

CICD

Stage	Before CI/CD	After CI/CD
Coding	Human	Human
Code Review	Human, Subjective, Inconsistent	Human/CI - Static Analysis
Compile/Lint	Human	CI
Merge/Integrate	Human	CI
Run Unit Tests	Human, Hit or Miss, Easily Bought Off with Pressure	CI
Run Integration Tests	Human, Hit or Miss, Easily Bought Off with Pressure	CI
Verify Dependency Security	Human, Often Not Done	CI
Deploy to Test Env	Human, Problematic, Missed Steps	CD
Team Test	Human, Time Consuming	CD - Automated Acceptance Tests
Deploy to Client Test Env	Human, Problematic, Missed Steps	CD
Client Test	Human, Often Unnecessary If Pre-Development Activities are On Point	Human - Maybe Not Needed If We Can Build Confidence
Create Infrastructure	Human, Problematic, Missed Steps, Stressful	CD
Deploy to Production	Human, Problematic, Missed Steps, Stressful	CD
Smoke Test in Prod	Human, Inconsistent	Automated Smoke Tests (Subset of AAT's)
Rollbacks	Human, Problematic, Missed Steps, Stressful	CD
Promoting Production	Human, Problematic, Missed Steps, Stressful	CD
Celebrate!	Human	Human

Benefit Of CICD

- **No more manual deploying to environments**
- **No more modifying environment settings in GUI's**
- **No more neglecting the unit tests**
- **No more leaving broken code in place**

Reduce Cost

- Less developer time on issues from new developer code
- Less bugs in production and less time in testing
- Less human error, Faster deployments
- Less time to market
- Reduced downtime from a deploy-related crash or major bug

Make Client Happy

- Reduced deploy errors. no more errors by missing the checklist.
- Faster release rate. you can verify the progress any time you want.