CI/CD - An improved method of product development and delivery

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Advantages of CI/CD for building and deploying automation into our company's products

The process of numerous times a day merging all developers' working copies to a common mainline. It is the "Creating" process.

The culmination of CI is a high-quality, deployable product, and everything relating to the code belongs here.

The following are some typical CI-related phases:

- Unit Test
- Compile
- Static Analysis
- Testing for dependency vulnerabilities
- Artifact storage
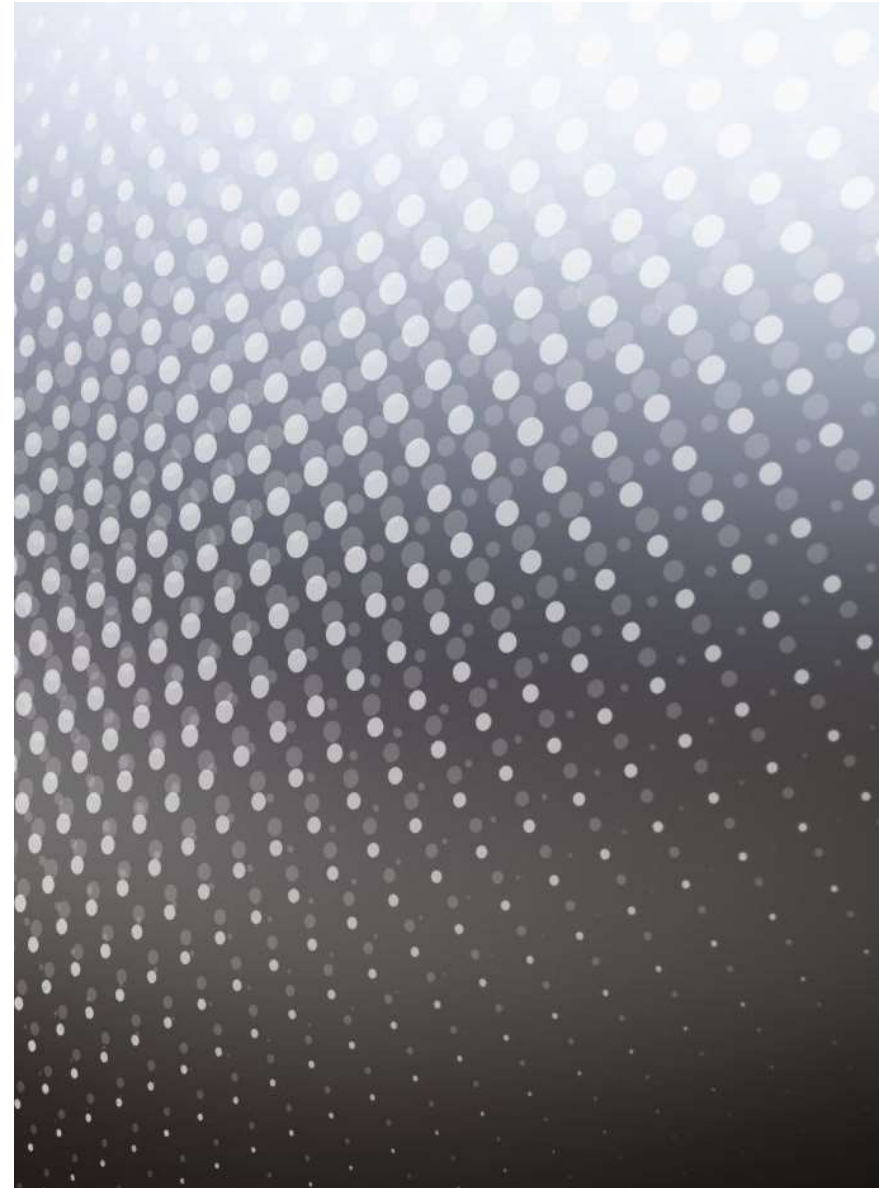
Continuous Deployment

An approach to software engineering where value is typically given through automated deployments.

Anything pertaining to the artifact's autonomous deployment falls here.

The following are some typical CD-related phases:

- Building and configuring infrastructure
- Promoting to production
- Rollbacks in the event of a failure;
- Smoke Testing (also known as Verify)

Benefits of CI/CD at the Business Level

The idea behind CI/CD is the proverb "a penny saved is a penny gained," thus here are some advantages of creating a CI/CD pipeline:

Automate Infrastructure Creation: By reducing human error and facilitating quicker deployments, this will save costs.

Faster and More Regular Production Deployments: By delivering new, income-generating features more frequently, this would assist to generate revenue.

Automatic Smoke Tests: By minimizing downtime due to a deploy-related crash or a significant bug

Benefits of CI/CD at the Business Level

Find	Deploy	Detect
Find security flaws: This would save money by averting humiliating or pricey security gaps.	Deploy to Production Without Manual Checks: By reducing the time it takes for features to reach the market, this would assist to improve revenue.	Detect Security Vulnerabilities: This would save money by averting humiliating or pricey security gaps.