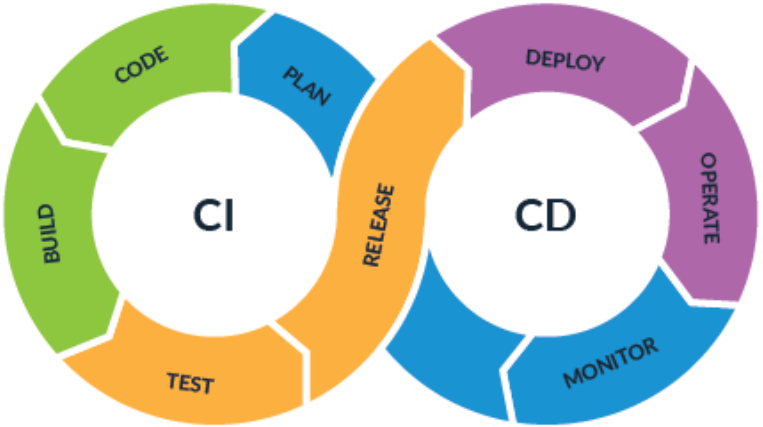
CI/CD

Continuous Integration
Continuous Delivery



Huh! , what is CI/CD?

a series of steps to deliver a new version of software that guarantees:

Continuous Integration (CI):

• Automates the process of building and testing code changes whenever they are committed to a code repository.
• Helps catch errors and issues early in the development process.

Continuous Delivery (CD):

• Automates the release of code changes to production.
• Involves building, testing, and deploying code changes in a continuous and automated manner.
• Increases the speed and efficiency of the development process.
• Allows teams to release high-quality software more frequently and with greater efficiency.

what are CI/CD benefits?

CI/CD benefits include:

1. Faster feedback to catch errors and issues early on
2. Increased quality through automated testing and deployment
3. Greater efficiency by automating repetitive tasks
4. Improved collaboration among team members
5. More frequent releases with greater confidence
6. Increased agility to respond to changes in user requirements or business needs.
7. CI/CD benefits include:
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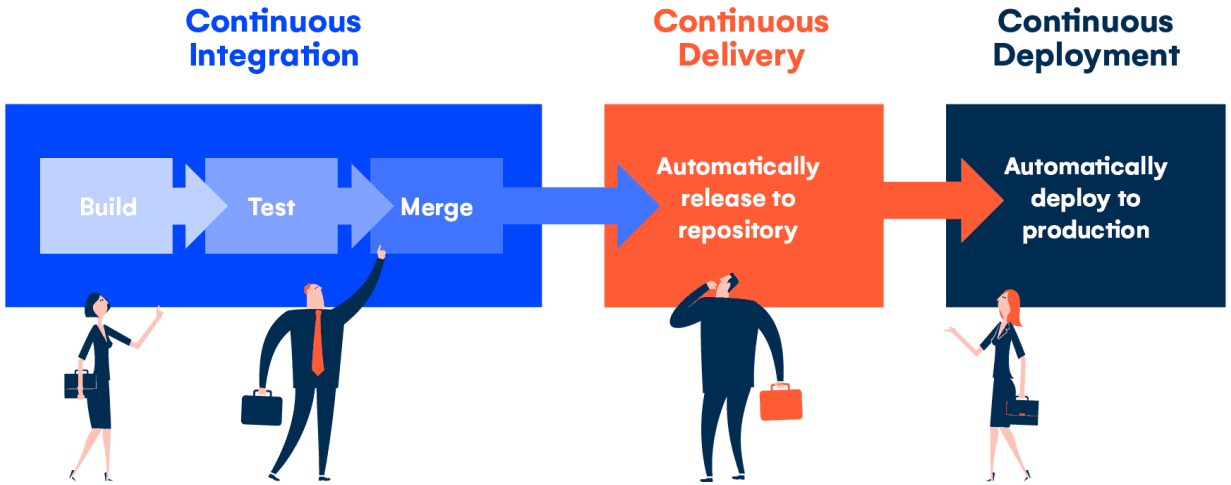
Overall, CI/CD

- Helps reduce the risk of errors and issues in production.
- Allows teams to release software more frequently and reliably.
- Is an important practice for modern software development.

Finally, How technical benefits of CI/CD lead to protecting revenue, increasing revenue, reducing costs, or avoiding costs for business.



Example: Etsy, an e-commerce platform.

in the case of Etsy, an e-commerce platform for handmade and vintage items.

In 2011, Etsy migrated from a traditional release process to a continuous deployment process using a CI/CD pipeline. This involved automating the building, testing, and deployment of code changes, resulting in faster and more frequent releases. As a result of this migration, Etsy was able to achieve the following benefits:

Increased Revenue

from $525 million in 2011 to $1.7 billion in 2019, representing a three-fold increase. This growth was driven in part by the ability to quickly iterate and deploy new features and improvements, which was made possible by the faster release cycle enabled by CI/CD. (source: Etsy Investor Relations)

Cost Reduction

By automating the release process and reducing manual effort, Etsy was able to reduce the cost of development and maintenance. In fact, the company reported that the migration to CI/CD resulted in a 70% reduction in the time it took to release a new feature. This, in turn, allowed engineers to focus on higher-value tasks, reducing the overall cost of development. (source: Atlassian)

Avoiding Costs

With the ability to catch and fix bugs earlier in the development process, Etsy was able to avoid the costs associated with addressing issues in production. According to the company, the migration to a CI/CD pipeline resulted in a 75% reduction in the time it took to detect and fix issues. This allowed Etsy to address issues before they impacted users, reducing the overall cost of maintenance and support. (source: Etsy Engineering)

Protecting Revenue

With a more reliable release process enabled by CI/CD, Etsy was able to avoid downtime and outages that could have resulted in lost revenue. In fact, the company reported a 90% reduction in the number of outages after the migration. This improved reliability helped to maintain user trust and prevent lost revenue due to service disruptions. (source: Etsy Engineering)

Final result

+$1,175 billion

Happy customers, fewer costs

Thanks!

Any questions?

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