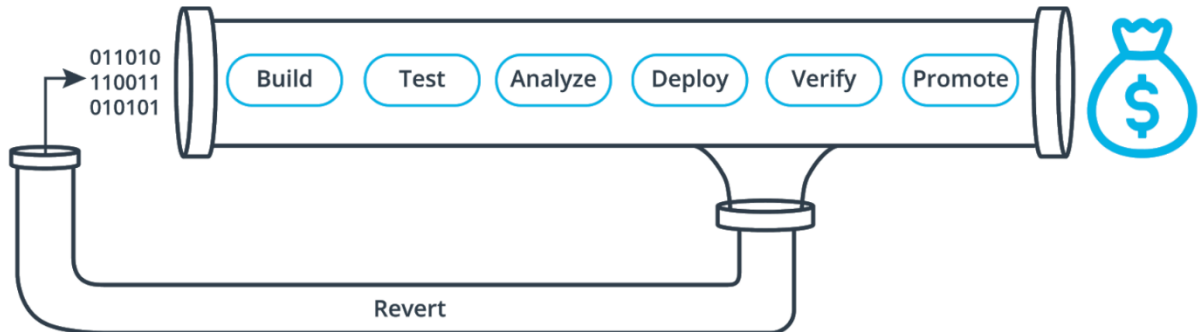


I. Fundamentals of CI/CD:

The CI/CD Pipeline



1. Continuous Integration

Is merging all developers' working copies to a shared mainline several times a day.

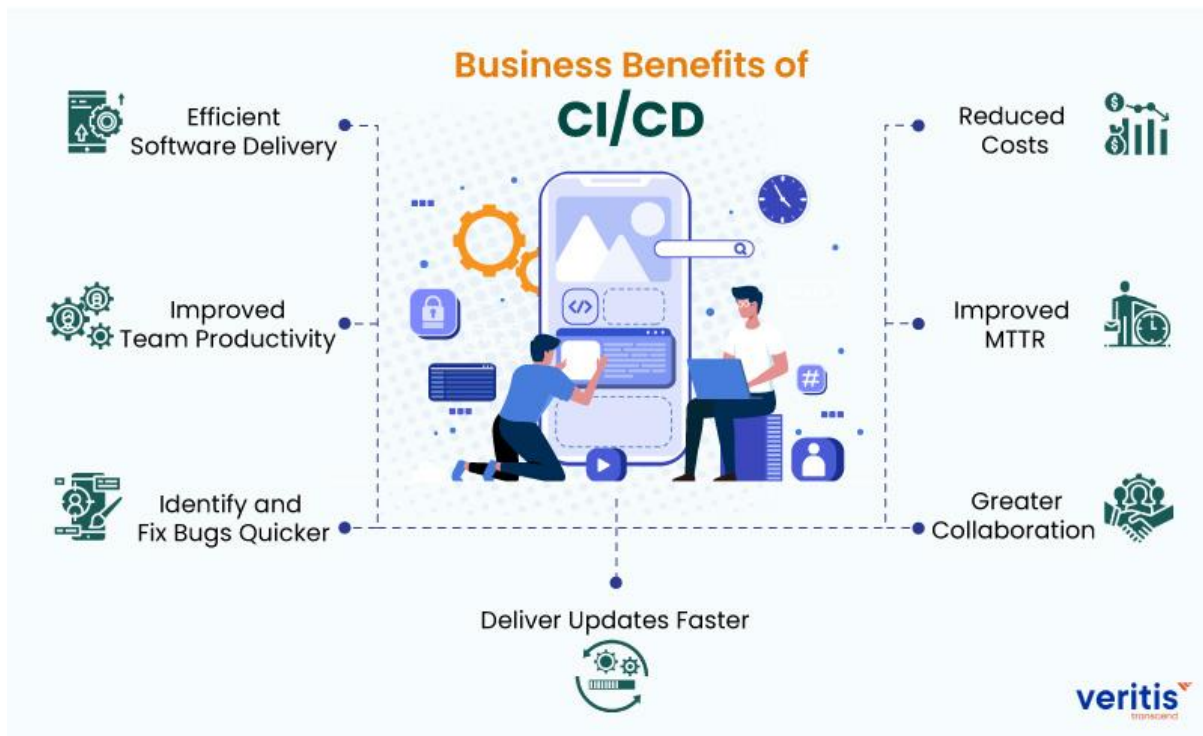
- Compile
- Unit Test
- Static Analysis
- Dependency vulnerability testing
- Store artifact

2. Continuous Deployment

A software engineering approach in which the value is delivered frequently through automated deployments.

- Creating infrastructure
- Provisioning servers
- Copying files
- Promoting to production
- Smoke Testing (aka Verify)
- Rollbacks

II. Benefits of CI/CD



- Less developer time on issues from new developer code
 - Reduced downtime from a deploy-related crash or major bug
 - Quick undo to return production to working state
 - Prevent embarrassing or costly security holes
 - Less infrastructure costs from unused resources
 - Less human error, Faster deployments
 - Less time to market
 - Less bugs in production and less time in testing
- ➔ We will have Faster time to market, Better code quality, Faster bug fixes, Reduce costs And increase revenue for businesses