

# Udapeople: Benefits of CI/CD

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# What is CI/CD?

## Lets get on the same page

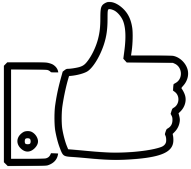
**Continuous Integration** - The practice of merging all developers working copies to a shared mainline several times a day

**Continuous Delivery** - An engineering practice in which teams produce and release value in short cycles.

**Continuous Deployment** - A software engineering approach in which the value is delivered frequently through automated deployments.



# Why Should We Adopt CI/CD for Udapeople?



## Customer Satisfaction

Buggy software results in a bad experience for the Customer. CI/CD helps us prevent bugs which improve the user experience.



## Better Features

Less time fixing bugs and spent on deployment means more time working on features. This reduces costs and also helps improve the user experience



## Rapid Development

Bugs are less common, but when they do occur notified and able to fix much quicker. Save time and money. Automate Infrastructure.



## Better Communication

CI/CD helps communication across teams by providing a common framework for what is important to test in the product.



## Monitoring

Insights into application performance. This will enable analytics in which to improve the product with.



## The Trade-offs

- Takes time upfront to build the Pipeline.
- Communication between Teams needs to be emphasized.

**Invest Time Now to Save Time Later**

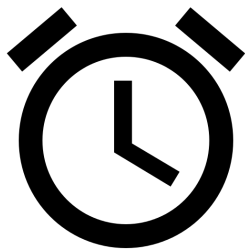


## Summary



### Prevent Cost

- Catch Test Failures - Less Human Errors
- Detect Security Vulnerabilities - Prevent Exposing Customer Data
- Automate Infrastructure Creation - Less Human Error



### Reduce Time and Cost

- Catch Compile Errors After Merge - Less Developer Time on Issues
- Get Alerted on Errors - Faster Resolutions, Better experience for users
- Automate Infrastructure Cleanup - No human error leaving expensive infra up.



### Increase Revenue

- Faster and more frequent deployments - Less time to market on features
- Deploy to Production without manual checks - Less time to market.