

# Challenges Faced

- 1. Our manual release process is error-prone and always leads to delays of production deployments.
- 2. This in turn often leads to poor software quality since we don't have time for quality analysis anymore.
- 3. Deployments are pretty complex. Only a chosen few experts are able to understand the whole process and tons of hand crafted helper scripts. No smoke tests and rollback mechanisms.
- 4. We get late feedback from the business department which prevents us from creating flexible solutions.

# CICD Benefits

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- ▶ Solutions:
  - ▶ Implement Continuous Integration: automate compiling, testing, code analysis and artifact storage
  - ▶ Automate Infrastructure Creation
- ▶ Benefits:
  - ▶ Cost reduction due to less human errors and faster deployments
  - ▶ Reduce complexity and save manual troubleshooting time

# CICD Benefits

## Solution

- ▶ Implement Continuous Deployment: automated deployment of changes at any given point in time.
- ▶ Involve customers and business stakeholders already in deployment process .

## Benefits:

- ▶ Faster feedback cycles of customers lead to higher customer satisfaction rates since they are involved right from the beginning of feature development/deployment and not just at a fixed release date

# CICD Benefits

- Solutions:

- Automate today's manual deployment steps for smoke tests and rollbacks
- Add automated infrastructure provisioning.

- Benefits:

- Regressions and breaking changes in code as well as infrastructure deployments can be found much quicker and can be resolved for the whole automation process.
- Automated Smoke Tests and Rollbacks will protect project revenue due to reduced downtimes from deploy-related crashes and fast automated rebuilding of production ready state.