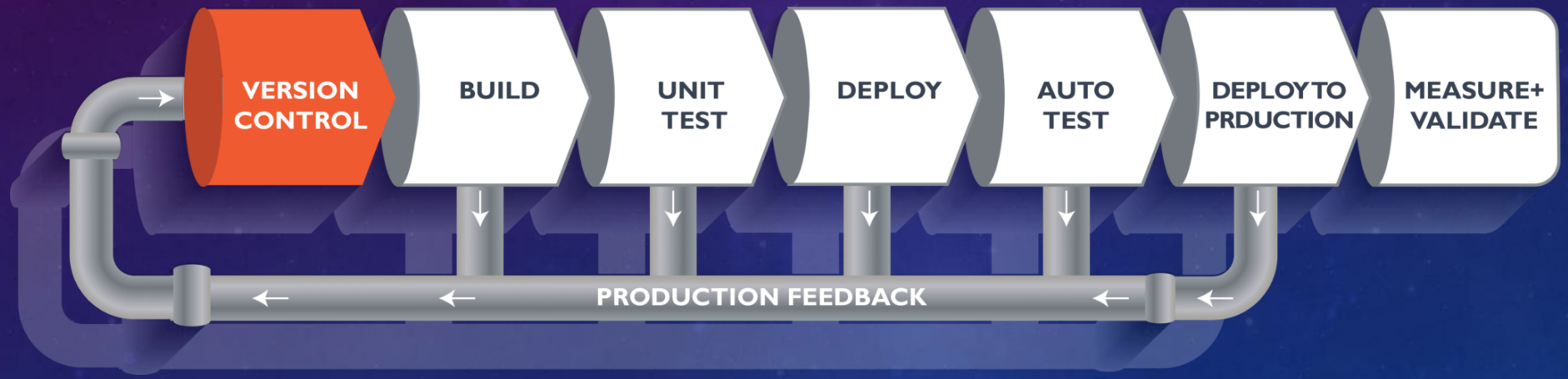
BENEFITS OF CI/CD

FUNDAMENTAL OF CI/CD

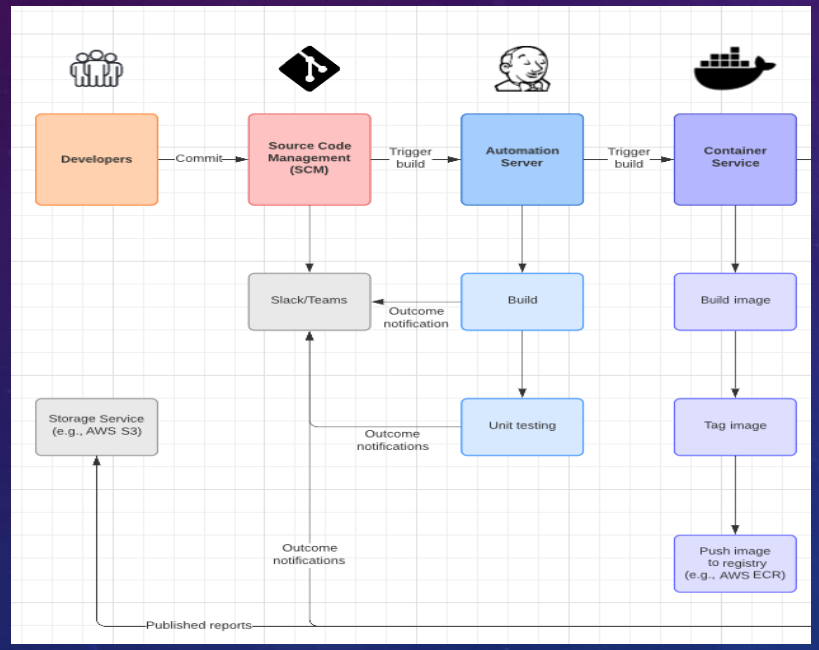
Continuous Integration/Continuous Deployment is a process of delivery and optimizing product deployment by automating the code checks, infrastructure provisioning and monitoring steps of product delivery.



CI/CD

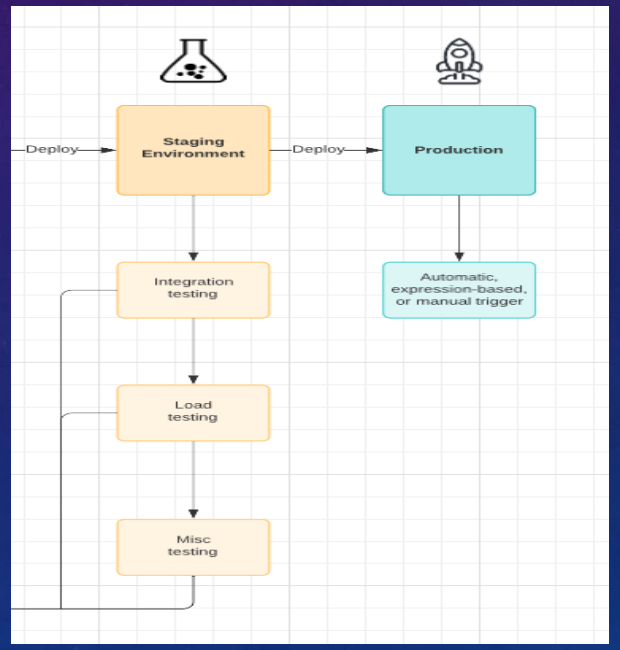
Continuous Integration(CI)

Is the act of merging all developers working copies of the udapeople product code into a shared main repository multiple times a day.



Continuous Deployment(CD)

Is the process where values is repeatedly and frequently release through automated deployment.



WHY IS CI/CD IMPORTANT?

Less Time on Testing

Because the CI pipeline of udapeople has a standard and strict test format it adheres to, it leaves little space for errors as developers has to conformed this standard and write better quality code with less bugs, which will in turn give developers enough time to focus On other product value rather than Debugging thus **reducing cost**

Security Vulnerability

Check for security vulnerability During the build process and helps to avoid protect client data from attack from dubious sources thus **avoid unnecessary cost** from fixing these vulnerabilities

Faster Deployments

Infrastruction creation and Provisioning is automated which will lead to less human error from configuration drifts, and thus **avoiding unnecessary cost**

Infrastructure Cleanup

Automate the cleanup of unused Infrastructure resources. This in turn help to avoid cost by eliminating the cost accrued by these dormant resources

Less Manual Check

Udapeople product value is deploy to target audience faster without the delay caused by manual checks, which leads to increase in revenue by providing newer and better features to customers

Smoke Test

Helps to check if a product is Responding the way its expected, And helps to reduce downtime due to Production crash

Q & A