

The background is a dark navy blue. In the top-left corner, there are two overlapping geometric shapes: a blue parallelogram and a light green parallelogram. In the bottom-left corner, there is a circular inset showing a detailed, grayscale image of a printed circuit board (PCB) with various electronic components. In the top-right corner, there is a faint, grayscale image of a circuit board with many small, rectangular components arranged in a grid-like pattern.

Concept and Benefits of CI/CD

- Faith Odonghanro

What is CI/CD and What does it offer us?

CI/CD stands for **Continuous Integration** and **Continuous Delivery**.

CI is the practice of merging of various developer code into a single repository branch or mainline several times per day

CD is an engineering practice where the development team produces and releases value to customers in short cycles.

There's a step further to this, **Continuous Deployment**, this simply means **no manual approval** involved for tested and working features before they get deployed to production - build, test, deploy, all in one go via a commit.


Definitions! Definitions! Am I right?

Simply put, CI/CD is a practice that lets us **eliminate manual processes** involved in the lifetime of **developed features** from completion of development till they get in the hands of users (become actual valuables). Think about that for a moment.



What CI/CD provides to us and What it means for us as a business

- 01 Catch Compile-time Errors and Unit Test Failures Faster in the pipeline; with this we prevent bugs from getting to production thereby avoiding cost
- 02 With Automated Smoke Tests we can reduce downtime from a deployment related crash thereby reducing cost in those cases
- 03 It enables Faster and More Frequent Production Deployment which means getting value in the hands of users more quickly, receiving feedback early, and ultimately generating revenue



What CI/CD provides to us and What it means for us as a business

- 04 With the ability to **Detect Security Vulnerabilities** on the fly, we **prevent security risks from getting to production** and thus **avoid unnecessary cost**
- 05 CI/CD lets us **Automate Infrastructure creation and cleanup**, this eliminates manual infrastructure creation. This is a **BIG** one, because we don't just have **faster deployments** but also, **less human error** in the process, thereby **reducing and avoiding cost** in those cases



And more...

CI/CD provides us many more benefits than highlighted in the previous slides. I'm not saying it's the perfect thing that solves all our business problems, or help us achieve all our business goals, no.

But ultimately, the benefits it provides will either help us **avoid or reduce cost** and/or **increase/maintain revenue** in the long run.

According to data, most of the issues CI/CD prevents e.g inability to release features quick (providing value quickly), and many more not highlighted previously are the cause of many failed IT projects/businesses.

If **UdaPeople** is going to achieve the success it deserves, CI/CD will be a great booster towards achieving it.

THANK YOU!!!