Why CI/CD?

Benefits of CI/CD

What is CI/CD?

CI (Continuous Integration):

The practice of merging all developers' working copies to a shared mainline several times a day.

CD (Continuous Deployment):

A software engineering approach in which the value is delivered frequently through automated deployments.

In a nutshell CI/CD is a set of development practices aimed at automating the building, testing, and deployment of applications.

What value CI/CD adds to our business?

- Catch Compile Errors After Merge which reduces developer time spent on issues from new developer code, which <u>Reduce Cost.</u>
- Catch Unit Test Failures which reduce bugs in production and time consumed in testing, therefore <u>avoiding extra cost.</u>
- Detect Security Vulnerabilities, therefore avoiding embarrassing or costly security holes, which <u>prevent spending extra cost</u>.
- Automate Infrastructure Creation, and by increasing the level of automation it decreases human error, increase speed of deployments and <u>avoid extra</u> <u>cost</u>.
- Automate Infrastructure Cleanup which results in Less infrastructure costs from unused resources and <u>reduce costs</u>.

What value CI/CD adds to our business?

- Faster and More Frequent Production Deployments, therefore new value-generating features released more quickly which <u>increases revenue</u>.
- Deploy to Production Without Manual Checks which leads to less time to the market and <u>increases revenue</u>.
- Automated Smoke Tests therefore early detections of failures or things that may cause failure which reduced downtime from a deploy-related crash or major bug and <u>protect revenue</u>.
- Automated Rollback Triggered by Job Failure, therefore quick undo to return production to working state which <u>protects revenue</u>.
- Customer satisfaction by reducing the down time and increase the speed of releasing new features which eventually <u>increases revenue</u>.

What value CI/CD adds to our business?

- Continuous feedback, A unified CI/CD process, operating as part of a DevOps platform, gives everyone on the team – including business stakeholders – a way to see what's happening, where it's happening, and what might be going wrong.
- Optimum transparency and accountability. Thanks to continuous feedback, a CI/CD pipeline makes the entire software development process completely transparent to the business side. Product managers can check project status in a glance and track accountability as needed.