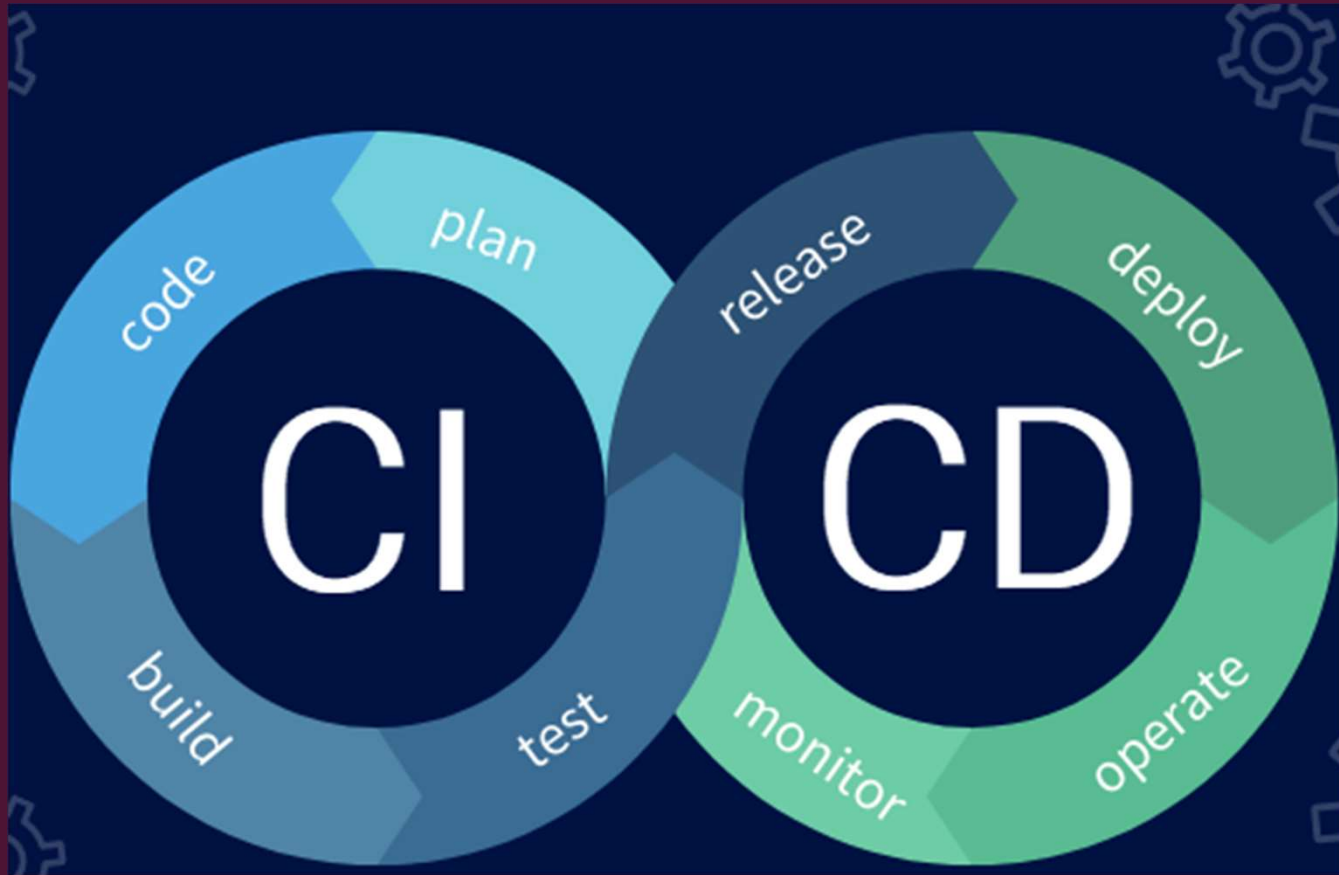# CI/CD IN THE BUSINESS

A BUSINESS TRANSFORMING INITIATIVE

WHAT IS CI/CD?

- What is Continuous Integration(CI)?
  - CI is a culture of continuously merging code changes from different engineers into a single codebase, where automated tests and builds are run.
  - It involves with the following:
    - Code
    - Build
    - Testing
    - Analysis

WHAT IS CI/CD? CONT.

- What is Continuous Deployment(CD)?

- Continuous Deployment is deploying code immediately after it has passed automated testing

- It involves:

  - Infrastructure Setup

  - Server Provisioning and Configuration

  - Smoke Testing

  - Promoting to Production

  - Rollbacks on failure.

  - Monitoring/Logging

BENEFITS OF CI/CD TO THE BUSINESS

- Superior Quality of Code

  - Code is written by multiple developers into a single codebase, allowing parallel testing. Developers get to collaborate and share ideas with the team continuously. This ensures poor code doesn't get into production.

- Easy Rollbacks

  - With CI/CD, rollbacks are easy. When a product or feature fails, we can quickly rollback to a previous version, preventing the business from making losses.

BENEFITS OF CI/CD TO THE BUSINESS

- Faster Time to Market

    - Faster error resolution time saves time and costs on debugging and helps get the product to market faster. Developers are also aware quality code which passes tests are automatically deployed into production. With this, the business can immediately start generating revenue rather than waiting for the app to be manually checked before release.

- Cut Costs

    - CI/CD helps cut costs on manual deployments. Teams spend less time on manual testing, etc. and business won't have to spend on other unnecessary tasks.