The UdaPeople

# Why to use CI/CD?

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### The current Situation

#### How we work:

- Manual merge new features into Main branch
- Configuring test suite manually per tool menu
- Building new version on demand
- Deployment is done manually
- Target environment is managed manually
- All knowledge is bind to one person!

#### Leads to:

- We loose code on failed merges
- Merging new features costs a lot of time
- Our tests are not reliable!
- We need to invest a lot of effort to make our unit tests "green"!
- Releasing new features costs us a lot of time and effort
- Roll-backs can lead into critical situations
- Security issues can not be identified quickly, hot fixes are taking very long
- High dependency on one single person
- The frustration level on the team is high

### The current Situation

Is having the following impacts:



- Deployments are more cost intensive as we spend too much timer on doing them
- As of bugs and security issues, we risk our customer satisfaction
- We loos revenue as we can not deploy new features in time
- We loose skilled developers as of high frustration
- Using a cost intensive infrastructure
- We risk our revenue with critical roll-backs

# CI/CD can help!

#### By providing the following features:

- Catch compile errors before merging
- Automatically run Unit Test, and catch errors
- Almost all configuration is checked into source code
- Detect security issues and CVE's on used libraries
- Automated infrastructure creation and cleanup
- Automatically deploy new versions without manually checks
- Automatic smoke tests
- Automated rollback on failed job

# CI/CD can help!

#### By giving the following benefits:

| Reuces Costs                    | Avoid Costs   | Protect Revenue                                    | Increase Revenue  |
|---------------------------------|---|--|---|
| Less issue tracking on new code | Reducing bugs in production and less time for testing | Less downtime from crashes related from deployment | Reduce time to market!                                  |
| Less unused infrastructure      | Less bugs and security issues in production           | Quick fall-backs to a working state                | New value<br>generating features<br>are released faster |