



CI/CD Benefits

What Is CI/CD?

Continuous integration and continuous deployment (CI/CD) is a set of ideas, processes, and capabilities that enables software changes to be delivered to users in a timely, repeatable, and secure manner by introducing automation into software development processes

How organizations save cost and deliver product faster ?



Continuous Integration

- Reduces code conflicts.
- Faster code merge.
- Catch compile errors after merge.



What is the revenue from applying CI/CD for my organization?

- Increase in revenue.
- Cost Reduction.
- Faster product delivery.
- Quick Rollback if required.



Continuous Deployment

- Faster and more frequent production deployments.
- Avoid manual intervention by deploying to production in an automated fashion.
- Automated and faster rollbacks in case of failure.



Why the hassle?

- Increase in market share
- Faster feature delivery for customers



Action	Value
New value-generating features released more quickly	Increase Revenue
Less time to market	Increase Revenue
Less human error, Faster deployments	Cost Avoidance
Quick undo to return production to working state	Protect Revenue

Understanding the Process of CI/CD

Developers frequently commit codes to version control systems such as GitHub, which start the CI process.

The code quality can be determined by scanning or analyzing it with static code analysis tools.

The CI process creates the final build after running automated tests, such as unit and integration tests

Implementing CI is the first essential step for a developer to create high-quality code. Several CI tools are available, including Harness CI, CircleCI, and Travis CI. Code changes are deployed automatically into production in the final stage of the CI/CD pipeline once the build has passed all tests.

The technical purpose of CI is to create a standardized and automated process for developing, packaging, and testing programs. Most developer teams are inclined toward code changes when the integration process achieves better cooperation and software quality. On the other hand, the CD begins where CI ends to ensure that the code changes are automatically pushed to the selected infrastructure environments.

CI/CD refers to a pipeline where you can submit new code on one end, let it get tested through phases such as sourcing, building, staging, and production, and then finally release it as a ready-for-production code.