CI/CD benefits for business

In the context of the project of UdaPeople

Benefits of CI/CD

- FAST AND RELIABLE RELEASES

- BETTER VISIBILITY ACROSS
DEVELOPMENT PROCESSES

- EARLY BUG DETECTION

- QUICK FEEDBACK LOOPS

- HAPPIER AND MORE
PRODUCTIVE TEAMS

Faster Release Rate

- Failures are detected faster and as such, can be repaired faster, leading to increasing release rates. However, frequent releases are possible only if the code is developed in a continuously moving system.

- CI/CD continuously merges codes and continuously deploys them to production after thorough testing, keeping the code in a release-ready state. It's important to have as part of deployment a production environment set up that closely mimics that which end-users will ultimately be using. Containerization is a great method to test the code in a production environment to test only the area that will be affected by the release.

Faster Mean Time To Resolution (MTTR)

- MTTR measures the maintainability of repairable features and sets the average time to repair a broken feature. Basically, it helps you track the amount of time spent to recover from a failure.

- CI/CD reduces the MTTR because the code changes are smaller and fault isolations are easier to detect. One of the most important business risk assurances is to keep failures to a minimum and quickly recover from any failures that do happen. Application monitoring tools are a great way to find and fix failures while also logging the problems to notice trends faster.

Customer Satisfaction

- The advantages of CI/CD do not only fall into the technical aspect but also in an organization scope. The first few moments of a new customer trying out your product is a make-or-break-it moment.

- Don't waste first impressions as they are key to turning new customers into satisfied customers. Keep your customers happy with fast turnaround of new features and bug fixes. Utilizing a CI/CD approach also keeps your product up-to-date with the latest technology and allows you to gain new customers who will select you over the competition through word-of-mouth and positive reviews.

Increase Team Transparency and Accountability

- CI/CD is a great way to get continuous feedback not only from your customers but also from your own team. This increases the transparency of any problems in the team and encourages responsible accountability.

- CI is mostly focused on the development team, so the feedback from this part of the pipeline affects build failures, merging problems, architectural setbacks, etc. CD focuses more on getting the product quickly to the end-users to get the much-needed customer feedback. Both CI and CD provide rapid feedback, allowing you to steadily and continuously make your product even better.