

Proposal for the Adoption of CI-CD for UdaPeople product

1.0 Introduction

UdaPeople product is a revolutionary product for businesses to manage their personnel. It is very valuable, and our clients will be excited to have an easily accessible and affordable product to manage employees. Before the team commence active development, a careful look at our development and delivery process flow is needed following the decision to adopt the agile software development methodology.

In agile, software development and delivery are expected in fast and short time intervals. For the team to meet be truly agile, continuous integration and continuous delivery (CI-CD) should be adopted.

This proposal discusses CI-CD and the benefits our organisation will achieve if it is adopted.

2.0 What is CI-CD?

CI-CD is a common term used by developers and software engineering teams to describe the practices of continuous integration, continuous deployment, and continuous delivery.

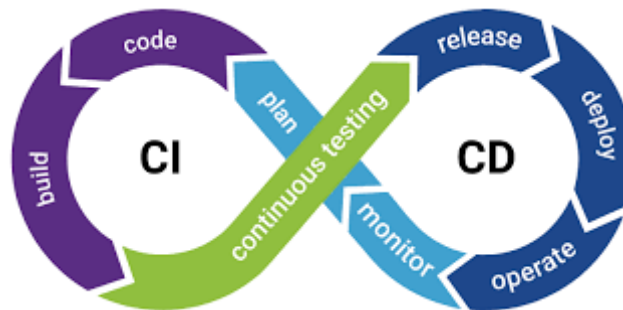


Figure 1: Example of a Software life cycle using CI-CD

Continuous integration is the practice of merging all developers working copies to shared mainline several times a day.

Continuous deployment is a software engineering approach in which updates and value are delivered frequently through automated deployments.

Continuous delivery is an engineering practice in which engineering teams produce and release value in short cycles. In general, Continuous delivery combines the practice of CI and CD to deliver value to customers.

4.0 Benefits of CI-CD

Continuous delivery principles have helped engineering teams change how they deliver software to customers to improve customer satisfaction. There are many engineering teams that are excellent at DevOps, Agile, Lean, Kanban, Scrum etc. However, they fail to deliver value to clients and leave their clients unhappy. One major cause of unsatisfied customers is the long-time intervals required to see features that were expected. CI-CD is all about putting features out faster so customers can start using them and the company can gain back trust.

With CI-CD, we can retain customers and they can become ambassadors to potential clients thereby resulting in new contracts and revenue for the company.



Figure 2: Benefits of CI-CD

One characteristic of CI-CD is that once set up, it becomes a true north meaning, continuous improvement is guaranteed once continuous delivery is accepted by an organisation. As the team begins its continuous improvement, management is sure to observe increased productivity and gain confidence that features will be built correctly. CI-CD enables features to be built correctly because it incorporates development, testing, builds and deployment as a single pipeline or process. Most CI_CD tools like circle ci, ansible and Prometheus are very affordable. The financial gains from CI-CD far outweigh the cost to get started with it.