



CI/CD – Powering up software product release

Using CI/CD to achieve build and deploy automation
within our company.

Continuous Integration – The big Picture

- Humans are known as error-prone species. This is what gave birth to Continuous Integration (CI). This is a process whereby developers form a cohesive unit by automatically sharing their code in a central repository in real-time. Errors and costs are highly reduced through this phenomenon. I strongly recommend this for the engineers at Udapeople because it has been widely proven to be effective and efficient. Features here includes: Building your software automatically, releasing your software from a central repository, test starting your application, testing the most important features and writing unit tests for new features

Continuous Deployment – Publishing code with ease

In the early days of software development, codes are deployed in months. But with a new automation, they can be deployed in minutes several times a day. This is made possible with Continuous Deployment (CD). CD mainly exists to drive out waste by reducing batch size of codes and increasing tempo of delivery. It's an automated process of “double-checking” codes before publishing them online. It involves tasks like: Creating and configuring infrastructure, Promoting to production, Smoke Testing and rollbacks (in case if any failure).

Business benefits of Continuous Integration

- The major benefits of Continuous Integration to business includes:
 - Reduce running costs of software resulting in increase in revenue
 - Development teams are able to iterate faster with smaller code changes
 - Fewer bugs make it into production thereby avoiding unnecessary costs
 - Better transparency of code because of frequent testing
 - Debugging is better done at a faster rate thereby saving time and stress

Business Benefits of Continuous Deployment (CD)

- On the back of making money spent worthwhile, these are the immense values that continuous deployment (CD) can offer to the company
 - It leads to faster and more frequent production deployments.
 - It leads to enhanced visibility and tracking.
 - CD increases the coding standards and hence results in enhanced quality of release
 - It saves time hereby giving rise to more innovation among the team members