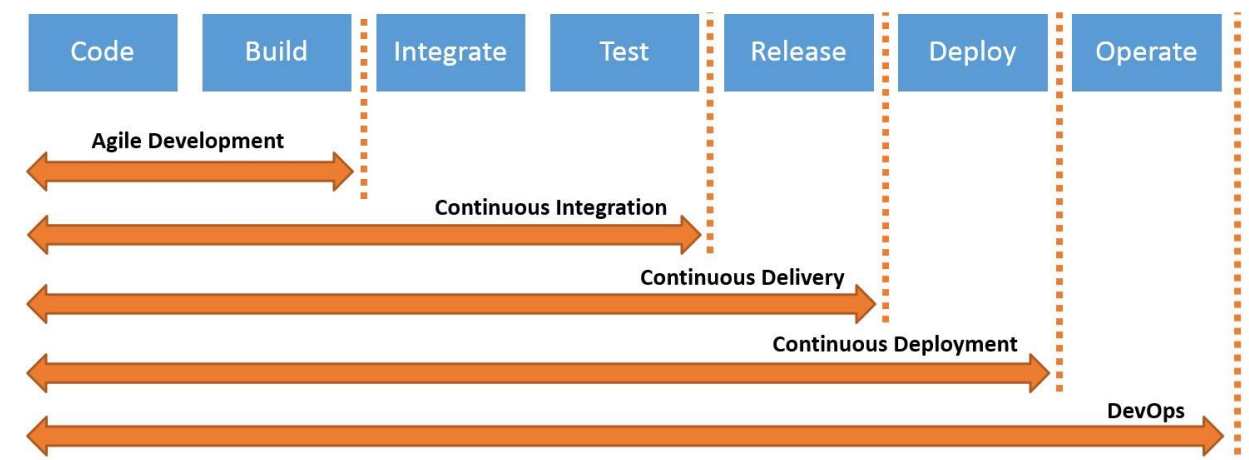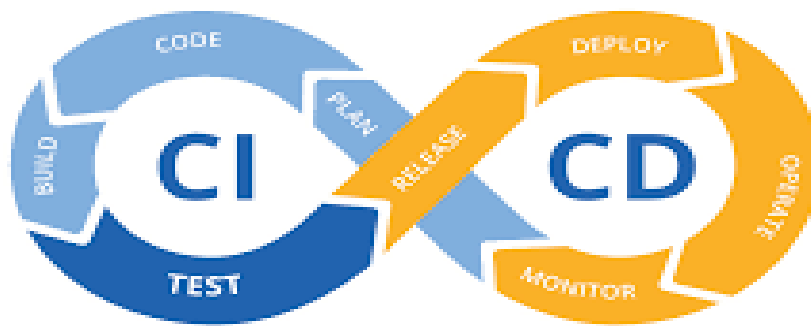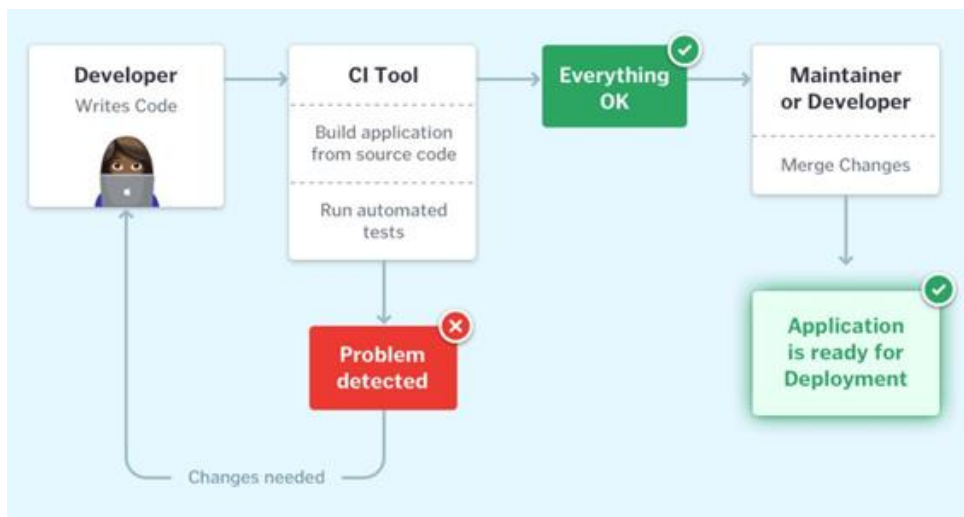# UDAPEOPLE

CI/CD BENEFITS PROPOSAL

WHAT DOES CI/CD? CONCEPTS EXPLAINED BELOW:

▸ CI/CD consist of three major concepts
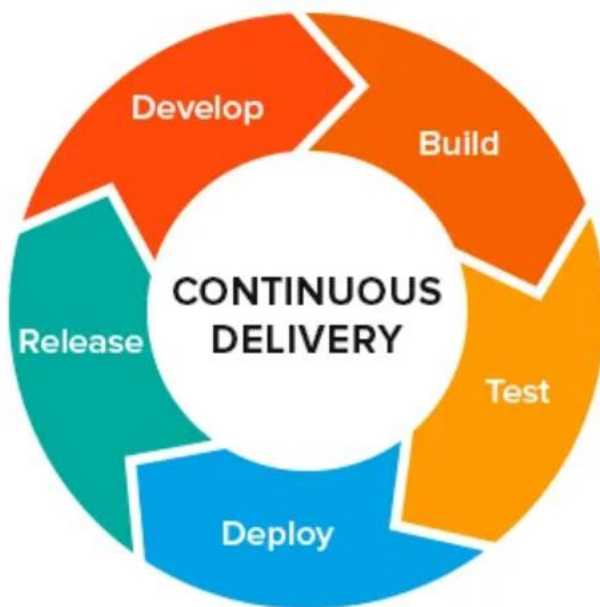
○ Continuous Integration

Continuous Integration describes the process of merging developer branches to the main branch several times a day. Each merge triggers an automated code build and test sequence, which ideally runs in less than 10 minutes.

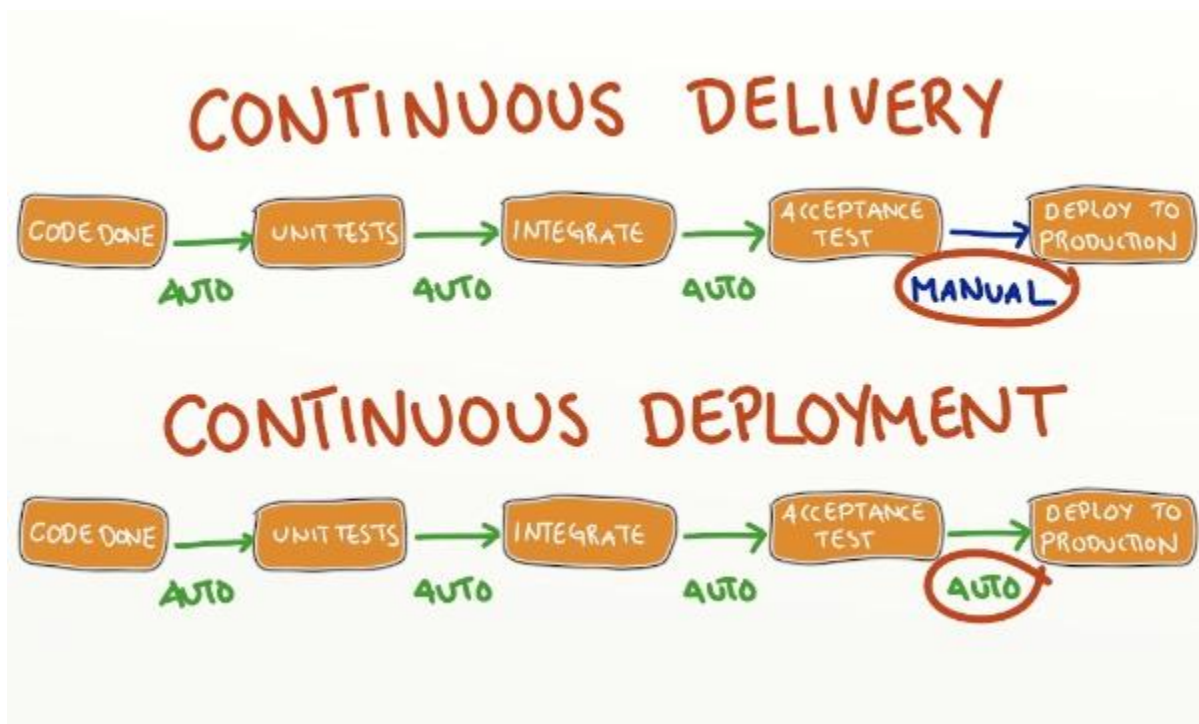• Catch Compile errors After Merge.

○ Continuous Delivery

       In addition to Continuous Integration, Continuous Delivery makes sure that changes of a software product can be released quickly to customers in an automated way and at any point in time.

▶ **Continuous Deployment: -**

Continuous Deployment extends Continuous Delivery in such a way that it allows frequent automated deployments without any human interaction. Typical phases in Continuous Deployment are Infrastructure Provisioning, Smoke Testing, Production Deployments and and automated Rollbacks.

WHAT ARE OUR CURRENT PAIN POINTS?

 ➢ Proceesing software delivery manually. Due to this delivery taking a day some times.
 ➢ Deploying code manually takes time and issues due to the check or config missed.
 ➢ Our manual release process is error-prone and always leads to delays of production deployments
 ➢ Releases for every 4 months.
 ➢ We get late feedback from the business department which prevents us from creating flexible solutions.

Benfits of CICD:-

Technical	Value	Translation
Speed of deployment	Reduce Cost	Less human errors
Faster testing and analysis	Avoid cost	Less test in Production
Detect security vulnerability	Avoid cost	Prevent embarcing or costly revenue holes
Catch Unit test failures	Avoid cost	Having less bug in our live app and spending less time doing manual testing.
weekly Releases	Increase Revenue	New value generating features released more quickly.
Automated Smoke Tests	Protect Revenue	Reducing downtime caused by deploy-related crash or bugs
Automatci Rollbacks	Increase Revenue	Quick undo the business
Automatic deploy to production	Increase Revenue	Less time to Marcket