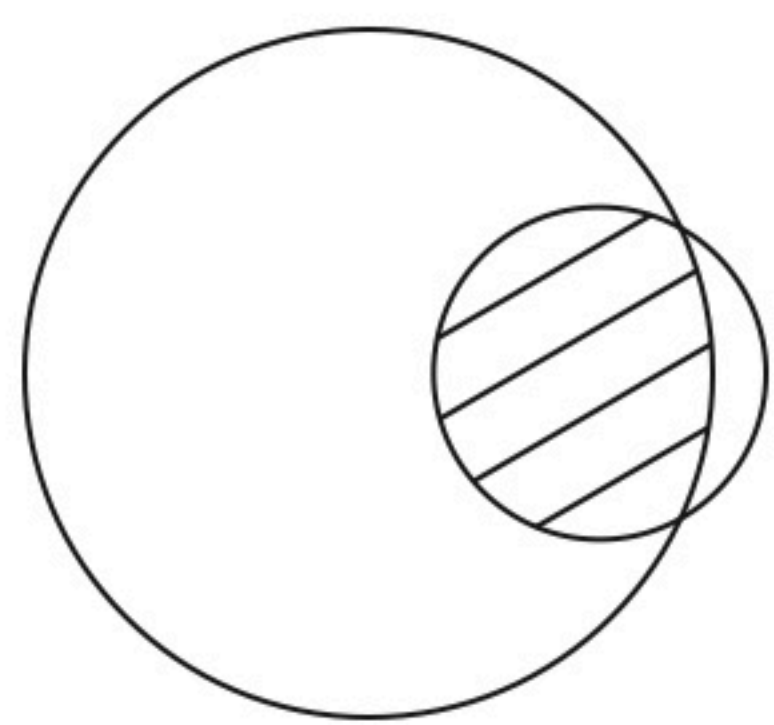


EMPIRICAL

Empirical Security builds precision AI
tuned to your cybersecurity environment



Methodology

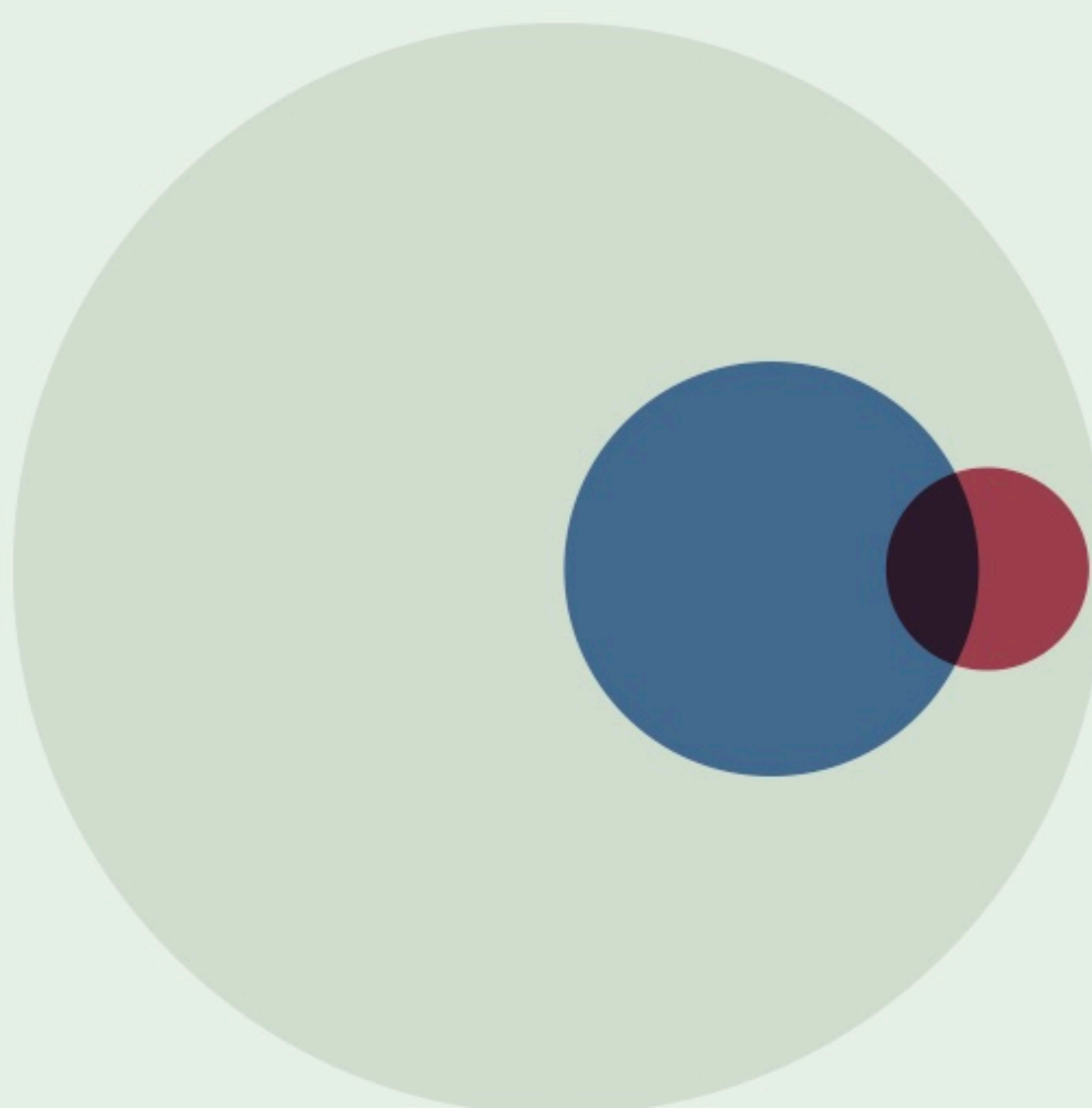
Our local models are trained directly on your organization's vulnerability and remediation data, learning the patterns, priorities, and risk tolerances unique to you. The result is data you can defend in a board meeting, one grounded in your own evidence rather than industry averages.

Effort Comparison

It would take more than 10x people and resources to prioritize potential threats using CVSS than Empirical.

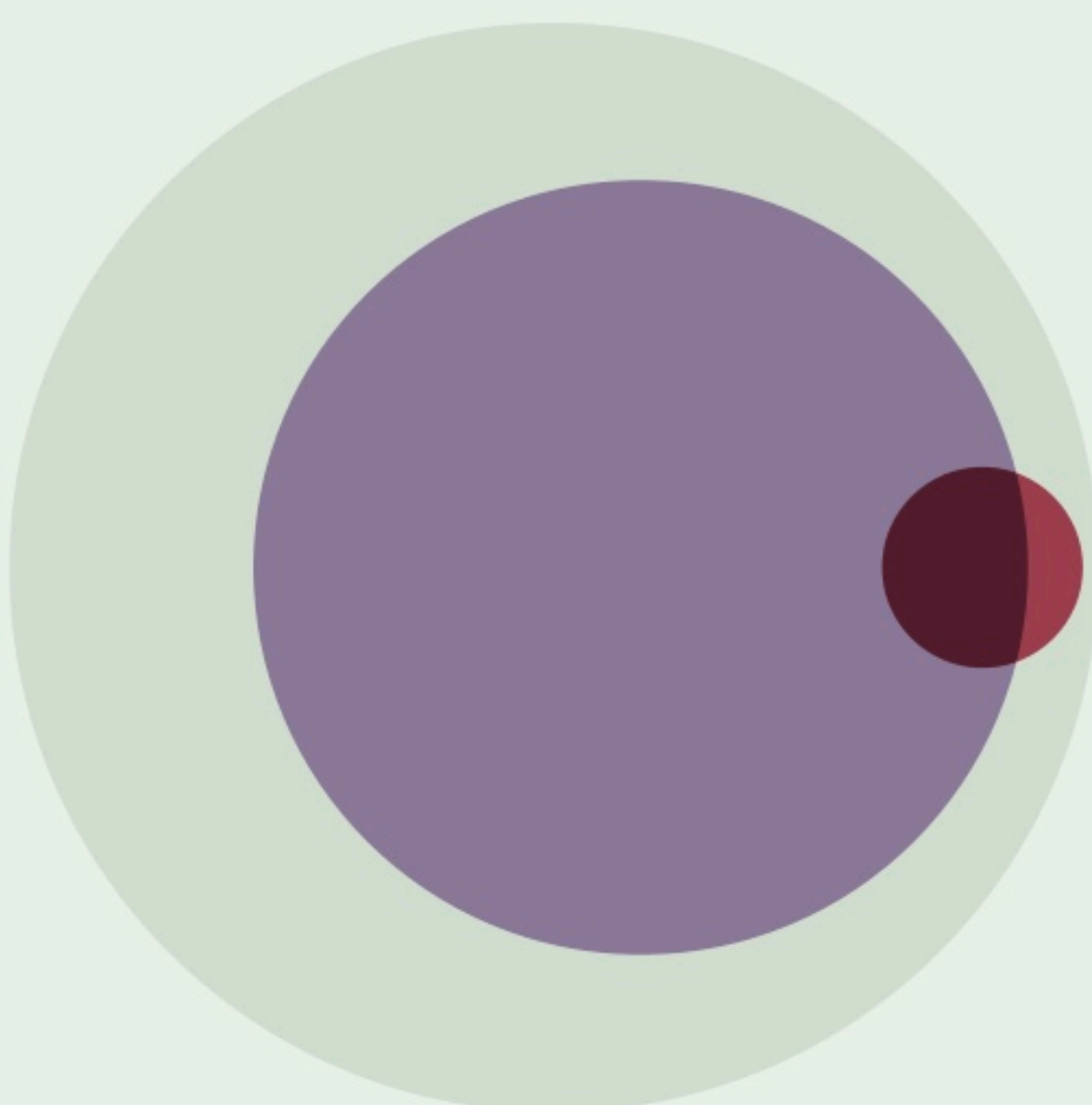
Coverage Comparison

You will be 6x more efficient at remediating actual threats using Empirical than using CVSS.



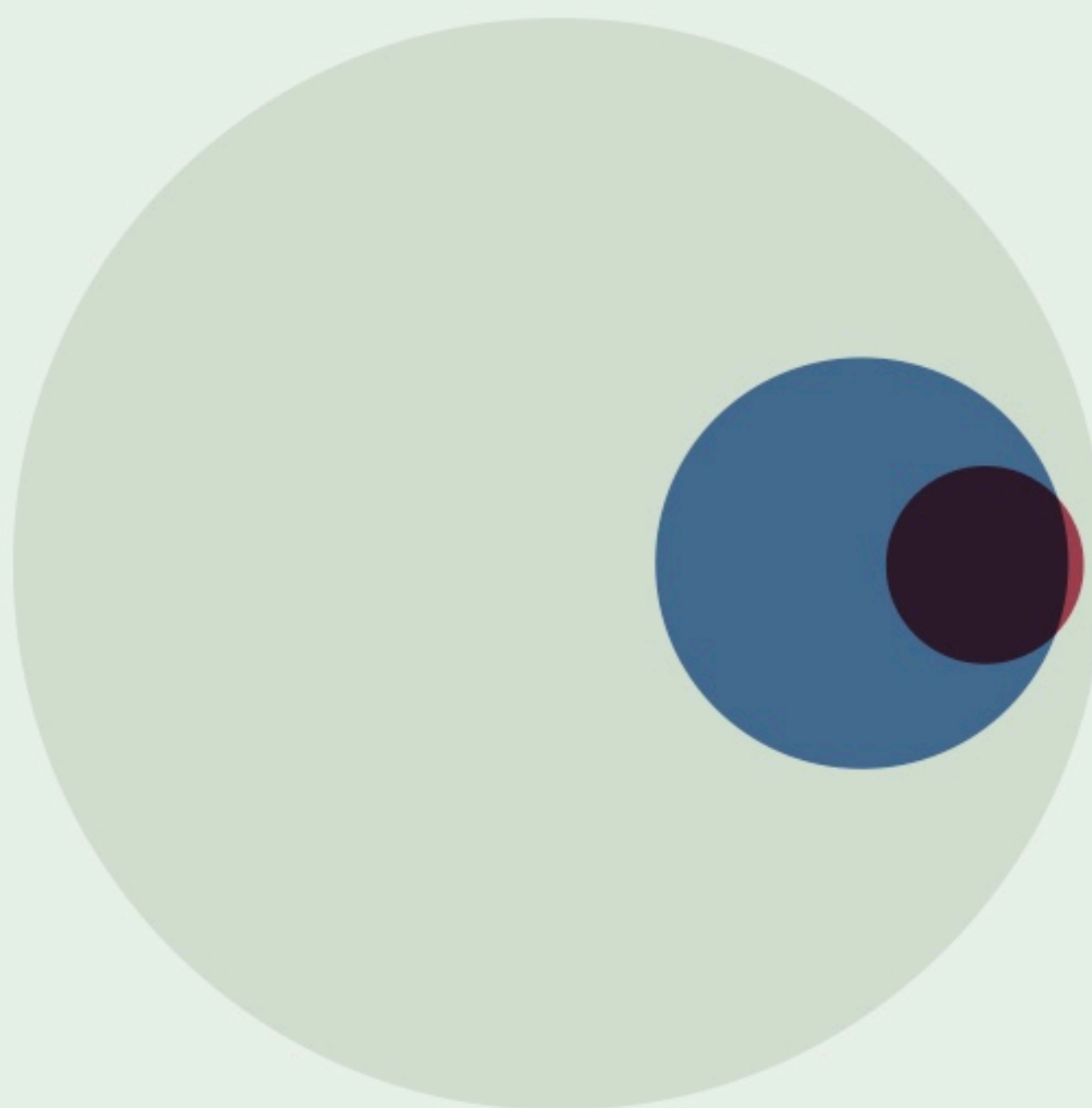
CVSS 9+ (Critical)

THRESHOLD: 0.9
EFFORT: 14.4%
COVERAGE: 40.4%
EFFICIENCY: 9.5%



CVSS 7+ (High to Critical)

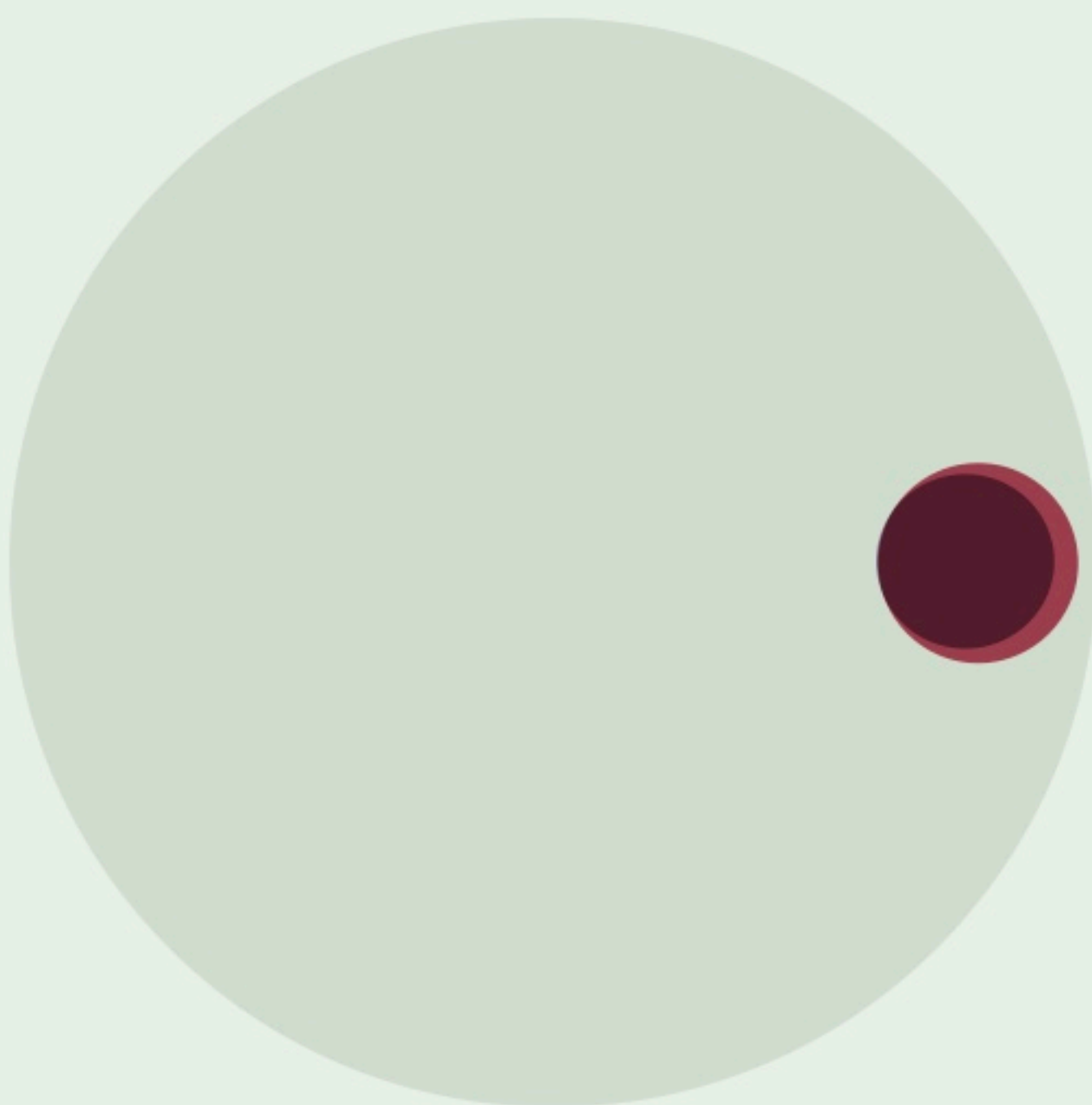
THRESHOLD: 0.7
EFFORT: 50.5%
COVERAGE: 76.8%
EFFICIENCY: 5.1%



Empirical Radiant (Same Effort)
Better Coverage & Efficiency

THRESHOLD: 0.028
EFFORT: 14.4%
COVERAGE: 95.4%
EFFICIENCY: 22.4%

Local model results may vary depending on your security dataset.



Empirical Radiant (Same Coverage)
Less Effort, More Efficiency

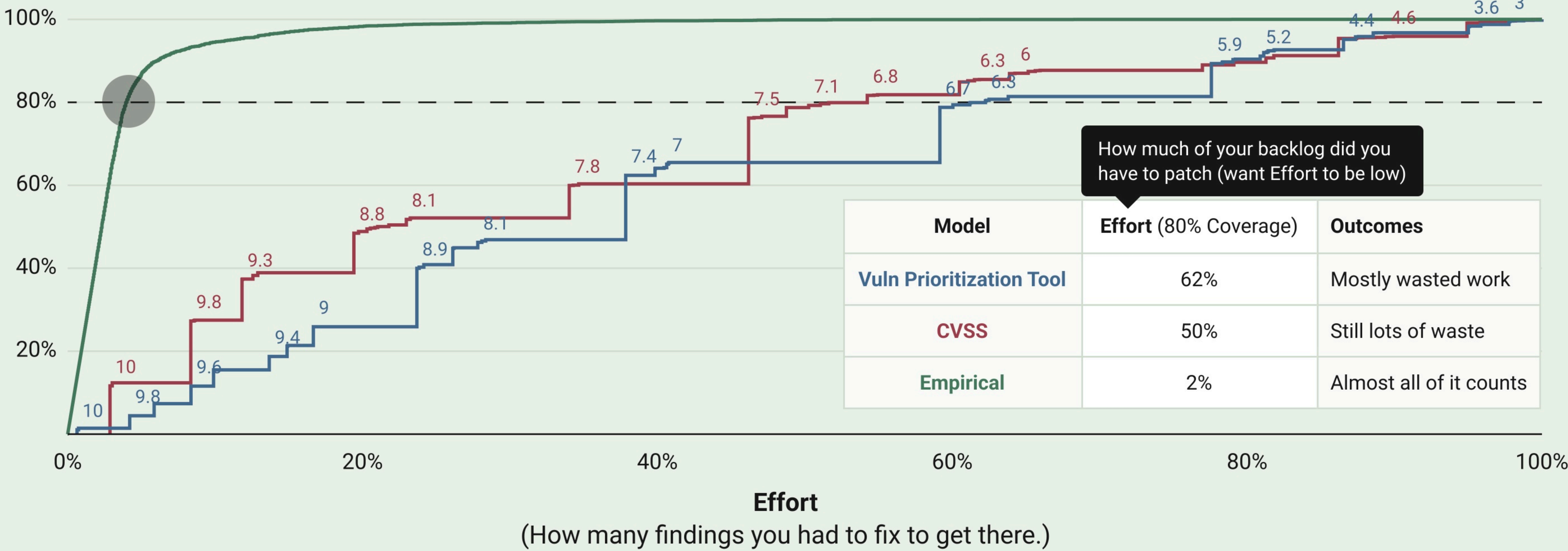
THRESHOLD: 0.968
EFFORT: 2.6%
COVERAGE: 76.9%
EFFICIENCY: 99.3%

Local model results may vary depending on your security dataset.

More protection, a fraction of the patching

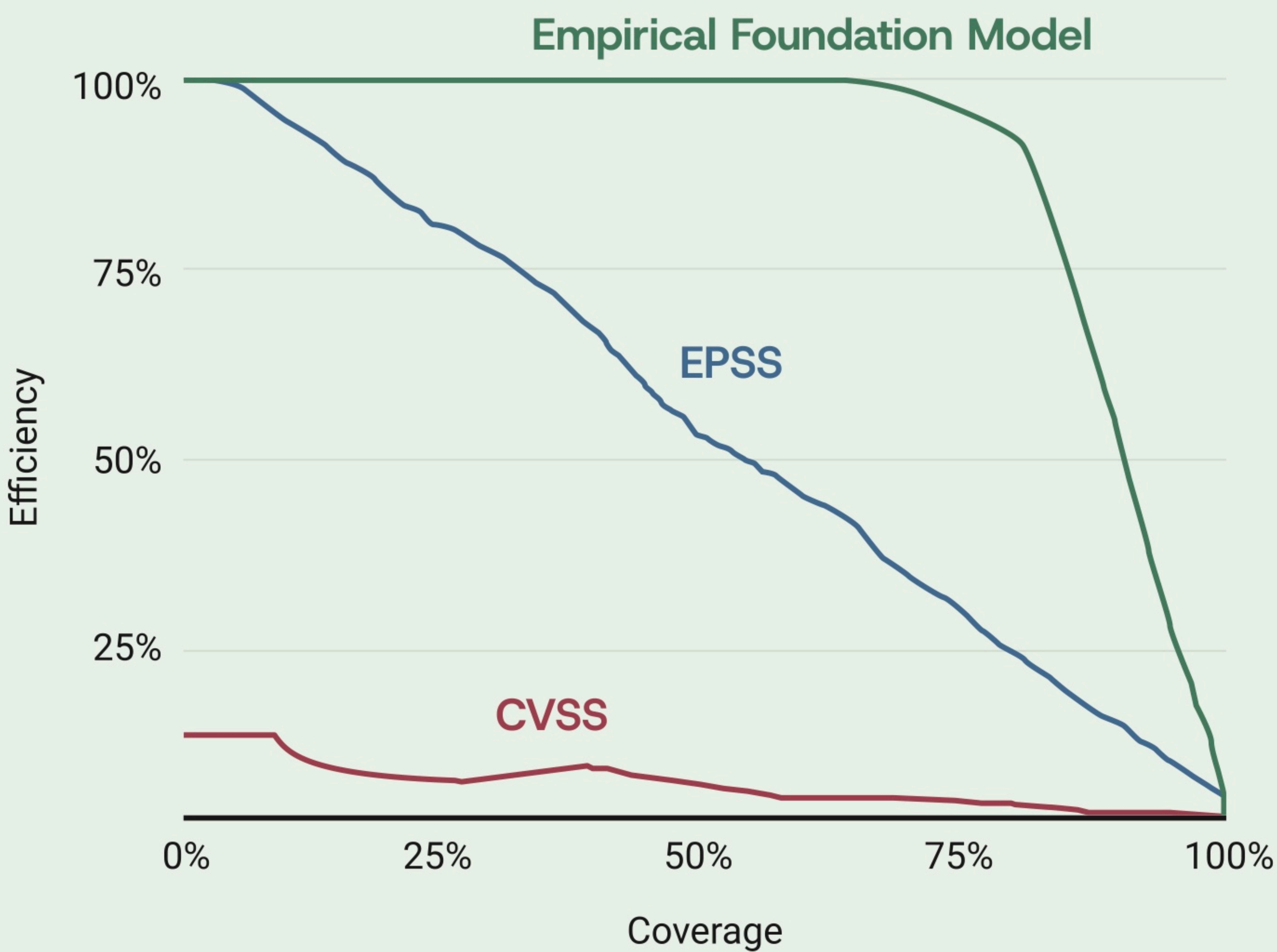
Coverage (% of exploited vulnerabilities fixed)

To stop 80% of the vulnerabilities attackers actually use
How much of your backlog did you have to patch?



EMPIRICAL

Compare Model Threshold Performance



Empirical Models combine real-time internet exploitation telemetry with EPSS predictions to provide the most accurate view of exploitation.

Empirical monitors activity on over 19,000 exploited CVEs—10 times more than the next best model—and offers hourly exploitation evidence and volume, an industry first. Compare to DHS CISA KEV: ~1200.

How do we define Efficiency?

Efficiency considers how efficiently resources were spent by measuring the percent of prioritized vulnerabilities that were exploited. Prioritizing mostly exploited vulnerabilities would be a high efficiency rating (resources were allocated efficiently), while prioritizing perhaps random or mostly non-exploited vulnerabilities would result in a low efficiency rating. Efficiency is calculated as the number of exploited vulnerabilities prioritized (True Positives, Correctly Identified) divided by the total number of prioritized vulnerabilities (True Positives + False Positives).

How do we define Coverage?

Coverage considers how well is the percent of exploited vulnerabilities that were prioritized, and is calculated as the number of exploited vulnerabilities prioritized (True Positives, Correctly Identified) divided by the total number of exploited vulnerabilities (True Positives + False Positives). Having low coverage indicates that not many of the exploited vulnerabilities were remediated with the given strategy.

We bring measurable impact

Past solutions can't prioritize, assess, and handle effective inference at scale. With Empirical, our models provide understanding and superior prioritization.

19,000+

Known Exploited Vulns (and hourly telemetry about when exploitation occurred)

12.4x

A 1249.04% increase in total exploited CVEs as of January 9th, 2025 compared to CISA Known Exploited Vulnerabilities (KEV)

23x

4925 newly exploited CVEs in the last 12 months, compared to 204 in CISA KEV

