The Fundamentals and Benefits of CI/CD to Achieve, Build, and Deploy Automation for Cloud-Based Software Products

From the beginning of time that there has been no CI/CD development and deployment to production has been hectic and frustrating from one code break to another code break even at the conclusion of a very good job in development time but transition to production there will always be a break in the code which makes it fail and makes it a downtime for production which usually cost the organization greatly.

With the help of CI/CD in place development and deployment has been a sweet thing to think of and workflow has improved with great amount of progress that has increase the usage of production development.

CI/CD helps to catch and compile errors after merge which reduces cost of resources i.e. using less developer time on solving issues from a new developer code in the organization. Bugs are been minimized in production state and less time in testing new changes this helps to avoid cost of multiple instances of running production servers.

Having faster and more frequent production deployments increase revenue by giving new value-generating features released more quickly in the production state. With the automated some Tests there are reduced down time from deploy-related crash or major bug issues in codes which protects revenue of the organization.

Security is a very high and valued aspect in an production and development process with CI/CD detecting security vulnerabilities prevent costly security holes. Infrastructures can be automated i.e. created and also cleaned up giving a good change of less human error, and faster deployments, this helps to promote less infrastructure cost from unused resources.

CI/CD helps to deploy to production without manual checks which increase revenue by less time to release production to the market for consumers. The best way to have a successful deployment and if in case anything should happen there should be a process that can roll back when there is a failure, the automated rollback triggered by job failures in CI/CD that is done quickly by returning production back to the working state helps to protect revenue of the organization.