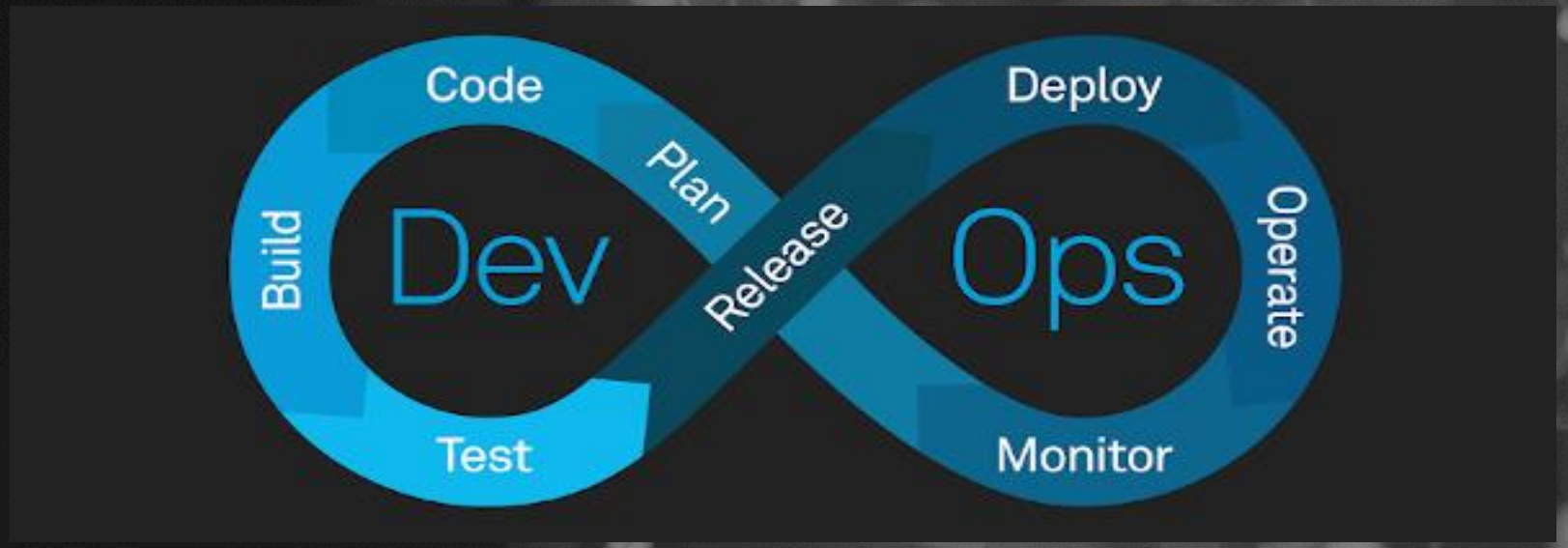


FUNDAMENTALS & BENEFITS OF CI/CD

AGENDA

INTRODUCTION: What is CI/CD

HOW CI/CD WORKS

BENEFITS OF CONTINOUS INTEGRATION

BENEFITS OF CONTINOUS DEPLOYMENT

WHY CI/CD

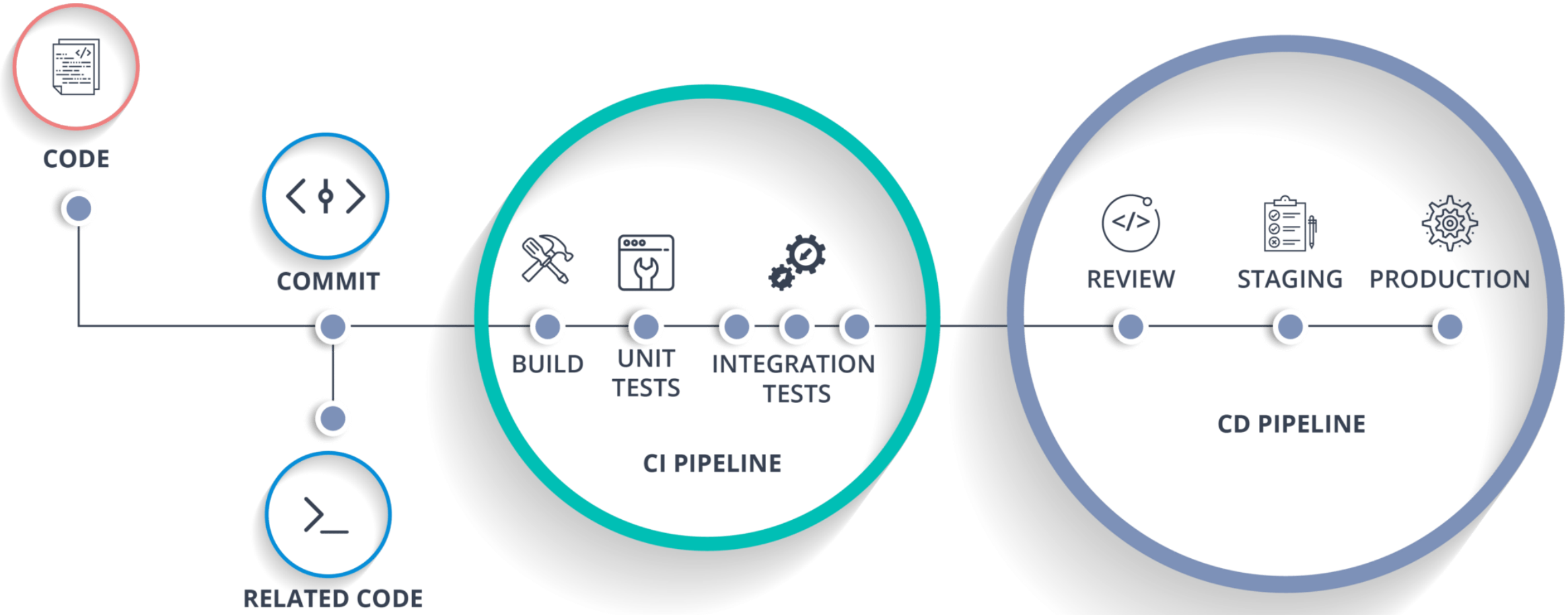
CLOSING

WHAT IS CI/CD

Continuous Integration (CI) is the practice of automating the integration of code changes from multiple contributors into a single software project. Each Integration is verified by an automated build and automated tests.

Continuous Deployment (CD) is a strategy for software releases wherein any code commit that passes the automated testing phase is automatically released into the production environment, making changes that are visible to the software's users.

HOW CI/CD WORKS



BENEFITS OF CONTINOUS INTEGRATION

Continuous Integration

- Reduces code conflicts.
- Faster code merge.
- Catch compile errors after merge.

What’s in it for our organization:

- Increase in revenue.
- Cost Reduction.
- Cost Avoidance at some cases.
- Revenue protection.

BENEFITS OF CONTINOUS DEPLOYMENT

Continuous Deployment

- Faster and more frequent production deployments.
- Avoid manual intervention by deploying to production in an automated fashion.
- Automated rollbacks in case of failure.

What's in it for our organization:

- Increase in market share
- Faster feature delivery for customers

CI/CD IN ACTION

Problem Statement	Solution	Benefits
• Manual and error-prone release process • poor software quality	• Implement Continuous Integration: automate compiling, testing, code analysis and artifact storage • Automate Infrastructure Creation	• Cost reduction due to less human errors and faster deployments • Reduce complexity and safe manual troubleshooting time
• Complex deployments and handcrafted automation which often fail. Missing smoke tests and rollback mechanisms	• Automate today's manual deployment steps for smoke tests and rollbacks • Add automated infrastructure provisioning	• The truth lies in the source code and not in the heads of one or two experts. This means that regressions and breaking changes in code as well as in infrastructure deployments can be found much quicker and can be resolved for the whole automation process. And as a plus changes are always documented in source code. • Automated Smoke Tests and Rollbacks will protect project revenue due to reduced downtimes from deploy-related crashes and fast and automated rebuilding of production ready state
• Late customer feedback	• Implement Continuous Deployment: automated deployment of changes at any given point in time. • Involve customers and business stakeholders already in deployment process	Faster feedback cycles of customers lead to higher customer satisfaction rates since they are involved right from the beginning of feature development/deployment and not just at a fixed release date

THANK YOU

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