

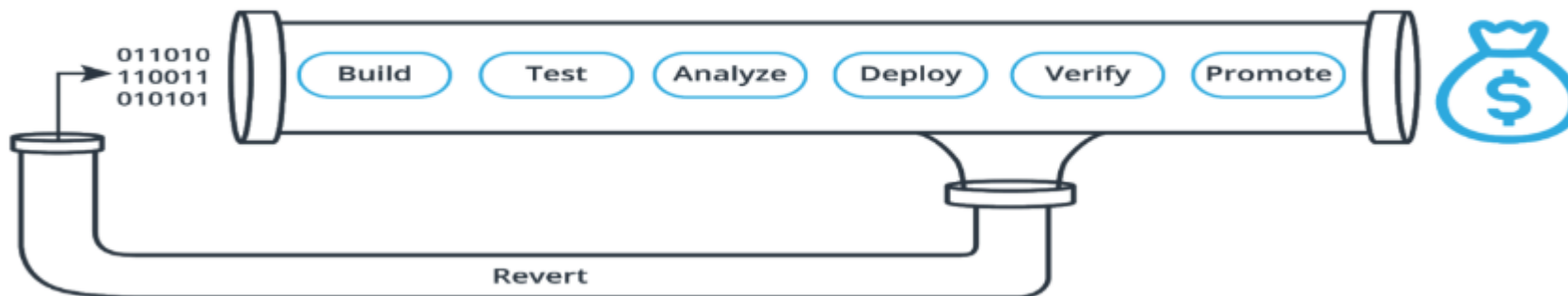
Udapeople App

Why we should use CI/CD to Achieve, Build and Deploy Automation

What is CI/CD ?

- ▶ CI/CD means Continuous Integration / Continuous Delivery.
- ▶ It focuses on automating the software delivery process and enables teams to deliver in shorter cycles
- ▶ CI/CD can be visualized like a pipeline. It uses different tools to cover and automate the most important steps of the software development process. New software is supposed to fail as early as possible in this pipeline so it can be fixed quickly.

The CI/CD Pipeline



Reduce existing cost

- ▶ Using Continuous Integration and Continuous Delivery methods can help us reduce and avoid cost by:
 - Having developers spend less time on fixing errors in the code or fixing bugs in production. This may also lead to faster deployments in general
 - Avoiding to run infrastructure that is not used by scaling automatically and shutting down unused resources
 - Automation also helps prevent security holes which can be quite costly

Increase and Protect Revenue

- ▶ Furthermore we will be able to protect our existing revenue and might even increase it by using CI/CD. This is possible because:
 - Developers have more time to build new features and they can bring them to production faster. This means we can generate value for our stakeholders as fast as possible
 - We can automate our test routines which reduces the downtime of production from bugs or deployment related crashes. If production fails during an deployment we can easily undo the changes and return to working state.

Confidence

- ▶ Lastly, CI/CD enables us to bring a reliable result to our stakeholders and customers. Therefore trust in our product will increase immensely, which will likely attract new customers as well.