CI/CD - A better way to build and deliver products to market

The advantages of CI/CD in achieving build and deployment automation within our company's products

Continuous Integration

Continuous Integration is based on the concept that programming teams produce trustworthy and easily debuggable output by releasing tiny amounts of code frequently.

-continuous integration (CI) is the practice of merging all developers' working copies to a shared mainline several times a day

CI important phases:

- Regularly push your changes.
- After making the new modifications, test the application.
- Fix any new bugs or merge issues that have appeared in the code.
- Merge the code with the main branch after it passes the tests.

Continuous Deployment

-an approach to software engineering where value is frequently given through automated deployments.

-It is the automatic procedure of "Moving" the artifact from the shelf to the spotlight.

CD important phases:

- Creating infrastructure
- setting up servers
- copying files
- Promoting to production
- Smoke Testing
- Rollbacks

Benefits of CI/CD at the Business Level

- Detect Compile Errors Following a Merge:
  -It lowers costs because it frees up developer time that may be used for product development

- Create Infrastructure Automatically:
  -Less human mistake will be produced as a result, which will lead to quicker deployments and reduce costs.

- Automated Smoke Tests:
  -By minimizing downtime caused by a deploy-related crash or a significant fault, this would help protect revenue.

- Detect Security Vulnerabilities:
  -By minimizing expensive security gaps, this would aid with cost-saving.

- More frequent and quicker production deployments:
  -By introducing new features that generate value more quickly, this could assist to grow revenue.

Thank You!!