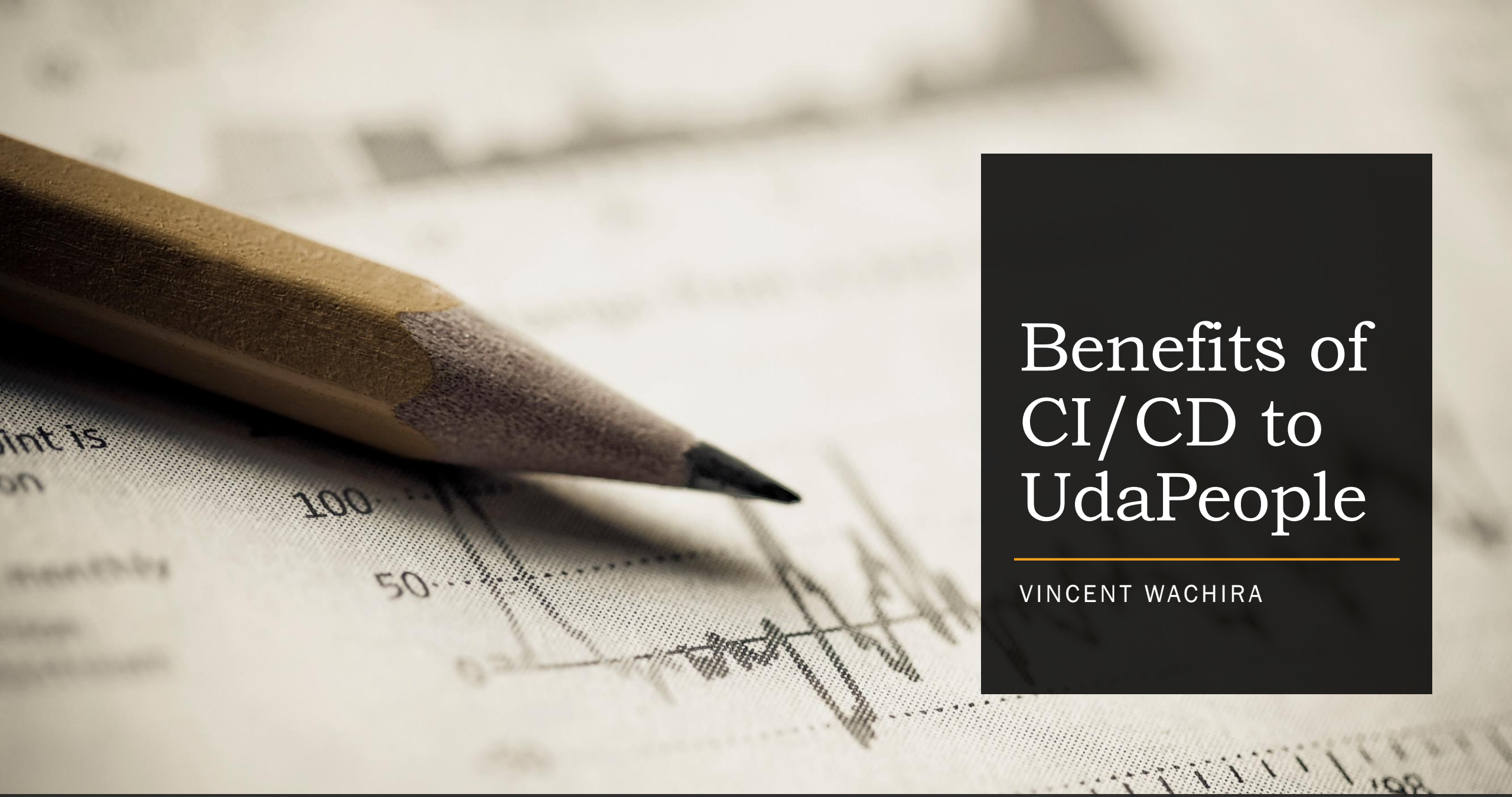


Benefits of CI/CD to UdaPeople

VINCENT WACHIRA

What are CI/CD Pipelines

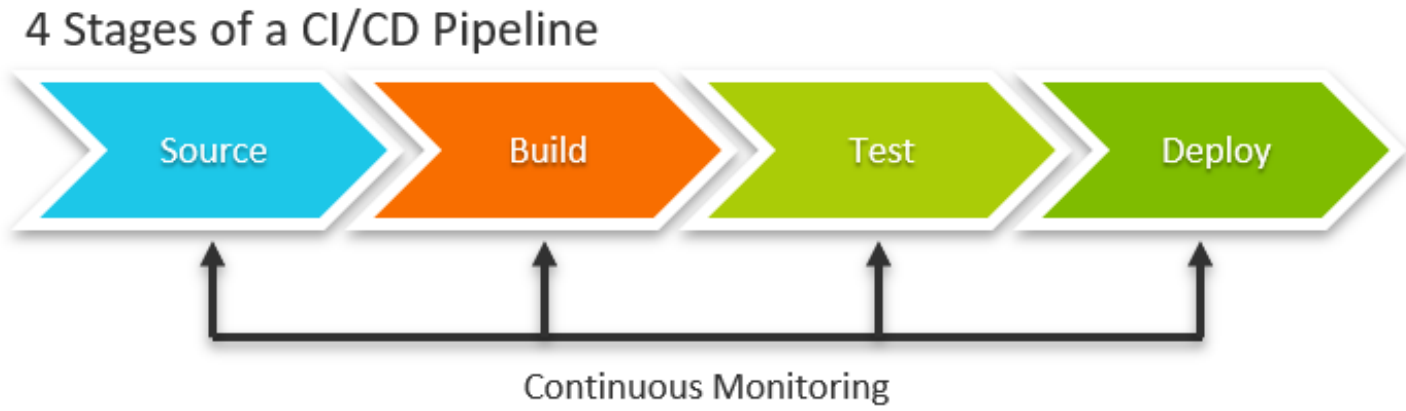
CI/CD is a method to frequently deliver apps to customers by introducing automation into the stages of app development.

CI/CD bridges the gaps between development and operation activities and teams by enforcing automation in building, testing and deployment of applications.

How do We Implement CI/CD

A CI/CD pipeline can be divided into four main stages: Source, Build, Test & Deployment.

Each subsequent stage must be completed before continuing to the next stage. All the stages are continuously monitored for errors or any discrepancies, and feedback is provided to the delivery team.



Benefits of CI/CD

1. Reduce Cost. Less developer time on issues from new developer code.
2. Avoid Cost. Less bugs in production and less time in testing.
3. Avoid Cost. Prevent embarrassing or costly security holes.
4. Avoid Cost. Less human error, Faster deployments.
5. Reduce Cost. Less infrastructure costs from unused resources.
6. Increase Revenue. New value-generating features released more quickly.
7. Increase Revenue. Less time to market.
8. Protect Revenue. Reduced downtime from a deploy-related crash or major bug.
9. Protect Revenue. Quick undo to return production to working state.

Conclusion

The benefits of an automated CI/CD pipeline range from practical considerations like code quality and rapid bug fixes, to ensuring you're building the right thing for your users and improving your entire software development process.

Despite the name DevOps suggesting a focus on developer and operations teams, building a CI/CD pipeline provides an opportunity for collaboration across a whole range of functions. By streamlining the steps to release your product, you provide your team with more insights into how your product is used and free up individuals' time so they can focus on innovation.