



Udapeople Project

Benefits to adopt CI/CD

According to Google Cloud developers

→ **Increase the speed of your deployments**

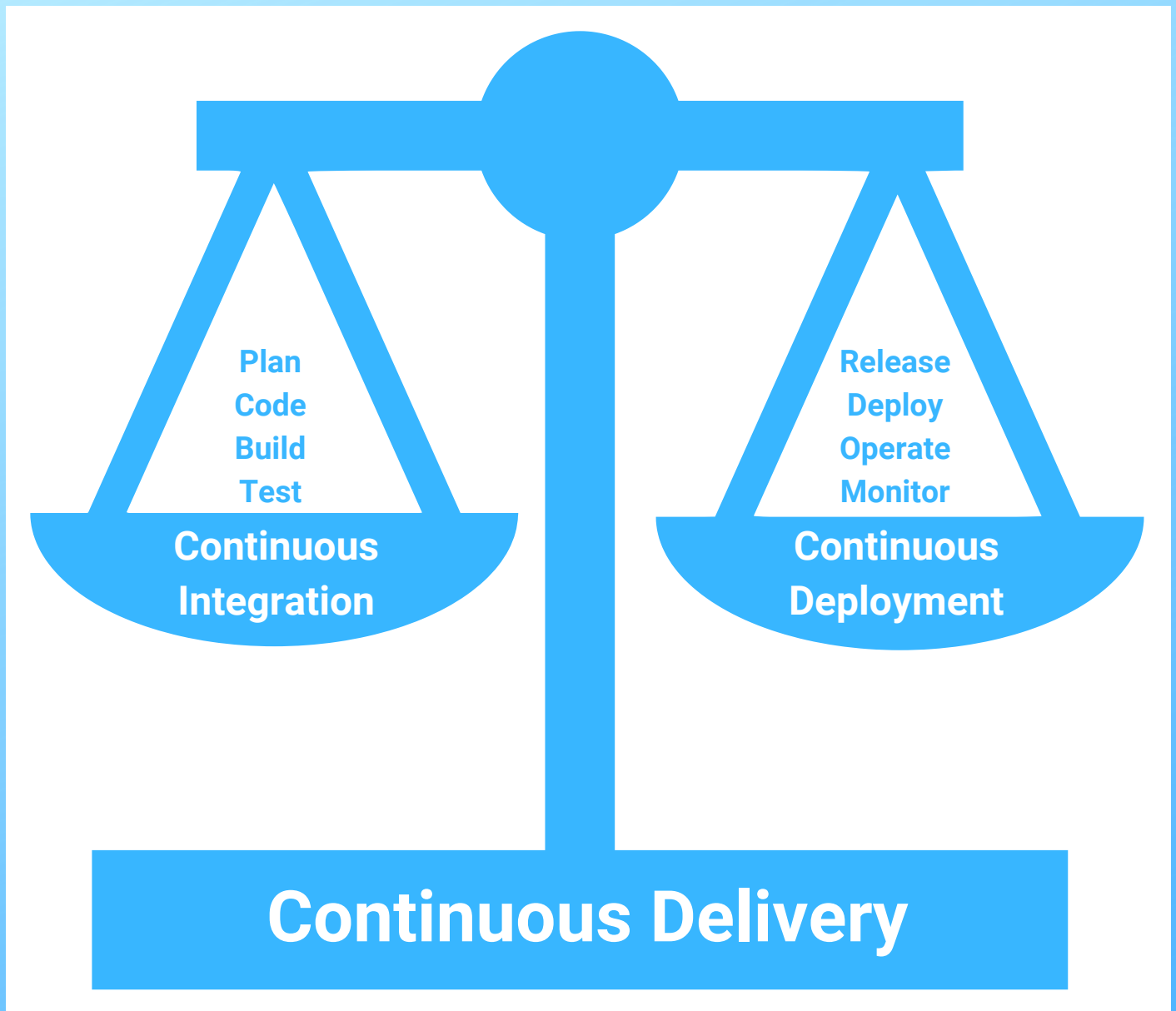
"The best teams deploy 208x more frequently and have lead times 106x faster when compared to low performers."

→ **Improve the stability of your software**

"High performers don't trade off speed and stability. The best teams recover from incidents 2.604x faster and have change fail rates 7x lower."

→ **Build security in from the start**

"High performers spend 50% less time fixing security issues compared to low performers."



Principles

Repeatable Reliable Process

Automate Everything

Version Control Everything

Bring the Pain Forward

Build-in Quality

"Done" Means Released

Everyone is Responsible

Continuous Improvement

Fundamentals

CONTINUOUS INTEGRATION

COMPILE

UNIT TEST

STATIC ANALYSIS

DEPENDENCY
VULNERABILITY
TESTING

STORE ARTIFACT

CONTINUOUS DEPLOYMENT

CREATING
INFRASTRUCTURE

PROVISIONING
SERVERS

COPYING FILES

PROMOTING TO
PRODUCTION

SMOKE TESTING

ROLLBACKS

Benefits

AVOID COST

Less bugs in production and less time in testing

Prevent embarrassing or costly security holes

Less human error, Faster deployments

REDUCE COST

Less developer time on issues from new developer code

Less infrastructure costs from unused resources

INCREASE REVENUE

New value-generating features released more quickly

Less time to market

PROTECT REVENUE

Reduced downtime from a deploy-related crash or major bug

Quick undo to return production to working state