THE INDISPENSABILITY OF CONTINUOUSLY DELIVERING VALUE TO OUR CUSTOMERS THROUGH CI/CD PRACTICES

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Background

In today's world of speed and fierce competition, survival and getting ahead depend on how quickly a business is able to move from concept to tangible value in the hands of customers. At Udapeople, our current process of shipping completed pieces of software from developers to customers is laden with long, manual processes that leave a lot of room for improvement in terms of developer productivity, discovery of and recovery from errors, turn around time, customer satisfaction, and ultimately revenue generation.

This presentation proposes the adoption of Continuous Integration and Continuous Deployment (CI/CD) principles and practices as a way of achieving this much-needed improvement.

CI/CD Explained

- **Continuous Integration**

  CI is the practice of developers frequently merging their code into a shared repository – ideally several times a day. It also involves the automatic enforcement of agreed quality standards on code before being allowed to persist in the repository.

- **Continuous Deployment**

  CD is the automatic deployment of new software artifacts to a production environment where customers can use them. It involves the automation of testing, failure detection, and graceful recovery if needed.

BENEFITS OF CI/CD

Adopting CI/CD unlocks a world of possibilities and benefits main of which are outlined below:

- Developers can focus most of their time on building more value.

- More revenue as a result of optimum application availability.

- Reduce costs by catching problems early and avoiding downtime.

- Preserves company image by early detection and mitigation of security vulnerabilities.

- Increase customer satisfaction and retention by frequent releases of new, valuable features.