Why CI/CD?

An approach for effective speedy continuous delivery

What is CI/CI?

In software engineering, **CI/CD** or **CICD** is the combined practices of continuous integration (CI) and (more often) continuous delivery or (less often) continuous deployment (CD).[1]

CI/CD bridges the gaps between development and operation activities and teams by enforcing automation in building, testing and deployment of applications. CI/CD services compile the incremental code changes made by developers, then link and package them into software deliverables

Reference: Sacolick, Isaac (2020-01-17). "What is CI/CD? Continuous integration and continuous delivery explained". *InfoWorld*. Retrieved 2021-06-01

How can it help our business?

The following 9 points brief it all

1. Smaller Code Changes

Small code change at a time makes it easy to observe the change and handle any incident that happens because of it

2. Fault Isolations

Due to its nature in isolating stages that the code passes through to get to production you can know where the problem at which reduces the costs

3. Faster Mean Time To Resolution (MTTR)

Because ci/ci structures the procedures the code passes by to get to the production server, you can detected the problem quickly

4. More Test Reliability

Since CI/CD skips no tests beside that it encourages pushing tests with change to maintain a certain testing coverage level
It makes the the code tests in sync and updated with the changes

5. Faster Release Rate

Since the issues the detected quicker it can be fixed quicker

6. Customer Satisfaction

Since the code is followed by a good clean CI/CD pipeline it's getting faster to deliver the features the customer demands

7. Increase Team Transparency and Accountability

Since each change happens from anyone of the team member is

8. Reduce Costs

Failing fast and knowing where the fault is and repairing it fast can radically reduce costs by cutting wasted production resources fees

9. Easy Maintenance and Updates

Setting up CI/CD right makes developers more confident in updating their software