



CI/CD:

What is it, and why should you do it?

What is CI/CD?

CI/CD stands for **Continuous Integration** and **Continuous Deployment**, and is a set of engineering practice used by teams to deliver features faster and frequently.

Why use CI/CD?

The benefits of CI/CD pipeline can be categorised under revenue and cost.

Revenue:

- Increase Revenue
- Protect Revenue

Cost:

- Reduce Cost
- Avoid Cost

Increase Revenue

- Faster releases since code checks, build, deployment are done automatically
- Frequent releases can happen since there's no manual time consuming steps. With this also smaller code changes can be deployed.

Protect Revenue

- Automate smoke testing. This reduces the probability of new releases crashing and causing downtime.
- Automatically cancel release should smoke test fails or if rollback to previous stable version if new release encounters errors.

Reduce Cost

- Catch code errors before deployment. Reduces time spent on issue from new code
- Automate infrastructure creation and cleanup. Reducing cost from unused dangling resources.

Avoid Cost

- Detect security issues thereby protecting user data and avoiding lawsuits.
- Catch bugs in code. This reduces the bugs introduced into production.