# The Importance of CI/CD and its Automation Powers

## Introduction

Welcome to today's presentation on the importance of CI/CD and its automation powers. CI/CD stands for Continuous Integration and Continuous Delivery. It's a crucial practice that enables organizations to ship software quickly and efficiently.

## What is CI/CD?

CI/CD stands for Continuous Integration and Continuous Delivery. It allows for the rapid and efficient delivery of software. Ensures a continuous flow of new features and bug fixes.

## What is CD?

CD stands for Continuous Delivery or Continuous Deployment.

CD involves making code continuously integrated deployable to an environment, such as QA or production. Continuous Deployment goes one step further by automating the actual deployment.

# Continuous Integration (CI)

Developers frequently merge their code changes to a shared repository. It's an automated process that prevents integration conflicts. Automated testing is a key part of CI. CI/CD Benefits

## Benefits of CI/CD.

Reduction of Non-Critical Defects

CI/CD saves time and money.

Developers can work on fixing older code and making it cleaner.

Tackling the backlog and non-critical defects becomes feasible.

### Fail Fast

Detect errors faster and take corrective actions. Saves time, money, and minimizes debugging. Early issue resolution is a significant advantage.

#### Make Revenue

Faster and more frequent production deployments.
Removal of manual checks before deployment speeds time to market.
Protect Revenue

Automated smoke tests reduce downtime due to deployment-related crashes. Automated rollback means a quick undo from production to a working state.

### **Avoid Cost**

Automation of infrastructure creation results in faster deployment and fewer human errors. Catching unit test failures leads to fewer bugs in production.

Detecting security vulnerabilities prevents future attacks.

#### Reduce Cost

Automation of infrastructure cleanup prevents unnecessary costs on unused resources. Catching compile errors after merging reduces time spent on issues from new developer code. Conclusion

In conclusion, CI/CD and its automation powers are essential for modern software development. They reduce defects, save time and money, and ensure faster, more reliable deployments. Embrace CI/CD to stay competitive in today's fast-paced tech landscape. Thank You

Thank you for your attention.