

# CI/CD AUTOMATION POWER

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## CI/CD Meaning

- Cl stands for Continuous Integration in which incremental code changes are made frequently and reliably. While CD stands for Continuous Deployment.
- Automated build-and-test steps triggered by CI ensure that code changes being merged into the repository are reliable.

• The code is then delivered quickly and seamlessly as a part of the CD process.

### Benefits of CI/CD

#### Increase revenue

- CI/CD provides faster and more frequent production deployments which means new valued features are released more quickly adding profit to our application.
- We can make automatic checks using CI/CD before deploying to production which decreases the employees needed for this function and also decreases the time to market.

#### Protect revenue

- Automated smoke tests can be launched reducing the downtime from related crash or major bug.
- Also quick undo is available to return the production state back to working state in case of any failure.

## Benefits of CI/CD (Cont.)

#### avoid cost

- Less bugs in production and less time in testing as CI/CD Catches Unit Test Failures
- CI/CD Prevents embarrassing or costly security holes as it helps in detecting security vulnerabilities.
- Less human error and Faster deployments are provided as Infrastructure Creation is automated.

#### Reduce cost

- Catch Compile Errors After Merge Less developer time on issues from new developer code
- Automate Infrastructure Cleanup Less infrastructure costs from unused resources

