Continuous Delivery Is Important

- Delivering multiple features all as one package does not make customer satisfied.
- However continuous delivery indeed has proved that features continuous delivery does make customer satisfied.

Continuous Integration + Continuous Deployment = Continuous Delivery

Before & After

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

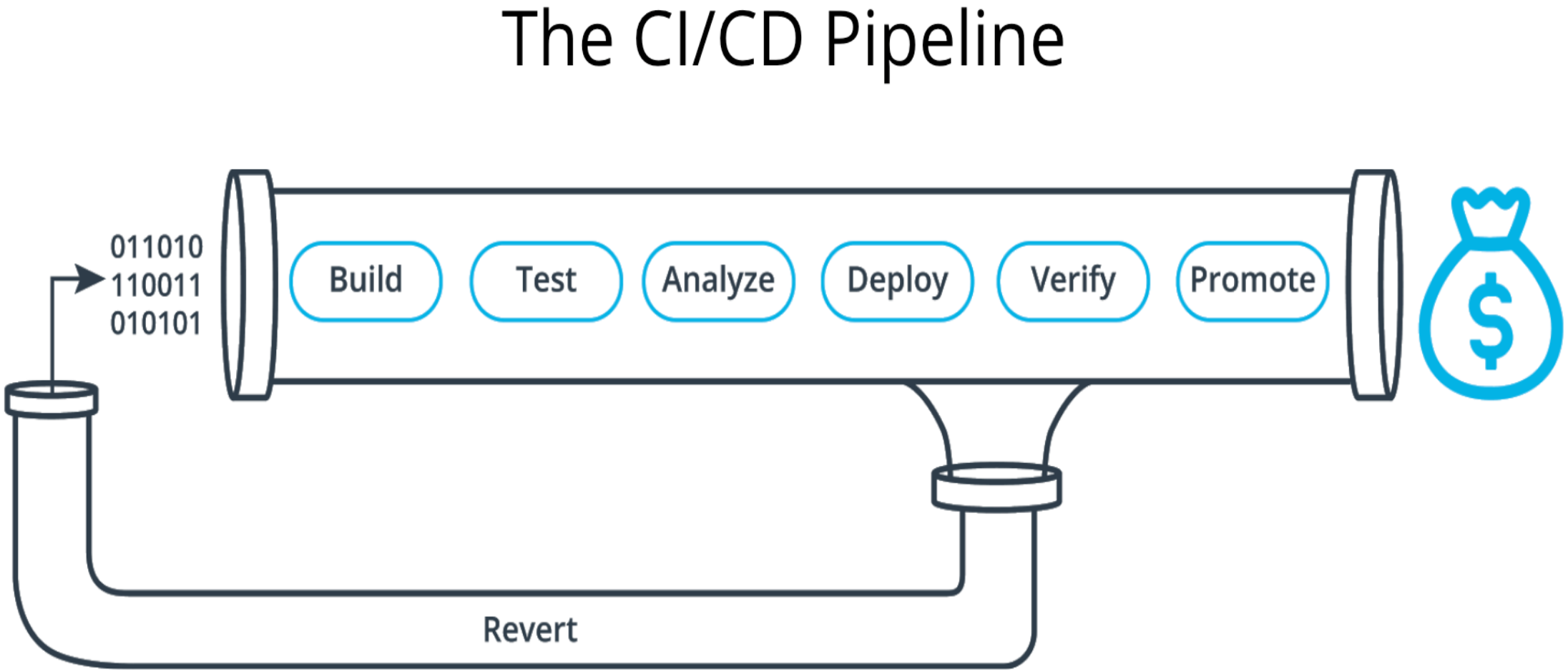
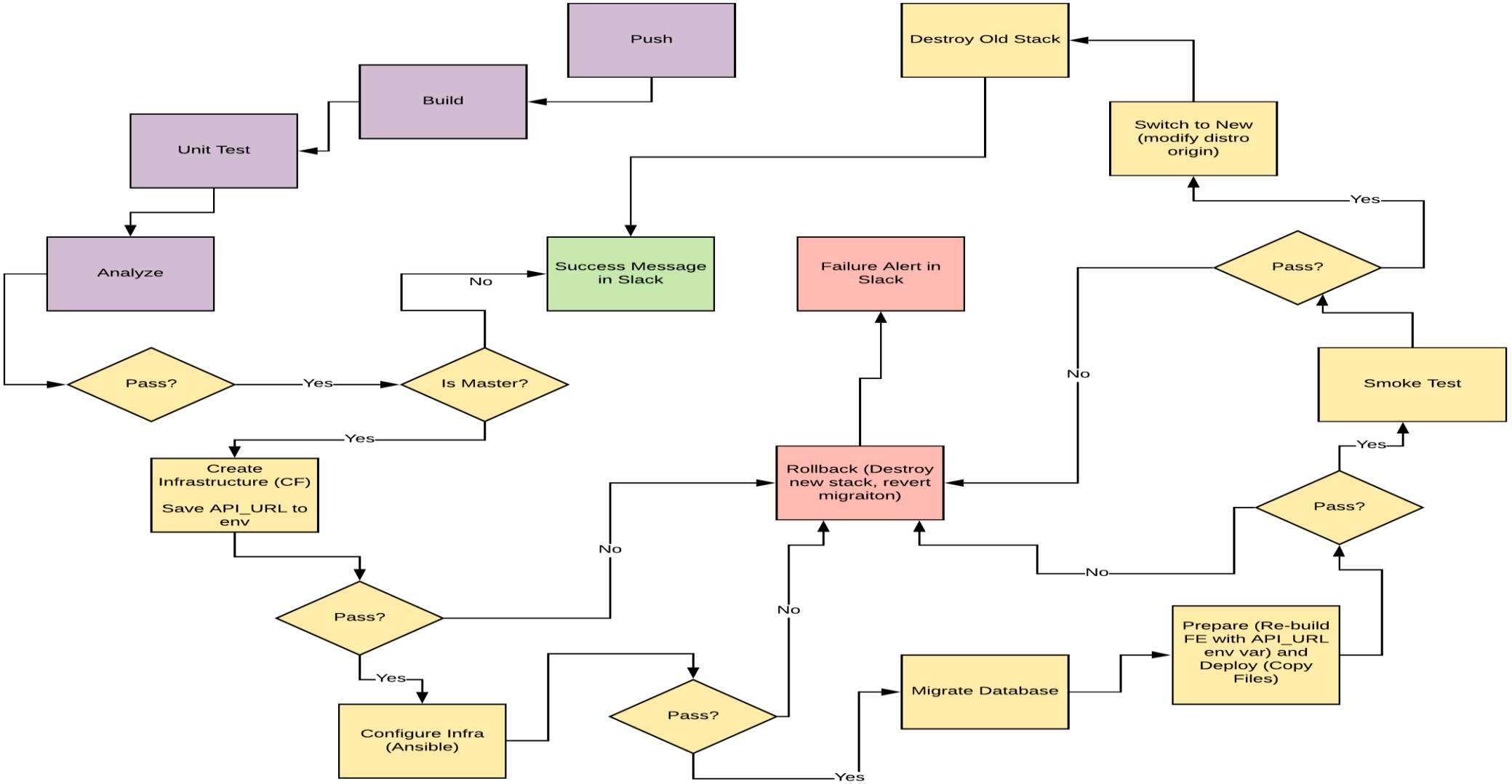
Signs of CI/CD Need

- Investing **more time** in a release cycle than delivering value
- Going through integration hell every time we finish a feature
- **Code gets lost** because of botched merges
- Unit test suite hasn't been green in ages
- Deployments contribute to **schedule slip**
- Friction between ops and development departments
- **Only one engineer** can deploy a system
- ***Deployments are not cause for celebration***

Tech / Finance : One Team & One Language

Technical Language	Value	Translation
Catch Compile Errors After Merge	Reduce Cost	Less developer time on issues from new developer code
Catch Unit Test Failures	Avoid Cost	Less bugs in production and less time in testing
Detect Security Vulnerabilities	Avoid Cost	Prevent embarrassing or costly security holes
Automate Infrastructure Creation	Avoid Cost	Less human error, Faster deployments
Automate Infrastructure Cleanup	Reduce Cost	Less infrastructure costs from unused resources
Faster and More Frequent Production Deployments	Increase Revenue	New value-generating features released more quickly
Deploy to Production Without Manual Checks	Increase Revenue	Less time to market
Automated Smoke Tests	Protect Revenue	Reduced downtime from a deploy-related crash or major bug
Automated Rollback Triggered by Job Failure	Protect Revenue	Quick undo to return production to working state

CI / CD Pipelines



One Solution Not The Solution