CI/CD: THE NEEDED CHANGE

Presented by: MARY OGUNMOLA

AGENDA

- Problems faced currently

- Concepts of CI/CD

- Benefits of CI/CD

- How CI/CD provides solution to our problems

PROBLEMS FACED CURRENTLY

- Releasing software can be a painful and time-consuming process. One involving weeks of manual integration, configuration and testing while the ever-present risk of discovering a showstopper threatens to force everyone back to square one.
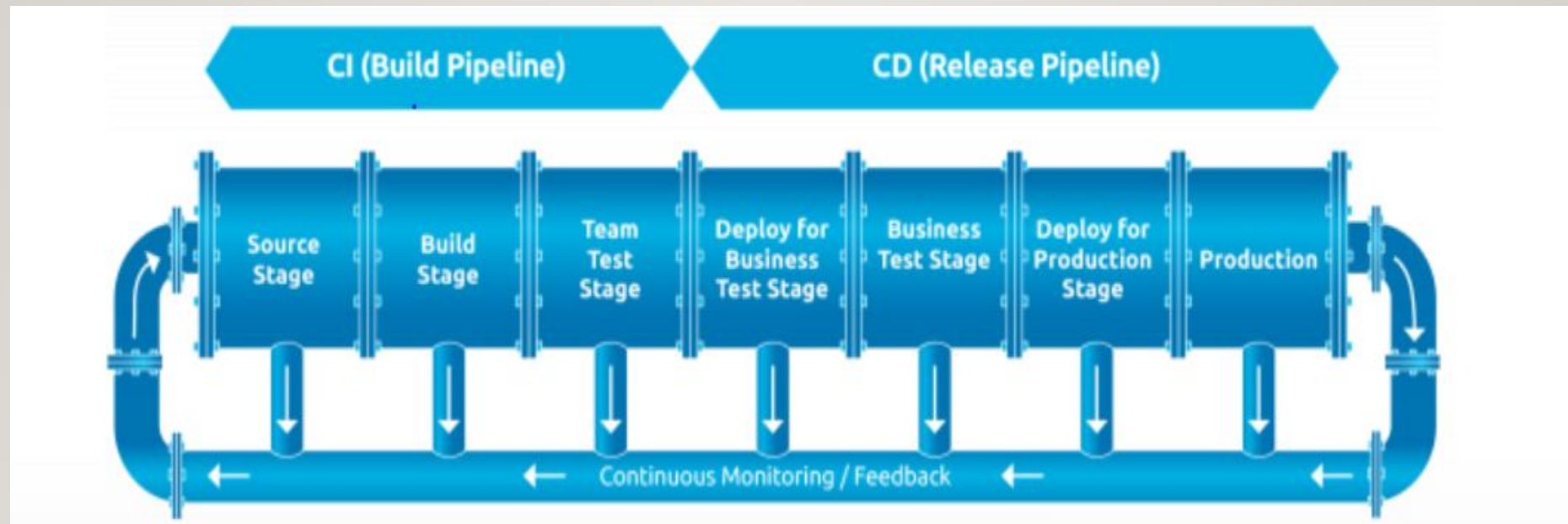
CONCEPT OF CI/CD

The primary goal of a CI/CD pipeline is to deliver working software to users quickly and frequently.

Continuous Integration is the practice of automating the integration of code changes into a single software project. With CI, Developers can discover conflicts at the boundaries between new and existing code early, while conflicts are still relatively easy to reconcile. Once the conflict is resolved, work can continue with confidence that the new code honors the requirements of the existing codebase.

Continuous Deployment is an approach in which value is delivered through automated deployments. Deploying automatically pushes features and fixes to customers quickly, encourages smaller changes with limited scope, and helps avoid confusion over what is currently deployed to production.
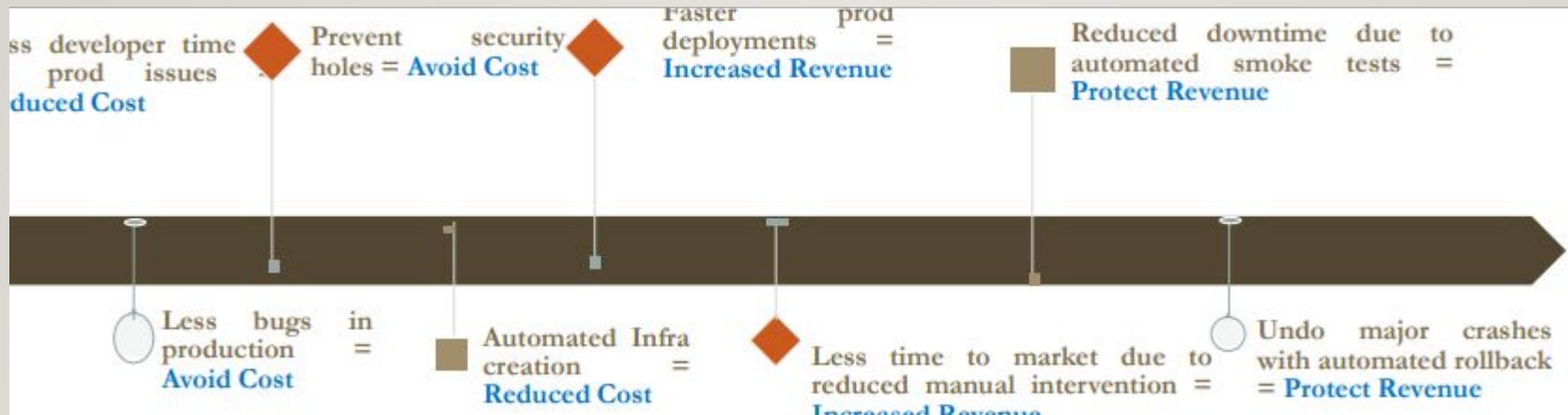
THE CONCEPT OF CI/CD

A diagram(CI/CD PIPELINE) showing the relationship between continuos interaction and continuous deployment.

Benefits of CI/CD

- Before CI/CD came into the picture almost everything required human intervention , this led to a lot of 'unavoidable' human errors. The intervention of CI/CD caused a great reduction in these errors. CI/CD improves velocity, productivity, and sustainability of development teams thus, creating and protecting revenue for businesses and also controlling and reducing costs.

ss developer time prod issues duced Cost

Prevent security holes = **Avoid Cost**

Faster prod deployments = **Increased Revenue**

Reduced downtime due to automated smoke tests = **Protect Revenue**

Less bugs in production = **Avoid Cost**

Automated Infra creation = **Reduced Cost**

Less time to market due to reduced manual intervention = **Increased Revenue**

Undo major crashes with automated rollback = **Protect Revenue**

THANK YOU !