Leveraging CI/CD Practices to Deliver Business Value Faster and Effectively

A UdaPeople Case Study

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What is CI/CD?

- **CI** stands for **C**ontinuous **I**ntegration. It is a software development practice involves automatically merging code from various developers into a central repository. This process usually includes compiling, testing, and analyzing code for errors, bugs, and security vulnerabilities, and ultimately building a deployable artifact.
- **CD** stands for **C**ontinuous **D**eployment or **C**ontinuous **D**elivery.
- **Continuous Deployment** involves automatically deploying the artifacts into production servers.
- **Continuous Delivery** encapsulates a set of engineering practices for helping teams release value and deploy quality code in short cycles.
- **Let's see how this translates to business value!**

- **Bob** is in a team leveraging CI/CD practices in their development process
- A lot of processes are automated, from code testing, to compilation, to deployment
- Bob's team releases value faster, helping UdaPeople achieve its revenue goals while cutting down unnecessary cost.
- Bob is constantly happy, and has more time to focus on his family and other manual tasks.
- **Bob just got a salary raise** 🎉🎉

- **Joe**'s team has refused to adopt CI/CD practices
- A lot of processes are manual, hence time-consuming and error-prone
- Joe's team usually releases shitty code, reducing customers' confidence in the business. This ultimately leads to customer churn and lesser revenue
- Bob is constantly depressed 😔, he might never get a raise
- **Don't be like Joe** 👎 **!!**

How CI/CD will help the UdaPeople Business?

- Testing and Linting in the CI pipeline will improve code quality, hence reducing the possibility of downtime due to a bug/error: **Saving cost**.
- Shorter release cycles reduce time to market: This gives UdaPeople an advantage over competitors, hence **more revenue**!
- Automated, repeatable and reliable processes reduce the need for manual labour: **Saves cost on hiring!**
- Efficient delivery processes generally **improve developer productivity**, hence provides more time to focus on incredible ideas that will provide value to UdaPeople and its customers
- CI/CD processes also enforce code quality standards via various testing techniques to detect and fix bugs faster. **This improves customers' confidence in the product!**

- **DEVELOPERS** will be more productive
- **CUSTOMERS** will be happier to use our quality product
- This will reduce cost and boost revenue for the **BUSINESS**
- **STAKEHOLDERS** will become more confident
- This is surely a WIN-WIN situation for UdaPeople
- Thank you for listening! I hope you give CI/CD a shot.