WHAT IS CI/CD

Continuous Integration (CI) is the software development practice of regularly integrating code changes into a shared code repository. Each commit triggers a build during which tests are run that help to identify if anything was broken by the changes.

Continuous Delivery is all about the ability to continuously deliver integrated code, be it bug fixes or new features, to production. It means that your “green builds” are ready to go in one click, should you wish to release them.

Technology Advantages

Superior Code Quality - One of the chief technical benefits of CI/CD is that it enhances the overall code quality.

Fault Detection & Isolation - Detecting the root cause of a fault and then pointing out the exact location of the fault is one of the most proclaimed benefits of CI/CD

Reduced Changes & Review Time - Code changes in such an environment are done at an atomic level, which reduces the risk of unintended consequences

Accelerated Release Cycles - Since the elapsed time to detect and correct production, escapes are shorter; CI/CD enables accelerated release rates

Business Benefits of CICD

Faster Release Rate - Failures are detected and repaired faster , increases release cycles

Reduced Costs - Use of automation in CICD reduces cost significantly

Easy Maintenance and Updates - Automated process ensures easy maintenance in reduced cost

More Test Reliability - With every single small changes being tested throughly the system is more reliable than ever

New features readily available - Feature toggles and blue-green deploys enable seamless, targeted introduction of new production features.

TRADITIONAL IT APPROACH AND DevOps WAY

	Dimensions	Traditional IT	DevOps
Planning & Organization	**Batch Size**	Big	Micro
	Organization	Skill Centric Silos	Dedicated Cells
	Scheduling	Centralized	Decentralized & Continuous
Performance & Culture	**Release**	High Risk Event	Non Event
	Information	Disseminated	Actionable
	Culture	Do Not Fail	Fail Early
Measure	**Metric**	Cost & Capacity	Cost, Capacity, and Flow (Time)
	Define "Done"	*"I did my job"*	*"Its ready to deploy"*