



CI/CD - A great means to bring
success into Business



Continuous Integration (CI):

It defines the seamless workflow to consolidate the code revisions from individual developers into a central repository, which will later be referenced for product deployment.

It allows the development team to have an automated workflow which will run the tests and builds on the central repository after every merge. Thus, enabling frequent commits (faster revisions) from dev team with a mechanism to human-less testing and verification the updated code.

Benefits of Continuous Integration

There are great advantages of adapting CI for any dev team. Below are some value addition to business with continuous integration framework in practice.

1. Fail Fast system (if any errors)

With unit tests and builds running automatically on the code base after every merge, the **time to detect a failure** in the product is **shorter**. Early detection of errors, ensure less issues during production/roll out and **over all less time** in testing/debugging.

2. Error free code integration

The code updates will only be approved upon successful testing and build stages. This ensures, **less developer time on issues** from new developer code.

3. Eliminating human dependency

The entire code integration from various developers in the team is **automated to run on every merge request**. The build environment and test scripts initially designed, can automatically initiated to run specifically on any branch of choice. The automated integration workflow once established **needs no human intervention** , thus results in a human error free code base.

Continuous Deployment (CD):

It defines the automated workflow to provision the production infrastructure, configure and deploy the artefacts to the consumers.

It allows the development team to make faster product upgrades, faster smoke tests and roll back automatically to the previous version in case of a failure during deployment workflow.

Some important topics that are covered in CD workflow are –

- Creating infrastructure
- Provisioning servers
- Configuring servers
- Smoke tests
- Migration from old to new deployment
- Rollback to previous deployment in case of failure

Benefits of Continuous Deployment

Continuous Deployment eliminates the overheads of redundant deployment workloads. The automated process makes the life easy for developers to really focus on the product content than struggling with the human errors that may exist during networking, infrastructure creation or configuring the servers.

Below are some great ways, where CD would directly impact the business.

1. Automate infrastructure creation and cleanup

The Infrastructure represented as a code, facilitates to automate the setup procedure. The automatic setup and cleanup of the cloud infrastructure **avoids any unnecessary setup costs**. Upon failure, the entire infra can be cleaned up quickly **reduce the resource costs**.

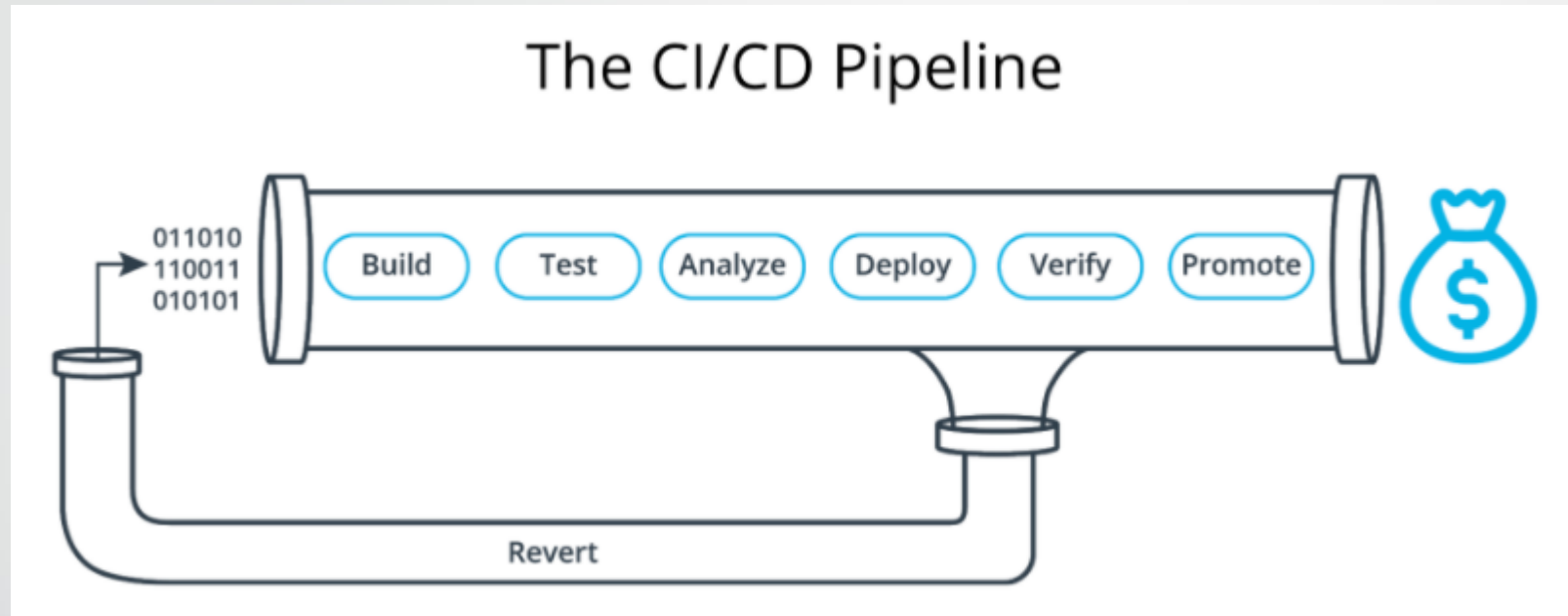
2. Faster and frequent production deployments

The new updates to the product can be rolled out to customer faster than ever with CD. This gives the business a great advantage of first in market feature and over-whelmed customer.

3. Migration to Production

Different migration strategies can be chosen based on the product volume and type. The auto promotion without impacting the current usage of the product, offers a great uninterrupted experience to the users.

Thank you...!



With CI/CD in practice,

Satisfied Employees and
Satisfied Customer
means
Business is Growing.