

CI/CD Implementation Proposal



► Situation:

UdaPeople has grown continuously both in revenue and staff size. With the product being at the core of the company's success, the engineering department grew considerable in size

► Challenge:

The engineering department needs to manage its developments in order to keep delivering high value features into production in short time while keeping errors and downtimes at the current low rate or even below

► Solution:

Using CI/CD from the first minute for any new development can save costs, protect and even increase revenue.

What is CICD



Continuous integration (CI) is practice that involves developers making small changes and checks to their code... In short, CI is a set of practices performed as developers are writing code, and **CD is a set of practices performed after the code is completed.**

- ▶ CI/CD consist of three major concepts
 - Continuous Integration
 - Continuous Deployment
 - Continuous Delivery

CI/CD is one of the best practices for DevOps teams to implement, for delivering code changes more frequently and reliably

Current Pain Points



- 1) Our release process is manual and error-prone this always leads to delays of production deployments and affects release time lines.
- 2) Poor Release quality, no code consistency and no proper backout or rollback mechanisms
- 3) Complex deployments - Only a chosen few experts are able to understand the whole process.
- 4) Infrastructure creation and clean up is manual
- 5) Inconsistent environment configurations
- 6) Conflicting goals between dev and ops

Result: High Cost and poor quality

Implementing CI/CD will Help in:



- Smaller Code Changes.
- Fault Isolations.
- Faster Mean Time To Resolution (MTTR)
- More Test Reliability.
- Faster Release Rate.
- Smaller Backlog.
- Customer Satisfaction.
- Increase Team Transparency and Accountability.
- Reduce Costs
- Easy Maintenance and Updates

Result: Low Cost and Good Quality which will increase revenue

CICD As Solution



- ▶ Using CI/CD pipelines can help us reduce costs, protect and even increase revenue
- ▶ CI/CD pipelines can help us cross-functional teams with their responsibilities by providing automation, governance, longevity, and security to the software delivery process
- ▶ It will improve Our release process as fully automated and will improve our release quality
- ▶ It will help us in Complex deployments
- ▶ Infrastructure creation and clean up will be fully automated and reliable.
- ▶ We will have more consistent environment configurations.
- ▶ No Conflicting goals between dev and ops as both will be managed by single team.