



CI/CD

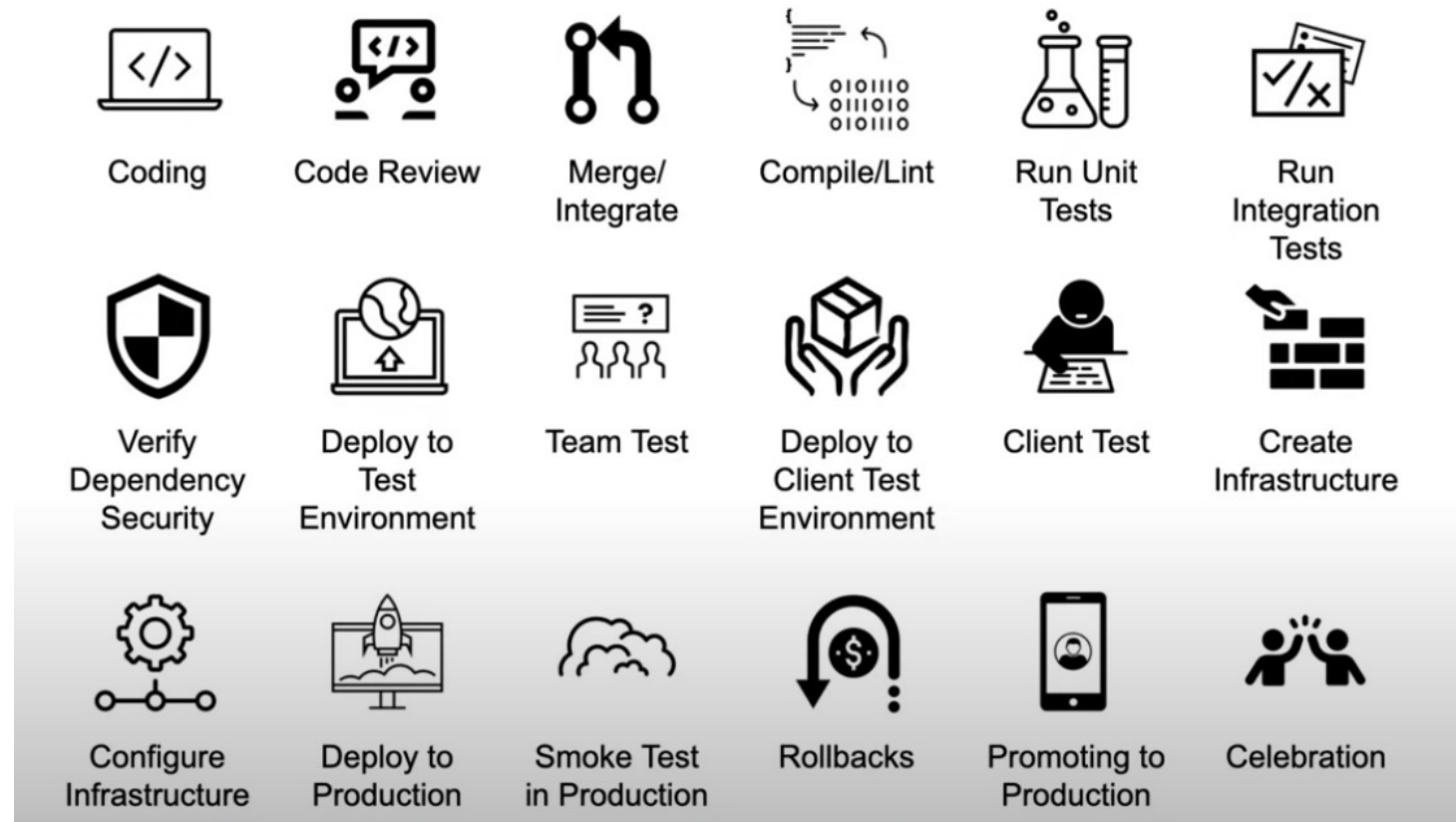
CONTINUOUS INTEGRATION
CONTINUOUS DEPLOYMENT

AGENDA

- I. Overview***
- II. Fundamental***
- III. Benefit***

I. OVERVIEW

Product Development Workflow: The workflow in the enterprise is going through the steps below. And it's mostly being done manually.



I. OVERVIEW

Risk assessment

HUMAN	TIME	COST	QUALITY
<ul style="list-style-type: none">- Hit or Miss- Subjective- Inconsistent- Missed Steps	<ul style="list-style-type: none">- Easily Bought Off with Pressure- Waste time to release	<ul style="list-style-type: none">- Cost for resources- Cost for maintains- Cost for risk	<ul style="list-style-type: none">- Low quality- Unsatisfactory quality

II. FUNDAMENTALS

Continuous Integration (CI)

Means using automation tools to build, test. Continuous integration most often refers to the build or integration stage of the software release process and entails both an automation component (e.g. a CI or build service) and a cultural component.

Continuous Deployment (CD)

A software engineering approach in which the value is delivered frequently through automated deployments. This is all deployment related activity including infrastructure set up, smoke testing and promoting to production.

Continuous Delivery

The over arching term for CI/CD - An engineering practice in which teams produce and release value in short cycles.

III. BENEFIT

CI/CD helps businesses increase revenue, protect revenue, reduce costs and avoid risks with the following ways:

Change less code

One technical advantage of CI/CD is that it allows you to integrate small pieces of code at once. These code changes are simpler and easier to handle than huge chunks of code. This prevents problems from generating errors later.

Error isolation

Fault isolation is the design of systems so that when a fault occurs, the consequences are within limits and controllable. This reduces the chance of failure and makes system maintenance easier.

Reduce error handling time

Since code changes are smaller and isolate errors, they are easier to detect, reducing the majority of error handling time. One of the most important business risk reduction factors is keeping errors to a minimum and quickly recovering from any problems.

Increase the reliability of the test

Using CI/CD, test reliability is improved due to small and efficient changes introduced into the system. This allows more accurate negative and positive tests to be performed.

III. BENEFIT

CI/CD helps businesses increase revenue, protect revenue, reduce costs and avoid risks with the following ways:

Speed up release

The faster the bugs are discovered, the faster the fixes are, and the faster the release speed.

Improve customer satisfaction

Using the CI/CD approach also keeps the product up to date with the latest technology and creates the best product, thereby delivering customer satisfaction.

Cost reduction

Automation in the CI/CD pipeline reduces the number of errors that can occur in multiple iterations of CI and CD. It also frees up developers' time that could be spent on product development as there aren't many code changes to fix if bugs are discovered quickly.

Easy maintenance and updates

Maintain and update products quickly and easily. In addition, it is also possible to rollback products to previous versions to help reduce system downtime. Thereby, reducing costs incurred.