# FUNDAMENTALS AND BENEFITS OF CI/CD

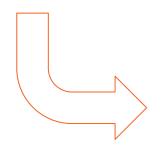
How Organizations Save Cost And Deliver Faster

#### What is CI/CD?

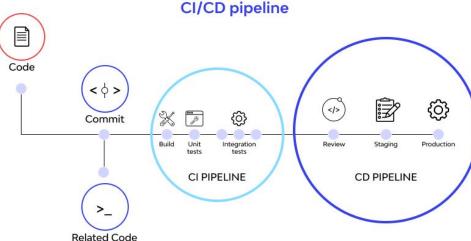
**Continuous Integration** is a development practice of code integration into a shared repository. Each integration is verified by an automated build and automated tests.

**Continues Delivery** is an extension of continuous integration. It aims to reduce the time the development teams takes between writing one new line of code and using it in production.

# How does the CICD Work?







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## Benefits

#### **Continuous Integration**

- Reduces Code Conflicts
- Faster Code Merge
- Catch Compile Errors After Merge

#### **Continuous Deployment**

- Faster & More Production Deployments
- Avoid Manual Intervention
- Automated Rollbacks In Case of Failure.



- Increase Revenue
- Reduce Cost
- Avoid Cost
- Protect Revenue



# **Continuous Deployment**

- Increase in market share
- Faster feature delivery

### Why We Should Invest Time In CI/CD?

**Customer Satisfaction** Buggy software harms your brand reputation Utilizing a CICD approach keeps your product up to date with the latest technology and allows you to gain new customers and guarantee long term contracts for your company.

**Reduce Cost and Boost Profit** Lowering chances of mistakes and limits the potential impact and loss that a deployment problem and bugs can cause.

**Smaller Backlogs** As most of the process is automated so your testers now have the time to deeply focus on the important phases of testing to get higher quality product.

**Shorter MTTR** It makes mean time to resolution shorter because of the smaller changes with the faster fault isolation.

**Accelerated Time To Market** The release frequency will increase dramatically which makes the way from development to production is too short.

**Fault Isolation** It helps to isolate the faults and makes it faster and easier to be detected by combining monitoring the systems to report the stage and locations of the faults

**Increased Productivity** Thanks to the automation of routine processes now the development team can focus on the crucial tasks only.

Flexibility & Responsiveness It makes applications updates faster which helps to release the new features faster and easier and fix the issues faster once a bug is detected.