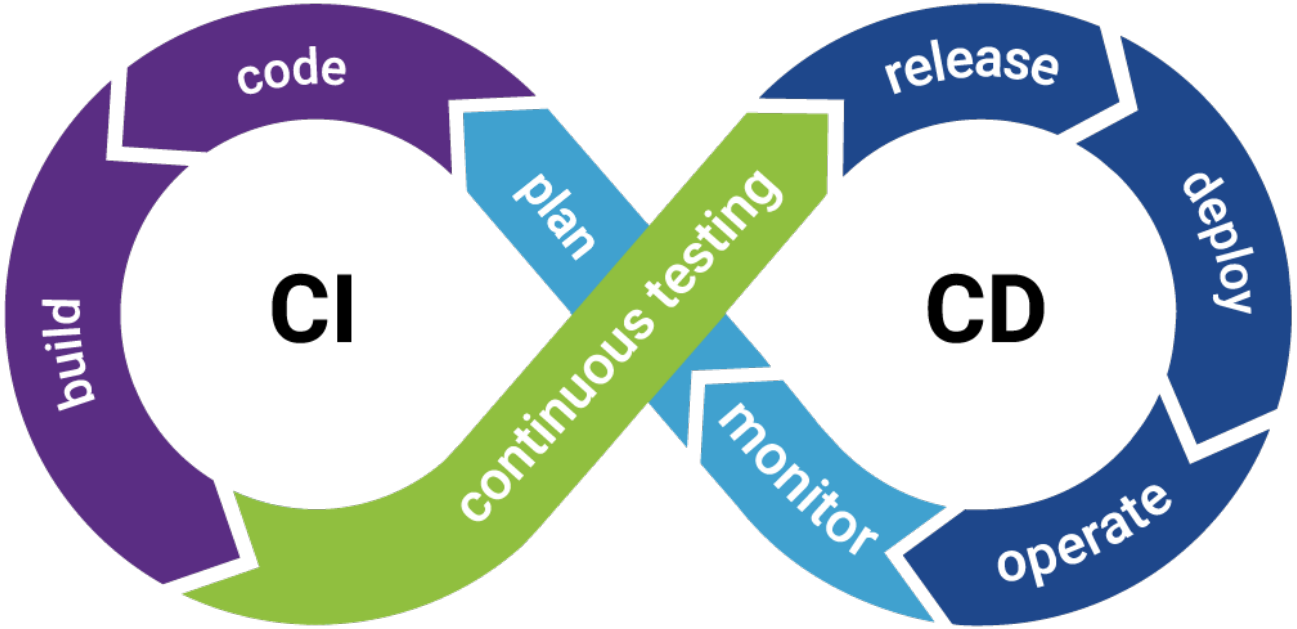

CI/CD

A BETTER WAY TO BUILD AND SHIP OUR PRODUCTS

Fundamentals to automate builds & deployment.

Continuous Integration (CI)

The practice of merging the working copies of all developers to a shared mainline several times a day in order to avoid conflicts in the code in the future. It is the first step and most important step towards ensuring we have a high quality, deployable artifact.

Fundamentals to automate builds & deployment contd.

Continuous Deployment (CD)

This is the process by which verified changes in the codebase are deployed to production as soon as they are ready and without any human intervention. Notable steps in this stage include:

- Provisioning servers.
- Setting up infrastructure.
- Copying files.
- Smoke testing.
- Promotion to production.
- Rolling back a change if something did not look right.

Benefits of CI/CD to our Business.

Detect Security Vulnerabilities

This would enable us detect serious security flaws that would be embarrassing if it was released to the public. This would save us money that would otherwise go into trying to win back customers' trust and rebuilding our image.

Catch Unit Test Failures

Having less bugs in our live product and spending less time doing tests manually would help us avoid unnecessary costs.

Benefits of CI/CD to our Business contd.

Automated Smoke Tests

This would protect our revenue by reducing downtime caused by deplyment-related bugs or crashes.

Deploy to Production without Manual Intervention

This will help us achieve a lesser time to market and thus increase our revenue.

Faster and More Frequent Production Deployment

We would generate more revenue by shipping value generating features more frequently to our customers and help us get feedback early and stay ahead.