

# CI/CD Benefits Proposal

# Overview

- ▶ What is CI/CD?
- ▶ Current scenario
- ▶ CI/CD the saviour
- ▶ Hurdles

# What is CI/CD?

## ▶ Continuous Integration

- ▶ Means merging of code changes from feature branch to master branch so many times a day in dev busy world. Once code is committed its Build using corresponding build tools, running the testcases for the respective changes and delivering the code artifact in a ease manner to the environment.

## ▶ Continuous Delivery

- ▶ Product will be ready to be available to market for the customer needs.

## ▶ Continuous Deployment

- ▶ Frequent automated deployment to respective env. From above Continuous Delivery. Easier way to automate provision Infrastructure, post deployment checks, Rollbacks.

# Current scenario

- ▶ Manual release process is error-prone cause delay in delivery to market.
- ▶ Deployments are complicated only experts at system can understand due to few/many scripts with no smoke and rollback mechanisms.
- ▶ Late results/feedback from business which reduces ROI from market.

# CI/CD the saviour

## ▶ **Manual and error-prone**

- ▶ Implement Continuous Integration :automate compiling, testing, code analysis and artifact storage

## ▶ **Deployments are complicated**

- ▶ Automate today's manual deployment steps for smoke tests and rollbacks
- ▶ Add automated infrastructure provisioning
- ▶ Reduce complexity and save manual troubleshooting time.

## ▶ **Late results/feedback from business**

- ▶ Faster feedback cycles of customers lead to higher customer satisfaction.
- ▶ Cost reduction due to less human errors and faster deployments.

# Hurdles

- ▶ Establishment of CI/CD to legacy system requires investment of time and effort required initially.
- ▶ Continuous learning, improvement, development and constant support is required for CI/CD pipeline to sustain for a long run.
- ▶ Results of CI/CD can be seen by improvement in delivery process and time taken to deliver to market over a period of time.