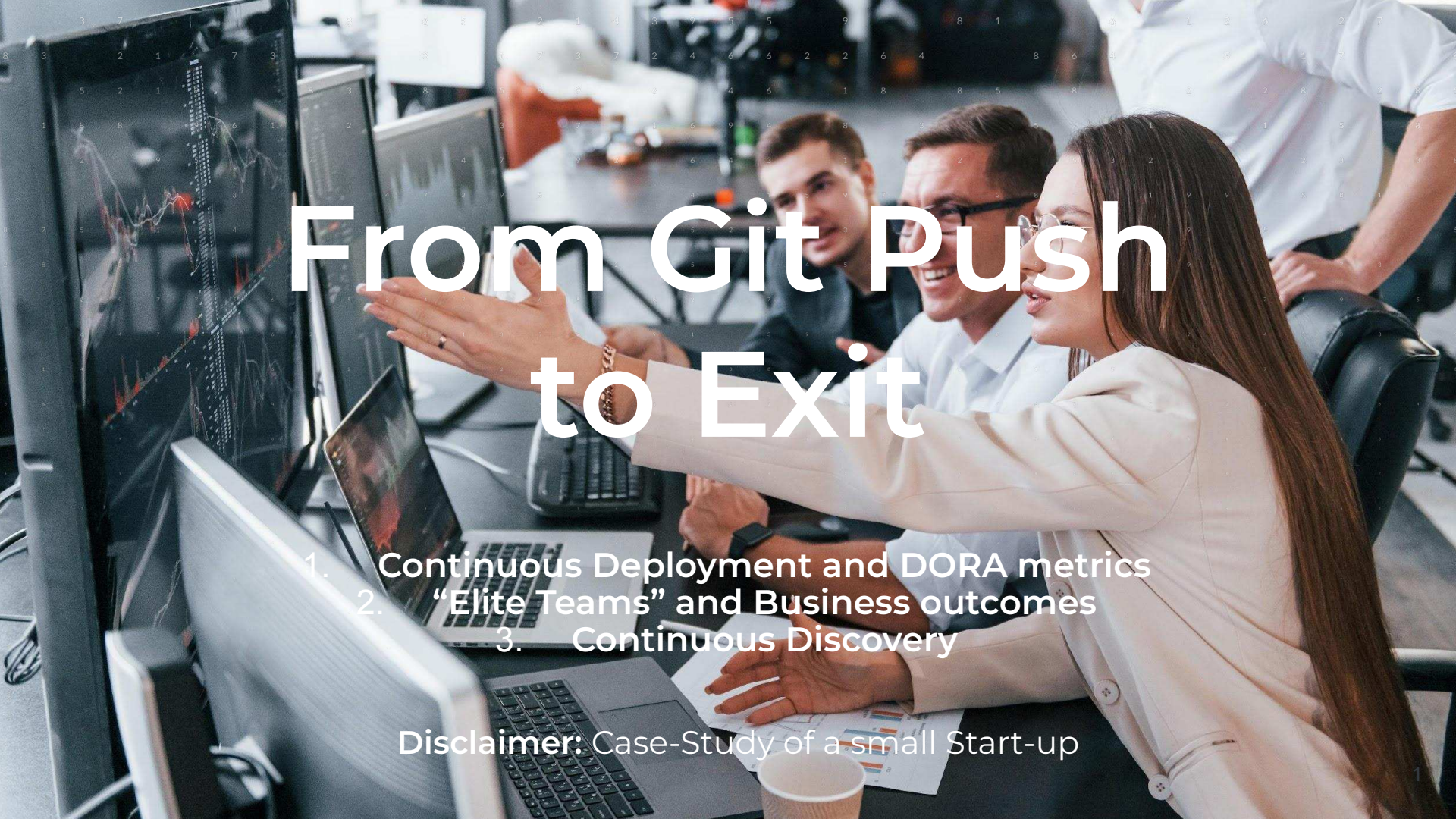


From Git Push to Exit

1. Continuous Deployment and DORA metrics
2. “Elite Teams” and Business outcomes
3. Continuous Discovery

Disclaimer: Case-Study of a small Start-up

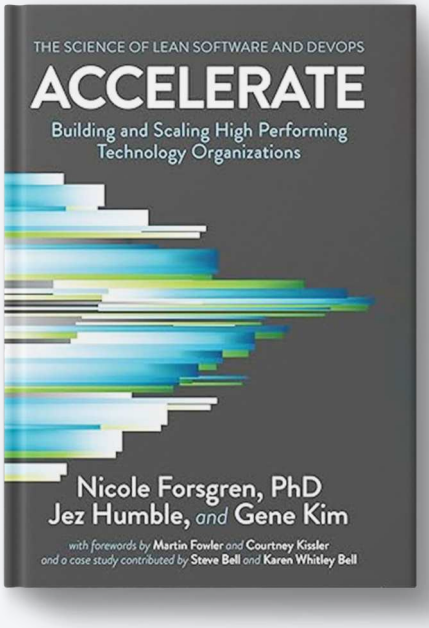
About Me

- Ukrainian
- Entrepreneur
- Software Engineer (PHP, Python, golang, Javascript)
- CTO
- MBA candidate (LBS logo)



DORA metrics

1. **Deployment Frequency**
2. **Lead Time**
3. **Mean Time to Recover (MTTR)**
4. **Change Failure Rate**

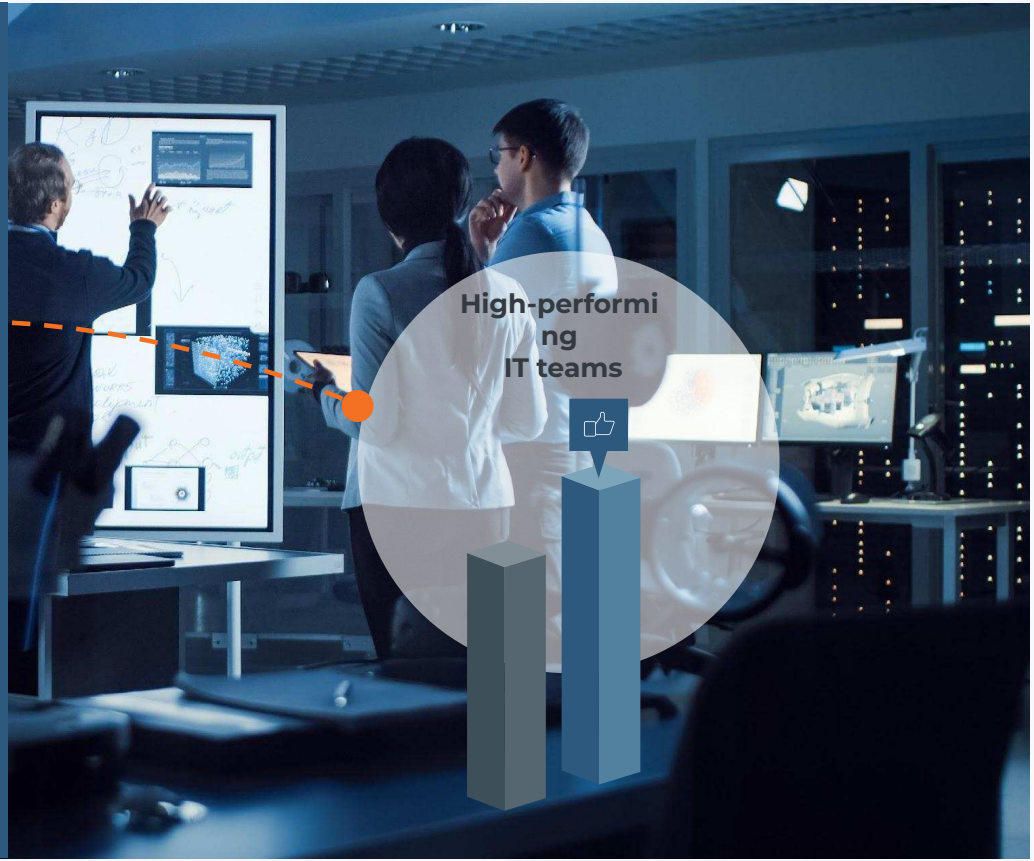


DORA Performance Tiers

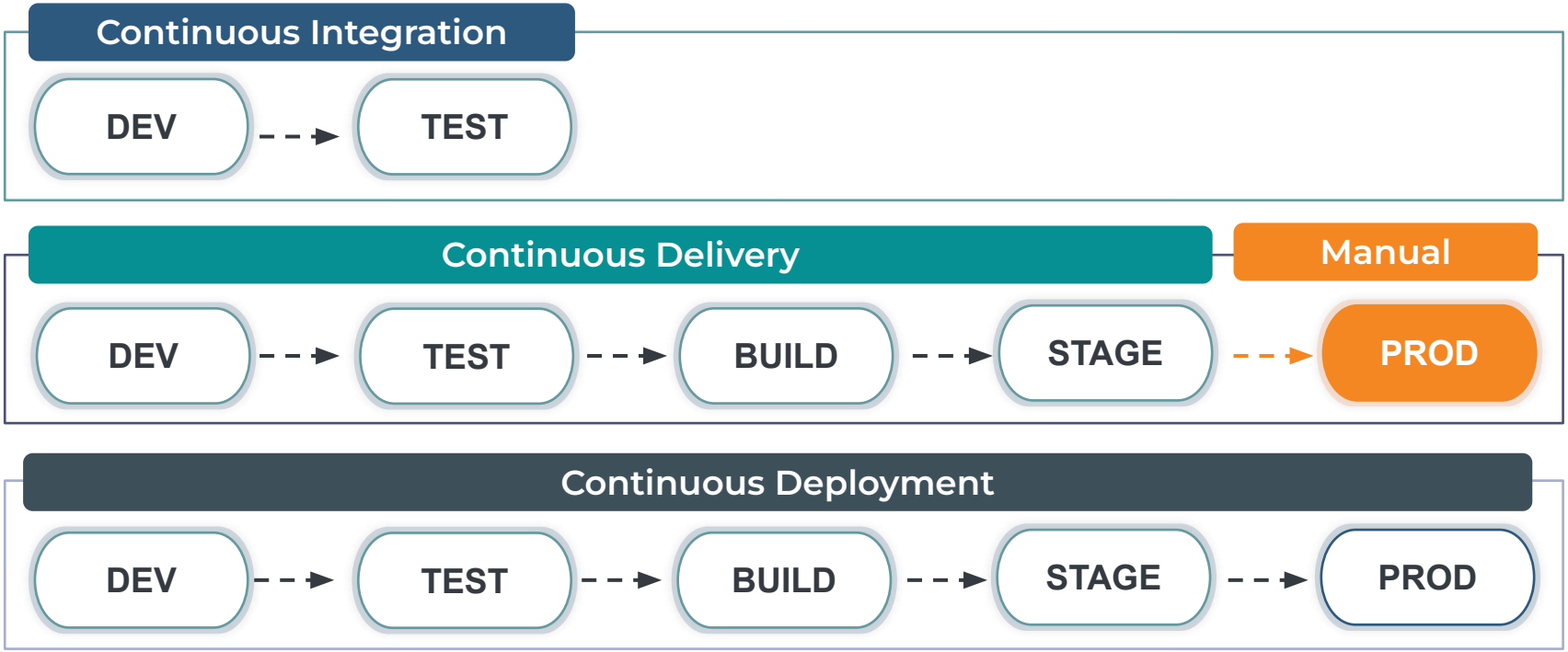
Metric	Low	Medium	High	Elite
Deployment Frequency	Once 1-6 months	Once 1-5 weeks	Once 1-7 days	Many times a day
Lead Time for Changes	1–6 months	1-5 weeks	1-7 days	< 1 day
Mean Time to Recover (MTTR)	1 week – 1 month	1 day – 1 week	< 1 day	< 1 hour
Change Failure Rate	46% – 60%	31% – 45%	16% – 30%	0% – 15%

High-performing IT teams (i.e. high/elite clusters) were **~2×** more likely to exceed their profitability, market share, and productivity goals than low performers

- 2014 State of DevOps Report
- “Accelerate”, 2018



Continuous Integration / Delivery / Deployment



Continuous Deployment and DORA

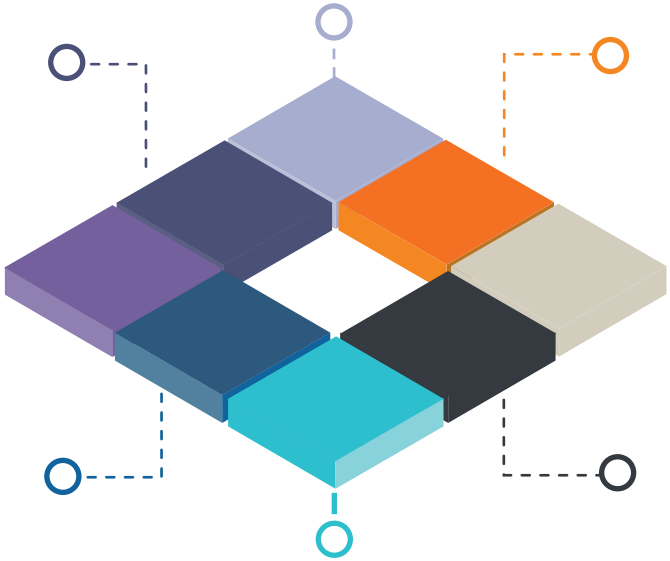
Metric	Continuous Deployment	Elite
Deployment Frequency	Every PR merged	Many times a day
Lead Time for Changes	Pipeline Duration	< 1 day
Mean Time To Recover (MTTR)	Pipeline rollback	< 1 hour
Change Failure Rate	? (Claim: low)	0% – 15%

Building Blocks

Configuration Management
(Python scripts + AWS Secret Manager)

Feature Flags
(Launch Darkly)

Infrastructure as Code
(AWS cdk)



Trunk-Based Development
(github)

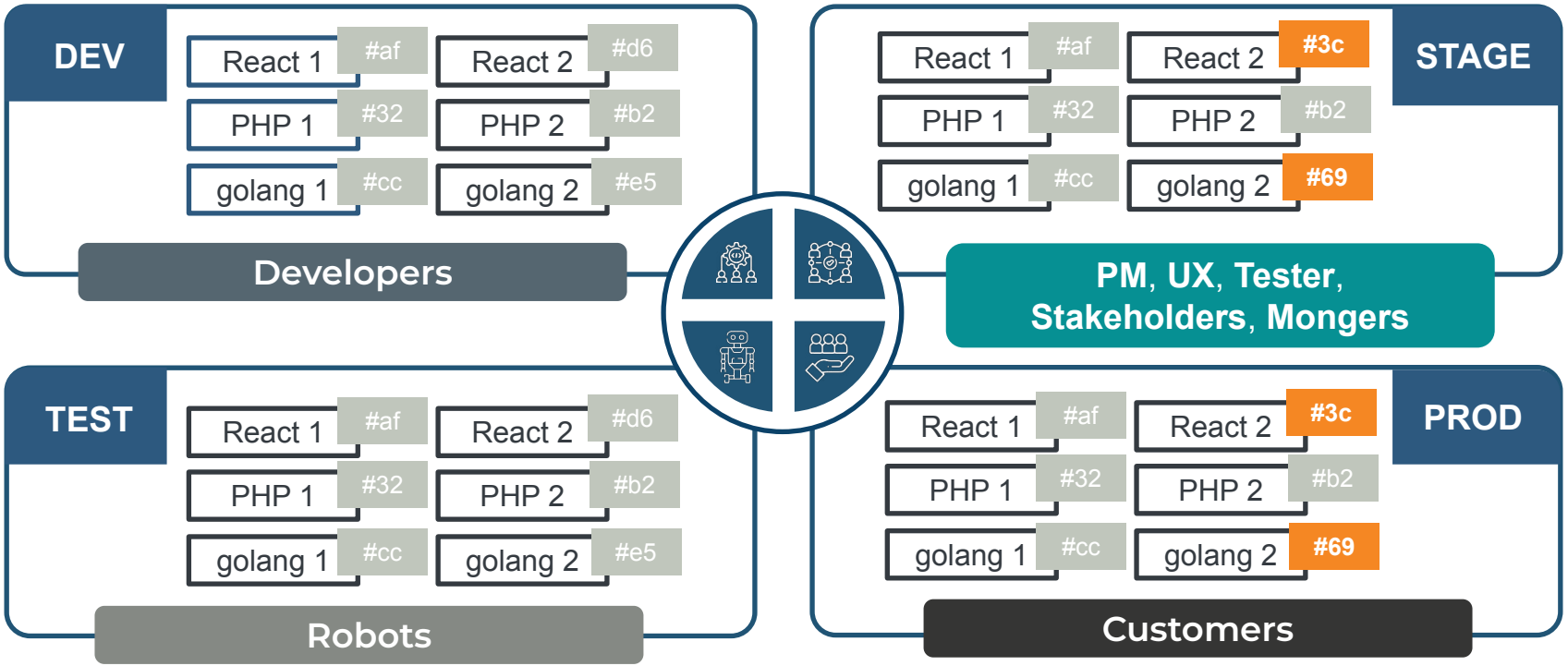
Testing
(unit-test + integration test + end-to-end Selenium)

Test Data Management
(fixtures + python-based anonymization of prod DB)

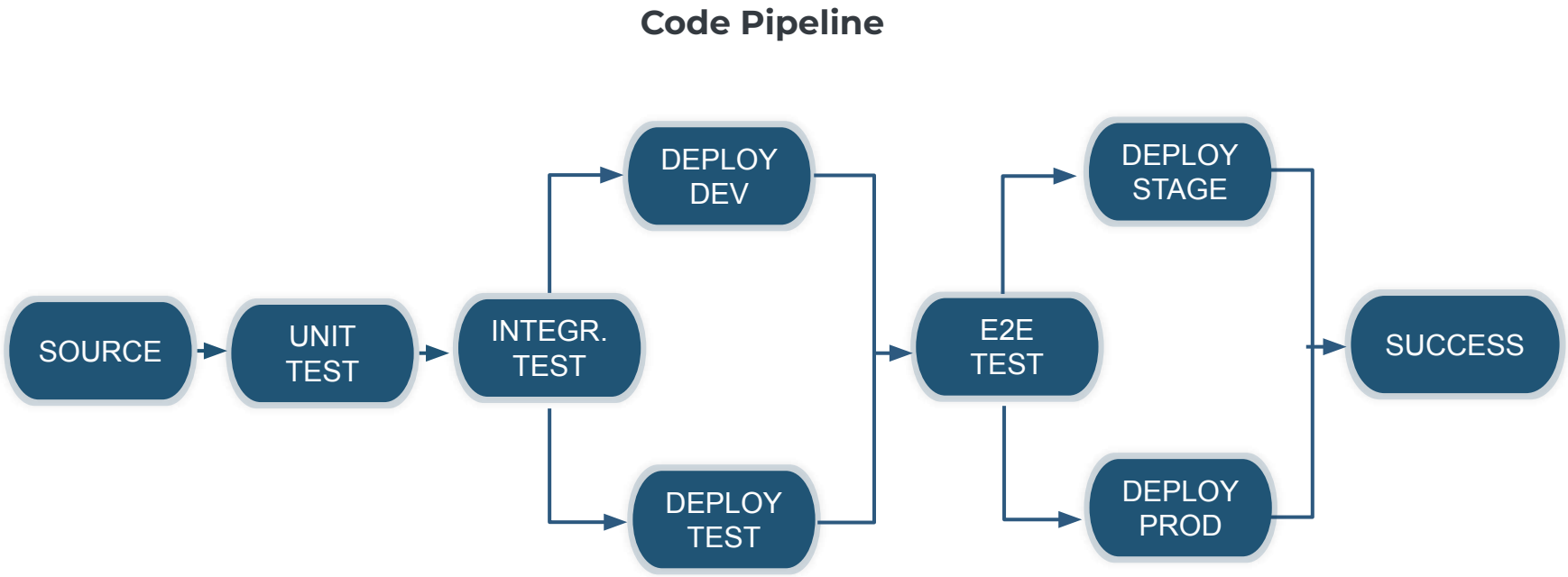
Observability and Monitoring
(CloudWatch + Sentry, Slack)

Deployment Automation
(AWS CodeBuild + CodePipeline)

Stages


DEV
React 1
#af
React 2
#d6
PHP 1
#32
PHP 2
#b2
golang 1
#cc
golang 2
#e5
Developers
STAGE
React 1
#af
React 2
#3c
PHP 1
#32
PHP 2
#b2
golang 1
#cc
golang 2
#69
PM, UX, Tester,
Stakeholders, Mongers
TEST
React 1
#af
React 2
#d6
PHP 1
#32
PHP 2
#b2
golang 1
#cc
golang 2
#e5
Robots
PROD
React 1
#af
React 2
#3c
PHP 1
#32
PHP 2
#b2
golang 1
#cc
golang 2
#69
Customers

Typical Pipeline



Result: Dora Metrics in our case (5 years timeline)

Metric	Continuous Deployment	Elite
Deployment Frequency	5-10 times a day	Many times a day ✓ ✓
Lead Time for Changes	5-30 min, depends on the app	< 1 day ✓ ✓ ✓
Mean Time To Recover (MTTR)	~ 6 hrs	< 1 hour ✗
Change Failure Rate	0.022%	0% – 15% ✓ ✓ ✓


Which metric should we use to evaluate the company?
MRR Growth!
EBITDA
DORA metrics
imgflip.com

Financial Metrics lag!

Lagging Financial Metric

Change:
NEW sing up Button color

2 weeks

Signal Significance Window

SALES CYCLE

8 weeks

X% change Cost of Acquisition

10 weeks FROM CHANGE TO OBSERVABLE RESULT

Leading Operational Metric

Change:
NEW sing up Button color

2 weeks

Signal Significance Window

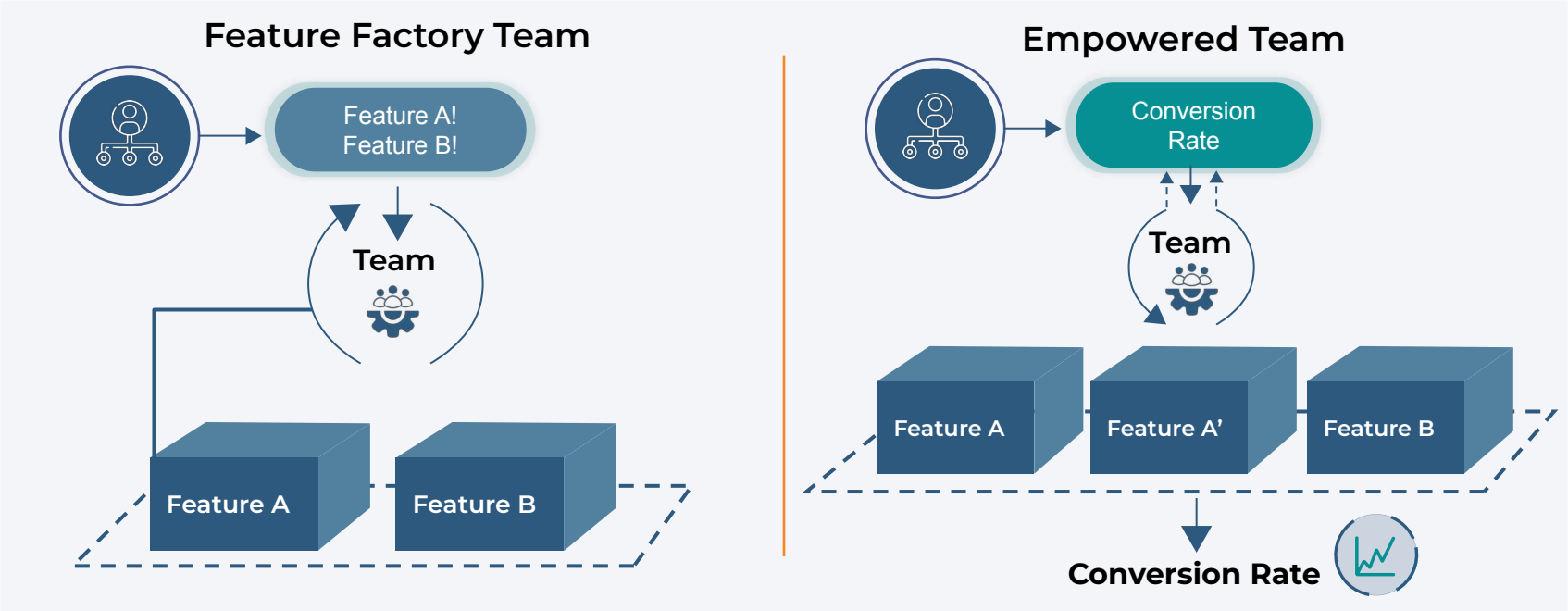
% change Conversion RATE

Just 2 weeks from change to observable result

Operational metrics (may) lead financial

Operational Metric	Effect	Financial Metric
Conversion rate ↑	More customers signed up	↓ Customer Acquisition Cost
Feature adoption ↑	Higher Customer Satisfaction	↓ MRR Churn ↑ LTV
Image processing cost per transaction ↓	Less cloud spending	↓ COGS
Sign-up rate ↑	Many sign-ups don't matter if users never activate	✕ **(no change)** Customer Acquisition Cost

A Team should be accountable for metric, not feature!

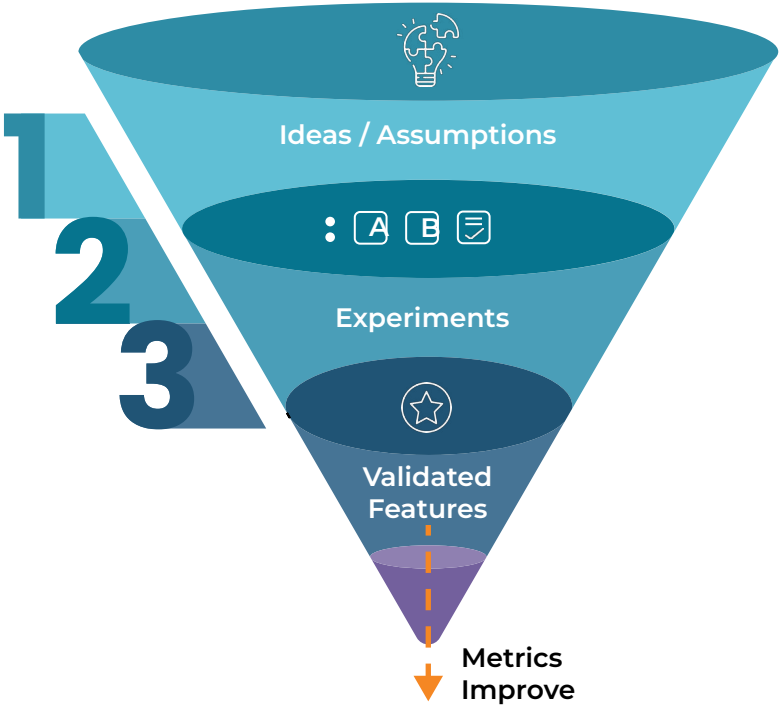


Outcomes are uncertain!

Feature	Expectation	Result
Social login	50% Conversion Rate increase	Marginal impact, 2% improvement
Better UX	10% improvement	12% improvement
Testimonials	10% improvement	50% improvement

Continuous Discovery

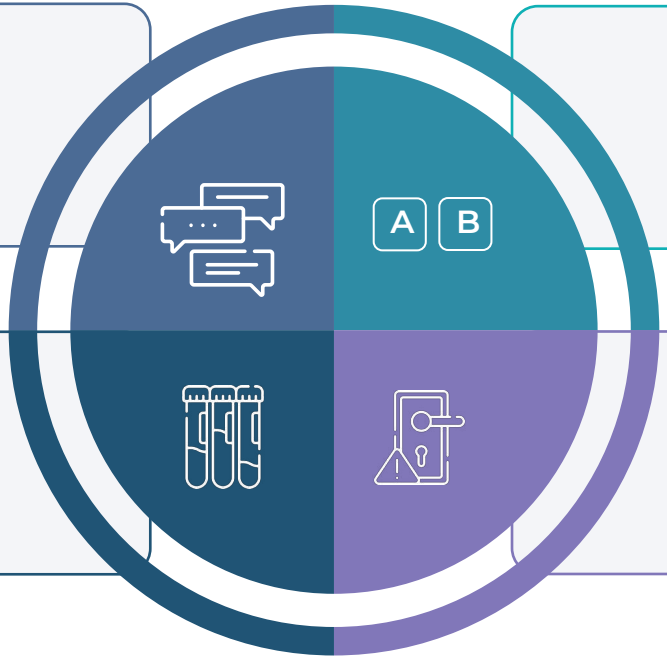
is the ongoing process where product teams engage directly with customers and data to uncover needs, validate assumptions, and test solutions through rapid experiments.



Experiments:

Customer Interviews

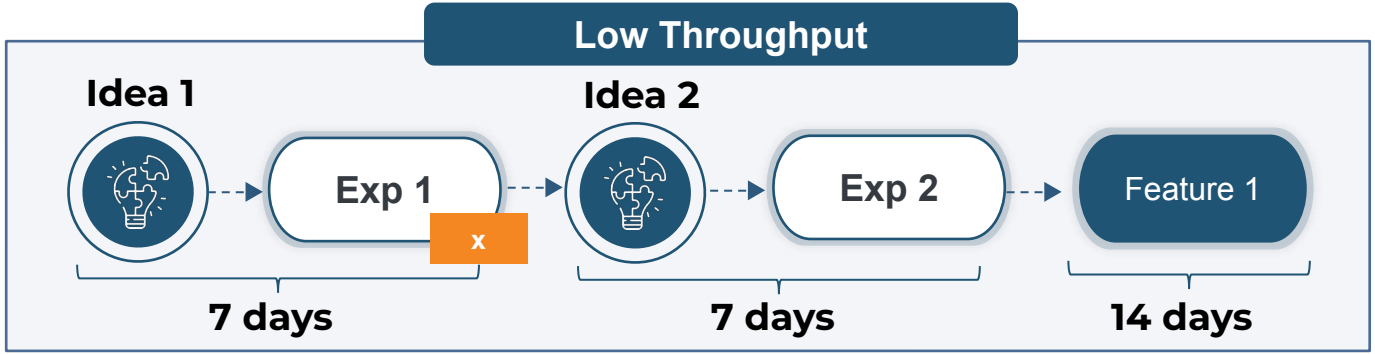
A/B testing



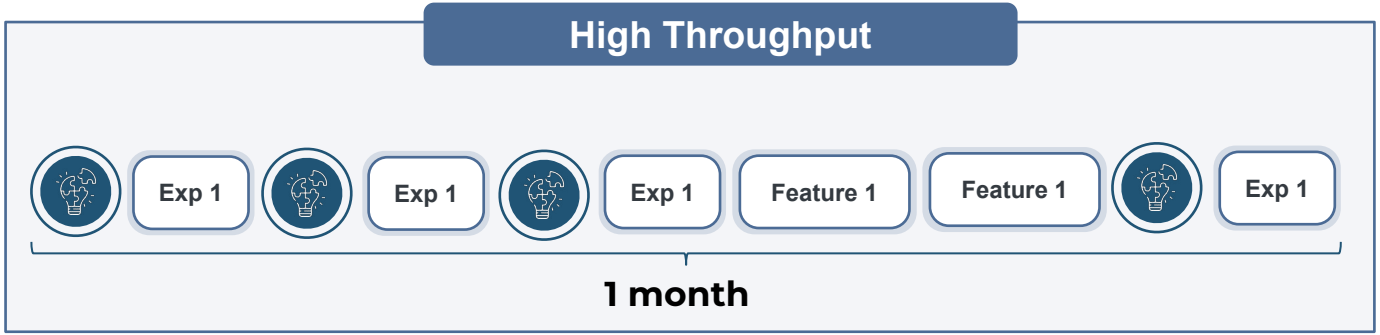
Technical Proof of Concepts

Fake Doors

Velocity Matters!

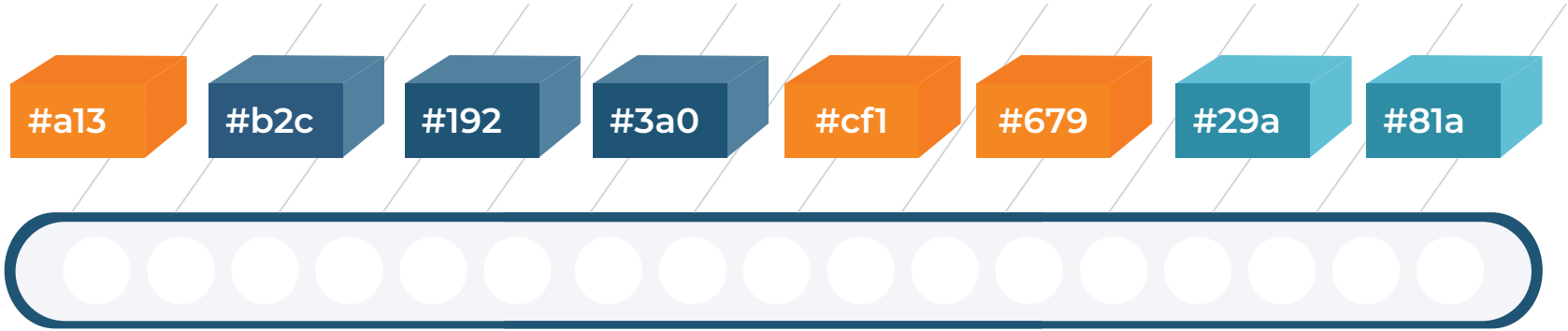


$1-(1-0.3)^3 = 0.657$

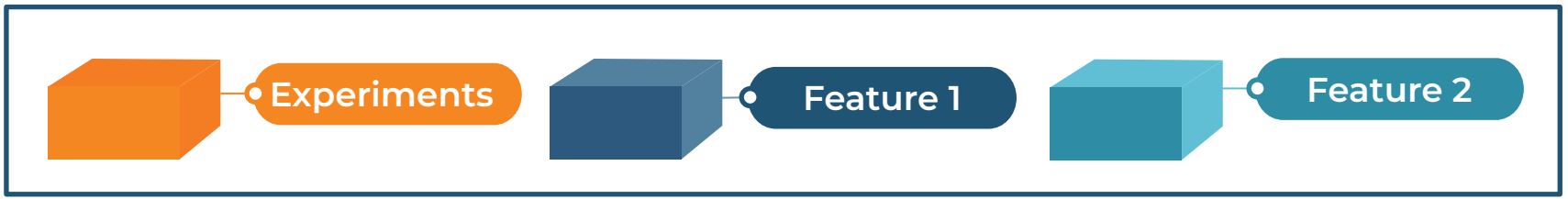


$1-(1-0.3)^{10} = 0.972$

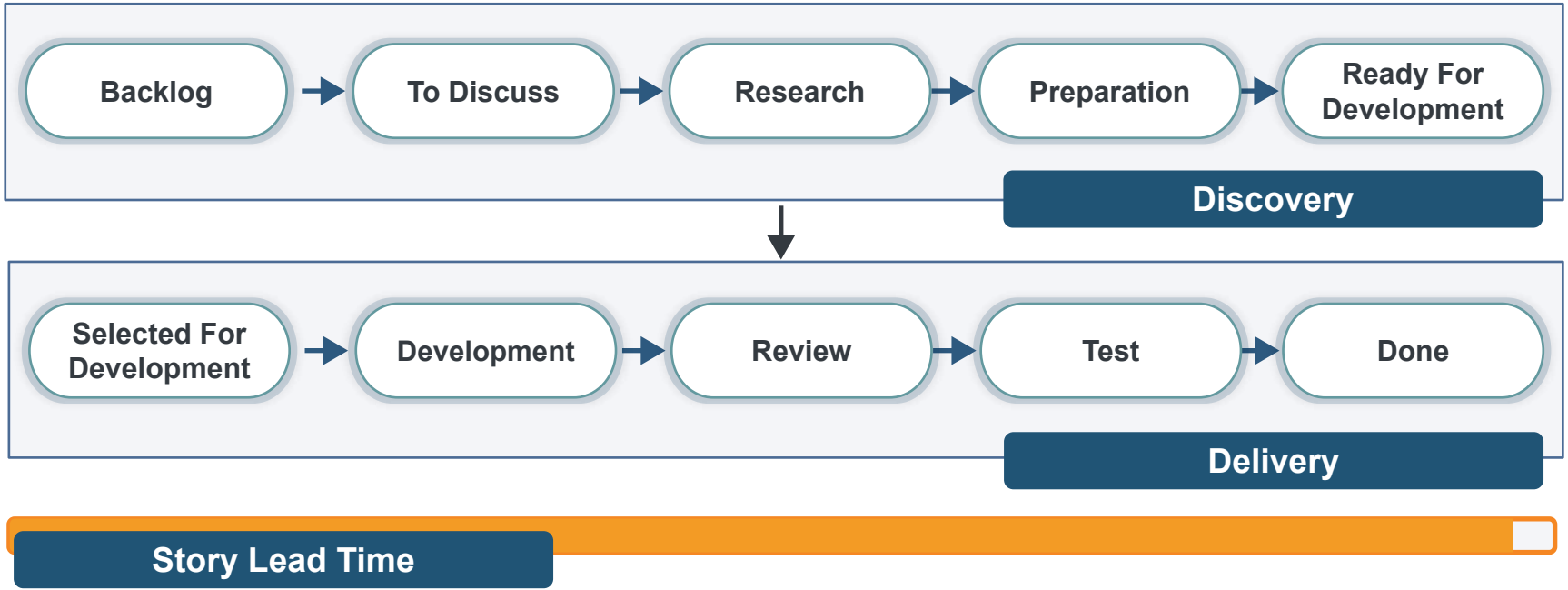
Continuous Deployment



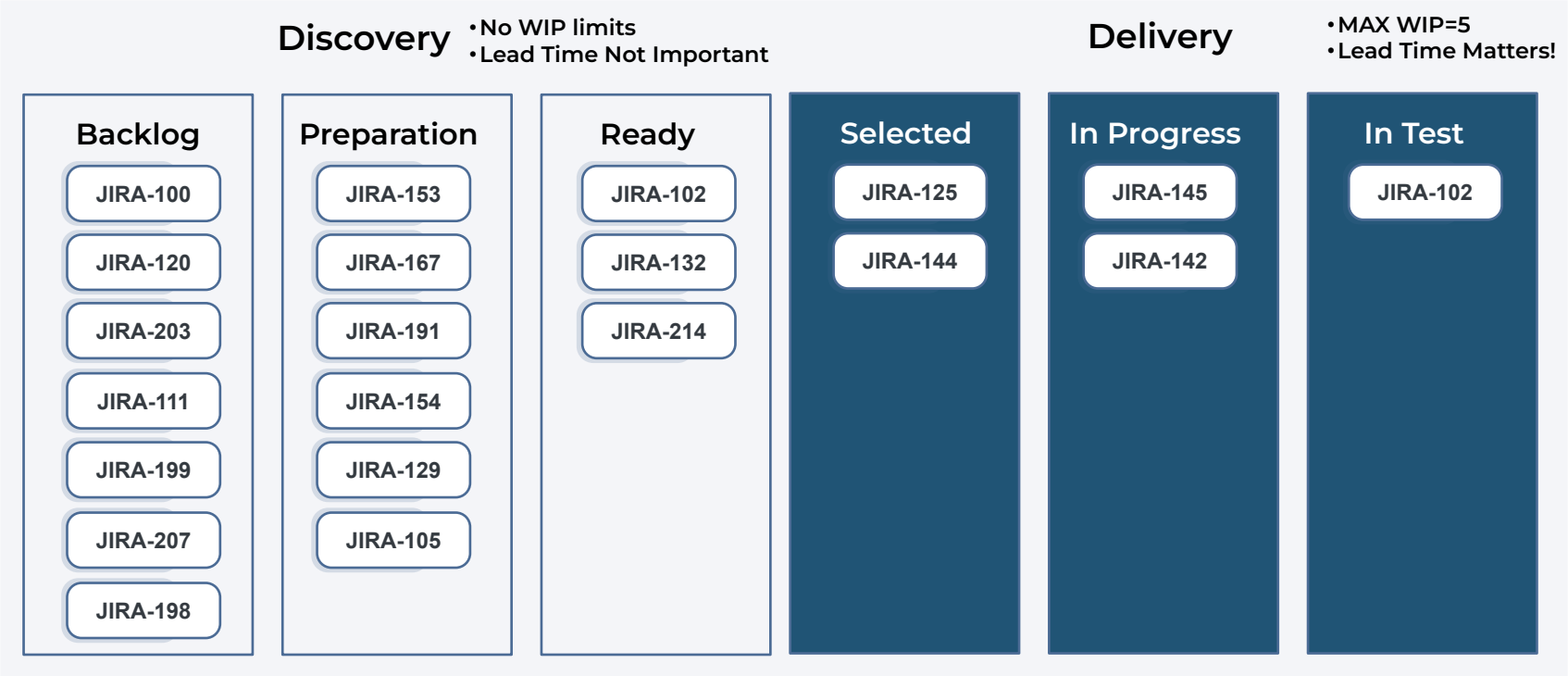
Commits (Releases) for:



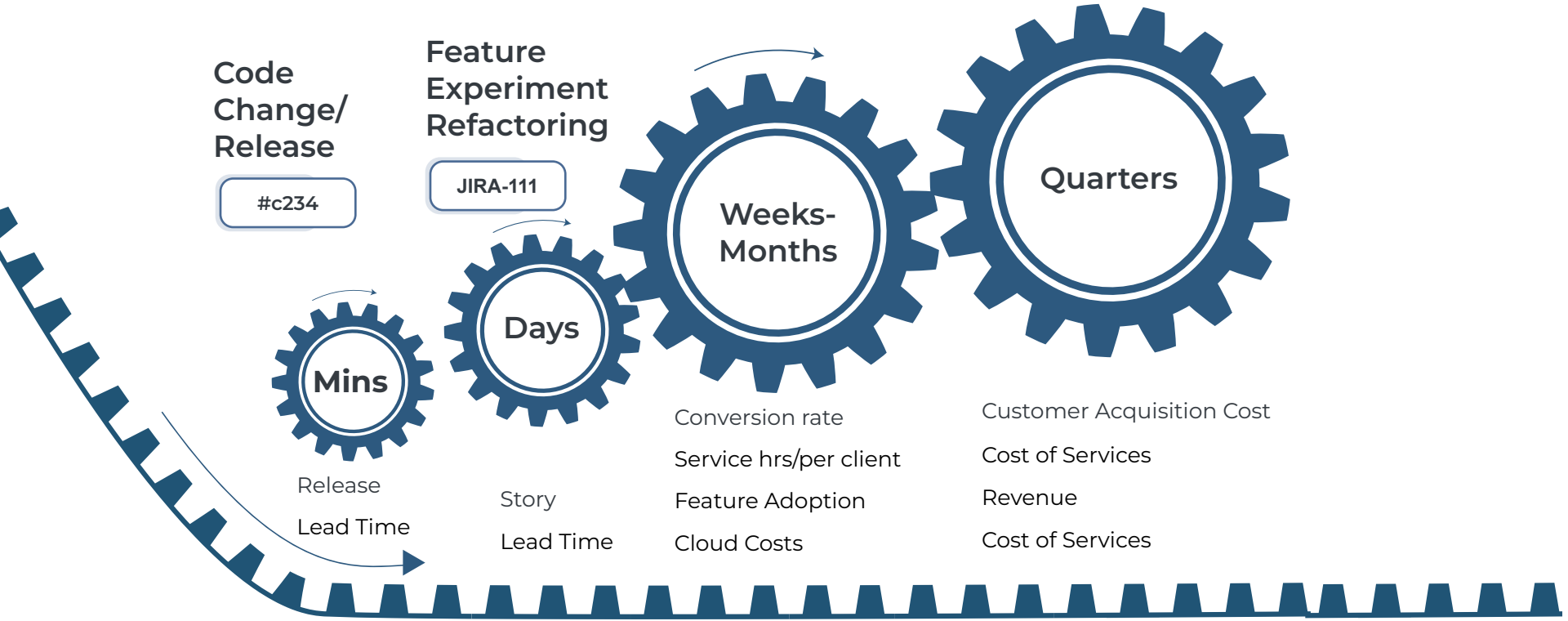
Fast releases lead to fast delivery
Features/Experiments



Kanban In Discovery / Delivery



From DORA Metrics to Business Results



CountX: Output metrics

Release Level:

- **Median Lead Time:** 15 mins
- **95 % interval:** [6 min; 35 min]

Story Level:

- **Median Lead Time:** 4.5 days
- **95 % interval:** [0.5 days; 27 days]

CountX: Goals Level

Operational:

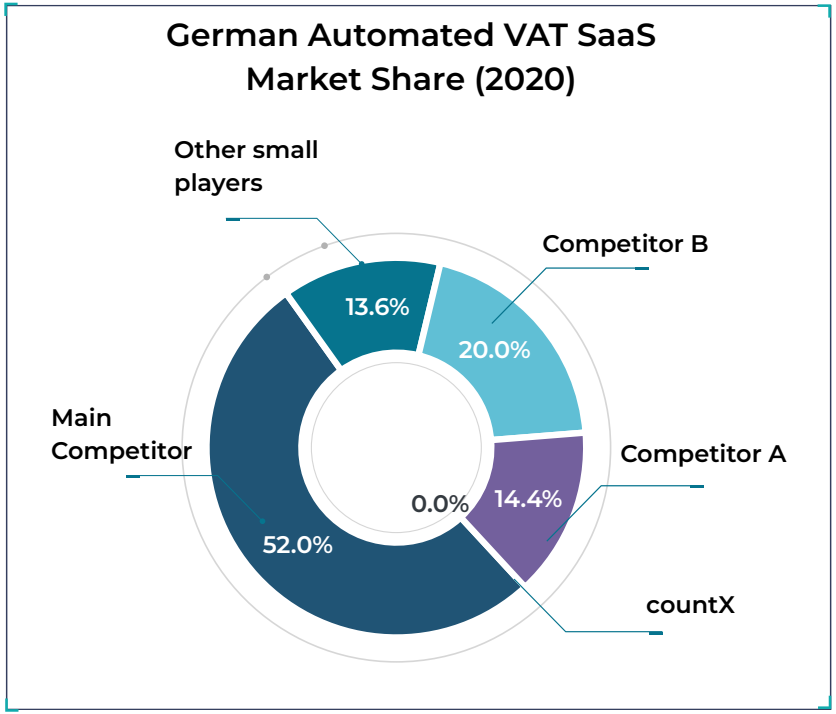
- # Manual Operations/Client
- # Human Interactions/Client
- Integrations Coverage

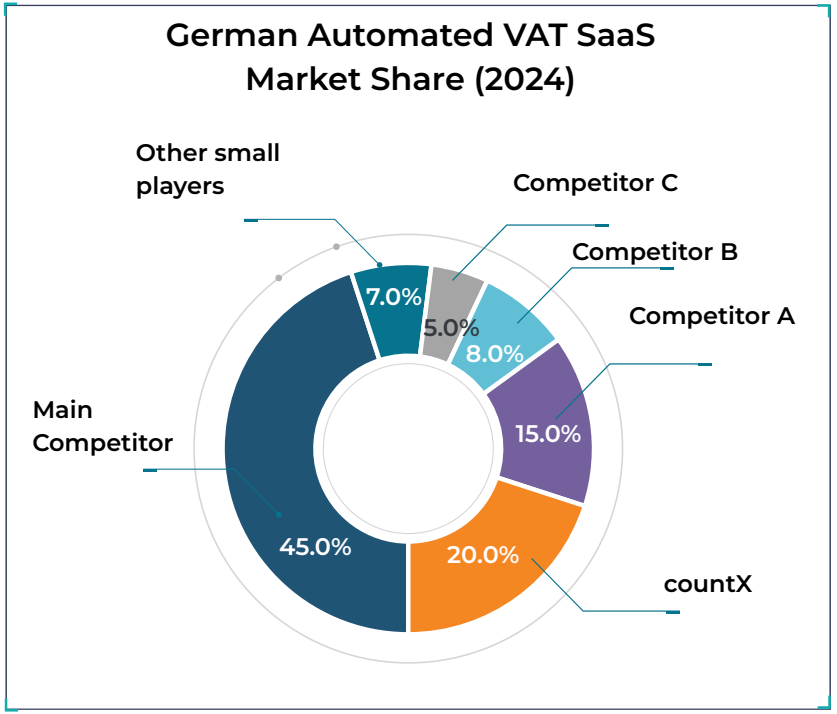
Financial:

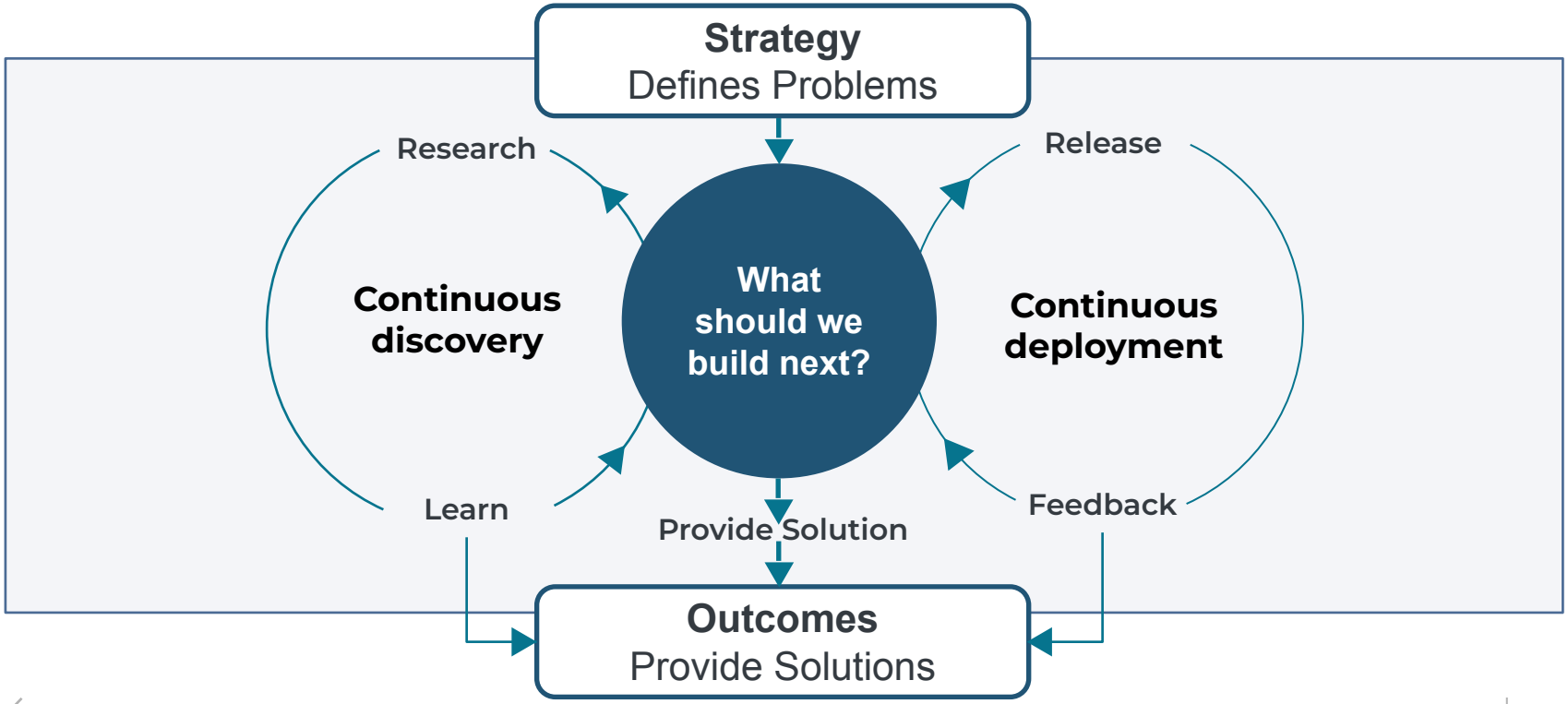
- COGS (Cost of Goods Sold)
- MRR (Monthly Recovering Revenue)



High-performing IT teams are ~2× more likely to exceed their profitability, **market share**, and productivity goals than low performers






Strategy
Defines Problems
Research
Release
Continuous discovery
What should we build next?
Continuous deployment
Learn
Feedback
Provide Solution
Outcomes
Provide Solutions

