UDAPEOPLE

Proposal for Implementing CI/CD

CHERGUI BENAISSA YACINE

AGENDA

Ce que ce rapport va couvrir

- What is CI/CD
- Consequence of CI/CD
- Why Is It Helpful
- Benefits of CI/CD
- The challenges

What is CI/CD :

Continuous integration

focuses on integrating work from individual developers into a main repository multiple times a day to catch integration bugs early and accelerate collaborative development. CI is practicing merging all developers' working copies to a shared mainline several times a day.

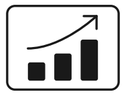
Continuous Delivery

concerned with reducing friction in the deployment or release process, automating the steps required to deploy a build so that code can be released safely at any time. An engineering practice in which teams produce and release value in short cycles.

Continuous Deployment

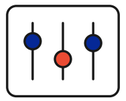
goes one step further than Continuous Delivery. While with Continuous Delivery you decide when you deploy the new version of the application at the end of the pipeline, Continuous Deployment takes care of the deployment of the new version of the application to the users automatically.

Consequence of CI/CD



No more manual deploying to environments

No more modifying environment settings in GUI's



No more neglecting the unit tests

No more leaving broken code in place

Benefits of CI/CD

Reduce Cost

- Less developer time on issues from new developer code
- Less infrastructure costs from unused resources

Avoid Cost

- Less bugs in production and less time in testing
- Prevent embarrassing or costly security holes
- Less human error, Faster deployments

Benefits of CI/CD

Increase Revenue

- New value-generating features released more quickly
- Less time to market

Protect Revenue

- Reduced downtime from a deploy-related crash or major bug
- Quick undo to return production to working state

The challenges

01 Requires a high level of discipline

02 Requires additional skills to maintain and extend automation

03 CI/CD configuration need high amount of learning.

04 CI/CD need to flexible and requires constant support, maintenance as well as development or enhancement.

05 lot of effort at the beginning but reduce cost in the future, the long run.

Thank you !