

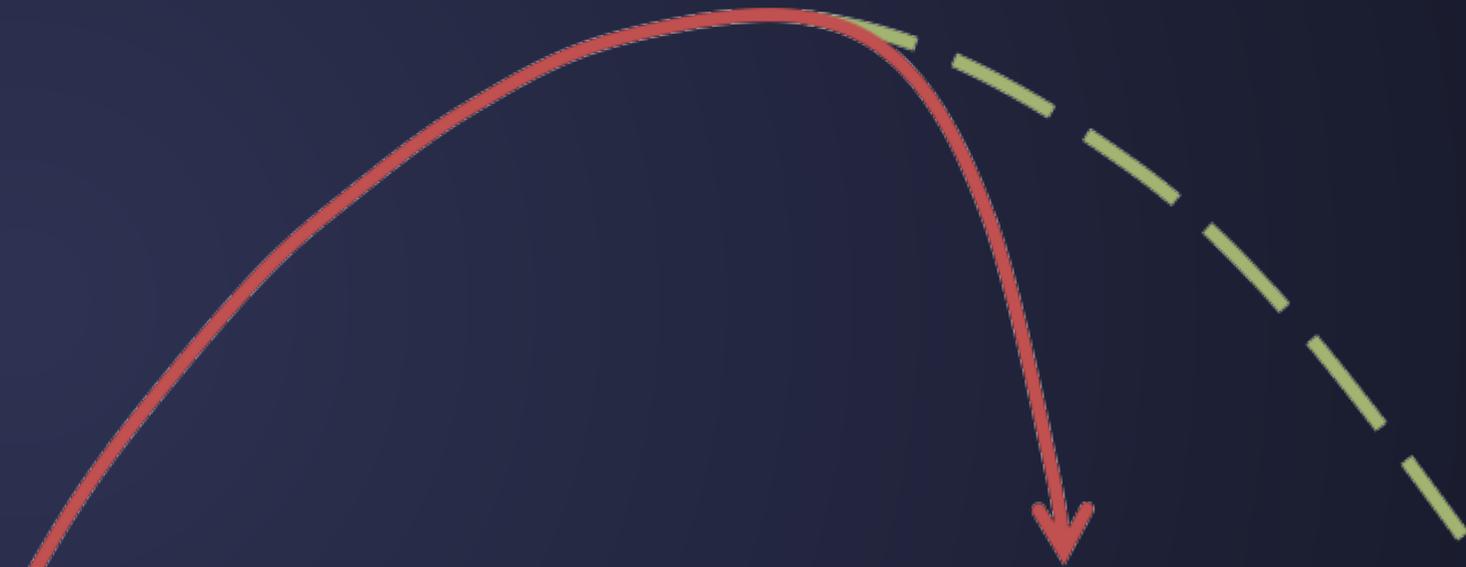
Essential engineering metrics every team should track

SUREN RODRIGO

Chief Product Officer, 99x



Slower than the
competition...



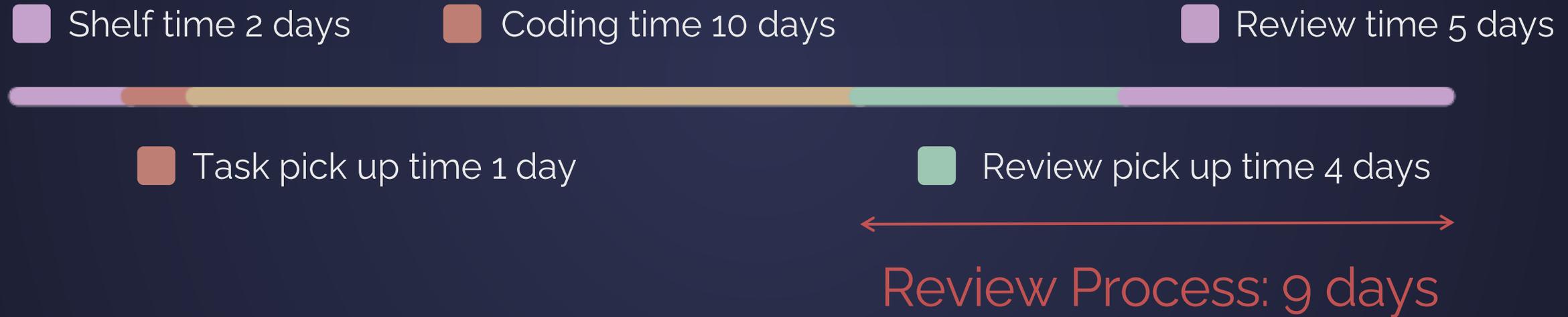
Elite Teams

127x - Shorter Releases
182x - Higher Frequency

Mediocre Teams



The 'lead time' was too long



Reluctance to pick
Pull Requests (PRs)
for review



PR Size

750 lines Avg Changed



220 lines Avg Added from 183 PRs



85 lines Avg Deleted from 103 PRs



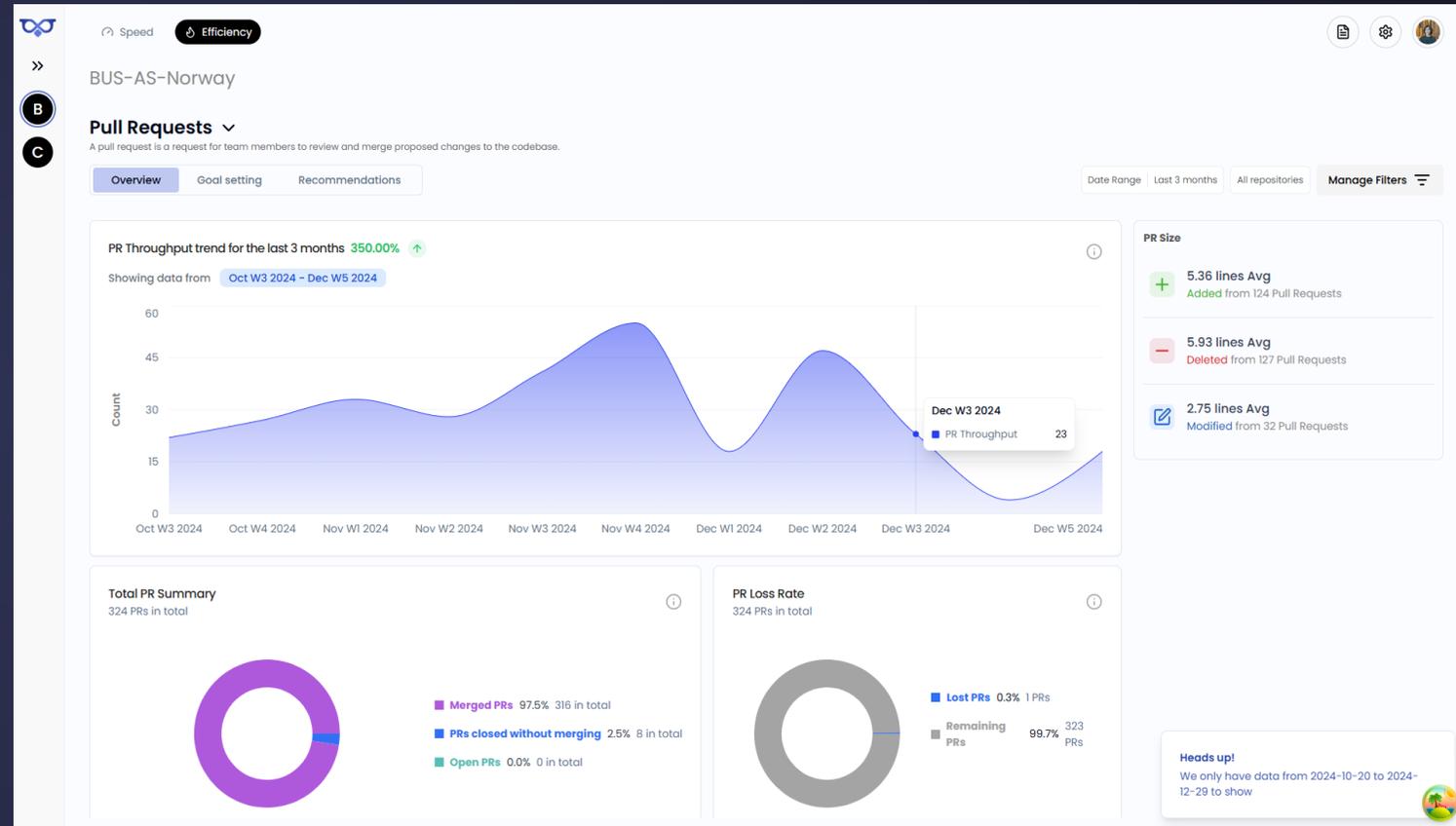
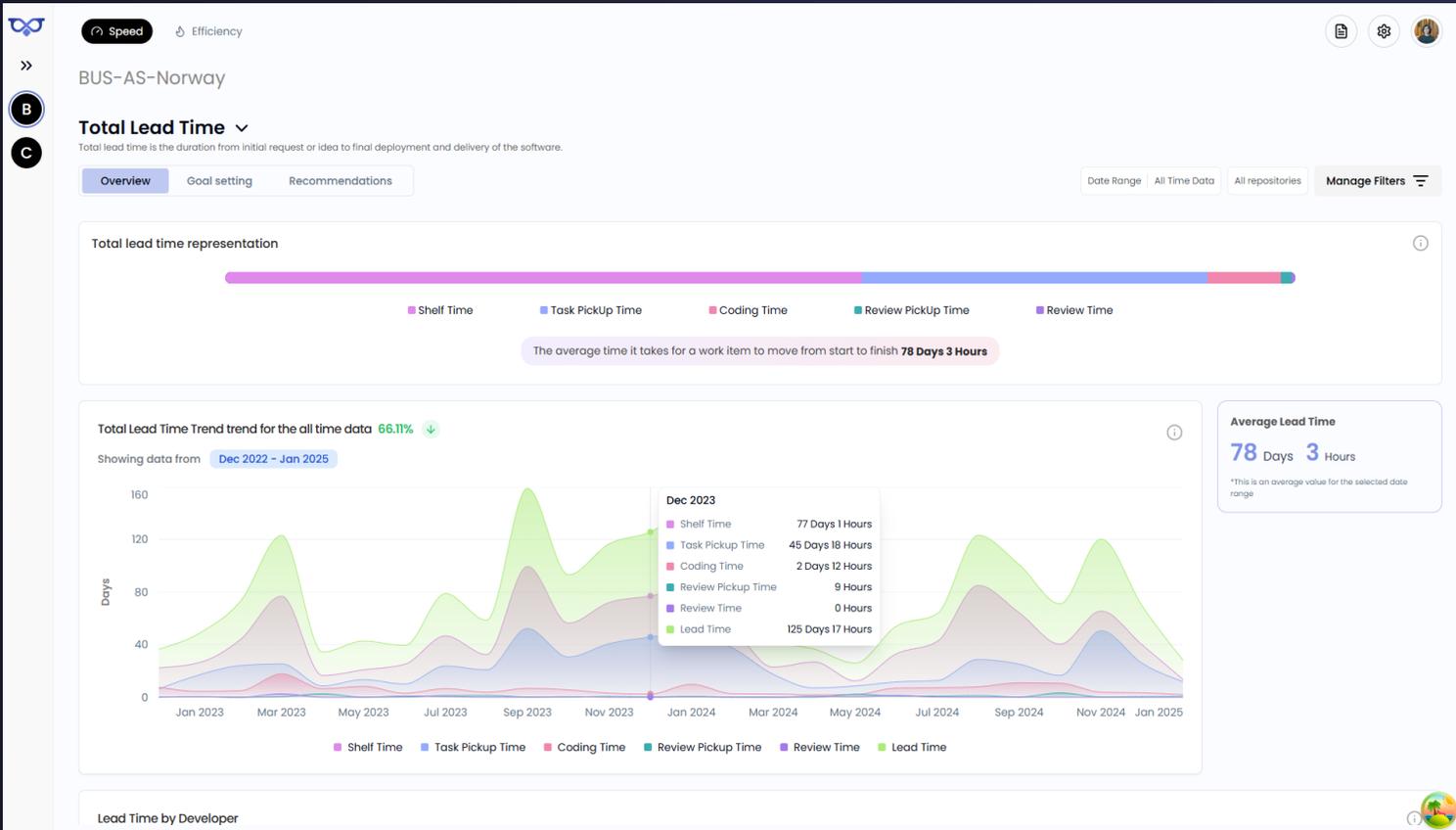
445 lines Avg Modified from 580 PRs

Category	Metric		Elite	High	Medium	Needs Focus
Velocity	PR Cycle time	Hours	<48	48-94	94-180	>180
	Coding Time	Hours	<12	12-24	24-38	>38
	Issue Cycle Time	Hours	<12	12-24	24-72	>72
	Issue Velocity	# Issues	>25 / week	15-25 / week	8-15 / week	<8 / week
	Mean Time To Restore	Hours	<1	1-12	12-24	>24
Quality	PRs merged w/o Review	% of total PRs	<5	5-15	15-25	>25
	PR Size	# Lines	<250	250-400	400-600	>600
	Average Commits after PR raised	# Commits	<1	1-4	4-5	>5
	Change Failure Rate	% dep. fail	<15	15-30	30-50	>50
Throughput	Code Changes	# Lines	<100	100-150	150-250	>250
	PRs Created	# / dev	>5 / week	4-5 / week	2-4 / week	<2 / week
	Coding Days	# days	> 4 / week	3.2-4 / week	2.4-3.2 / week	<2.4 / week
	Merge Frequency	% of PRs	>90	80-90	60-80	<80
	Deployment Frequency	# PRs	> 1 / day	2-5 / week	1-2 / week	< 1 / week
Collaboration	Time to First Comment	Hours	<6	6-18	18-30	>30
	Merge Time	Hours	<4	4-48	48-168	>168
	PRs Reviewed	# PRs / dev	>15	10-15	5-10	<5
	Review Depth / PR	# Comments	<5	5-10	10-15	>15
	Review Summary	Hours	<6	6-13	13-28	>28

“ Adoption of Software Engineering Intelligence Platforms (SEI) is projected to rise from 5% to 50% by 2027”

Gartner





<https://www.flowyzer.io>

Thank you!

SUREN RODRIGO

surenr@99x.io

