

Measuring Continuous Delivery

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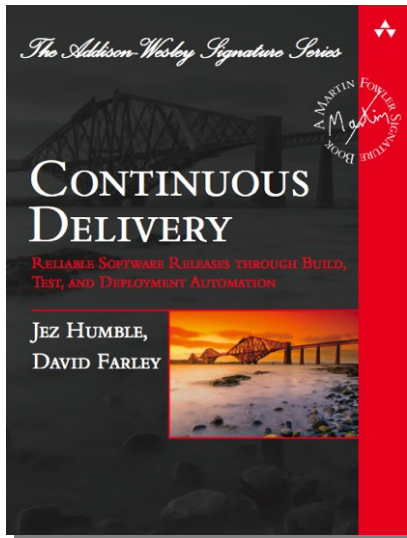
t: [@SteveSmithCD](https://twitter.com/SteveSmithCD)



Associated with



Continuous Delivery



“Speed is essential because there is an opportunity cost associated with not delivering software”

Dave Farley and Jez Humble

Continuous Delivery: when stability and speed can satisfy business demand

Discontinuous Delivery: when stability and speed are insufficient

Continuous Delivery

VERSION CONTROL

AUTOMATED CONFIGURATION

AUTOMATED INFRASTRUCTURE

DEPLOYMENT PIPELINE

TRUNK BASED DEVELOPMENT

CONTINUOUS INTEGRATION

EVOLUTIONARY ARCHITECTURE

DATABASE MIGRATIONS

TEST DRIVEN DEVELOPMENT

ACCEPTANCE & SMOKE TESTS

EXPLORATORY TESTING

DYNAMIC TEST DATA

MONITORING AND ALERTING

CANARY DEPLOYMENTS

Continuous Delivery

SMALL BATCH SIZE

DEVOLVED DECISION MAKING

SHARED INCENTIVES

BLAMELESS POST-MORTEMS

EVERYONE DOES ON-CALL

CONTINUOUS CHANGE REVIEWS

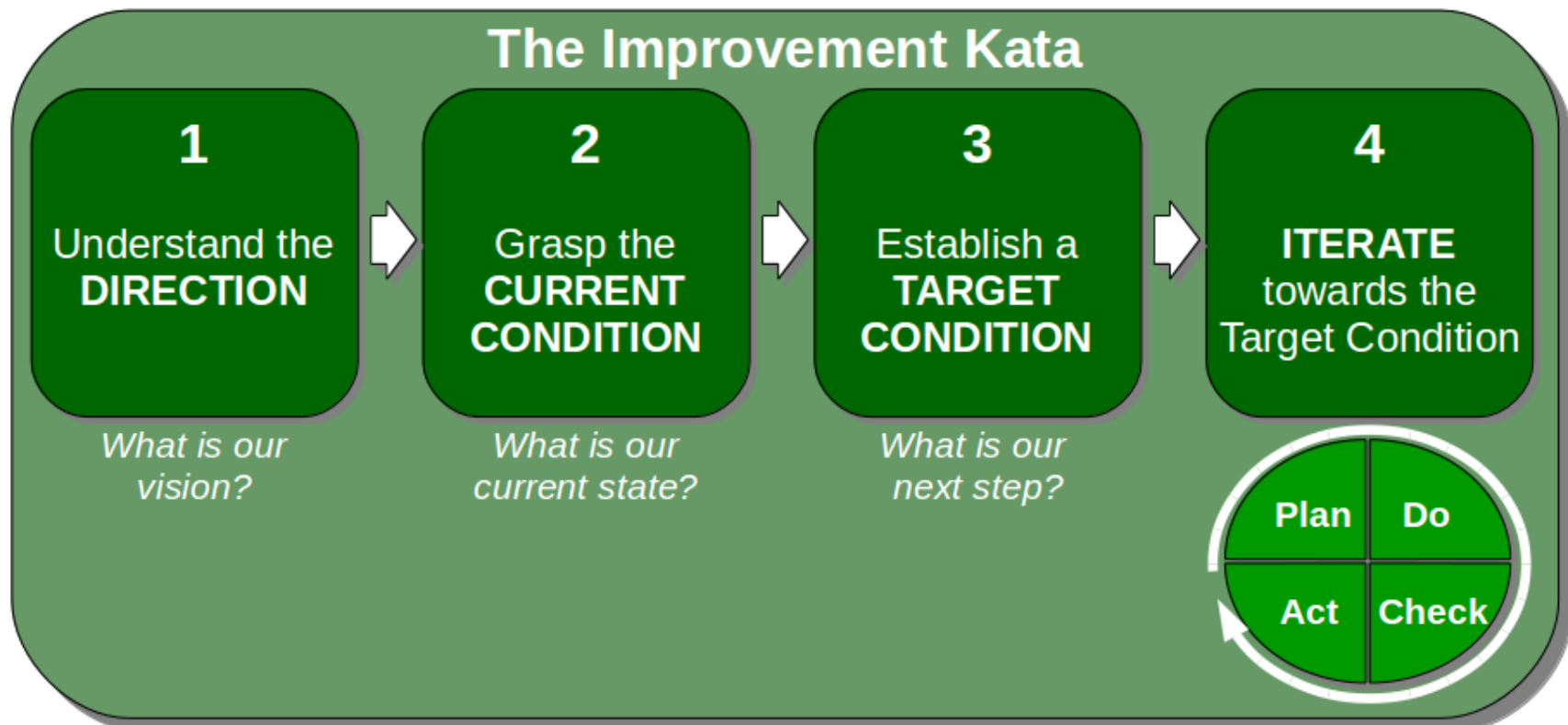
TRACEABILITY OF CHANGES

UPSKILL EMPLOYEES

CROSS-FUNCTIONAL TEAMS

CONWAY'S LAW ALIGNMENT

The Improvement Kata



Continuous Delivery Measures



“Higher throughput *and* higher levels of stability are possible at scale”

DevOps: Profiles in ITSM Performance and Contributing Factors

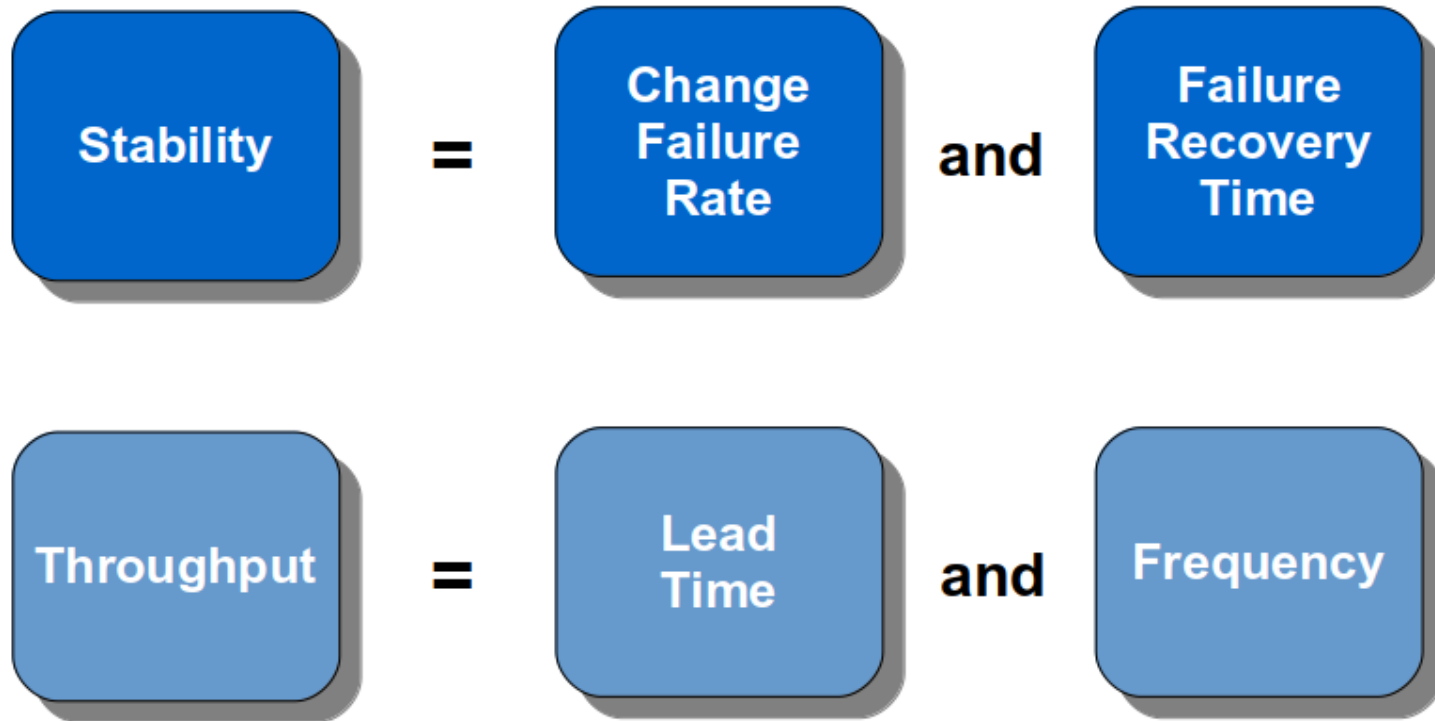
Nicole Forsgren and Jez Humble (WDSI 2016)



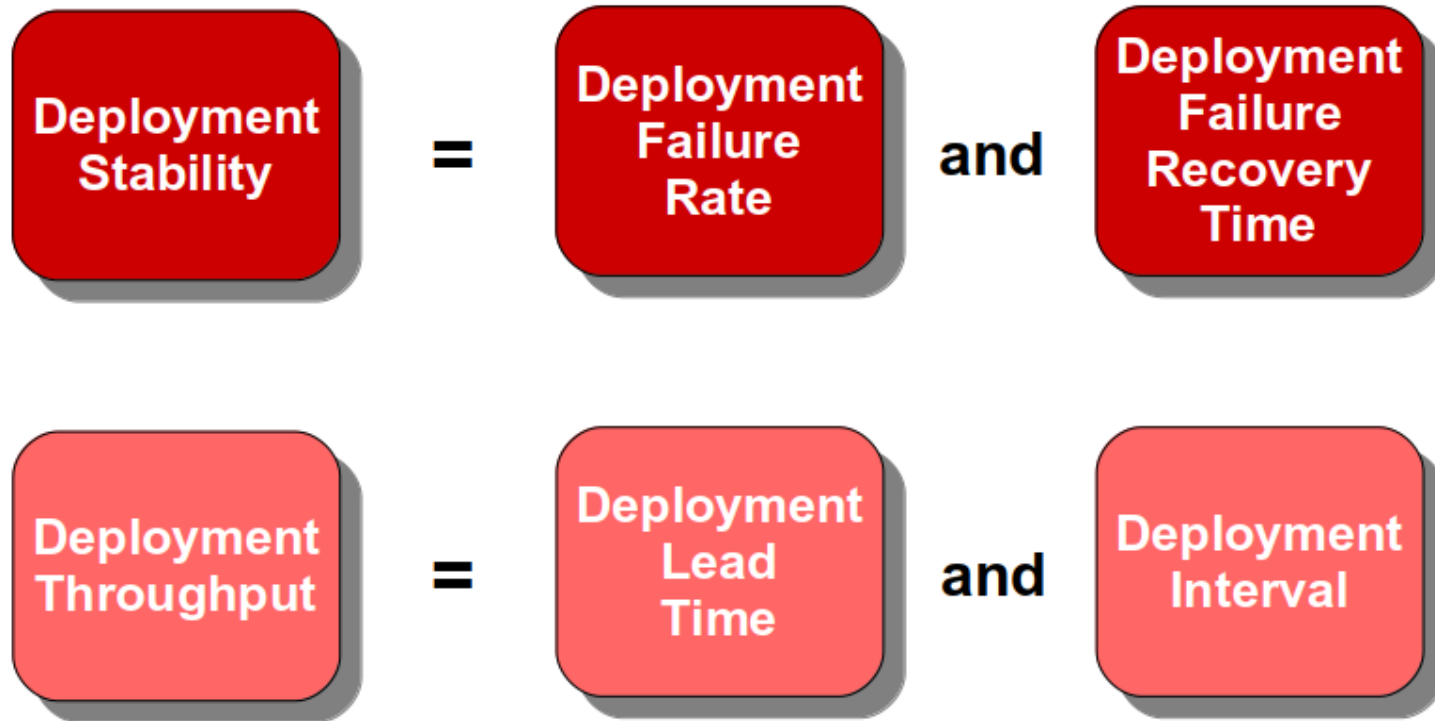
Continuous Delivery improves throughput and stability in unison

Continuous Delivery leads to strong IT performance

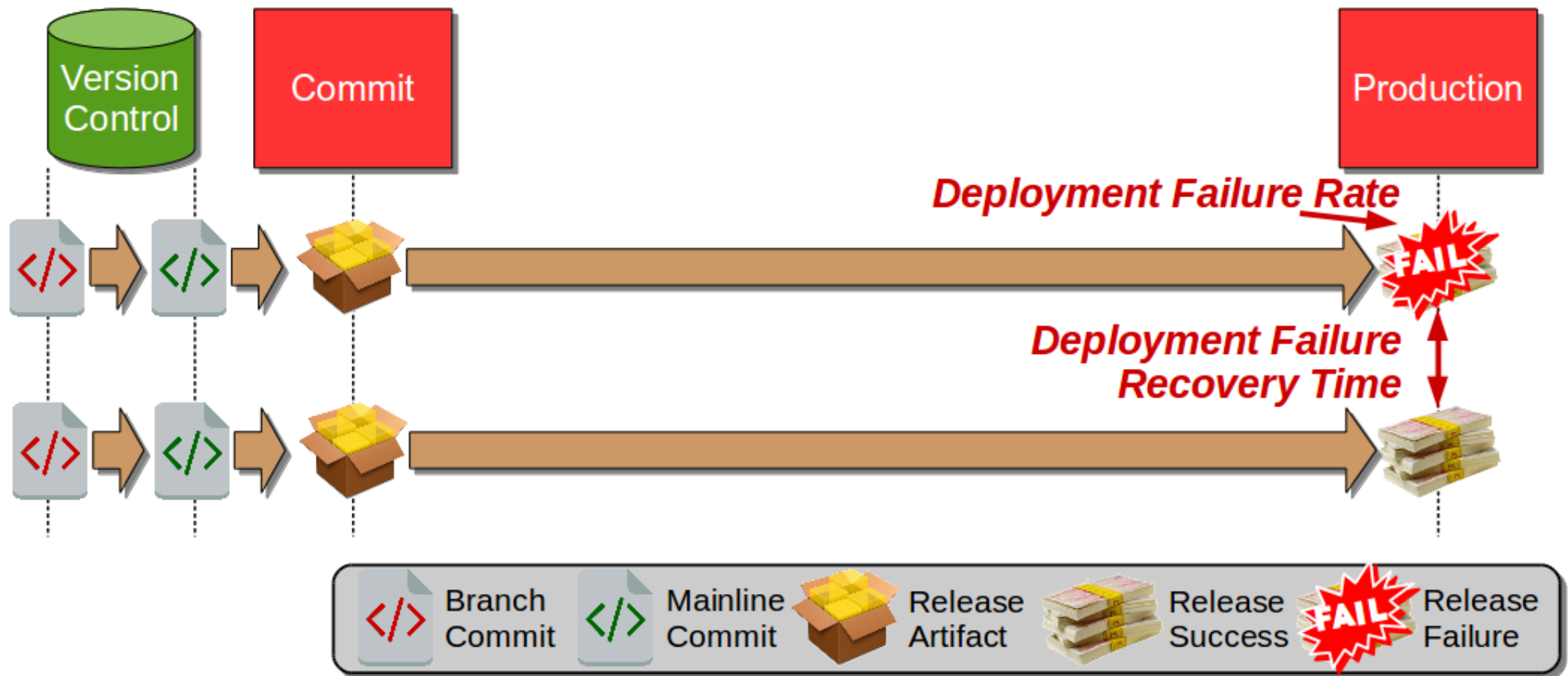
Continuous Delivery Measures



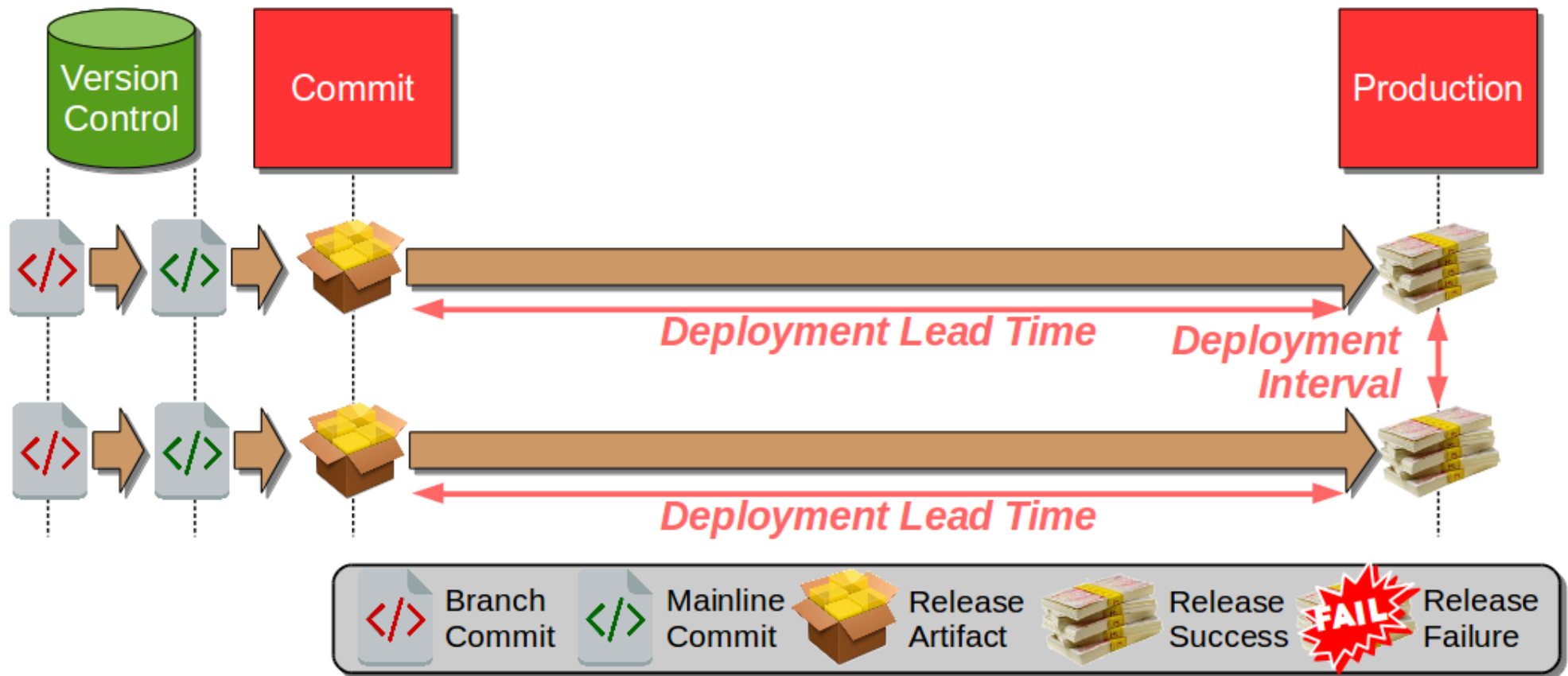
Deployment Indicators



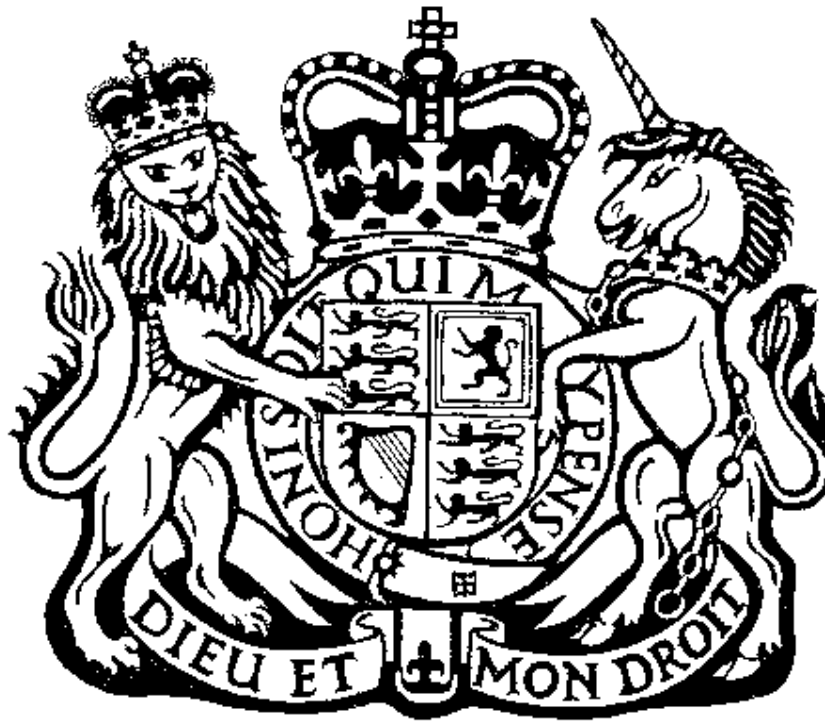
Deployment Stability Indicator



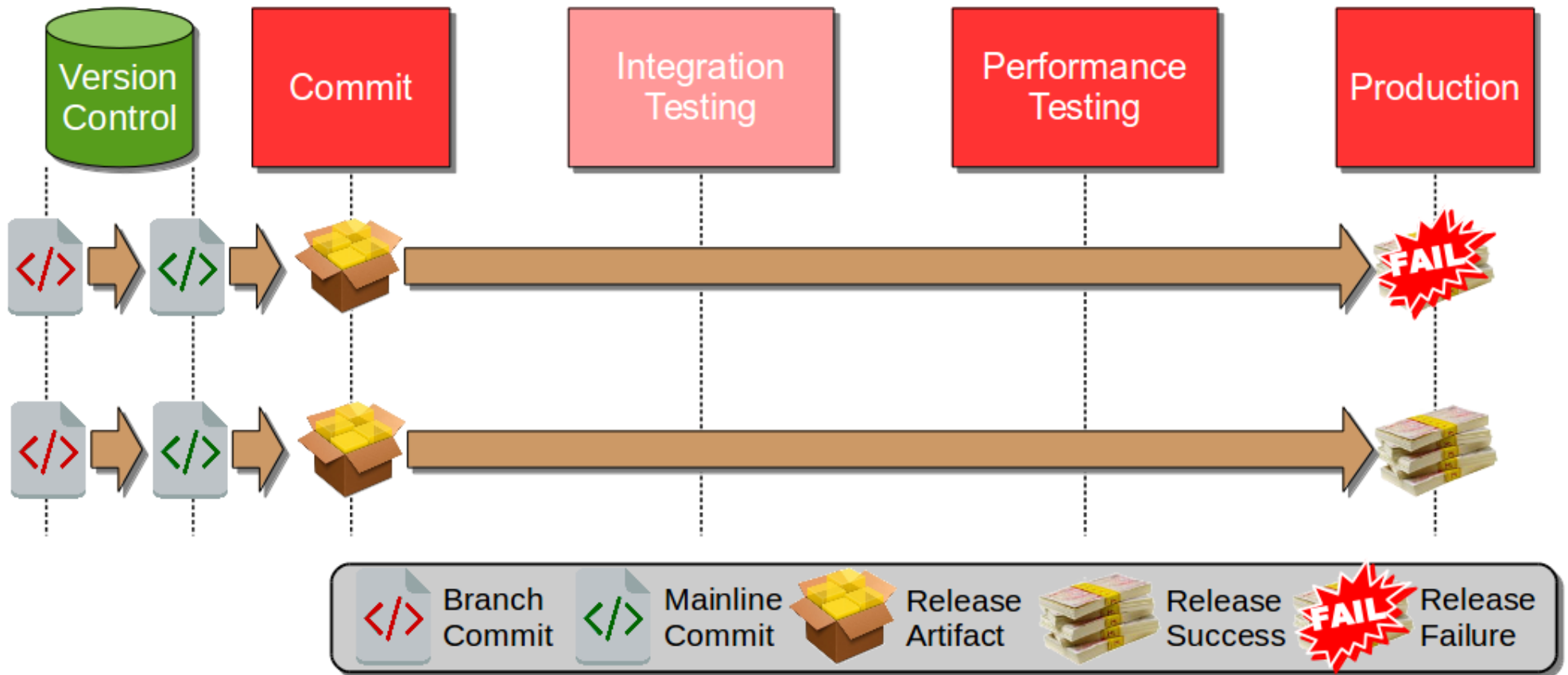
Deployment Throughput Indicator



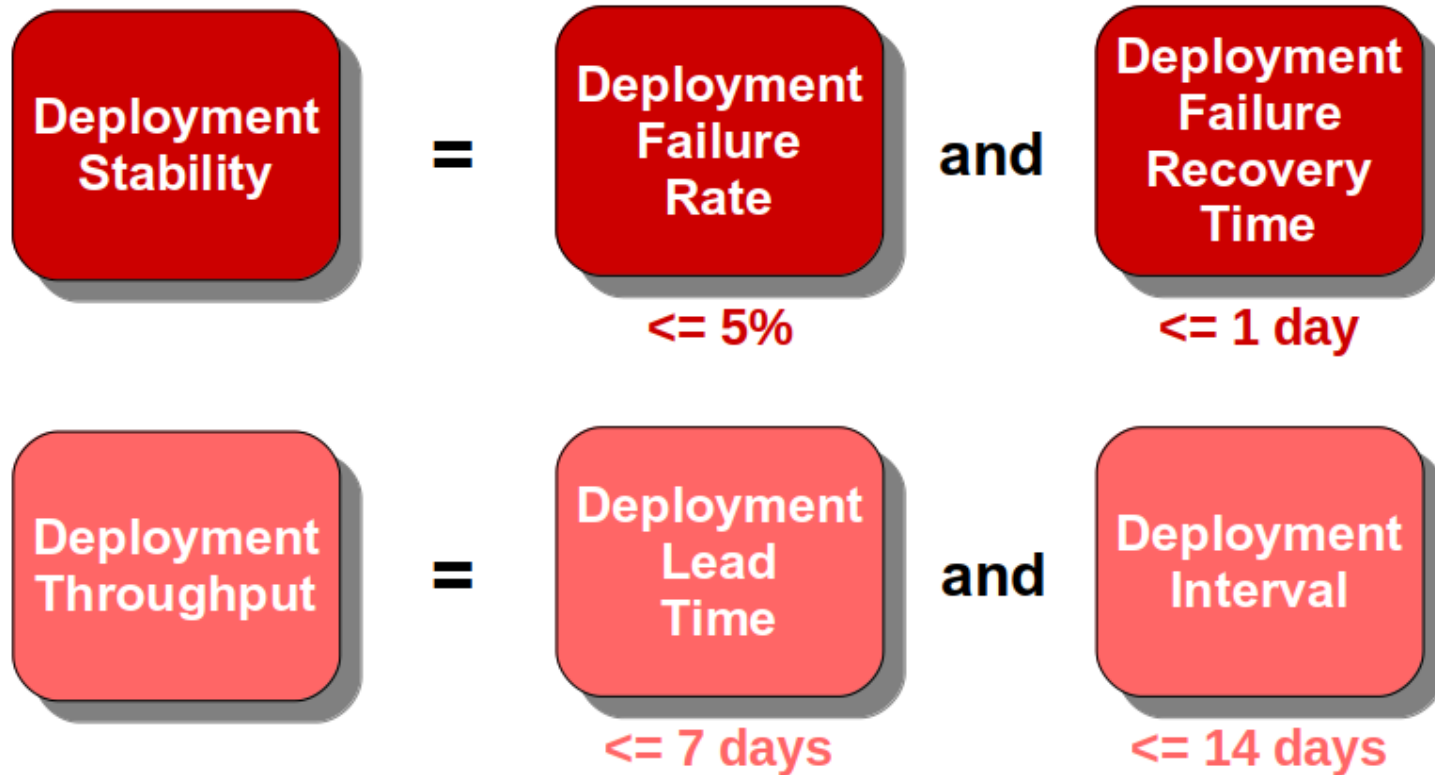
The Government Dept – 60 teams



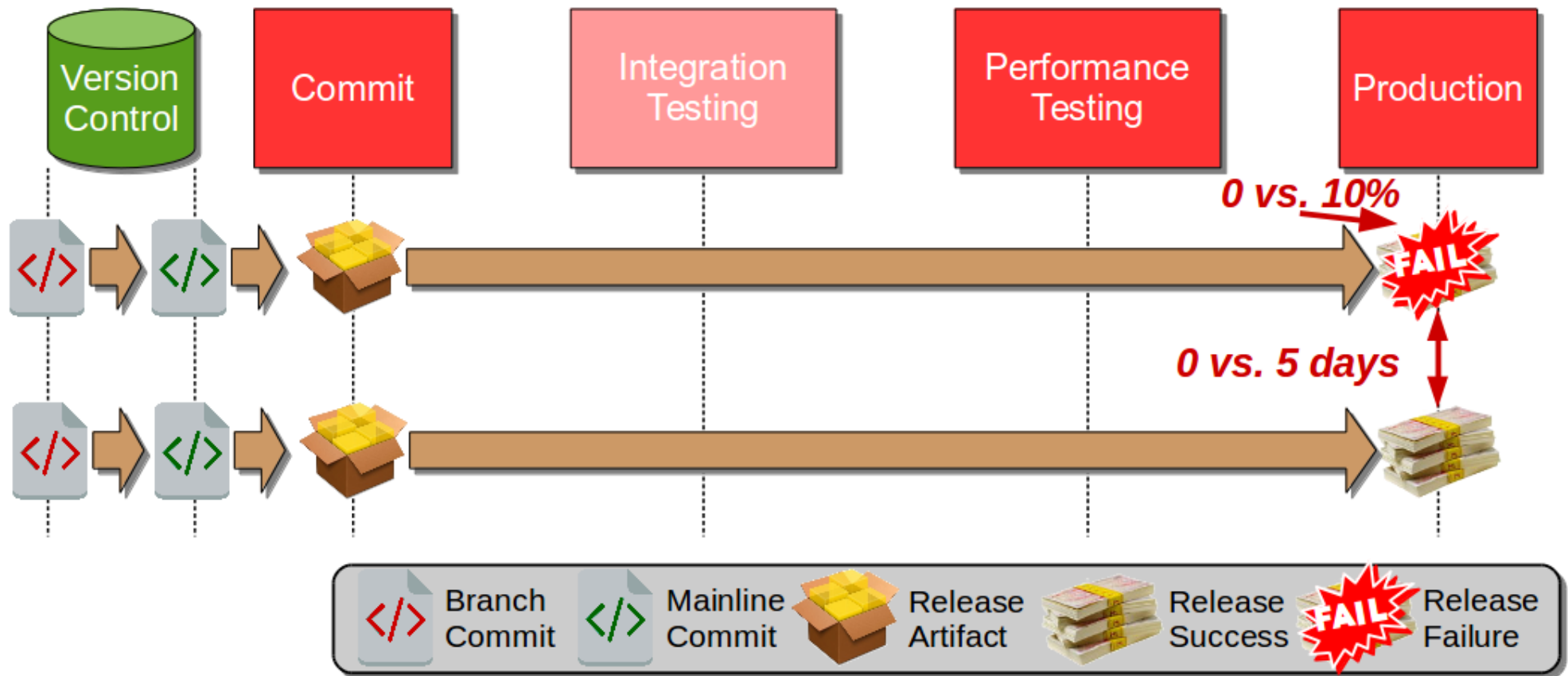
The Government Dept – 60 teams



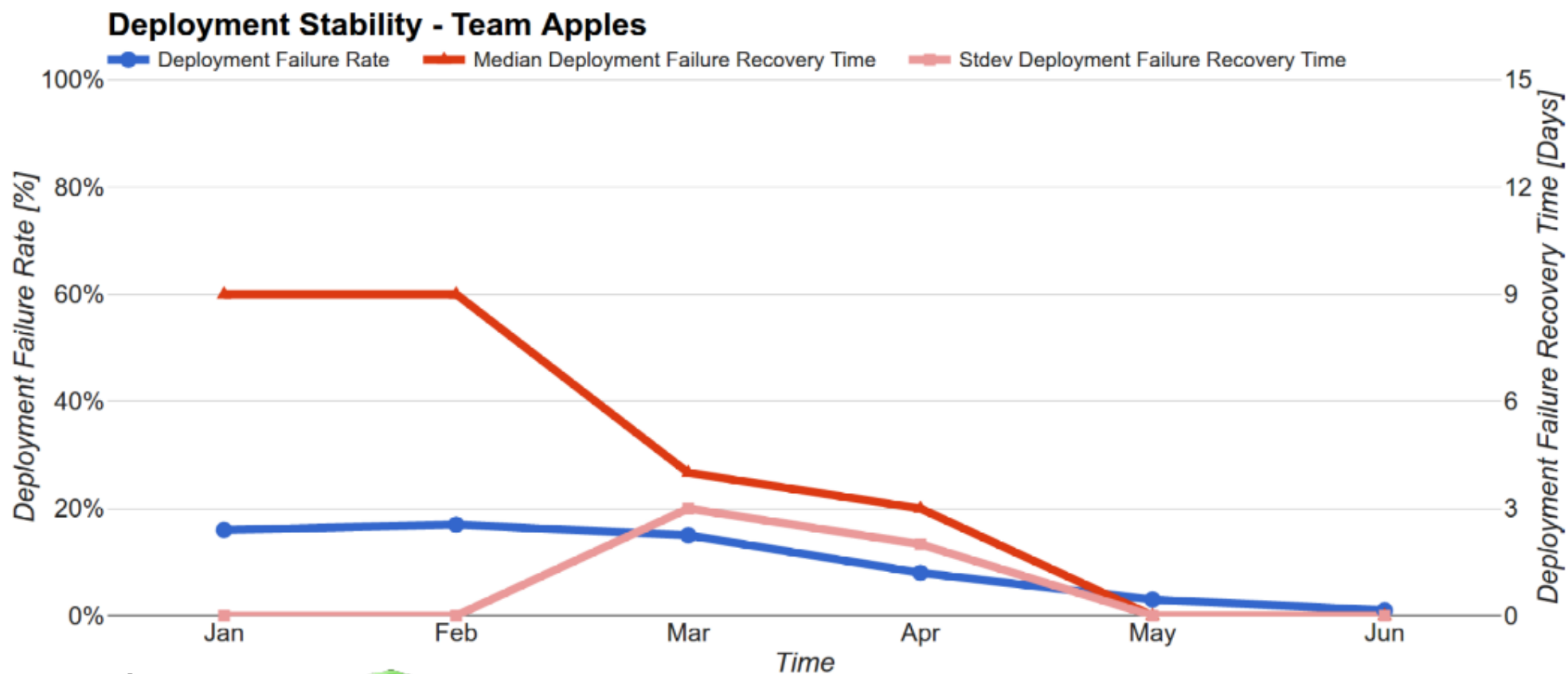
Deployment Indicators



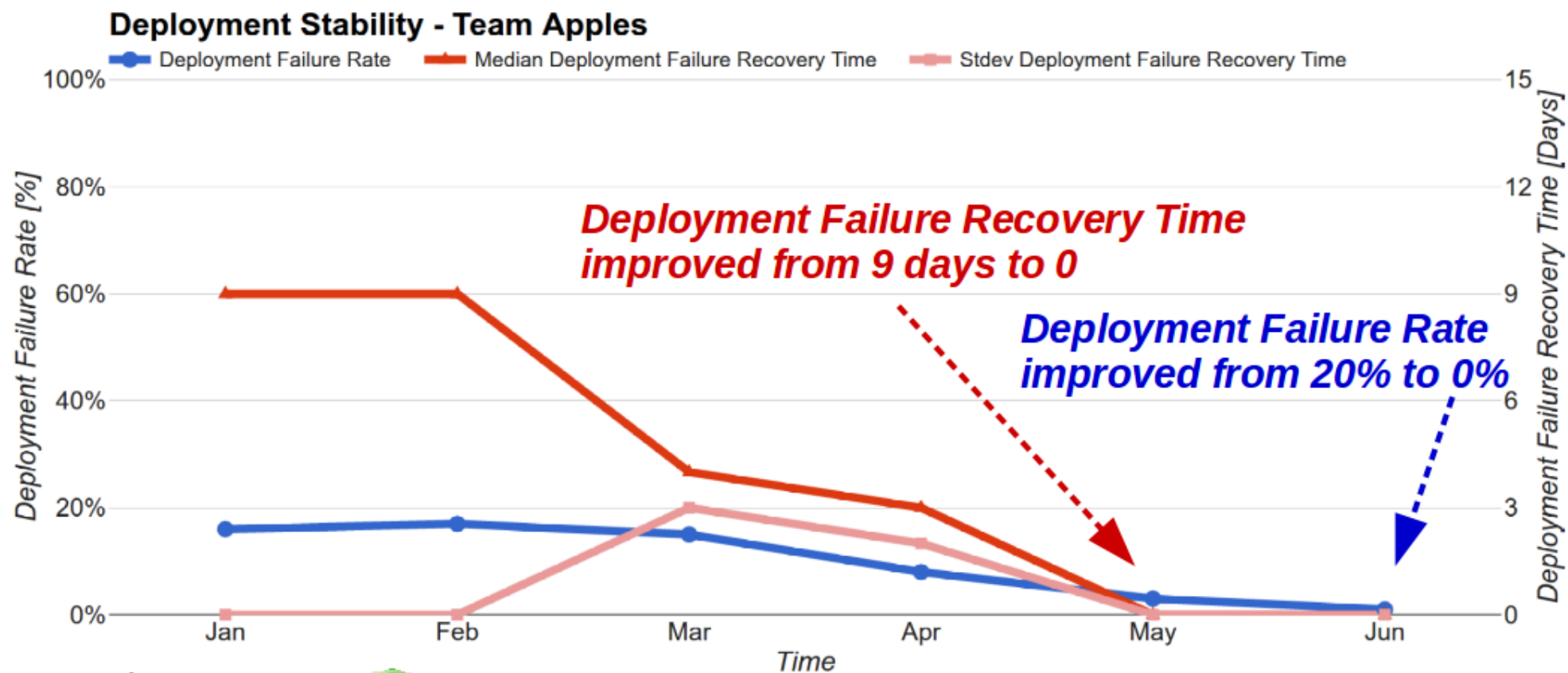
Deployment Stability Indicator



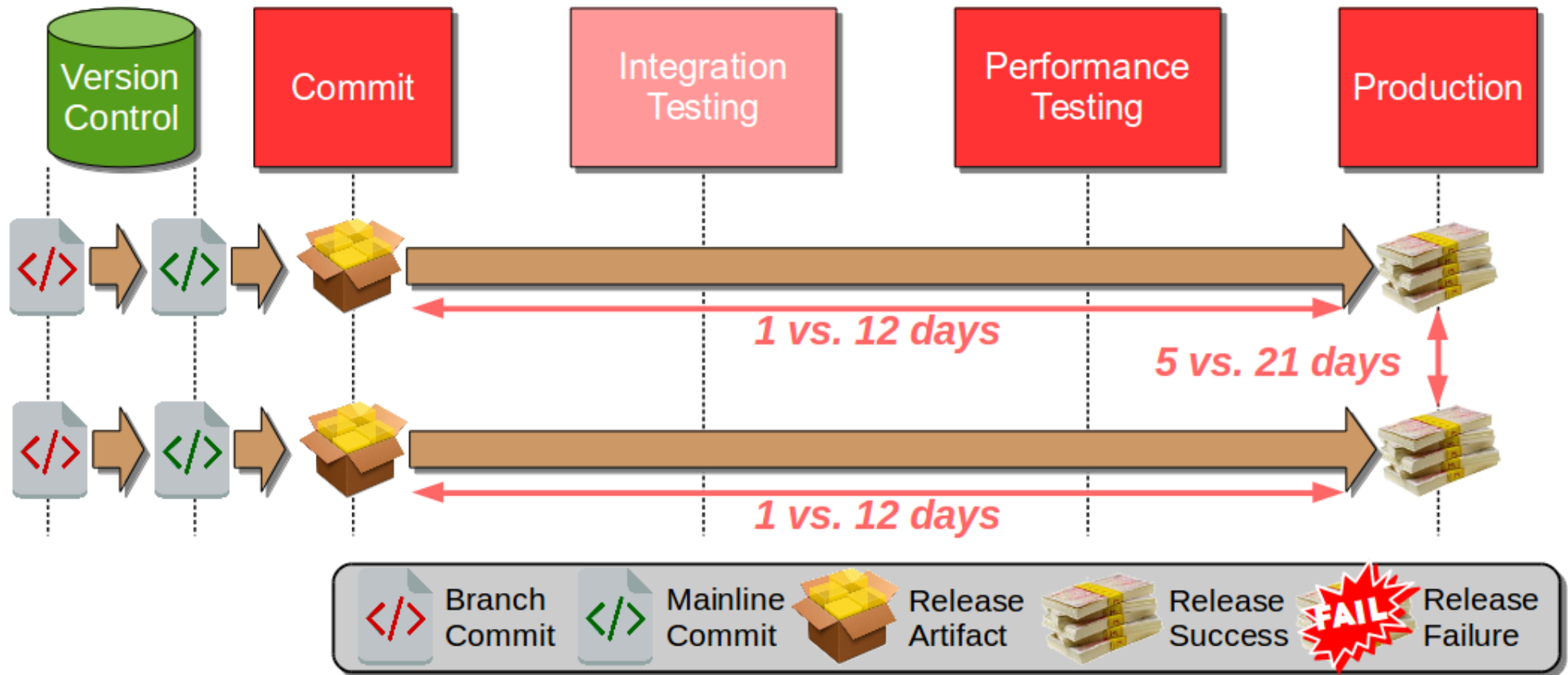
Deployment Stability - Apples



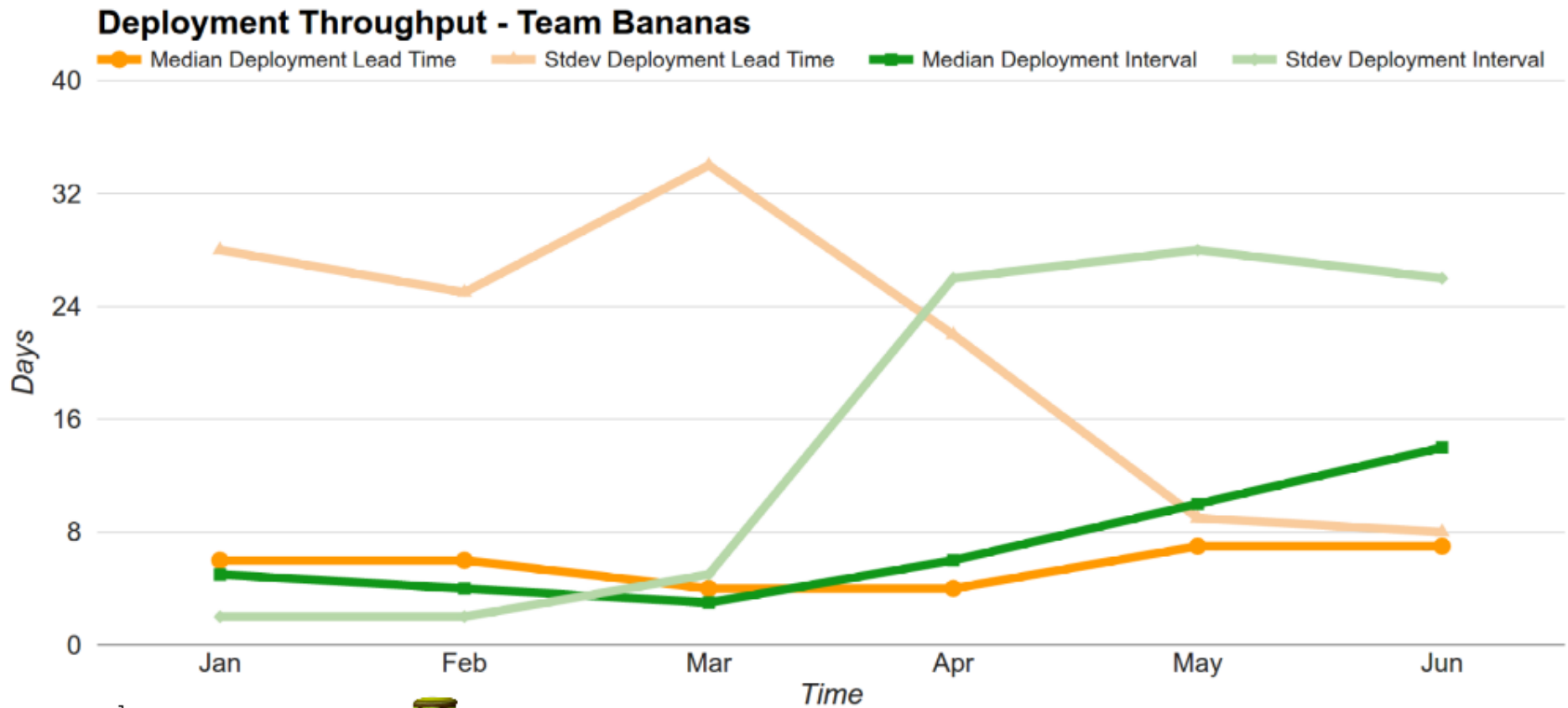
Deployment Stability - Apples



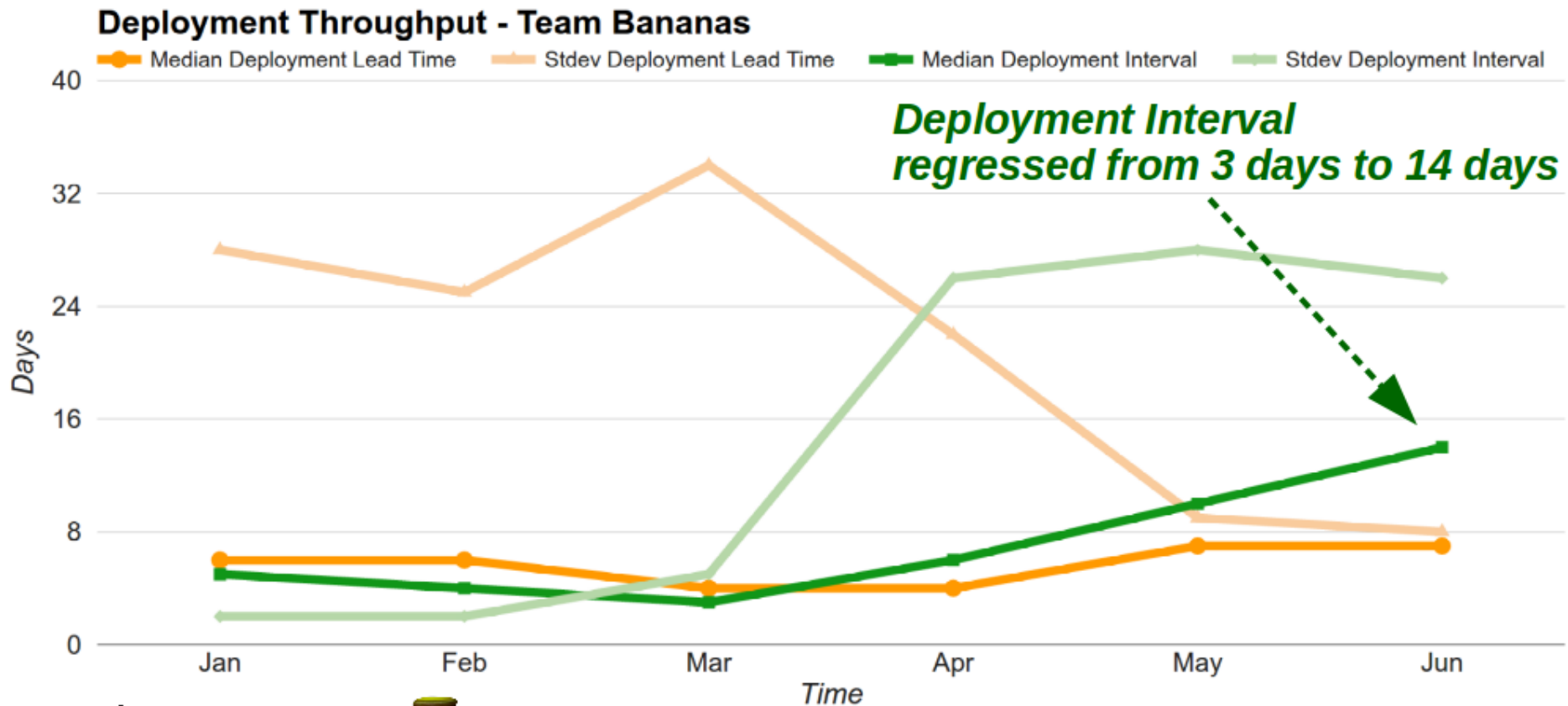
Deployment Throughput Indicator



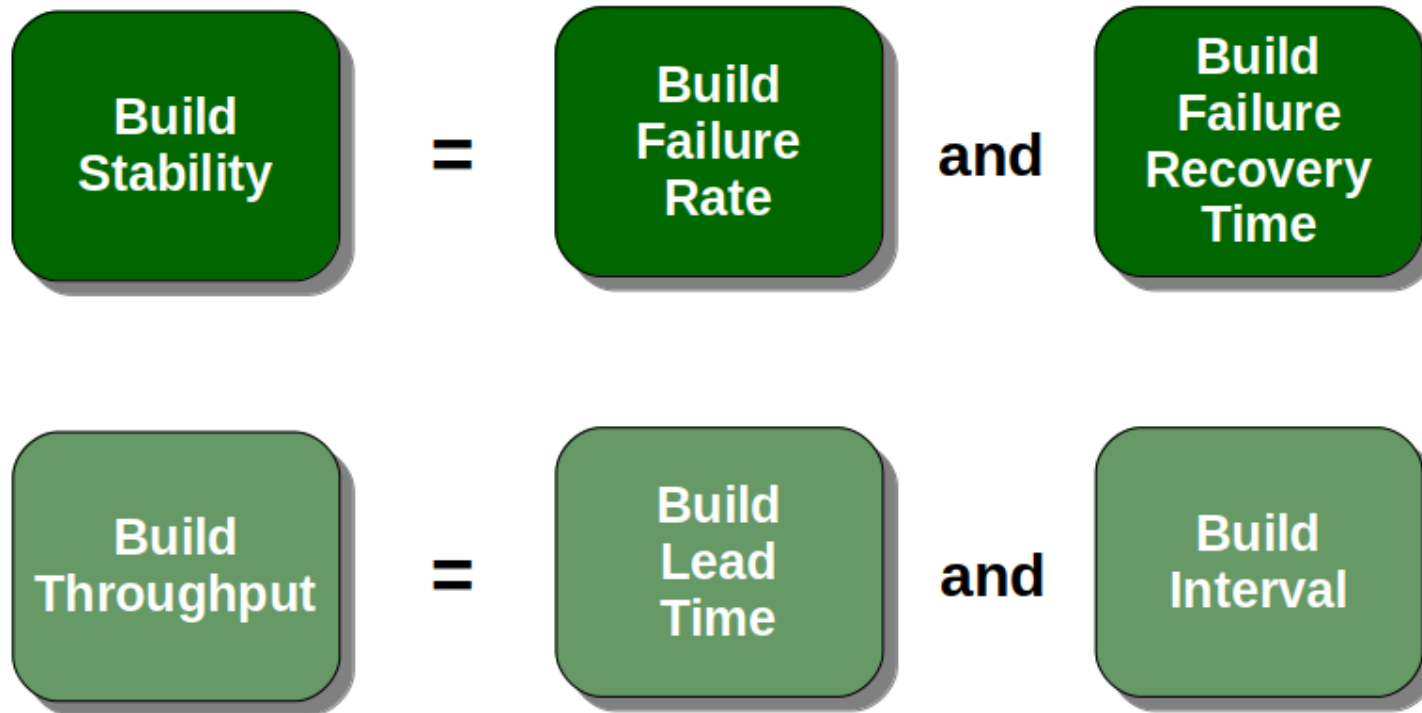
Deployment Throughput - Bananas



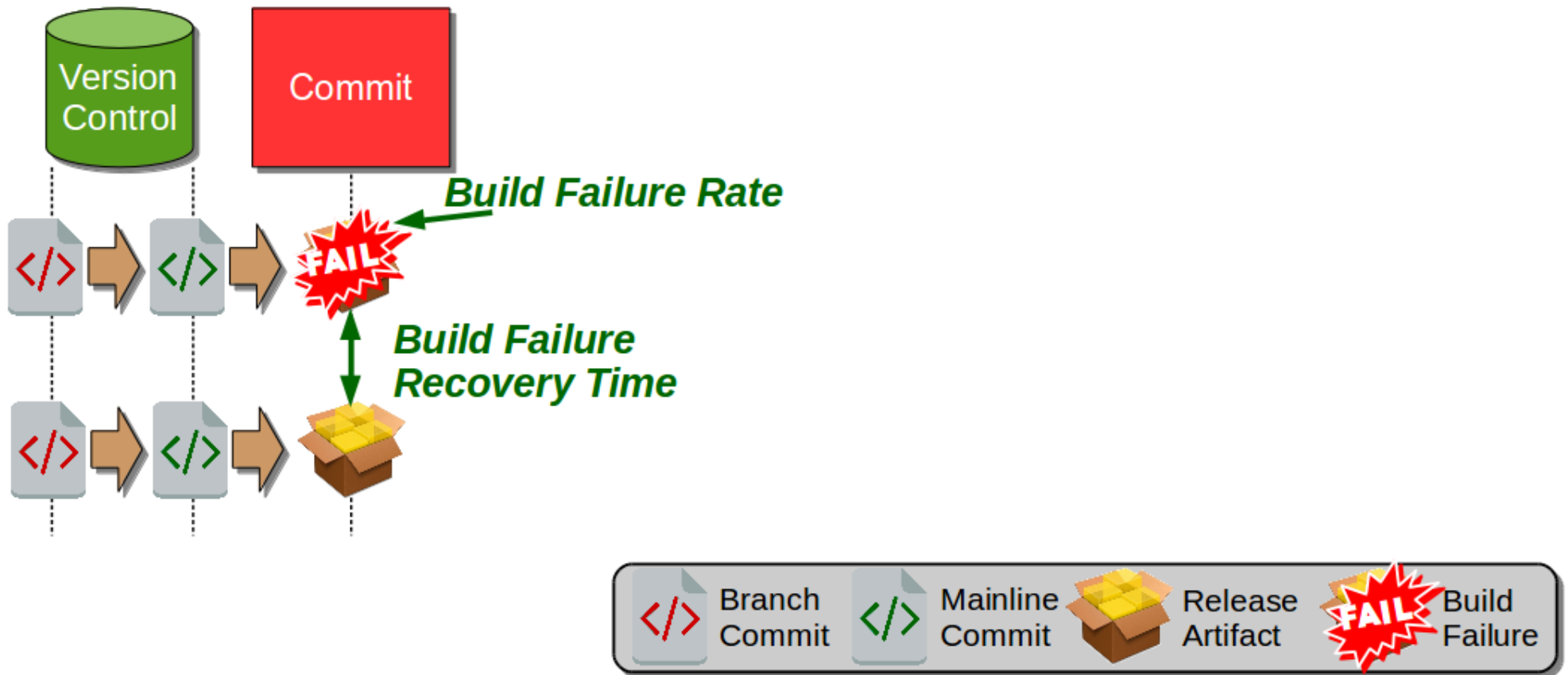
Deployment Throughput - Bananas



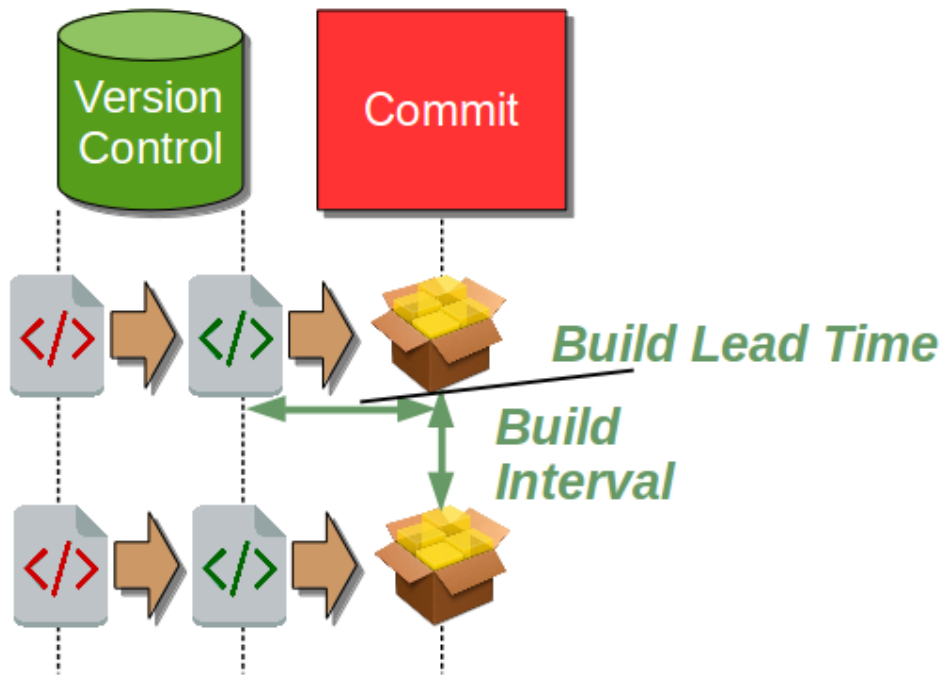
Build Indicators



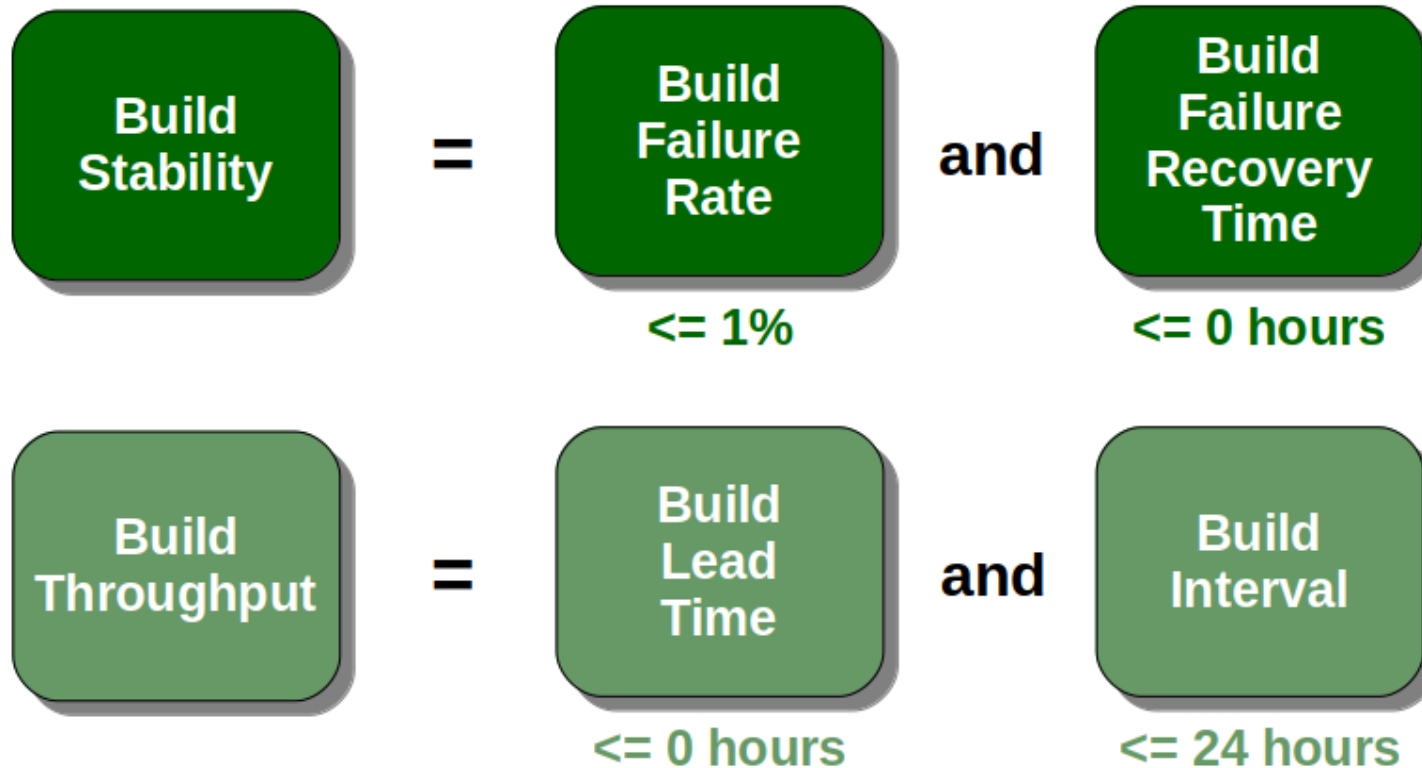
Build Stability Indicator



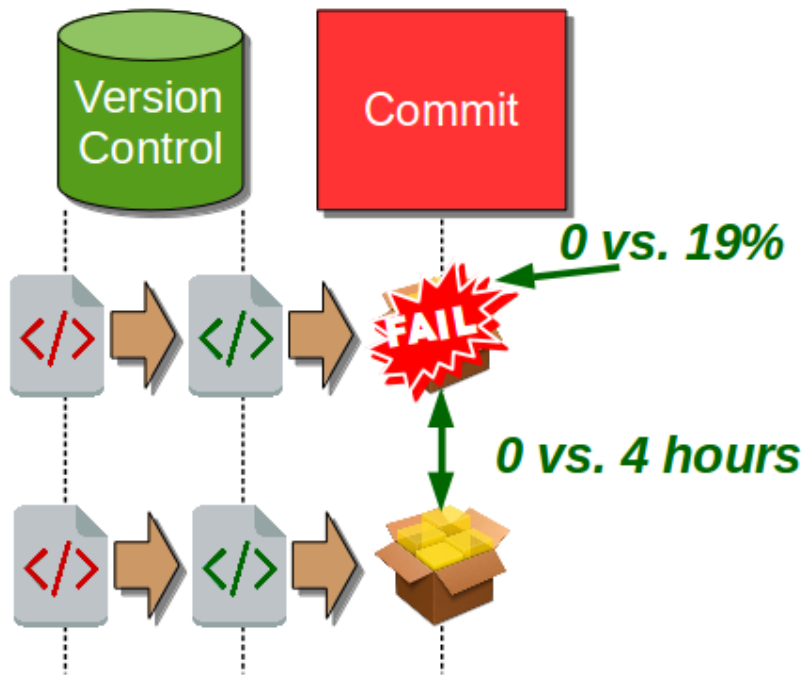
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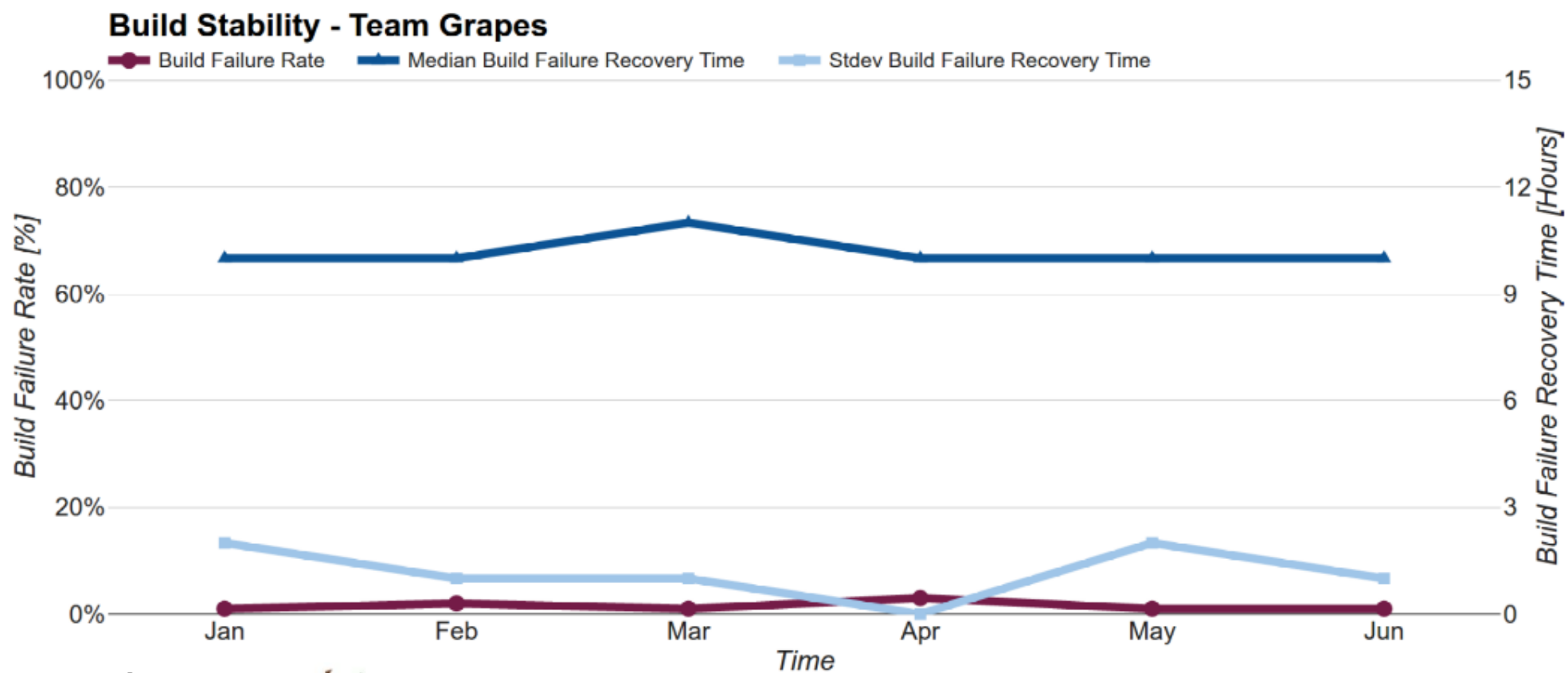
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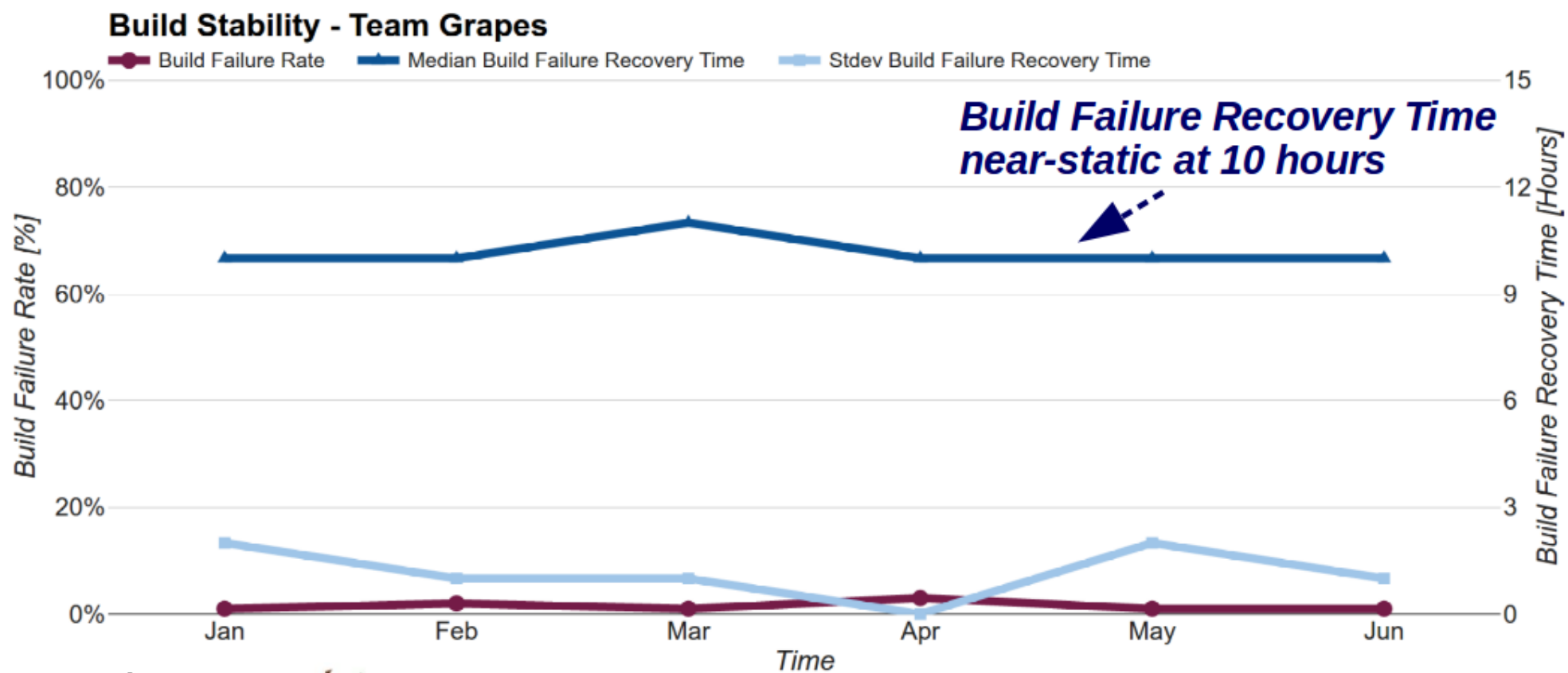
Build Stability Indicator



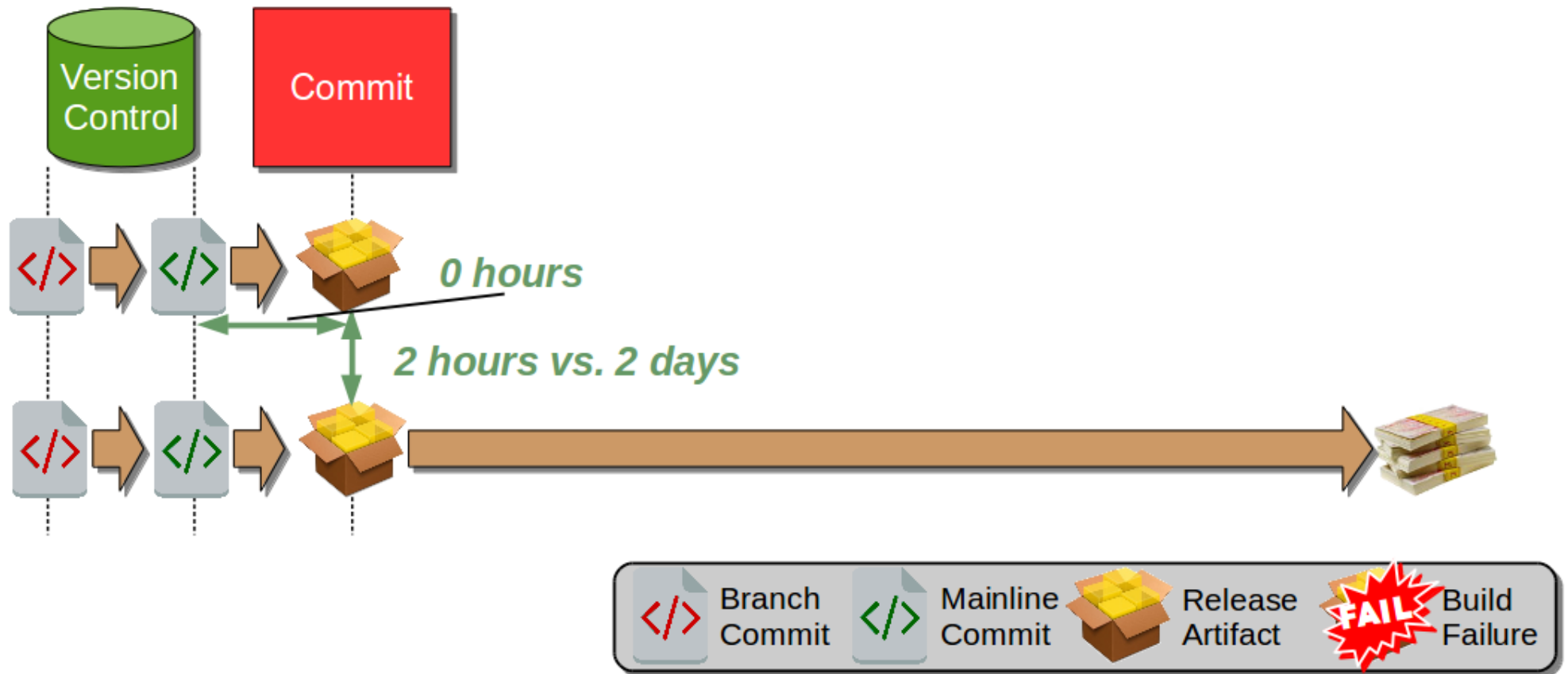
Build Stability – Grapes



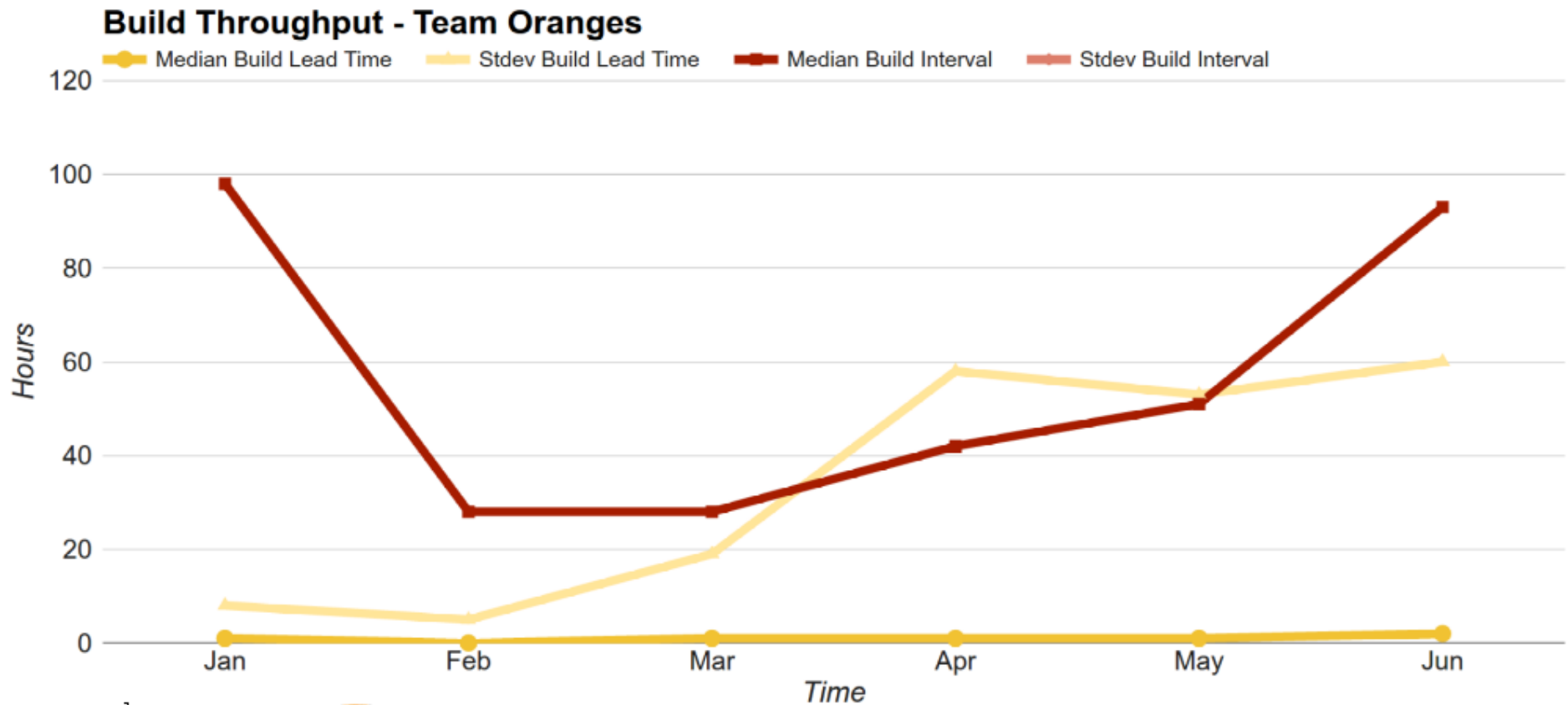
Build Stability – Grapes



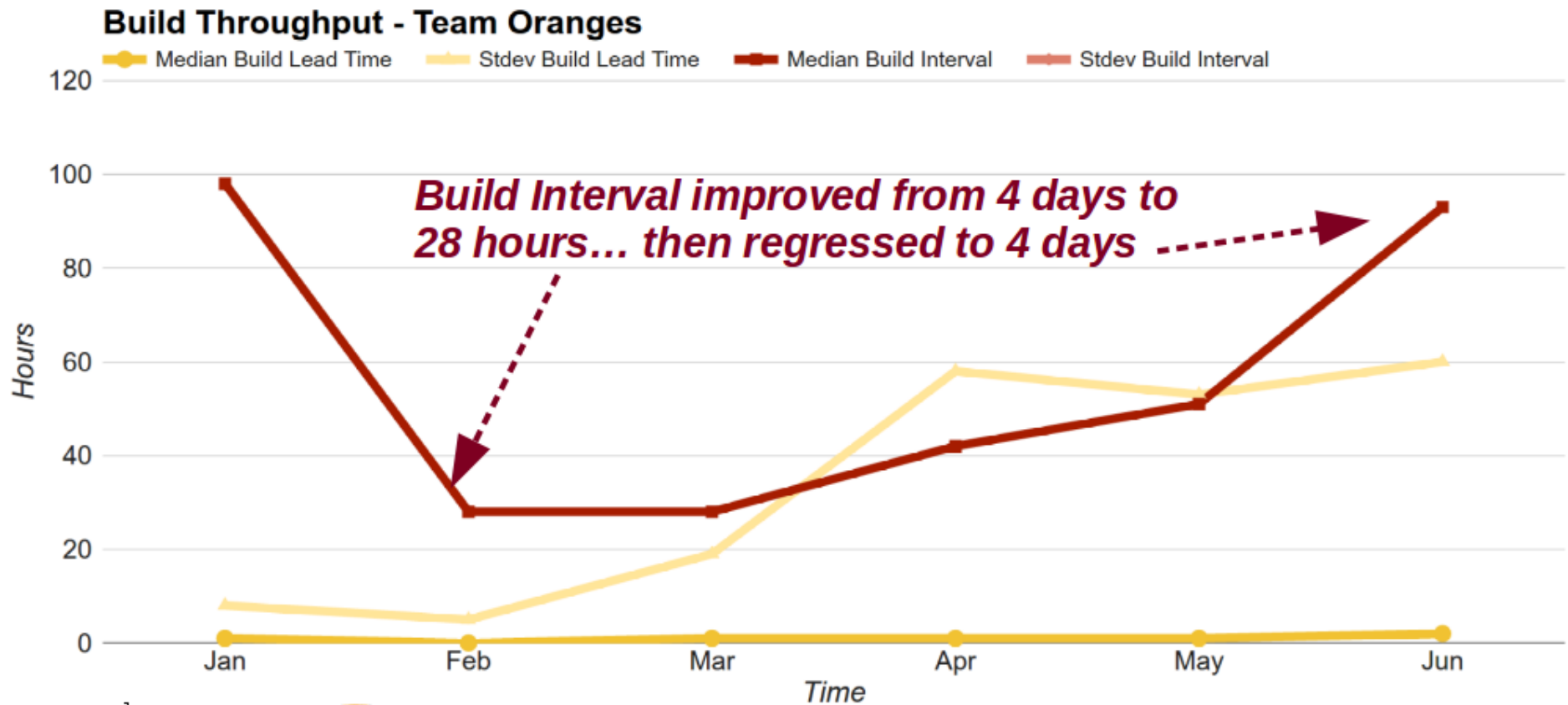
Build Throughput Indicator



Build Throughput - Oranges



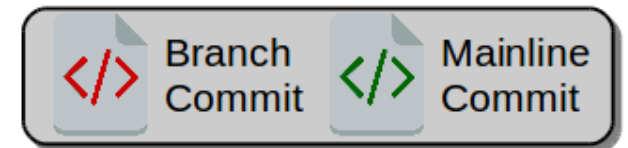
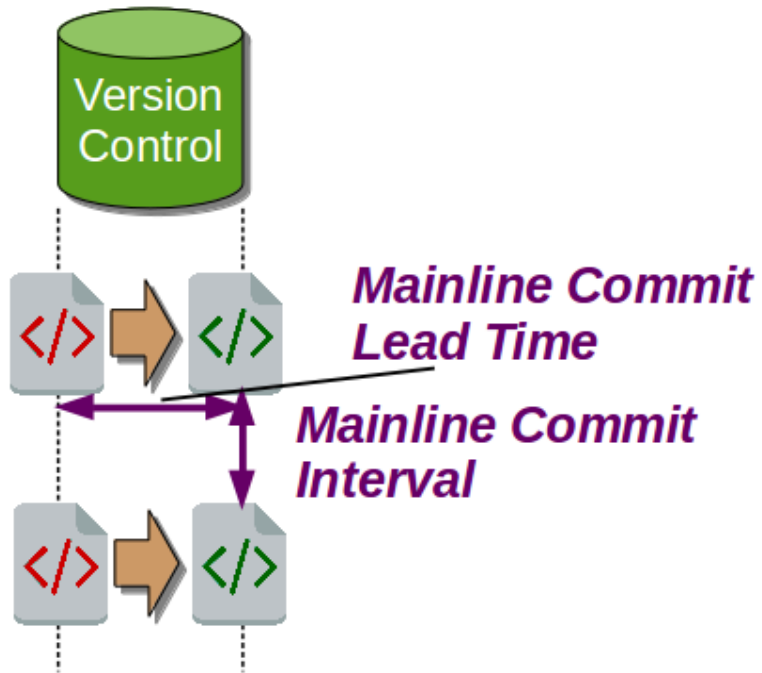
Build Throughput - Oranges



Code Indicator



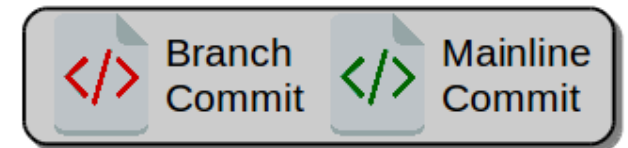
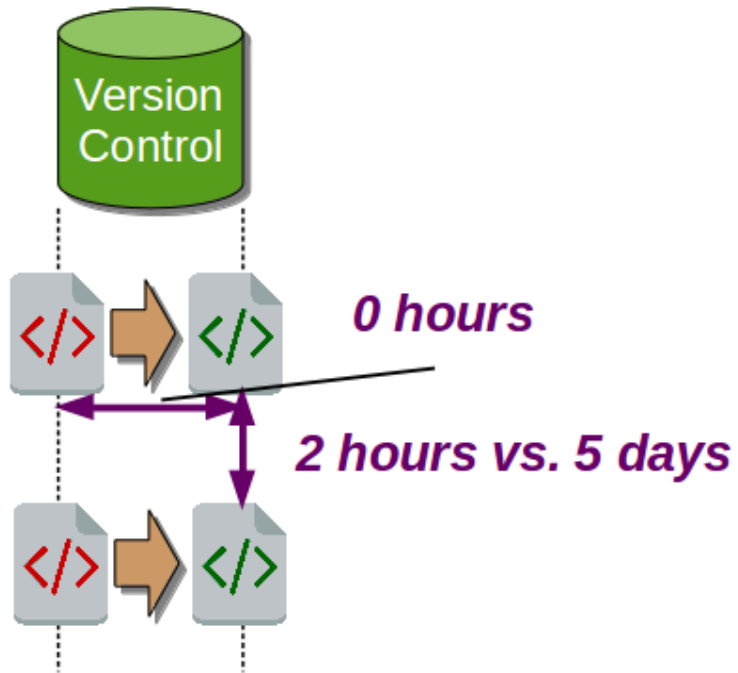
Code Throughput Indicator



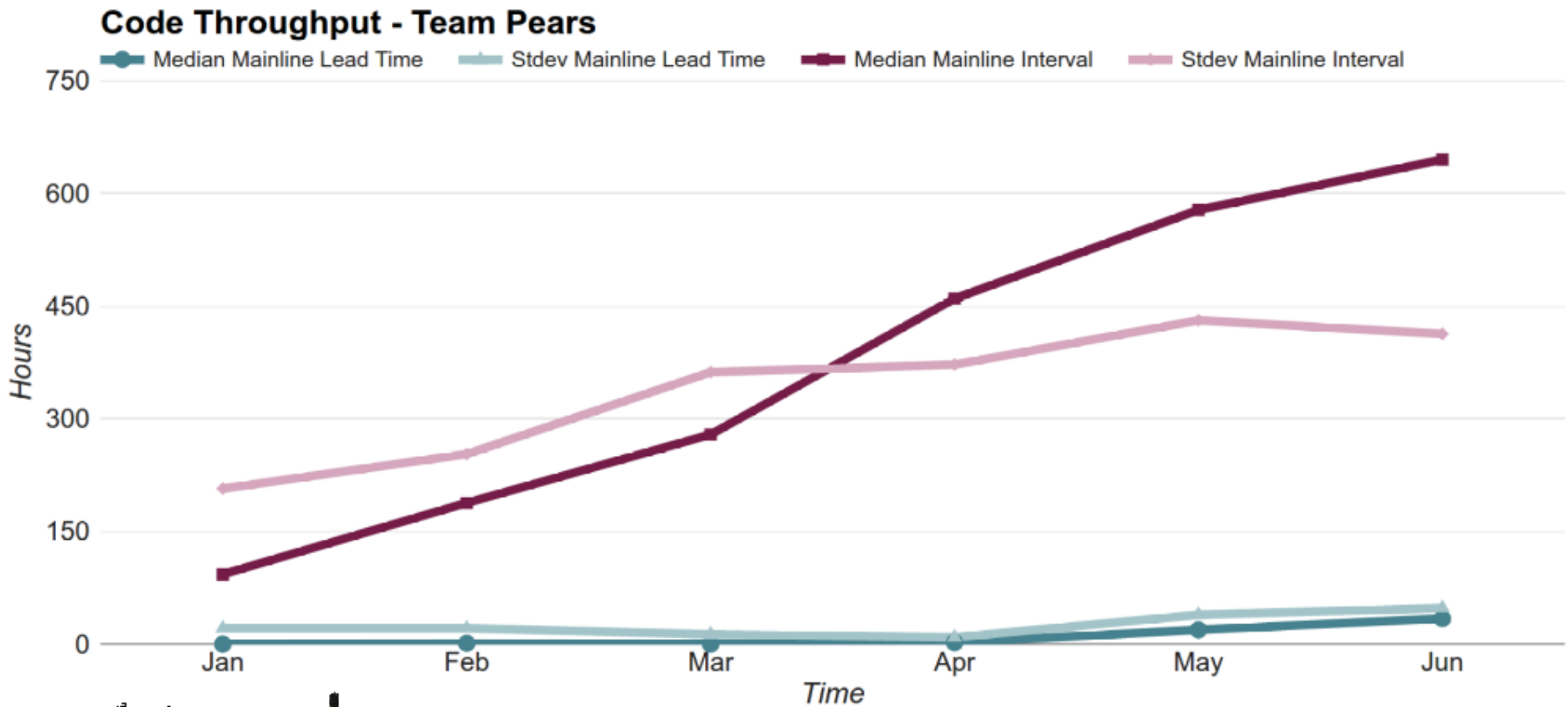
Code Indicators



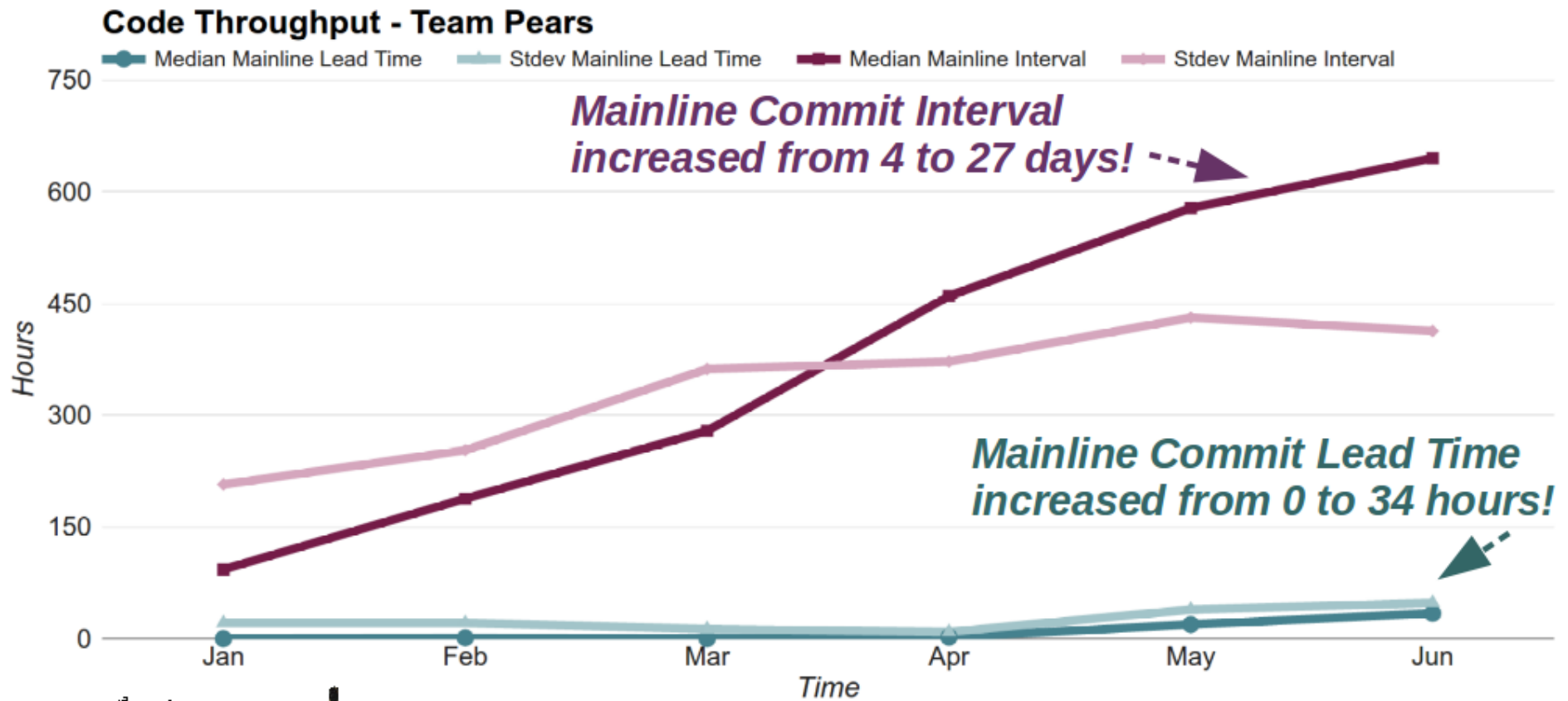
Code Throughput Indicator



Code Throughput – Pears



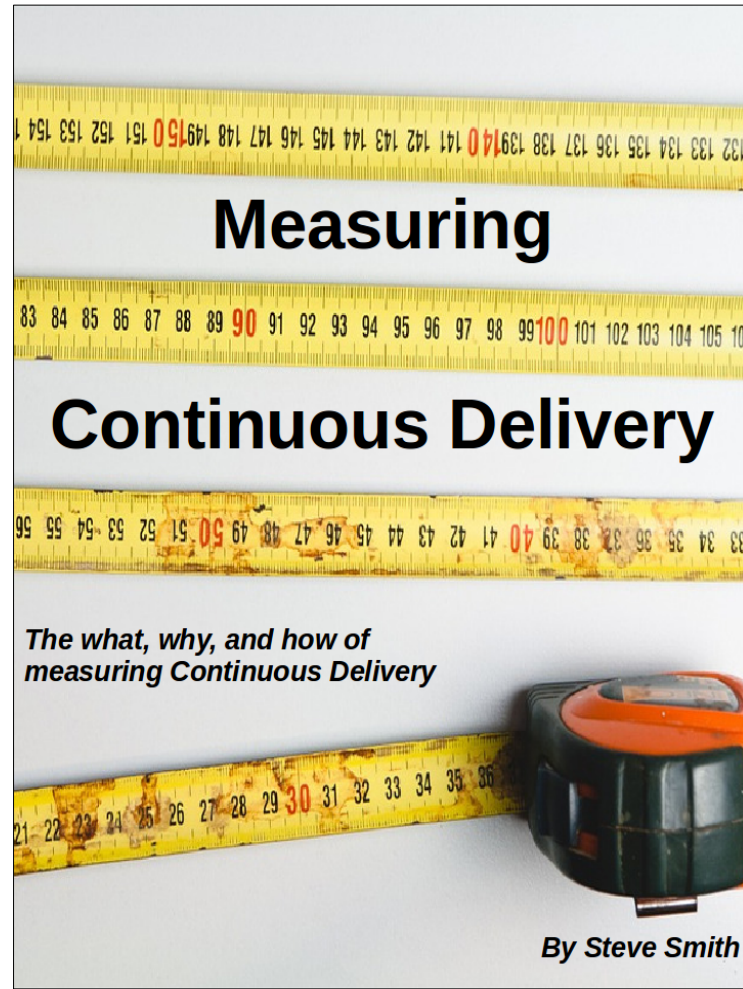
Code Throughput – Pears



The Government Dept – 60 teams



Summary



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