Benefits of CI/CD

Application Quality Improvement

- CI/CD enables to maintain Code Quality by Integration with tools like SONAR

- Allows frequent deployments enabling continous integrations thereby catching the integrations defects at the earliest stage

- Saves developers time in issues caused due to code merges

- Ensures code is bug free by automating regression test cases

- Static Code analysis is performed and security/vulnerabilities are addresed

Reduce Costs and Boost Profits

- Faster Release rates - Delivers high-quality products to market faster and feedbacks can be addressed quickly thereby boosting profits

- No manual intervention is required.Everything can be automated.Once Automated, It be reused and rexecuted N number of times.

- Saving time and resources

Automations

- Infrastructure stack can be easily automated

- No Manual interventions required

- Quicker & Faster deployments without any human errors

- Infrastructure scripts can be reused and modified according to needs

Deployments

- Zero or shorter outage time.

- Blue green deployments enable zero downtime.

- Easier rollbacks without any production outages.

- High Availability to customers.

- Reduced risk in deployment to production

- Frequent releases can be done in incremental manner

Monitoring

- Integration with multiple Monitoring systems like Prometheus,Graphite

- Proactive approach - Trends can be analysed to proactively find out the patterns of failures and identify the upcoming issues/risks

- Business/Technology can calculate the new infra needs based on the usages and monitoring reports

- Data can be used to train Machine Learning system to analyse the alerts and train the system automatically.