



UDAPEOPLE

CI/CD BENEFITS PROPOSAL



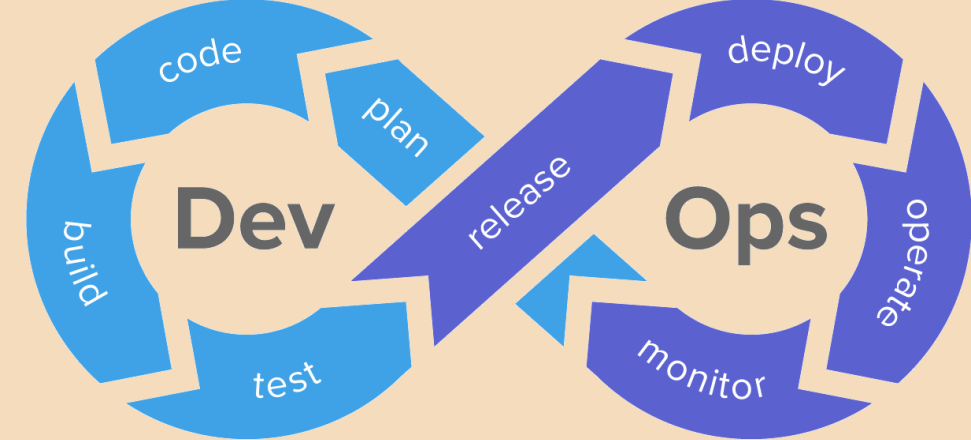
OVERVIEW

- **What is CI/CD?**
- **What is our current problem?**
- **What is CI/CD Solution and Benefits here?**
- **What challenges will be confronted?**

What is CI/CD?

➤ *CI/CD consist of three major concepts:*

- Continuous Integration
 - Continuous Integration describes the process of merging developer branches to the main branch several times a day. CI puts an emphasis on test automation and finally generates a high quality, deployable artifact.
- Continuous Delivery
 - In addition to Continuous Integration, Continuous Delivery makes sure that changes of a software product can be released quickly to customers in an automated way and at any point in time.
- Continuous Deployment
 - Continuous Deployment extends Continuous Delivery in such a way that it allows frequent automated deployments without any human interaction. Typical phases in Continuous Deployment are Infrastructure Provisioning, Smoke Testing, Production Deployments and automated Rollbacks.



What is our current problem?

Manual release process



Error-prone and always leads to delays of production deployments

Delays in getting new features into production



Lost opportunities and revenue

Late feedback from the business department



Prevents us from creating flexible solutions

What is CI/CD Solution and Benefits here?

➤ **Problem:**

- Manual and error-prone release process and poor software quality

➤ **Solutions:**

- Implement Continuous Integration: automate compiling, testing, code analysis and artifact storage
Automate Infrastructure Creation

➤ **Benefits:**

- Cost reduction due to less human errors and faster deployments
- Reduce complexity and save manual troubleshooting time



What is CI/CD Solution and Benefits here?

➤ **Problem:**

- Delays in getting new features into production, lost opportunities and revenue

➤ **Solutions:**

- Catch compile and unit test failures after merge

➤ **Benefits:**

- Less bugs in production
- More time for developing new features



What is CI/CD Solution and Benefits here?

➤ **Problem:**

- Late customer feedback

➤ **Solutions:**

- Implement Continuous Deployment: automated deployment of changes at any given point in time
- Involve customers and business stakeholders already in deployment

➤ **Benefits:**

- Faster feedback cycles of customers lead to higher customer satisfaction rates since they are involved right from the beginning of feature development/deployment and not just at a fixed release date



What challenges will be confronted?

- *Establishing CI/CD comes with a high amount of initial cost and learning. At first sight this might seem overwhelming compared to current best practices*
- *Delivering CI/CD pipelines is not a one time effort, but requires constant support and maintenance as well as continuous development and improvement*
- *Even though there are some challenges, CI/CD will improve overall business processes and dramatically reduce costs on the long run*



Thanks for watching!