

Fundamentals and Benefits of CI/CD to Achieve, Build, and Deploy Automation for Cloud-Based Software Products

Emerging markets and high performance teams are rapidly embracing the CI/CD in their software development cycle because of its tremendous cost and revenue advantage it delivers to the business and ease at which developers build softwares.

CI/CD means continuous integration and continuous deployment. Continuous Integration, CI is the technical term for merging new lines of code into our products or existing body of code after a series of fail safe checks is performed. Continuous deployment, CD, refers to the automatic deployment of our market ready products to production.

As the team lead for this project UdaPeople i propose the adoption of CI/CD to achieve, build and deploy cloud based software products. This is aimed to drive core successful business metrics as regards to cost and revenue.

The time it requires to set a fully automated CI/CD is two weeks. After setup the CI/CD stays with the product throughout its life span except for minor maintenance. This mitigates the cost incurred in repeated development process as the software

Fully automated CI pipeline reduces 90% of the deployment cost incurred by the business per time. It eliminates up to 80% cost on fixing bugs because human interaction is eliminated. The status of the CI process is quickly reported on monitoring channels for quick follow up.

Fully automated CD drives revenue by reducing the time to market as opposed to the manual process. The time to market required for new features and latest updates is greatly enhanced. It improves our software product availability by failing fast in advent of deployment error and hence activating a roll back. This gives the product high availability which will lead to client satisfaction and finally revenue.

A state of the art Human resource solution udapeople needs an enabling process around it so that it could drive revenue, reduce cost on software maintenance and also providing fast time to market