Plan the Work
Work the Plan

Postmortem Action Items:
Follow-up and Burndown



Postmortems 101

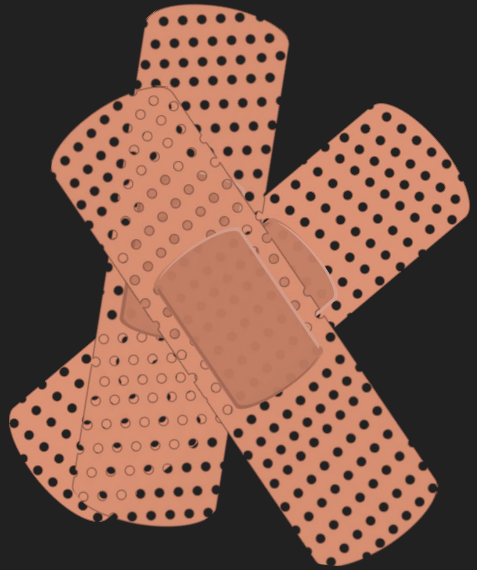
Postmortems are **great**! And **necessary**!

BUT… what about all those follow-up action items that still haven't been resolved months after the fact?




http://www.nasa.gov/mission_pages/swift/bursts/shredded-star.html#.UnymcnWvyCw

Antipattern 1: Unbalanced AI plan



vs.



https://commons.wikimedia.org/wiki/File:Scaffolding_on_Princes_Gate.jpg

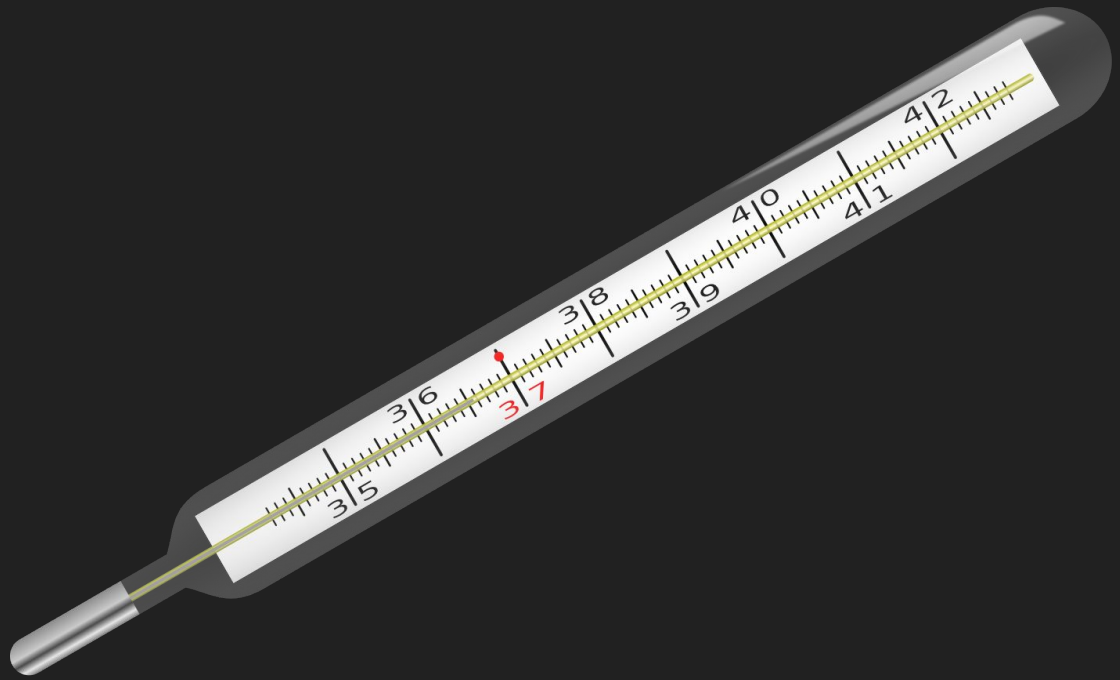
https://pixabay.com/en/band-aid-first-aids-injury-24298/

Solution: Balance your action item plan



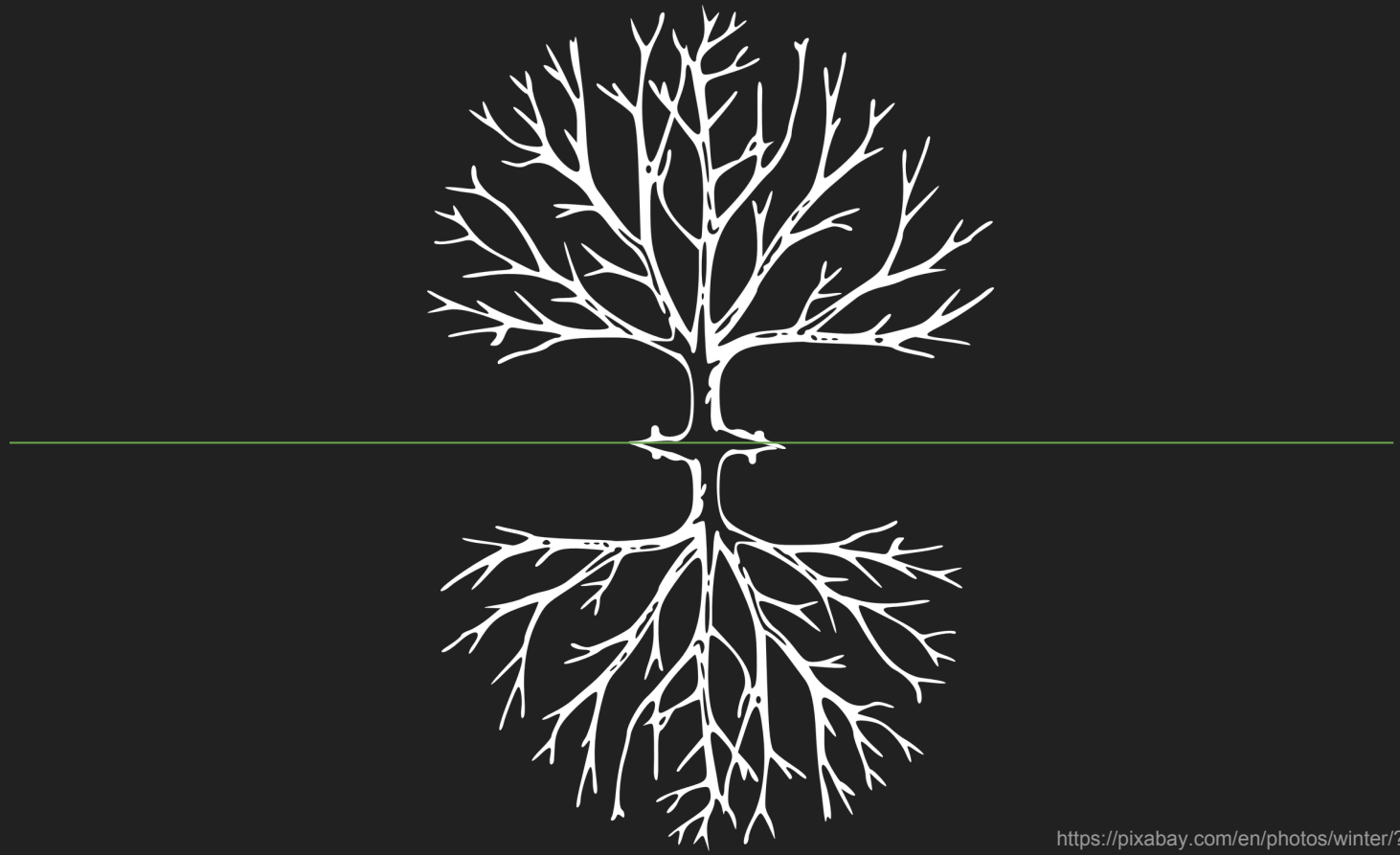
https://commons.wikimedia.org/wiki/File:A_dog_plays_on_a_seesaw_with_children_in_Scotland,.jpg

Antipattern 2: Only fixing symptoms



https://pixabay.com/en/photos/thermometer/

Solution: Address the problem at the root level



https://pixabay.com/en/photos/winter/?image_type=vector&cat=nature

Antipattern 3: Humans as root cause

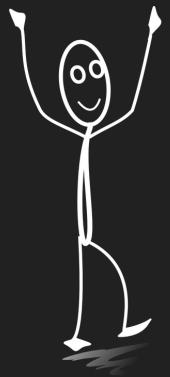
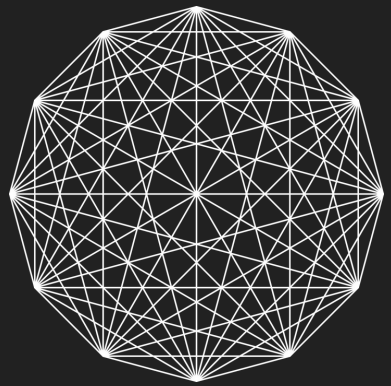
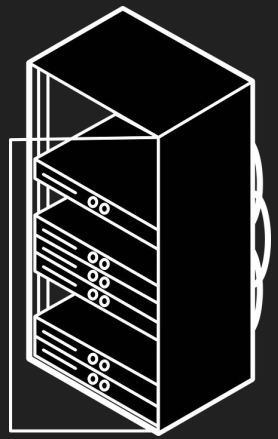




http://publicdomainvectors.org/tr/bedava-vektor/K%C4%B1rm%C4%B1z%C4%B1-i%C5%9Faret-eden-bir-ele/36212.html

Solution: Remove the ability for humans to introduce errors

Reliability =

$f($  ,  ,  ,  $)$

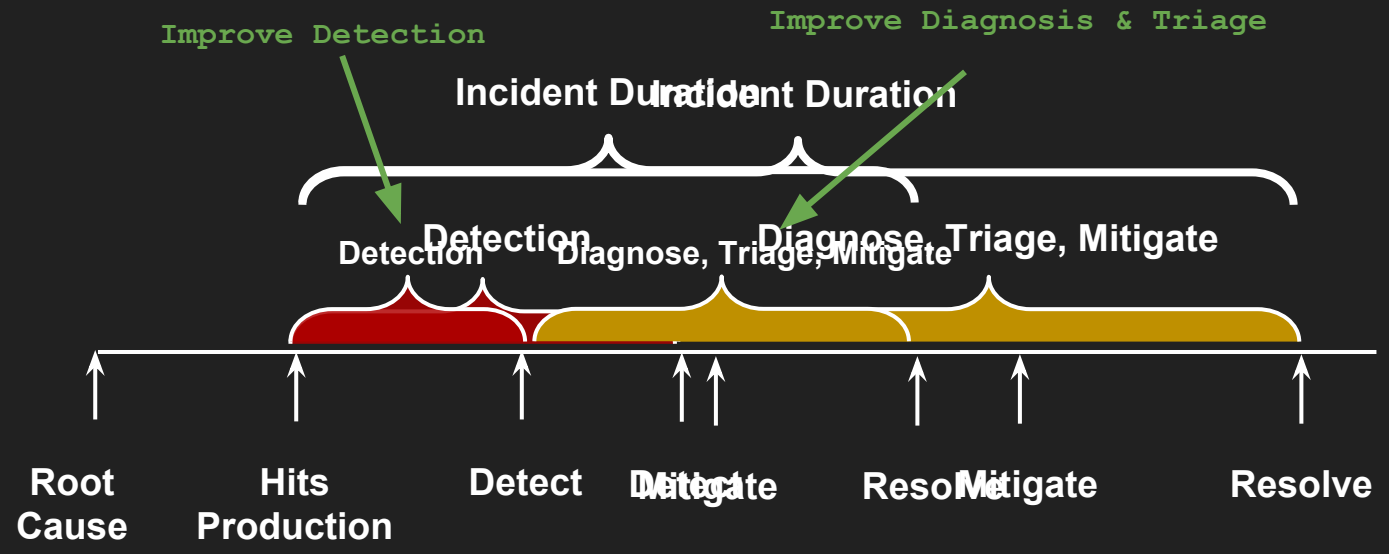
https://cdn.pixabay.com/photo/2013/07/12/17/12/happy-151793_960_720.png https://upload.wikimedia.org/wikipedia/commons/thumb/c/c4/Linecons_database.svg/600px-Linecons_database.svg.png
https://cdn.pixabay.com/photo/2013/07/12/17/46/geometry-152406_960_720.png https://cdn.pixabay.com/photo/2013/07/12/12/34/server-145957_960_720.png

Antipattern 4: Not thinking beyond prevention

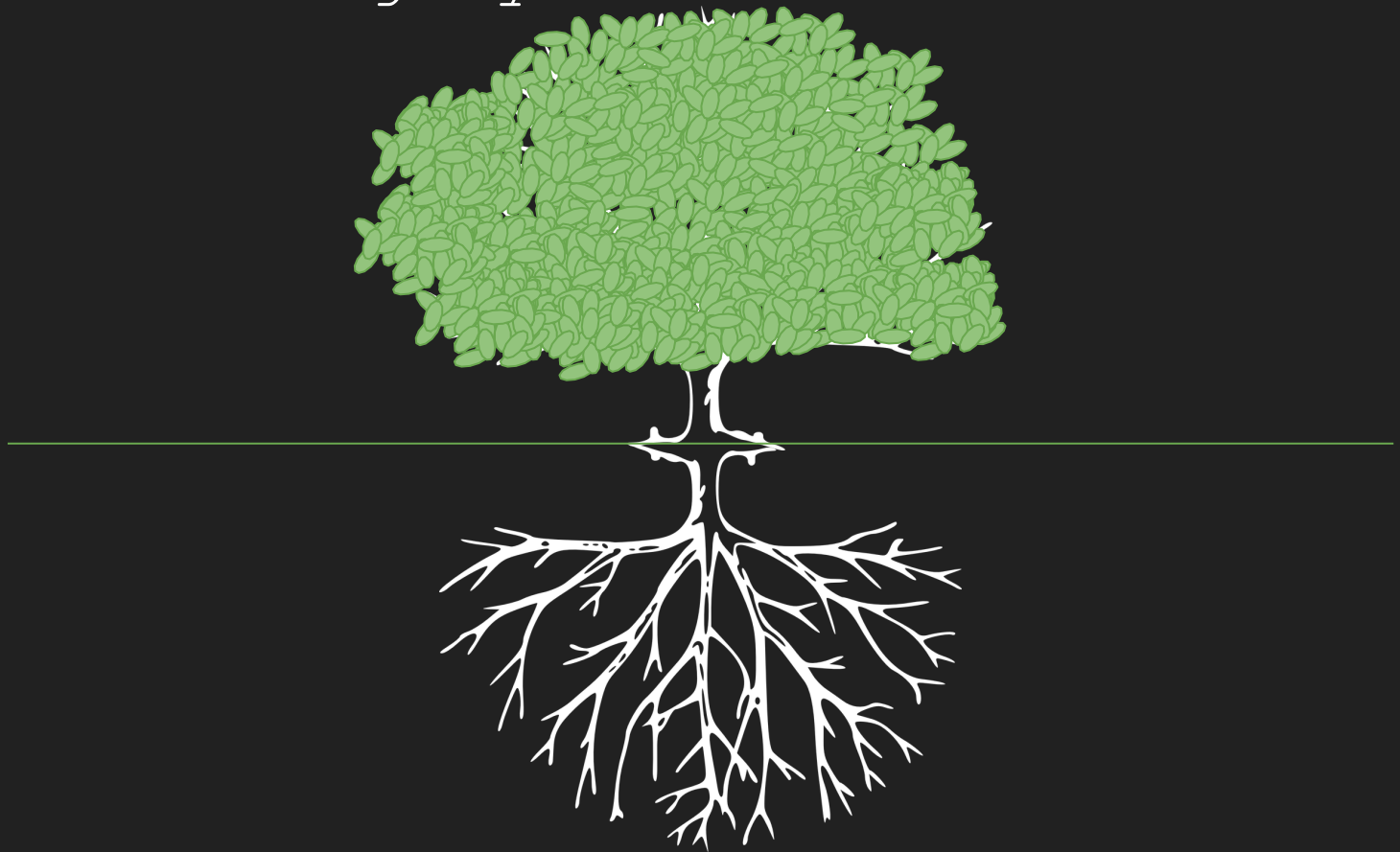


https://pixabay.com/en/domino-hand-stop-corruption-665547/

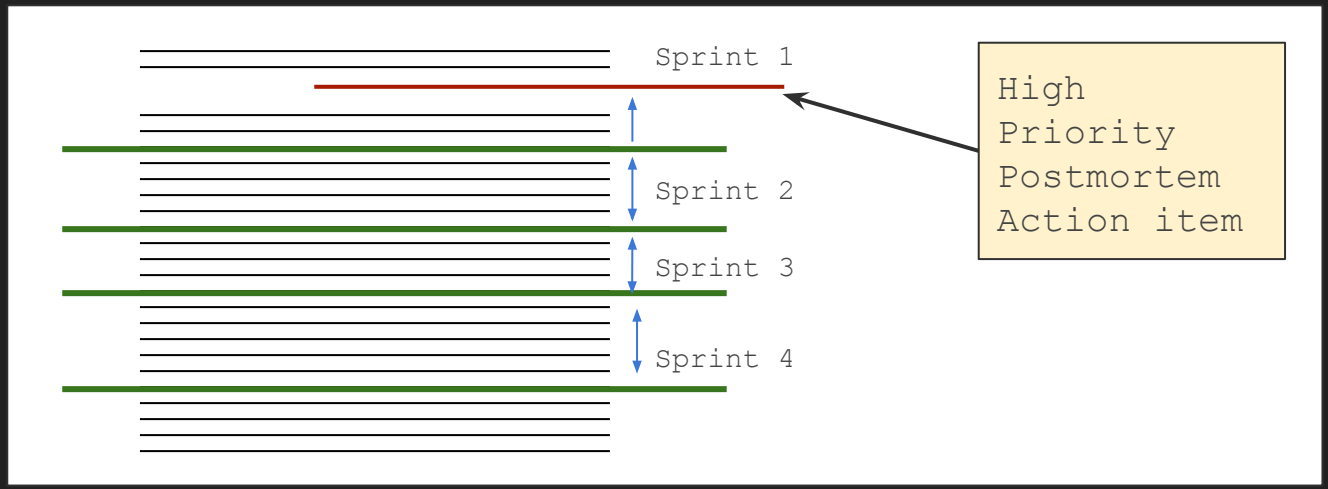
Solution: Consider the entire timeline of the incident



Transforming dysfunction to function



Best Practice 1: Prioritize and classify the work



Best Practice 2: Executive focus



https://en.wikipedia.org/wiki/Grace_Hopper

Executive focus: Ben Treynor Sloss

To our users, a postmortem without subsequent action is indistinguishable from no postmortem.

Therefore, all postmortems which follow a user-affecting outage must have at least one P[01] bug associated with them. I personally review exceptions. There are very few exceptions.



Best Practice 3: Postmortem reviews and reports

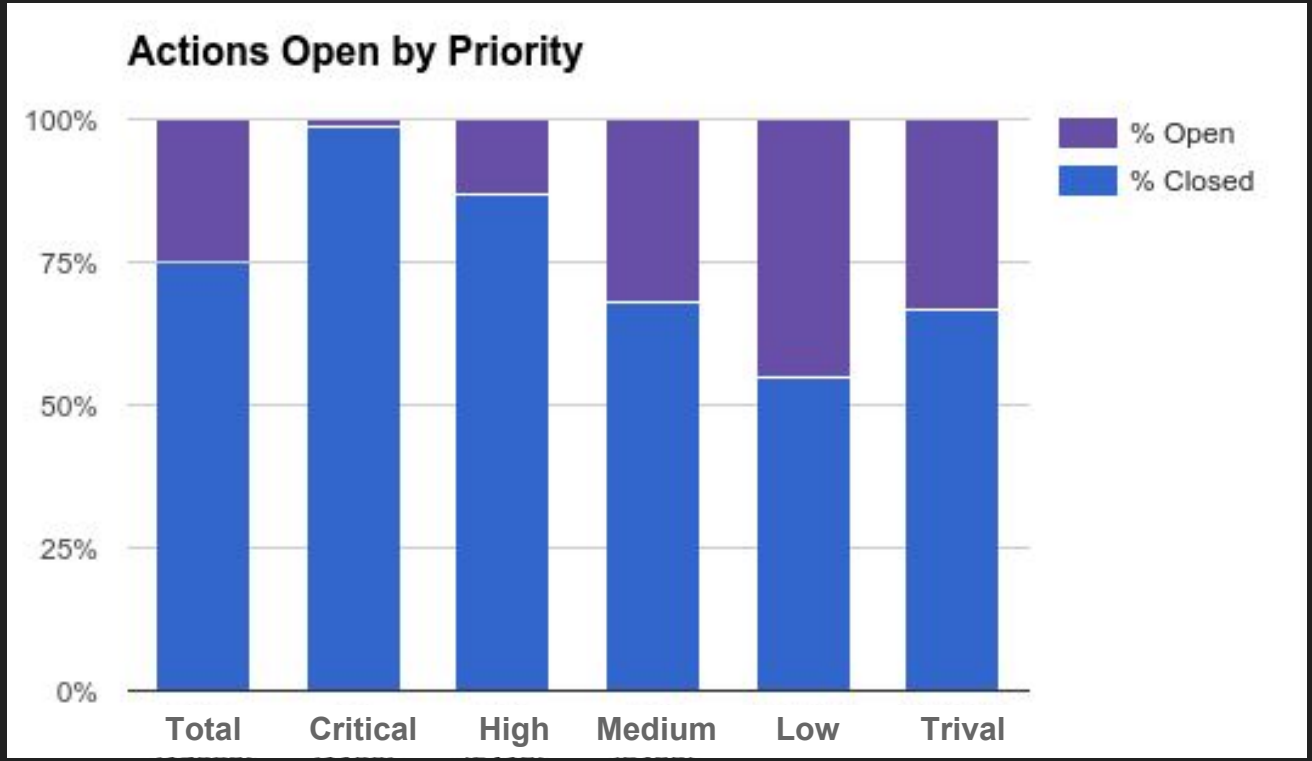
Example AI Review Checklist

- ☑ Realistic?
- ☑ Repeat incident prevention?
- ☑ Resolution time improvements?
- ☑ Automation Opportunities?
- ☑ Added to the project plan?

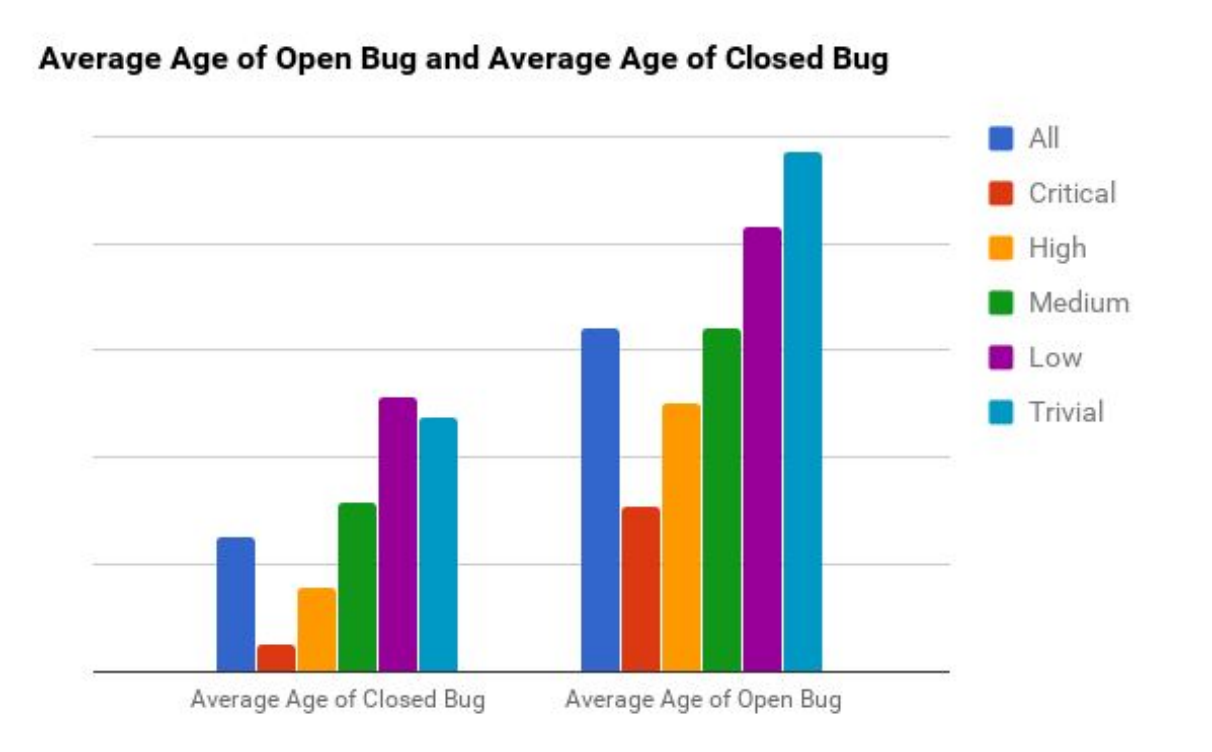


https://pixabay.com/en/check-mark-tick-mark-check-correct-1292787/

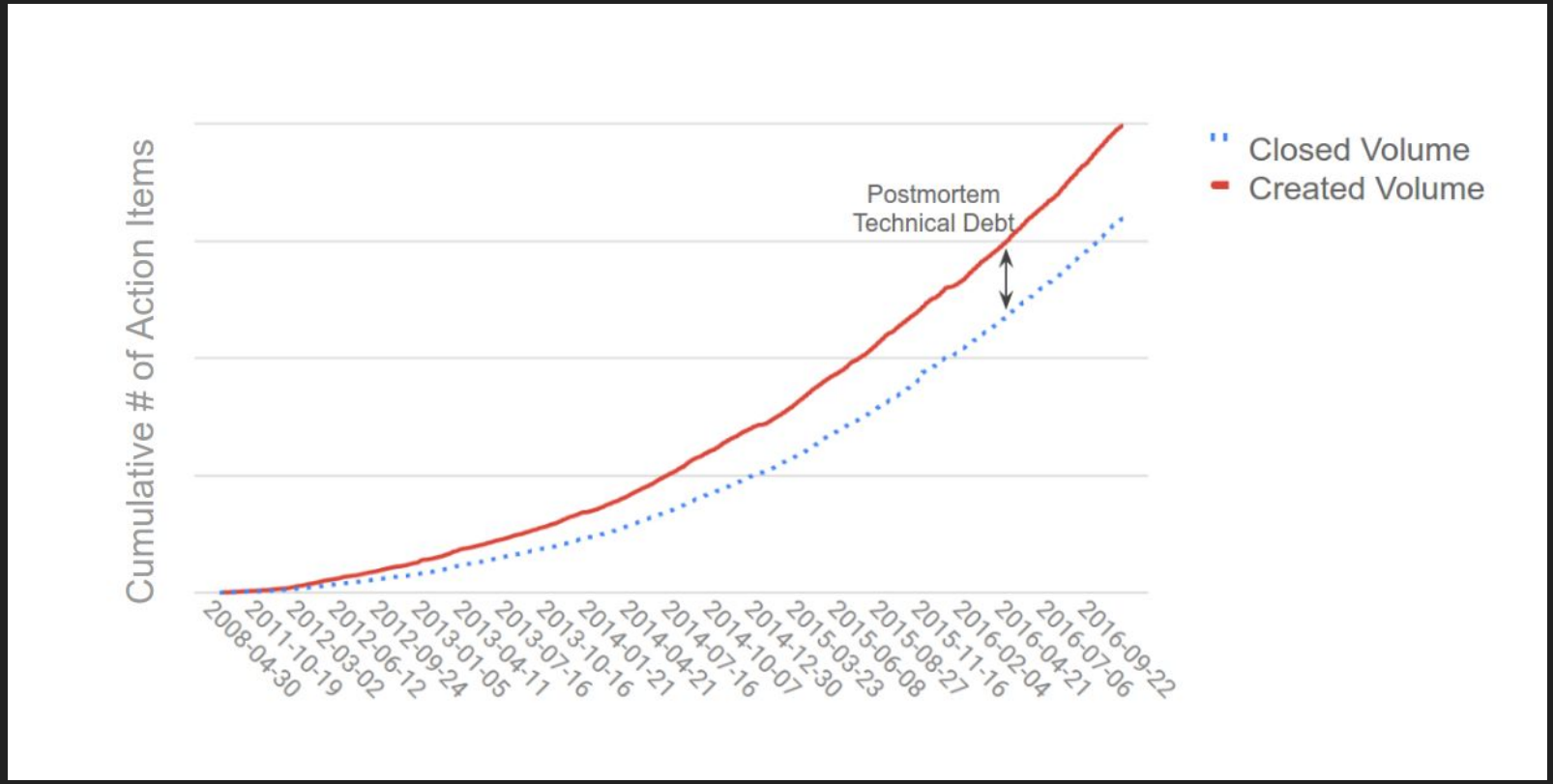
Reports: AIs open by priority



Reports: AI age



Reports: AI debt buildup



In sum: Every postmortem should have

- A balanced action item plan
- Concrete and actionable follow-up



Caveat: Specificity of Google

Modify these recommendations for:

- A much smaller organization
- Downtime-intolerant services
- Downtime-tolerant services



Further Resources

- USENIX ;login: Article
- Postmortem Culture: Learning from Failure (SRE Book)
- Handout: PM AI checklist



Thank You!

