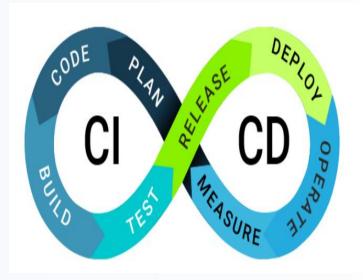
### **Benefits Of CI/CD for the UdaPeople Organization**





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# The Need for CI/CD

To stay competitive in the current market, organizations must strive to release features as fast as possible.

In the traditional software development methodologies, software releases were spread out, occurring quite rarely—every six months, for example. Bug fixes, functionality enhancements and new features collected over a long period of time had to be packed and released in one massive update.

CI/CD aims to enable software development teams to continuously deploy software updates into production to speed up application and feature release rates, reduce costs, and increase revenue.

CI/CD creates a fast and effective process of getting your product to market before your competition as well as releasing new features and bug fixes to ensure your customers are happy and satisfied. The platform that best enables these rapid release cycles is a seamless CI/CD pipeline.



## What Is CI/CD?

CI/CD, which is an acronym for continuous integration and continuous delivery (often used interchangeably with "continuous deployment), is a DevOps practice that aims to frequently deliver applications to customers by automating the stages of application development. The main concepts attributed to CI/CD are continuous integration, continuous delivery, and continuous deployment.





# Benefits Of CI/CD for the UdaPeople Organization

#### **Reduced Cost**

Automation in the CI/CD pipeline reduces the number of errors that can take place in the many repetitive steps of CI and CD. Doing so also frees up developer time that could be spent on product development as there aren't as many code changes to fix.

Automation is one of the most important reasons to implement a CI/CD pipeline. Automating build, testing and deployment not only make the life of the DevOps team easier, but also lowers costs.

#### Shorter time-to-market of new features

In utilizing CI/CD, code changes are small, and the organization can release software builds faster, on demand. This improves the ability to ship new features and functionalities. Your organization can react to the changing demands of the market and to new requests by the users. This will directly lead to an increase in revenue, as the organization will have the competitive advantage of deploying applications and features faster than the competition.

#### **Customer Satisfaction**

The goal of CI/CD implementation is to make customers happy. Buggy software can harm a company's reputation, sometimes irreparably. Using a CI/CD allows your organization gain new customers who will select you over the competition. Customers are kept happy with fast turnaround of new features and bug fixes. Customer feedback and involvement leads to usability improvements and overall customer satisfaction. Increased customer retention and acquisition will lead to an increase in revenue for the organization.



#### Improved code quality

CI/CD improves the overall code quality. Since code is released in small batches, it is possible to test it thoroughly detecting and fixing the most serious bugs before software is deployed to production. Additionally, automated tests allow you to fix bugs immediately, which is much easier and less costly, leading to the development of topnotch software applications.