

THE BUSINESS BENEFITS OF IMPLEMENTING CICD:

BUILDING BETTER
PRODUCTS FASTER



UDAPEOPLE

Overview of CICD

CI/CD which means continuous integration and continuous delivery is a method to frequently deliver software to customers by introducing Automation into of Software development. The main concepts of CICD revolves around continuous integration, continuous delivery, and continuous deployment. A CICD pipeline comprises of series of orchestrated steps with the ability to take source code from the developers to production. These automated steps includes building, packaging, testing, testing validating, verifying infrastructure, and deploying into all necessary environments.

Continuous Integration (CI)

This is the practise of automatically building and testing code every time a developer or team member commits the code to a shared repos. This may typically happen several times a day. The ultimate goal of continuous integration is to automate the testing and building a high quality, deployable artifact! Some common CI-related phases might include:

- Compile**
- Unit Test**
- Static Analysis**
- Dependency vulnerability testing**
- Store artifact**

Continuous integrations infers to the building and unit testing stages of the software release . Codes are from developers are automatically built, tested and Prepared for delivery to a staging environment or live production environment

Continuous Deployment (CD)

This is a software engineering strategy in which the product releases are delivered frequently through automated deployments.- This is an automated way of deploying the tested and built artifact into the production environment- Some common CD-related phases might include: -

- Creating and configuring infrastructure -**
- Promoting to production - Smoke Testing (aka Verify) -**
- Rollbacks in case if any failures**

Business Benefits Of Implementing CI/CD



Faster Delivery Time

Aim to make a software development process more faster and would help to increase revenue by releasing new value-generating features more quickly



Automate Infrastructure Creation

This avoids the cost introduced by human errors in manual creation of infrastructure and also reduce the cost accrued in unused resources.



Accelerated feedback loop with customers

Feedbacks are generated faster, this will increase customer retention and Revenue retention as well



Detect security vulnerabilities

Less bugs are shipped to production, This will reduce the security vulnerabilities and thus reduce cost of fixing issues

- ❖ Smoke test will be automated thereby reducing downtime from a deploy related crash or bug and in turn protects revenue.
- ❖ With all the benefits of CI/CD mentioned coupled with the low cost of implementation using cloud services, I believe it will be more cost effective and beneficial to our business.

Thank you.