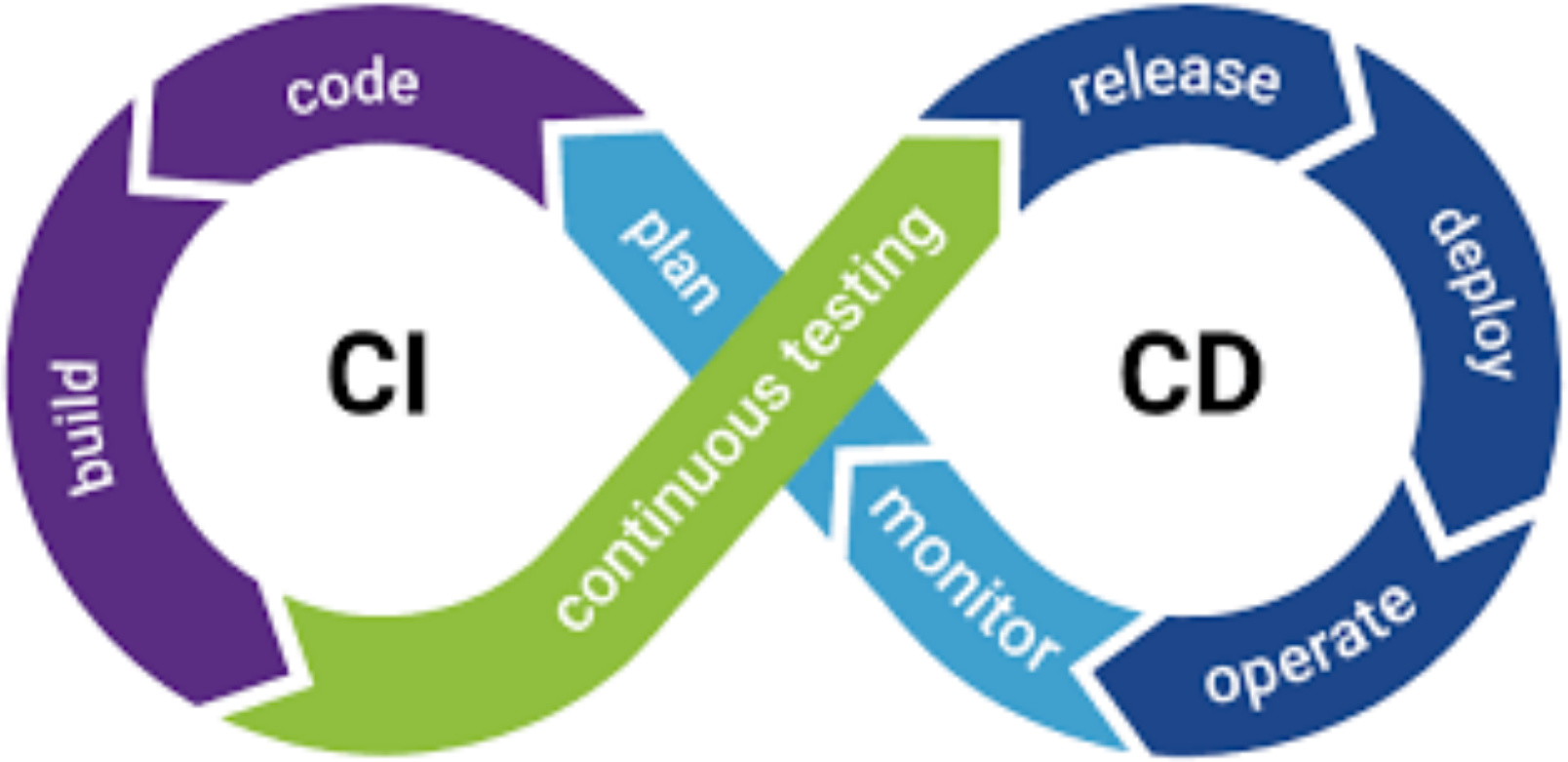

CI/CD – Develiry solution for better revenue and cost effective

Current challenges

- **Manual builds -** Manually compiling source files, packaging them and updating database schemas cost software teams a lot
- **Manual Unit Test –** time consuming and prone to vulnerability
- **Manual Deployment –** Possibility to human errors, false deployment and missed steps
- **Only one engineer** can deploy a system – lack of backup
- **Manual Post implementation –** high down time, missed steps

Continuous Integration and Continuous Deployment

- **Continuous Integration:** the practice of automating the integration of code changes from multiple contributors into a single software project. In simple words, it’s the practice of merging all developers' working copies to a shared mainline several times a day.
- **Continuous Deployment:** Automated process of deploying the code to needed environment (production, dev,…) with automated steps for configuration and development.
- **CI/CD approach:** Automated approach that automate most of testing and deployments steps, which save developers time for software-development and product enhancement.

Benefits of CI/CD

- **Catch Unit Test Failures in CI** -> less bugs in production and less time in testing (help avoid unexpected cost).
- **Automated Infrastructure creation and cleanup ->** less human errors, stable infra between deployment, help avoid cost caused by forgetting to destroy infra after testing.
- **Automated Smoke test ->** Reduced downtime from a deploy-related crash or major bug, help protect revenue.
- **Automated Rollback Triggered by Job Failure ->** Immediately return to last-working version, avoid errors on production.
- **Faster and More Frequent Production Deployments ->** New features, which earns more for product, are released quickly.