UDAPEOPLE – CICD BUSINESS CASE

By

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FUNDAMENTALS OF CICD

CICD stands for Continuous Integration and Continuous Deployment. It is a software development practice that involves regularly integrating code changes into a shared repository and automatically deploying those changes to a production or staging environment.

The goal of CICD is to improve the speed and reliability of the software development process by enabling teams to quickly identify and fix issues, and by automating the deployment of code changes.

This helps to ensure that the codebase remains stable and up-to-date and helps to reduce the risk of bugs or compatibility issues being introduced into the production environment.

CI involves regularly merging code changes and quickly fixing issues to keep the codebase stable and current. CD automates the deployment of changes as soon as they are merged.

APPLICATION OF CICD

This can save a lot of time and effort that would otherwise be spent manually deploying changes or waiting for scheduled tasks to do it.

A comprehensive CI/CD pipeline can be used to build, test, and deploy changes automatically while monitoring and alerting about any challenges during deployment.

This setup requires various tools, such as a version control software like Git and automation tools like Jenkins and Ansible etc. A CI/CD pipeline streamlines the development process by automating manual processes and reporting on problems early.

It also removes the potential for human error that can occur with manual testing and deployment.
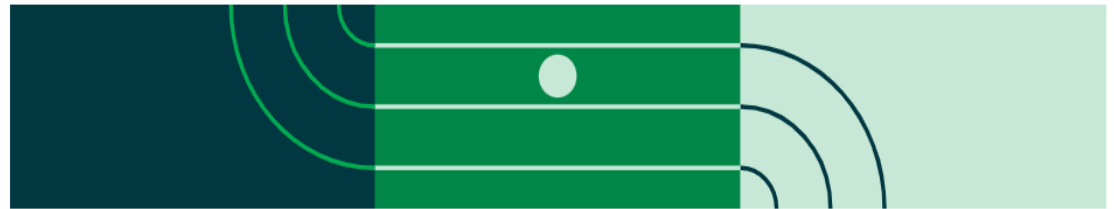
BENEFITS

- Improved speed and efficiency: CI/CD streamlines the software development process, allowing teams to move faster and deploy code changes more frequently.

- Increased reliability: Automated testing and deployment processes reduce the risk of bugs or compatibility issues, leading to more reliable and stable software.

- Improved collaboration: Regular integration of code changes into a shared repository allows teams to work together more effectively, and helps to reduce the risk of conflicts or integration issues.

- Faster time-to-market: By reducing the time it takes to deploy changes, CI/CD helps organizations to bring new products and features to market more quickly.

- Better alignment with business goals: CI/CD enables organizations to align their software development processes more closely with their business goals, by allowing teams to focus on delivering high-quality, valuable features to customers.

- Enhanced security: Automated processes and regular testing help to identify and resolve security issues more quickly, reducing the risk of data breaches or other security incidents.

SUMMARY

Overall, CI/CD provides businesses with a more efficient, reliable, and secure software development process, helping them to remain competitive and achieve their goals.

In conclusion, while the use of CICD processes will bring enormous gains to the business, the biggest win to udapeople will be reduced costs and increased reliability and safer operations.

THANK YOU