CI/CD Proposal

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OBJECTIVE

This PPT aims to provide an overview of fundamentals and benefits of CI/CD

The main objective of this proposal is to make the business understand the benefits by adopting CI/CD to Achieve, Build, and Deploy Automation for Cloud-Based Software Products.

We will be focusing on the transformational benefits that create revenue, protect revenue, control costs, or reduce costs through its adoption.

What is CI/CD

- CI/CD stands for continuous integration and continuous delivery.
- CI deals with the all the static code, where multiple people in a team collaborating with each other update the work done from their side on a single codebase without any conflicts, whereas CD covers the value obtained from the delivery or release of that updated code.
- In short we can sum it up as below
- Continuous Integration + Continuous Deployment = Continuous Delivery

Why should we adopt CI/CD

Let us consider the developer's perspective in here, for the benefits

- Repeatable Reliable Process
- Automate Everything
- Version Control Everything
- Bring the Pain Forward
- Build-in Quality
- "Done" Means Released
- Everyone is Responsible
- Continuous Improvement

Why should we adopt CI/CD

Let us consider the business perspective here, for the benefits

- Catching compile errors after merging code will lead to less developer time on issues from new developer code, and thus help to reduce cost.
- Catching unit test failures will result in lesser bugs in production and less time in testing too.
- Detecting security vulnerabilities will prevent embarrassing or costly security holes and help avoid cost.
- Automating infrastructure creation would decrease the chances of human error, and effect in faster deployments.

Why should we adopt CI/CD

- Automating infrastructure cleanup will help to utilise the infrastructure judiciously and reduce cost from unused resources.
- Faster and more frequent production deployments will result in new value-generating features releasing more quickly, helping to generate more revenue.
- New value-generating features will be released more quickly, by reducing manual checks while deploying in production, helping to increase revenue.
- Reduced downtime from a deploy-related crash or major bug by automating smoke tests and eventually protecting revenue.
- Quick undo to return production to working state by automated rollbacks triggered by job failures would again help in protecting revenue.

Thank You

For listening!!