FUNDAMENTALS AND BENEFITS OF CI/CD

SELLING CI/CD

WHAT ARE THE BENEFITS OF EACH PRACTICE?

we haven't yet looked into the reasons why you would adopt them. There's an obvious cost to implementing each practice, but it's largely outweighed by their benefits.

If the benefits truly outweigh the costs of implementation, you'll find that the business will often give you the green light.

CONTINUOUS INTEGRATION

What you need (cost) :	What you gain :	Value :
Your team will need to write automated tests for each new feature, improvement or bug fix.	Less bugs get shipped to production as regressions are captured early by the automated tests.	Reduce time
You need a continuous integration server that can monitor the main repository and run the tests automatically for every new commits pushed.	Testing costs are reduced drastically – your CI server can run hundreds of tests in the matter of seconds.	Reduce Cost
Catch Compile Errors After Merge	Less developer time on issues from new developer code	Reduce Cost
Catch Unit Test Failures	Less bugs in production and less time in testing	Avoid Cost
Detect Security Vulnerabilities	Prevent embarrassing or costly security holes	Avoid Cost

CONTINUOUS DELIVERY

What you need (cost) :	What you gain :	Value :
Deployments need to be automated. The trigger is still manual but once a deployment is started there shouldn't be a need for human intervention.	You can release more often, thus accelerating the feedback loop with your customers	Reduce Time
Automate Infrastructure Creation	Less human error, Faster deployments	Avoid Cost
Automate Infrastructure Cleanup	Less infrastructure costs from unused resources	Reduce Cost
Faster and More Frequent Production Deployments	New value-generating features released more quickly	Increase Revenue

CONTINUOUS DEPLOYMENT

What you need (cost) :	What you gain :	Value :
Deploy to Production Without Manual Checks	Less time to market	Increase Revenue
Automated Smoke Tests	Reduced downtime from a deploy-related crash or major bug	Protect Revenue
Automated Rollback Triggered by Job Failure	Quick undo to return production to working state	Protect Revenue