## Fundamentals and Benefits of CI/CD

TO ACHIEVE, BUILD, AND DEPLOY AUTOMATION FOR UDAPEOPLE PRODUCT

## What is CI/CD

- Continuous Integration(CI): is the practice where developers commits and merges different versions of their code into a shared single or main repository.
- Continuous Deployment (CD): is an engineering approach used in delivering value through automation.

## Benefits of CI/CD

The following are the benefits of CI/CD which will help the organization in creating revenue, protecting revenue, control costs and reduce costs.

- Customer Satisfaction: If a customer is satisfied with the products and features delivered, the organizations revenue is increased. That is, customers will use the product or feature more often and also refer other individiuals leading to having new customers and an increase in revenue.
- Reduced deploy errors: This will help reduce production downtime thereby also protecting revenue. That is, with the implementation of automated smoke tests, there is high confidence that deployments to production will not cause any major downtime which helps in protecting revenue.
- Automate infrastructure cleanup: Having unused resources accumulates extra costs. However, with CI/CD, an automated infrastructure cleanup can be implemented which will help in reducing the costs from unused resources.
- Faster and more frequent production deployments: With CI/CD, new value generating features or products are released quickly(Less time to market) which will lead to an increase in revenue for the organization.

## Conclusion

With the benefits of CI/CD shared in the previous slide, I believe it has given the organization more insights on the benefits the organization stands to gain (Revenue protection, Increased revenue and Reduced costs) if the implementation of CI/CD is approved.