CI/CD:

A breakdown of Fundamentals & Benefits

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Outline

1. What is CI/CD
2. How CI/CD works
3. Why use CI/CD?
4. Benefits of CI/CD in our Organization
5. Questions & Answers
6. Thank you
7. Questions & Answers

What is CI/CD

Continuous integration:

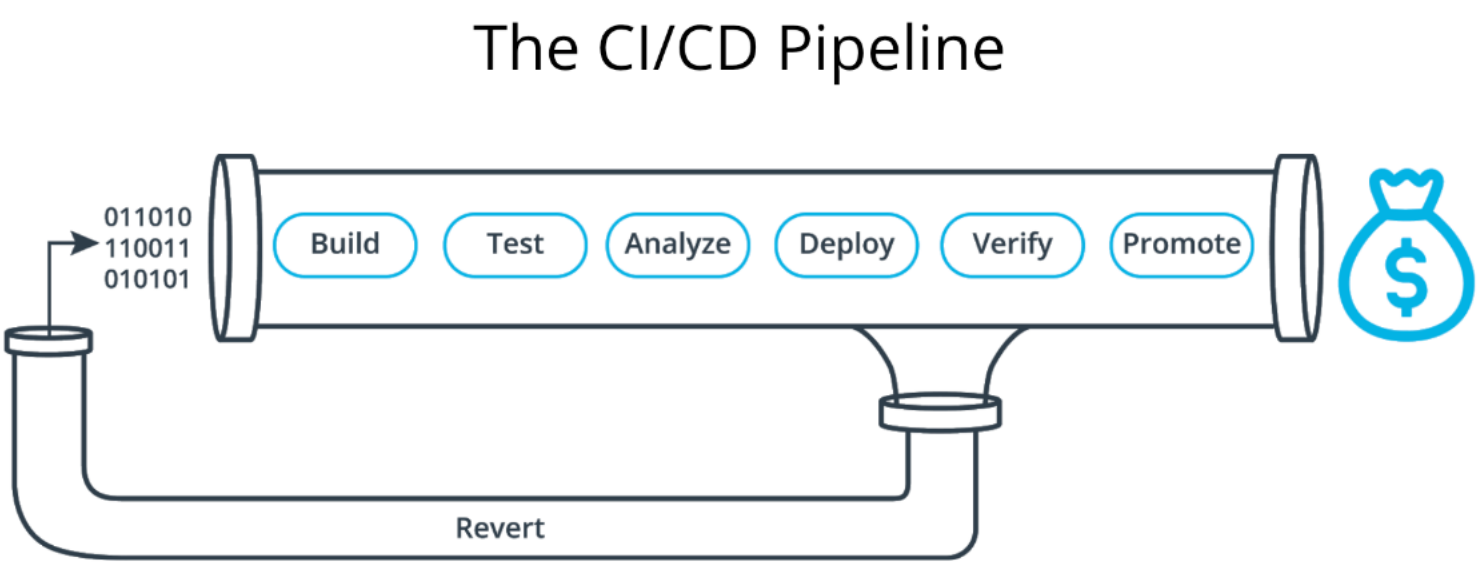
(CI) is a development practice that integrates codes into a repository. Each integration is verified by an automated build and text

Continuous Delivery:

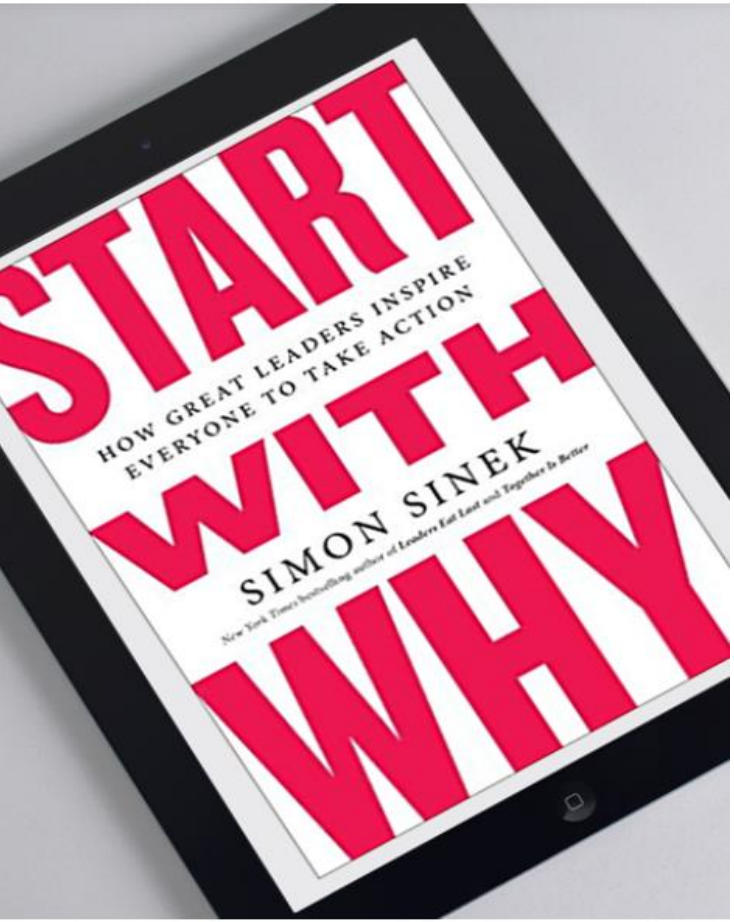
(CD) is an extension of CI that aims to reduce development time between writing code and using it in production

How CI/CD works

- Rollbacks



The Phases of CI/CD Pipeline



Why use CI/CD?

Why Use Continuous integration

1) Merge code Faster.

2) Catch compile errors after merge.

3) Reduces code conflicts.

Why Use Continuous deployment

1) Automate deployment to production and eliminate manual intervention.

2) Automated rollbacks in case of failure.

3) Deploy to production faster and more frequently.

Benefits of CI/CD in our Organization

S/N	Technical Benefit	Business Benefit	Comment
1	Catch Compile Errors After Merge	Reduce Cost	Less developer time on issues from new developer code
2	Catch Unit Test Failures	Avoid Cost	Less bugs in production and less time in testing
3	Automate Infrastructure Creation	Avoid Cost	Less human error, Faster deployments
4	Automate Infrastructure Cleanup	Reduce Cost	Less infrastructure costs from unused resources
5	Faster and More Frequent Production Deployments	Increase Revenue	New value-generating features released more quickly
6	Deploy to Production Without Manual Checks	Increase Revenue	Less time to market

Thank You

Questions & Answers