Continuous Delivery (CI/CD) Benefits

For Cloud-Based Software Products

Continuous Delivery - CI/CD

Continuous Delivery is a software engineering paradigm in which teams produce and release software in short cycles.

Continuous Delivery includes CI and CD

- **Continuous Integration (CI)** software engineering approach that handles automated code compiles, unit test and building of artifacts.
- **Continuous Deployment (CD)** software engineering approach that does automated deployment, which includes infrastructure, application and configuration.

Increase Revenue

- **Value-generating features released more quickly**
- **Reduce time to market**

CI/CD enables Faster and More Frequent Production Deployments without Manual Checks

Protect Revenue

- **Reduced downtime from a deploy-related crash or major bug**
- **Quick undo to return production to working state**

CI/CD provides automated Smoke Tests and automated Rollback Triggered by Job Failure

Reduce Cost

- **Reduce developer time on issues from new code**
- **Reduce infrastructure costs from unused resources**

CI/CD helps catch Compile Errors after Merge and automate Infrastructure Cleanup

Avoid Cost

- **Less bugs in production and less time in testing**
- **Prevent embarrassing or costly security holes**
- **Less human error, Faster deployments**

CI/CD benefits include Catching Unit Test Failures, Detecting Security Vulnerabilities and Automate Infrastructure Creation

Principles of Continuous Delivery

- Fully Automated from Check-in to Release
- Repeatable Reliable Process
- Built-in Quality and Continuous Improvement
- Everyone is Responsible

Ref: "Continuous Delivery“ by Jez Humble and David Farley

- Valuable ‘working’ software can be delivered more often like every two weeks to the client
- Clients will be happy to see new ‘working’ features added more often rather than a major release every six months
- Continuous Delivery improves on what we have in with automation