CI/CD BENETTS

BY: ROAYA MOHSEN



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What is CICD

CICD consist of 3 major concepts:

- Continuous Integration (CI): is the practice of automating the integration of code changes from multiple contributors into a single software project.
- Continuous Delivery (CD): is the discipline of being able to reliably release application changes (code) at any time. Beyond making sure your application passes automated tests which have all the configuration necessary to push it into production.
- Continuous Deployment (CD): is a strategy in software development where code changes to an application are released automatically into the production environment. This automation is driven by a series of predefined tests.

What are the issues before CI/CD

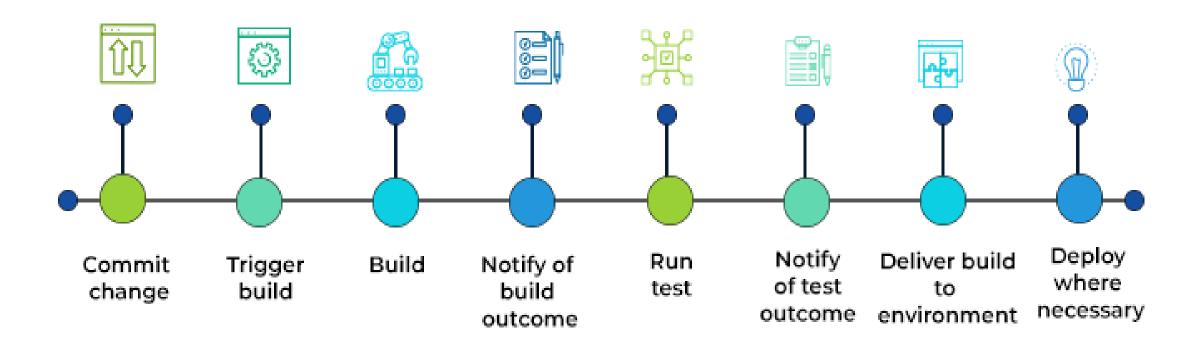
The manual release proccess is complex and take a lot of time

No smoke test or rollback mechanism

There is no time for quaity analysis



CI/CD PIPELINE







- Faster product delivery
- Quick rollback if required
- Efficient testing and monitiring
- Cost-effectiveness

What are the challenges of using CI/CD

- Establishing CI/CD comes with a high amount of initial cost and learning. At first sight this might seem overwhelming compared to current best practices
- Delivering CI/CD pipelines is not a one time effort, but requires constant support and maintenance as well as continuous development and improvement
- Even though there are some challenges, CI/CD will improve overall business processes and dramatically reduce costs on the long run

What the CI/CD business benefit

- Bring Products to Market Faster, visualized from commit to production.
- Allows Developers to Deliver Products Consumers Want Now.
- CI/CD enables organizations to respond to consumer needs as they evolve.
- The small code batches is easier to be reviewed and rectified, breakdowns and other critical issues can be limited by isolating bugs and, vulnerabilities before damage spreading.
- CI/CD enables organizations to respond to consumer needs as they evolve.
- plays a crucial role in shortening time to value.
- supports customer outcomes from a technical standpoint.
- Reduce Costs and Boost Profits

