



BENEFITS OF CI/CD

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- 1.What exactly does CI/CD mean?*
- 2.What are our present problems?*
- 3.How DevOps concepts could be useful to us?*
- 4.What will the hurdles be that we must overcome?*

OVERVIEW

Continuous Integration-

The process of often merging developer branches to the main branch is referred to as continuous integration. In the end, CI emphasises test automation and produces high-quality deployable artefacts.

Continuous Delivery-

Continuous Delivery, in addition to Continuous Integration, ensures that updates to software products can be made at any time and provided to clients in a timely manner.

Continuous Deployment –

Continuous Deployment is an extension of Continuous Delivery that permits frequent automatic deployments without requiring human input. Infrastructure Provisioning, Smoke Testing, Production Deployments, and automated Rollbacks are typical stages in Continuous Deployment.

WHAT EXACTLY DOES CI/CD MEAN?

- 1. Production deployments are frequently delayed by errors in our manual release procedure.*
- 2. As a result, we frequently end up with software that is of poor quality since we no longer have the time to perform quality analysis.*
- 3. Deployments are quite difficult. Just a select few professionals who have spent countless hours carefully crafting helper programmes can comprehend the entire procedure. There are no rollback methods or smoke testing.*
- 4. We receive business department input after business hours, which inhibits us from developing adaptable solutions.*

WHAT ARE OUR PRESENT PROBLEMS?

- 1.CI/CD increases revenue by delivering new features faster, capturing market opportunities.*
- 2.Improved product quality through CI/CD reduces support costs and boosts customer satisfaction
Leading to higher revenue.*
- 3.CI/CD's continuous feedback loop drives product enhancements, attracting more customers and
generating additional revenue.*
- 4.Rapid issue resolution in CI/CD minimizes downtime, ensuring uninterrupted revenue flow.*
- 5.CI/CD reduces development and deployment costs, maximizing profitability.*
- 6.Automation in CI/CD saves time and reduces labor costs, contributing to financial gains.*
- 7.CI/CD scalability handles increased workloads efficiently, avoiding revenue loss from performance issues.*
- 8.Collaboration and transparency in CI/CD prevent costly rework and delays, maintaining revenue momentum.*
- 9.CI/CD detects and resolves bugs swiftly, minimizing revenue impact and preserving customer loyalty.*
- 10.Continuous monitoring in CI/CD prevents security breaches and performance issues, safeguarding revenue streams.*

HOW DEVOPS CONCEPTS COULD BE USEFUL TO US?

- 1.Setting up CI/CD requires significant upfront investment and learning. This may appear daunting at first glance in comparison to existing best practises.*
- 2.Providing CI/CD pipelines is not a one-time endeavour; rather, it demands regular support, upkeep, development, and improvement.Notwithstanding some difficulties,*
- 3.CI/CD will ultimately enhance business operations and significantly cut expenses.*

WHAT WILL THE HURDLES BE THAT WE MUST OVERCOME?