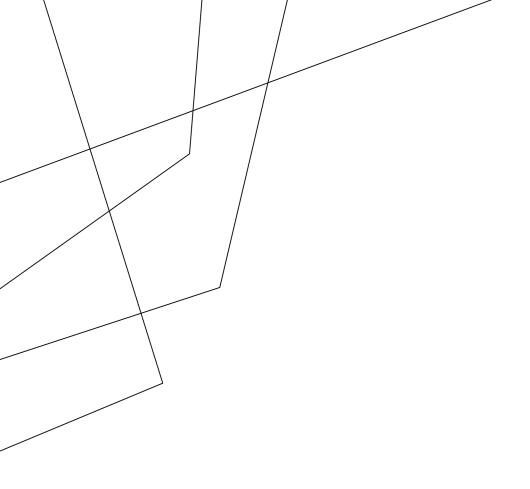


John Turner, UdaPeople Product Team



CI/CD OVERVIEW

#### What is CI/CD?

CI/CD is a way to **rapidly** and **frequently** deliver software to customers by automating aspects of software development and deployment.

#### Continuous Integration (CI)

Developers continuously integrate their changes into a shared repository, triggering **automated** building, testing and quality assurance of the software.

### Continuous Deployment (CD)

Fully-tested software is **automatically** deployed into Production so that users can access it as soon as possible.

#### CI + CD = Continuous Delivery of Value

Automation of repetitive tasks enables **faster**, **more frequent** delivery of software to customers at a **lower cost** and with **less defects**.

2022 Why we need CI/CD

# BENEFITS TO THE BUSINESS

	Create Revenue	Protect Revenue	Optimize Cost
Deliver faster and more frequently	✓		
Continuous stakeholder engagement	✓	✓	
Better software quality		✓	✓
Easier and quicker fixes		✓	✓
Easier rollbacks		✓	✓
Better visibility and accountability		✓	✓
Automate manual tasks and lower costs			✓

# HOW BENEFITS ARE ACHIEVED

	How it is Achieved
Deliver faster and more frequently	<ul> <li>Automating the release pipeline reduces time-to-release and frees up expensive development resources for other activities</li> </ul>
Continuous stakeholder engagement	<ul> <li>CI/CD provides all stakeholders with a single continuous view into the development process</li> <li>Continuous feedback on development activities makes the process transparent and accountable to business and other stakeholders</li> </ul>
Better software quality	<ul> <li>CI/CD test and QA automation flag code problems quickly and reliably, so problems 'fail fast'</li> <li>Time saved through CI/CD automation allows developers to work on improvements and defects that not otherwise get addressed</li> </ul>
Easier and quicker fixes	<ul> <li>Automated testing and detailed CI/CD logs make it easier for developers to diagnose and resolve defects</li> </ul>
Easier rollbacks	<ul> <li>Once deployments to Production are automated, it becomes a simple matter to be able to rollback to a previous release in the event of a problem</li> </ul>
Better visibility and accountability	<ul> <li>CI/CD pipelines deliver continuous feedback on a variety of predefined metrics, allowing the organization to make better data-based decisions</li> </ul>
Automate manual tasks and lower costs	<ul> <li>Automating repetitive tasks from the software development and release process frees up development resources and lowers costs</li> </ul>

### **SUMMARY**

- CI/CD automates repetitive development tasks to enable continuous delivery of value
- It helps to:
  - Create revenue
  - Protect revenue
  - Control / reduce costs
- Benefits include:
  - Faster, more frequent delivery
  - Continuous stakeholder engagement
  - Better software quality
  - Easier, quicker fixes
  - Easier rollbacks
  - Better visibility and accountability
  - Lower costs through automation