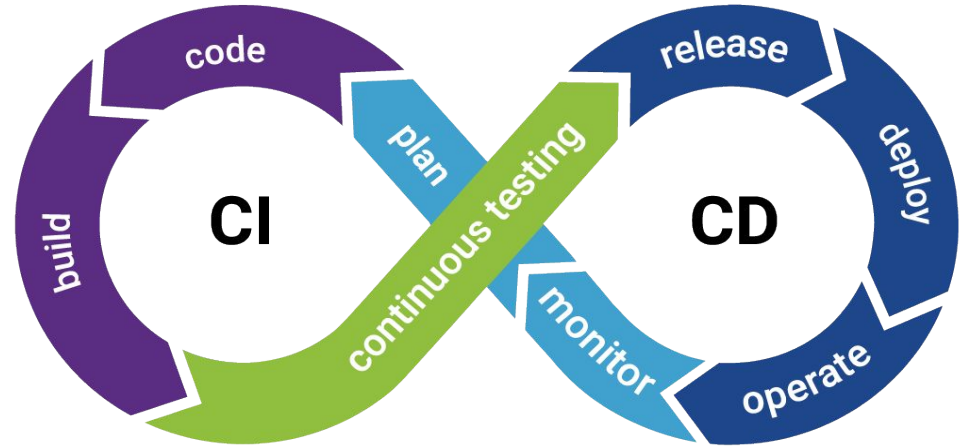

UDA-PEOPLE CI/CD PROPOSAL

Presented By: Mohamed Ra'fat

Overview

- What is CI/CD
- What we get from continuous integration
- What we get from continuous delivery and deployment





■ What is CI/CD:

- But what does it really mean the simplest and most proper definitions it's a set of processes and techniques that help and enable the engineering team as a whole to deliver value at a faster and more stable rate.

→ CI: Continuous Integration:

The ability to integrate code autonomously

→ CD: Continuous delivery:

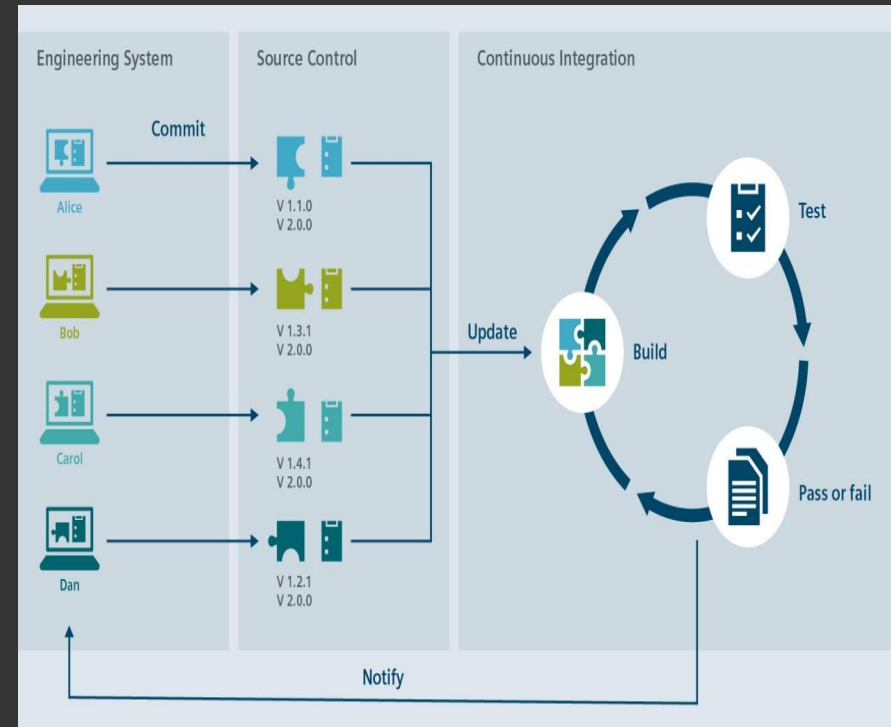
The ability to reach QA and staging environments autonomously
production manually

→ CD: Continuous deployment (CD Again):

The ability to reach from code to production autonomously

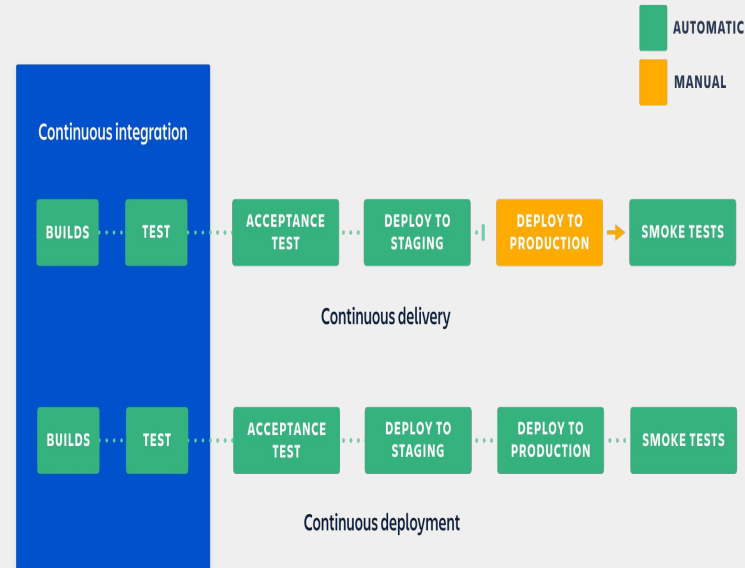
- Continuous Integration

- Continuous integration steps can save **Money?**
 - 1 - failed build in integrations step prevent wasted times on fixing issues and time almost always means money.
 - 2- failed tests means no times wasted on testing and avoiding the time and cost involved in the processOther things not shown directly reducing times on code review and manually checking for security issues also translate to money and time saved on development process can be used to actually fulfill other business needs



– Continuous Deployment vs Continuous Delivery.

- They actually only differ on the degree of automation and how much human involvement will be required generally the less is better but not always that is true.
- More tests the faster the deployment or build fails the less cost and resources are wasted starting from time, money and infrastructure (fail early and fail fast).
- Automated tasks most likely is faster than any humane possible so the faster and more frequent to deploy is the faster clients gets value (money)
- Reducing human interaction is similarly increase the speed of deployment no one should holds the gates for our salvation :D
- The ability for automated rollback means that we botched the build we need to recover before someone catch us so we can protect our money



– Cost Of CI/CD:

1- Money 2- Skills 3- Culture

- like any engineering process the first difficulty that face CI/CD is money we will need to invest initially to gain later :

1- Infrastructure and license costs while we will overall save and should gain more money initial investment and cost will be made first.

2- Training not every team member will have the necessary knowledge at the beginning knowledge and experience is iterative process but will be rewarding later.

3- Culture change should be made :

CI/CD and devops in general bloom in agile environment sharing responsibility ,focusing business first and customer satisfaction mindset no blaming and pointing fingers (automation can be oppressive tool if misused and can celebrate with us our success we can choose where we go).