

An abstract graphic consisting of several thin, black, overlapping lines that form a series of irregular, nested shapes, resembling a stylized mountain range or a series of overlapping planes. The lines are thin and black, set against a white background.

CI/CD PIPELINES

Foundational Pillar to reach the market faster

AGENDA

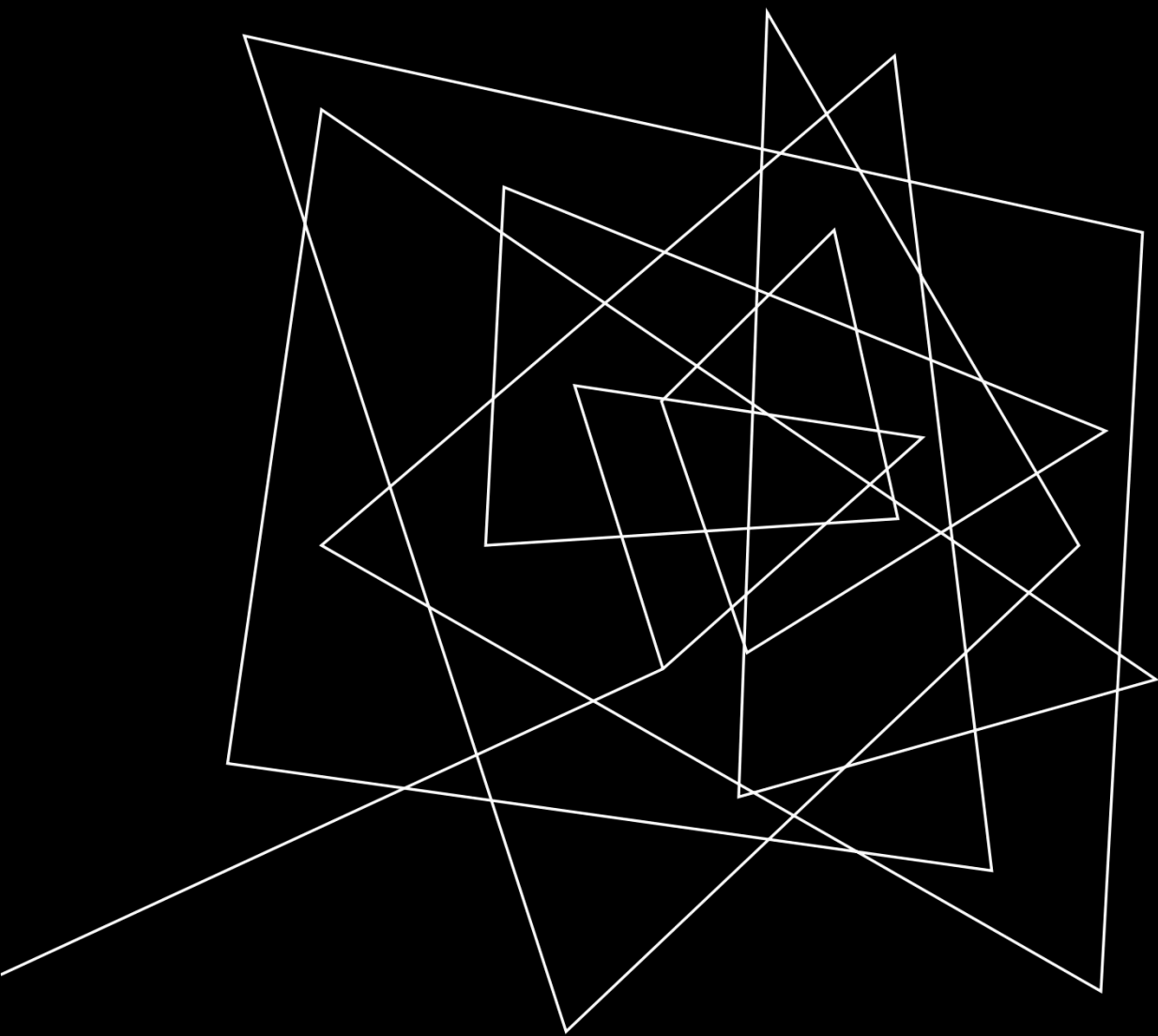
CI/CD What? Why? How?

Stakeholders' language

Some CI/CD tools

Summary

Resources and Questions

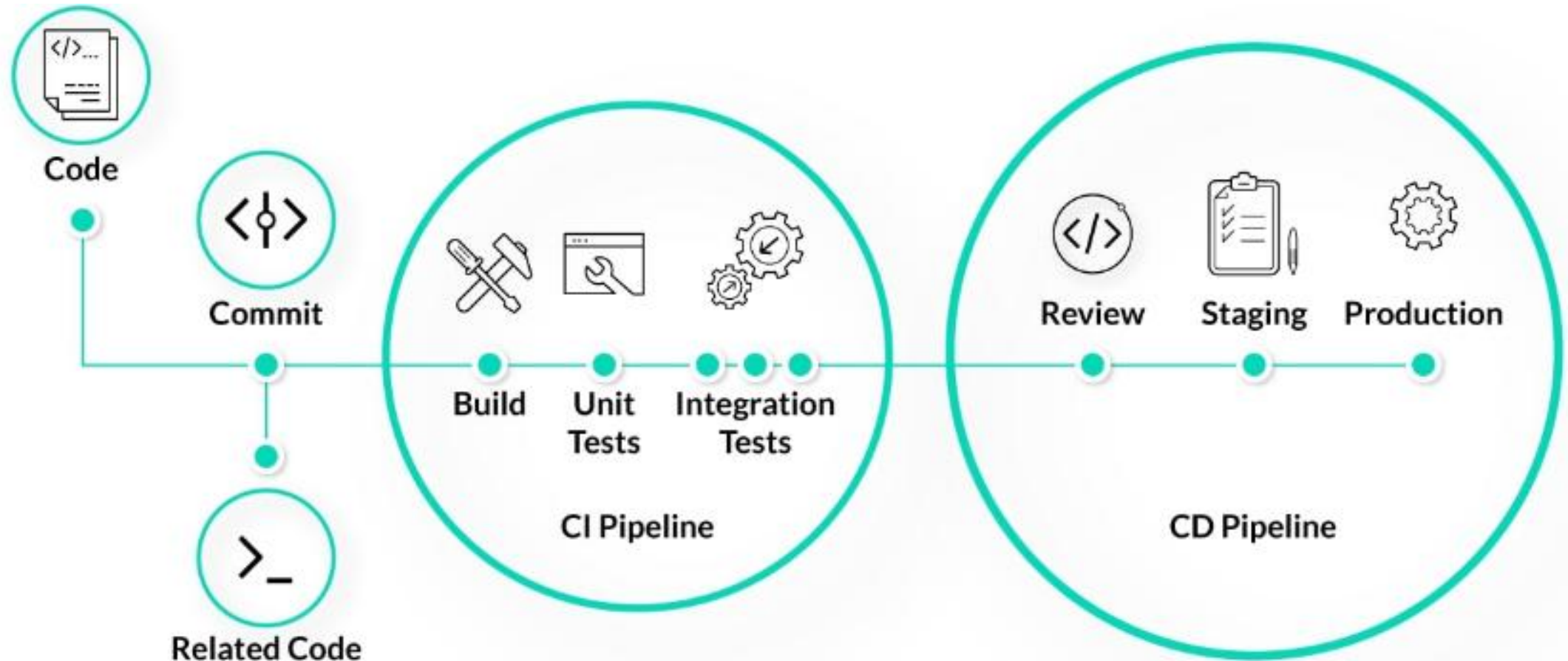


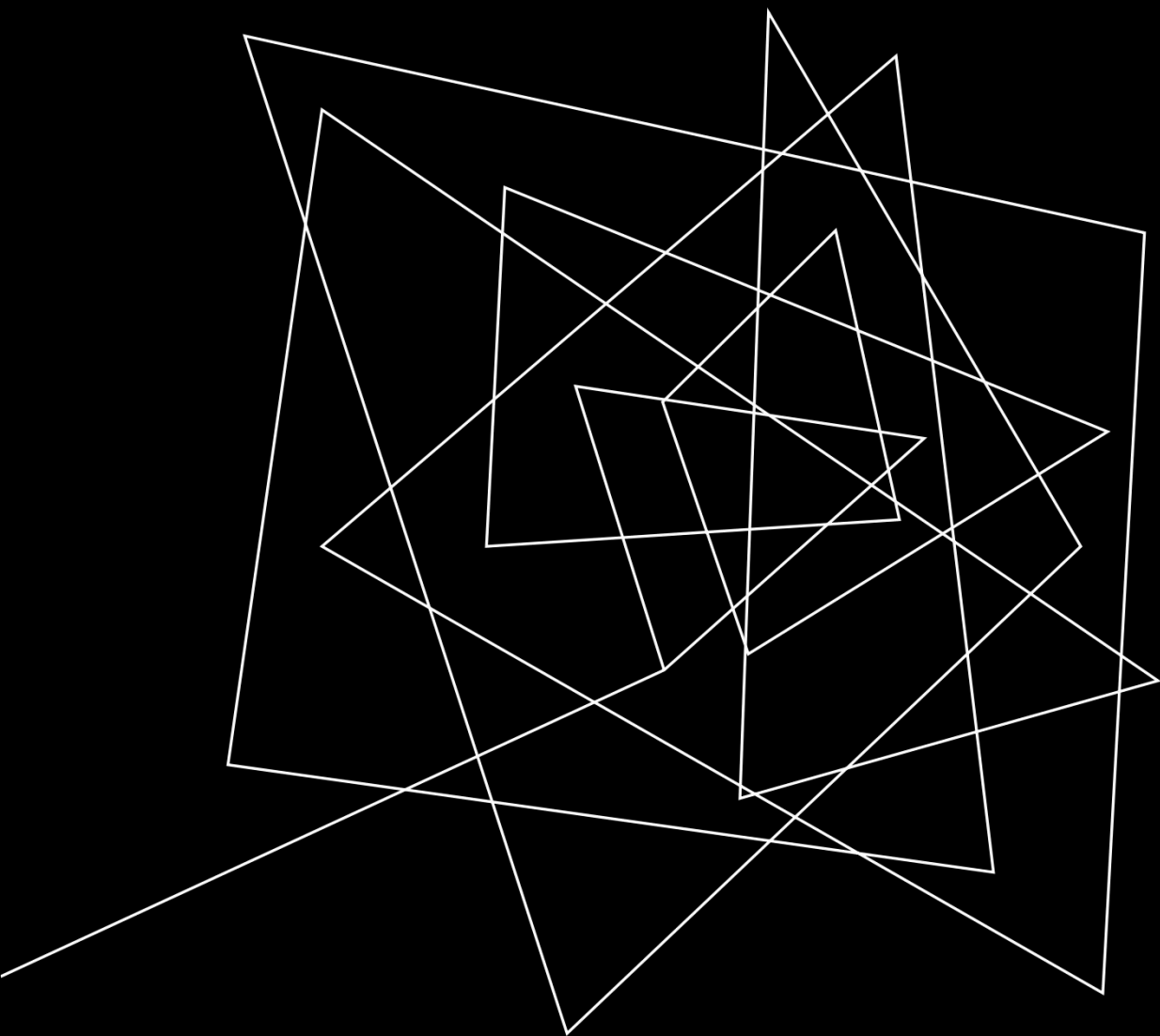
CI/CD PIPELINES

WHAT?

WHAT IS CI/CD?

- Continuous Integration
- Continuous Deployment
- Continuous Delivery



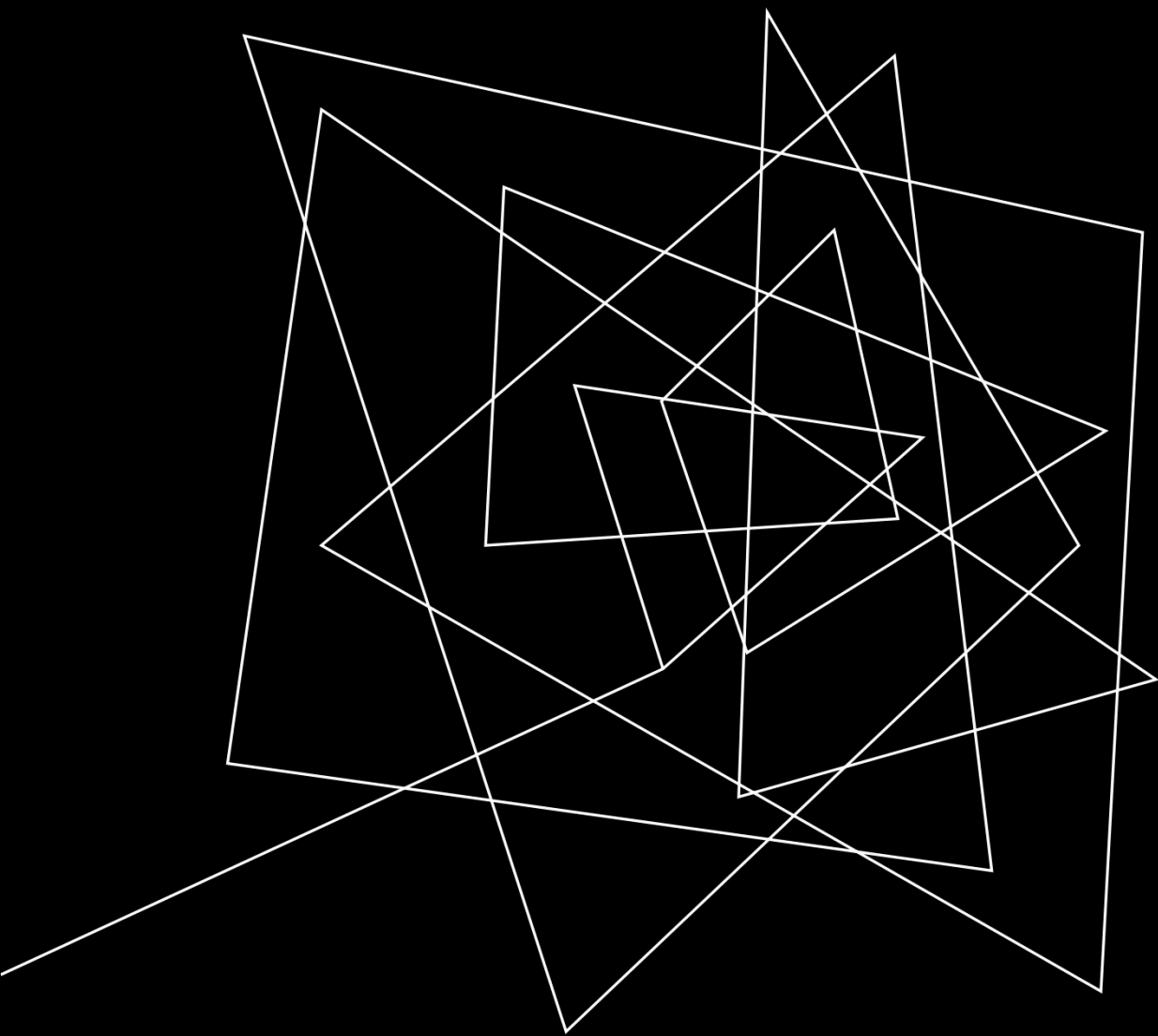


CI/CD PIPELINES

WHY?

WHY IMPLEMENT CI/CD PIPELINES?

| Technical Language | Value | Translation |
|---|------------------|---|
| Catch Compile Errors After Merge | Reduce Cost | Less developer time on issues from new developer code |
| Catch Unit Test Failures | Avoid Cost | Less bugs in production and less time in testing |
| Detect Security Vulnerabilities | Avoid Cost | Prevent embarrassing or costly security holes |
| Automate Infrastructure Creation | Avoid Cost | Less human error, Faster deployments |
| Automate Infrastructure Cleanup | Reduce Cost | Less infrastructure costs from unused resources |
| Faster and More Frequent Production Deployments | Increase Revenue | New value-generating features released more quickly |
| Deploy to Production Without Manual Checks | Increase Revenue | Less time to market |
| Automated Smoke Tests | Protect Revenue | Reduced downtime from a deploy-related crash or major bug |
| Automated Rollback Triggered by Job Failure | Protect Revenue | Quick undo to return production to working state |



CI/CD PIPELINES

HOW?

CI/CD BEST PRACTICES

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CI/CD BEST PRACTICES

Testing

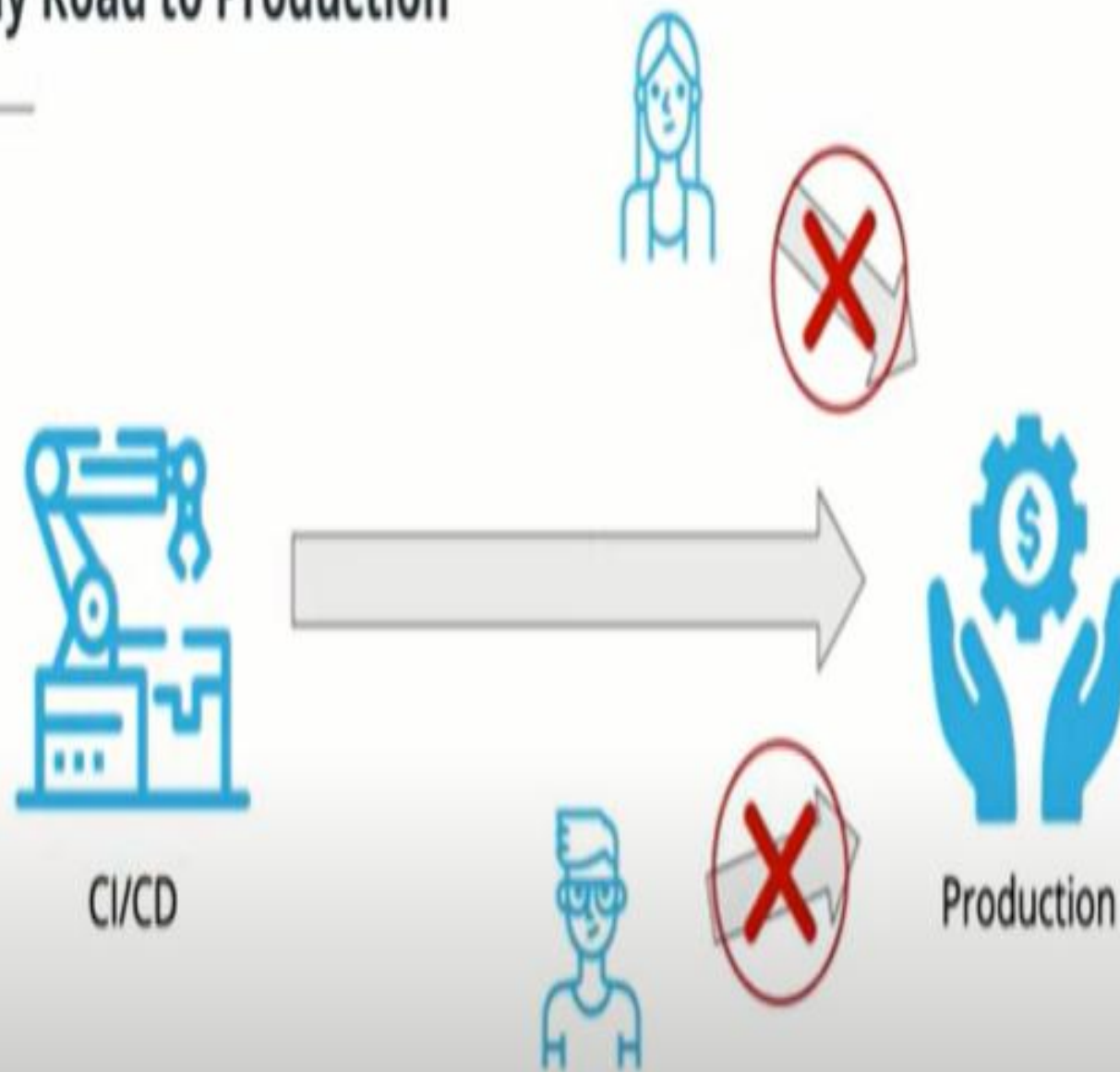


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CI/CD BEST PRACTICES

Only Road to Production





"IF IT CAN BE AUTOMATED,
AUTOMATE IT."



Increase Revenue



Reduce Cost



Protect Revenue



Avoid Cost

SPEAKING STAKEHOLDERS' LANGUAGE

CI/CD TOOLS



Jenkins
Open Source



Gitlab Community
Gitlab



Team City
JetBrains



Team Foundation
Microsoft

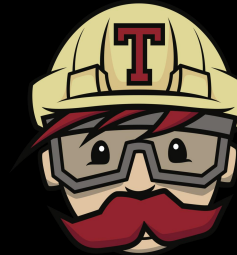


Bamboo

Bamboo
Atlassian



Gitlab
Gitlab



Travis CI
Travis CI



Circle CI
Circle Internet
Services



SUMMARY

As a foundation pillar of DevOps, we managed to know what is CI/CD, why do we need CI/CD and how to implement it.

In the end we had a quick overview of some CI/CD tools.

R1 ————— <https://www.atlassian.com/>

R2 ————— <https://www.digitalocean.com>

R3 ————— <https://www.learn.udacity.com>

R4 ————— <https://www.aws.amazon.com/>

RESOURCES

A series of white, overlapping geometric lines and polygons on a black background, located on the left side of the slide.

THANK YOU
YOUR QUESTIONS ARE MORE
THAN WELCOME

Abdelrahman Alaa Eldeen