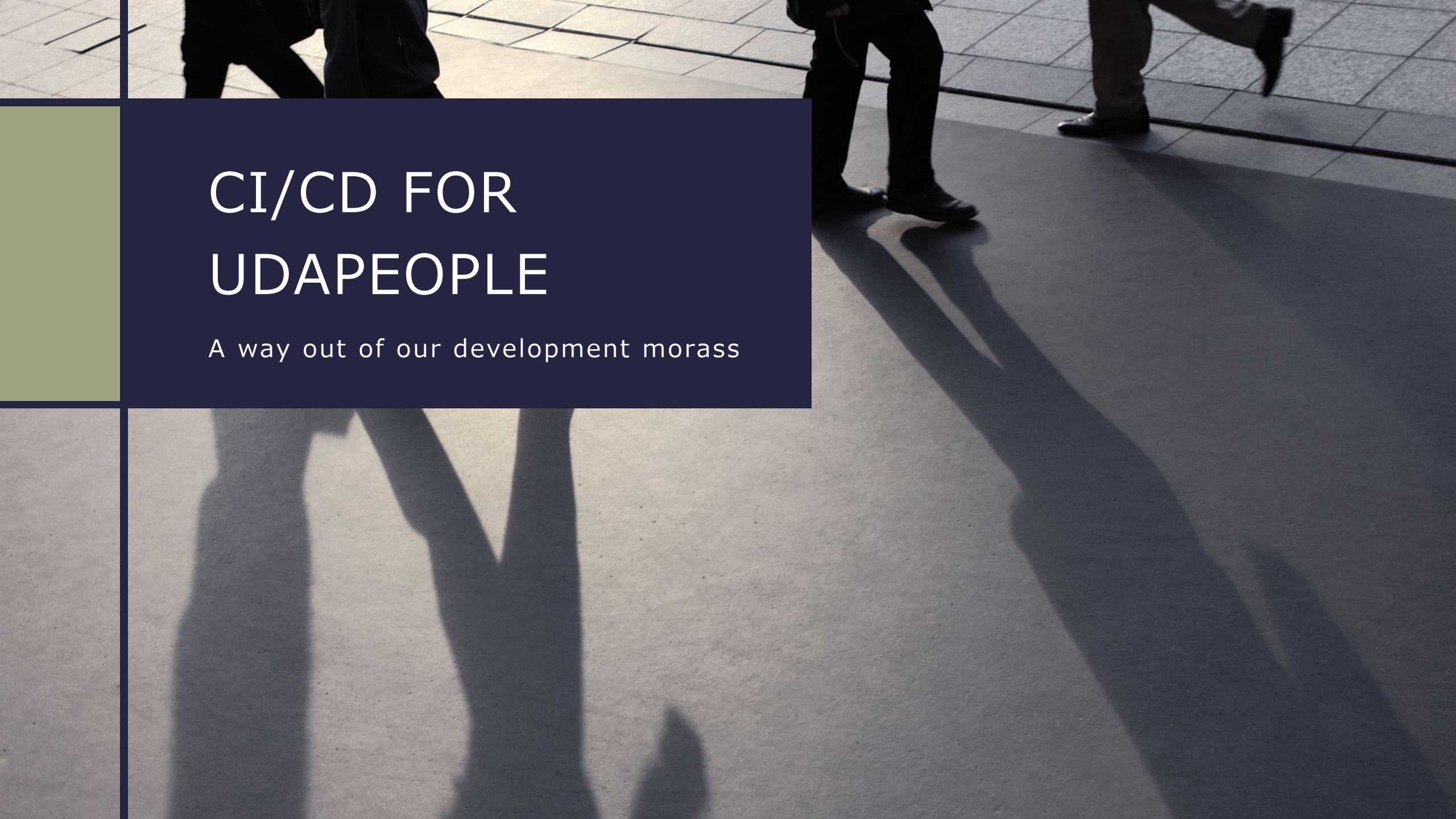


CI/CD FOR UDAPEOPLE

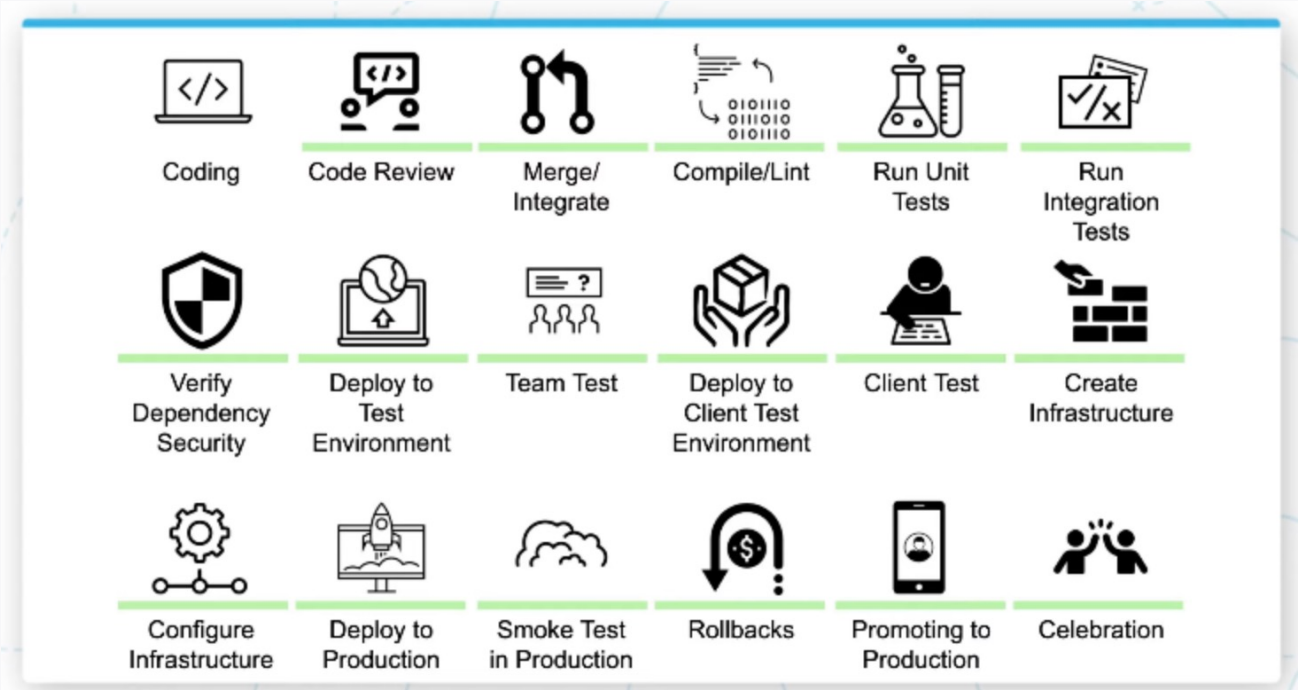
A way out of our development morass

Why Make the Investment in CI/CD?

- **ACME Software Consulting Firm Performed End-to-End Review of UdaPeople Software Development**
- **ACME identified cost savings of a whopping 30% on labor if UdaPeople invests in CI/CD**
- **Software and test engineers spend significant time on manual processes that can be automated via CI/CD**

UdaPeople Has Strong Software Engineering But We're Error Prone

Just What is CI/CD?



Removing *Human* Error

Before we implement CI/CD almost *everything* requires human intervention. Can you imagine a world without human error?

... Neither can I, but with CI/CD, we can reduce it!

Using Metrics to Show Our CI/CD is Healthy

Healthy Continuous Delivery

Let's take a look at a few metrics I use when I want to demonstrate the level of health or impact of a CD pipeline:

Metric	Formula	Impact
Lead Time to Production	(*Time at Successful Prod Deployment*) - (*Time at Completion of Feature Grooming*)	Shows how CI/CD is impacting overall delivery time, from the point the team hears about the feature to the point at which it is done (deployed to production). Easy metric to collect if using task management system to track feature grooming and deployments.
Rollback Rate	(*Total Rollbacks*) / (*Total Deployments*)	Shows the quality of our deployments. Of course, rate should be low because previous stages should filter out defected builds. This metric is a leading indicator for the confidence of the business in the dev team's ability to delivery.
Time to Failure	(*Time at Failure Discovery*) - (*Time at Build Start*)	Shows how quickly we find failures. The lower the better.
Production Uptime	(*Total Production Working Time*) / (*Total Time*)	Shows the amount of time we are taking production down because of botched deployments or due to our chosen deployment strategy.
Failed Pipeline Cost	Various calculations including job run time and resources created	Shows the estimated amount of money spent on a failed build. Encourages us to put cheaper jobs earlier in the pipeline.

QUESTIONS?