

# Benefits of CI/CD for cloud based products



# What is CI/CD?

- Before talking about the benefits of CI/CD and how it'll add more value to the company, let's just get to know the fundamentals of CI/CD and the problems it hopes to solve. CI/CD is short for continuous integration and continuous deployment. The 2 processes work together as a process called Continuous delivery.
- Continuous delivery is an engineering paradigm in which teams produce and release values in short cycles.
- Continuous integration is the practice of merging all developer's working copies to a shared mainline several times a day. It handles anything that has to do with code.
- Continuous deployment is a software development approach in which values are delivered frequently through automated deployments. It handles anything that has to do with deployments.

# So what are the benefits of CI/CD

- 1. Catch Compile Errors After Merge: This helps to reduce cost because there will be less time spent on issues from new developer code.
- 2. Catch unit test failures: This helps to avoid cost because there will be less bugs in production and less time in testing.
- 3. Detect security vulnerabilities: This helps to avoid cost because we would be preventing embarrassing or costly security holes.
- 4. Automate Infrastructure creation: This helps to avoid cost because there will be less human errors and faster deployments.
- 5. Automate Infrastructure cleanup: This helps to reduce cost because we would have less infrastructure cost from unused resources.



- 6. Faster and more frequent production deployment: This helps to increase revenue because we have new value generating features released more quickly.
- 7. Deploying to production without manual checks: This helps to increase revenue because features will take less time to go to market.
- 8. Automated smoke tests: This helps to protect revenue because we would have reduced down time from deployment related crash or bug.
- 9. Automating rollbacks triggered by job failures: This helps to protect revenue because we can have a quick undo process to return production to working state in case things goes wrong.



■ THANK YOU

