10 Tips to BAD Observability

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What is Observability?

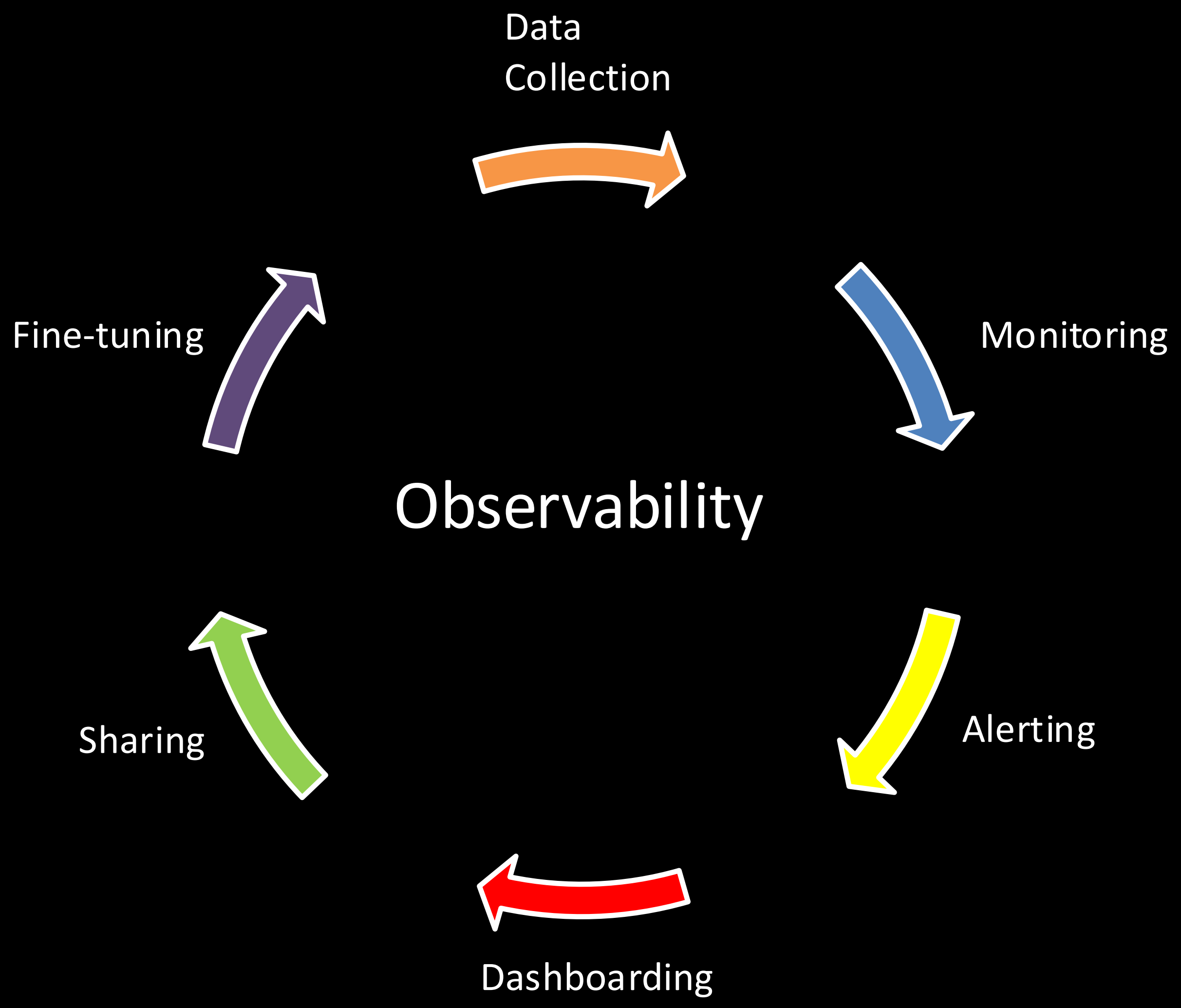
"Measure of how well internal states of a system can be inferred from knowledge of its external outputs."

Not only the objective health of the application but the overall E2E experience

Not only the health of the technical components but also its business impact

Not just having the data but being able to use the data

Ongoing Process



Observability

Data Collection

Monitoring

Alerting

Dashboarding

Sharing

Fine-tuning

Observability is crucial because…

FOUNDATION OF COMPLEX SYSTEMS

PERFORMANCE OPTIMIZATION

CONTINUOUS IMPROVEMENT THROUGH FEEDBACK LOOP

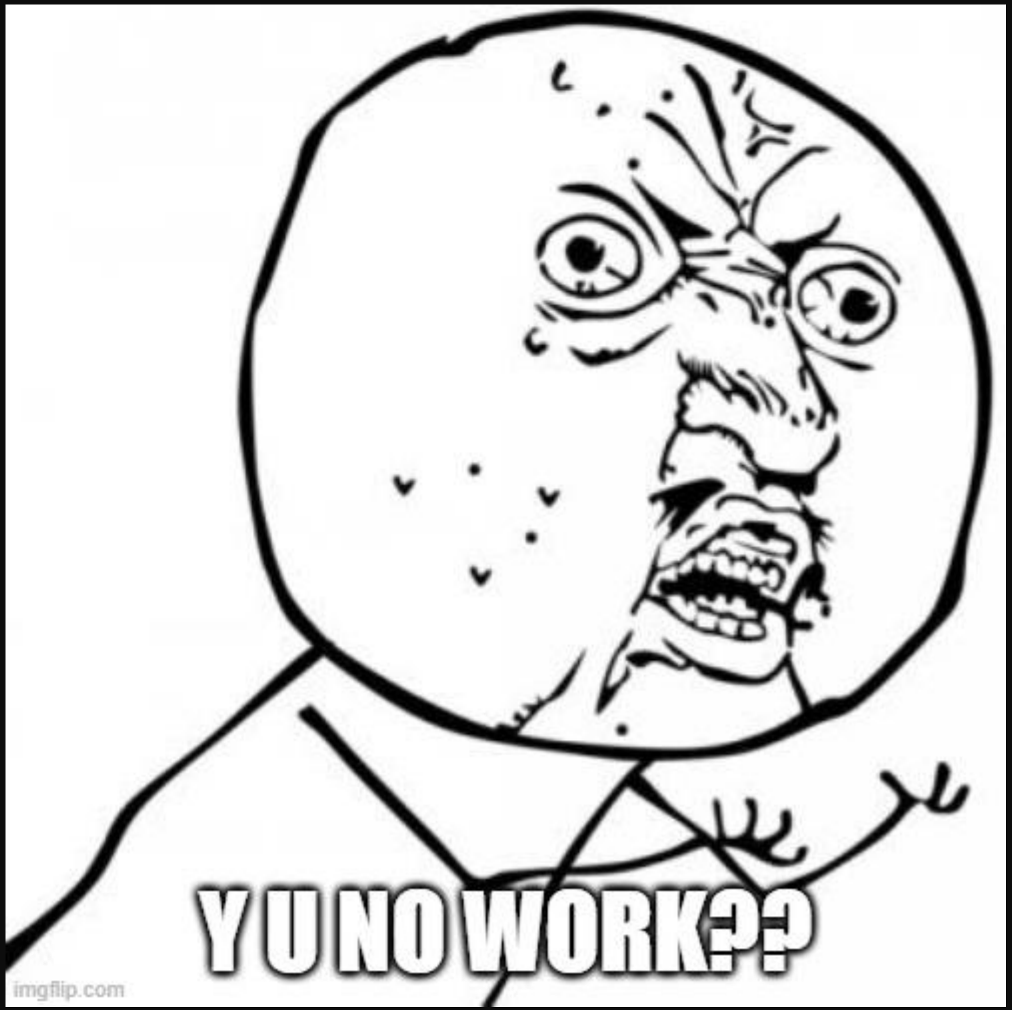
PROACTIVE ISSUE DETECTION

GROUND FOR MANY TOOLS AND TECHNIQUES

ENHANCED USER EXPERIENCE

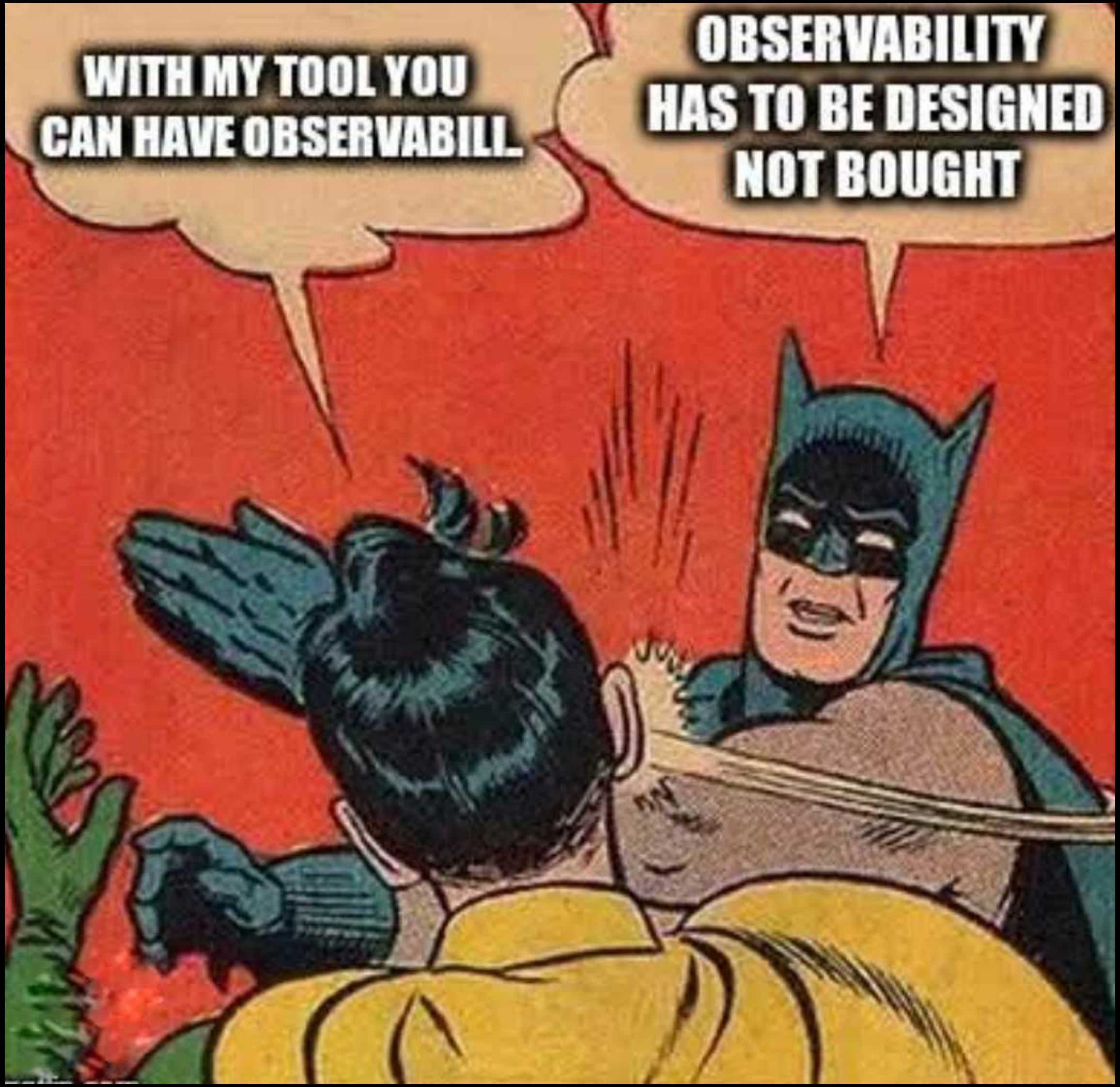
Here's 10 ways to implement Observability…

Badly



Throwing tools at a problem

- ✓ Tools don’t solve problems – people do.
- ✓ Expecting the tool to do everything end-to-end.


WITH MY TOOL YOU CAN HAVE OBSERVABILL
OBSERVABILITY HAS TO BE DESIGNED NOT BOUGHT

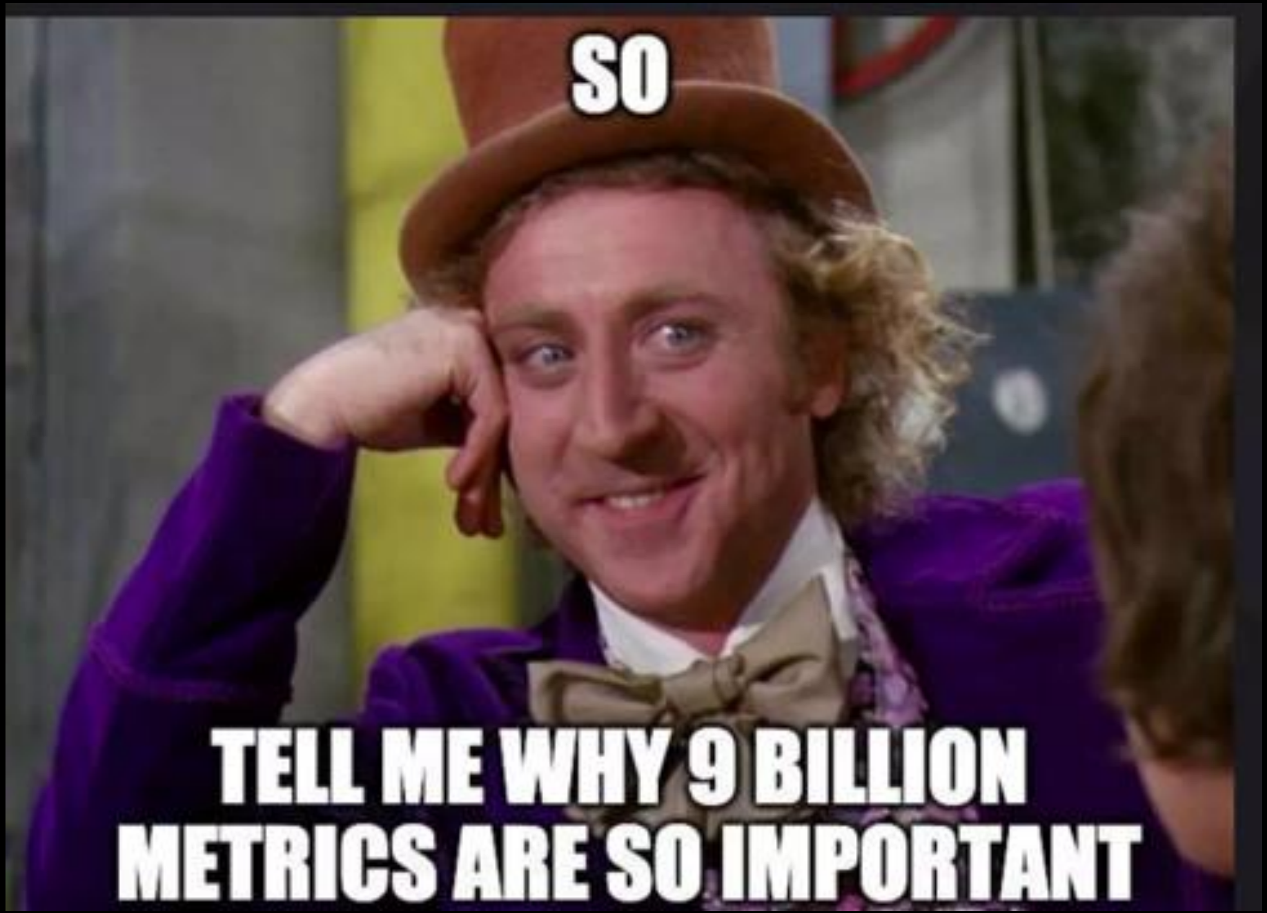
Best Practices

✓ Beyond tools – It’s a practice

✓ “The goal of Observability team is not to collect Metrics, Logs and Traces. It is to build a culture of Engineering based on facts and feedback, and then spread that culture with broader organization”

Garbage IN
Garbage OUT

- ➢ Impact on Analysis & troubleshooting
- ➢ Maintenance Challenges
- ➢ Network Overhead
- ➢ Reduced Signal-to-Noise Ratio



Best Practices

✓ *Clearly defining metrics and ensure alignment of goals centered around quality and overall productivity*

Enriched data IN, Operational results OUT

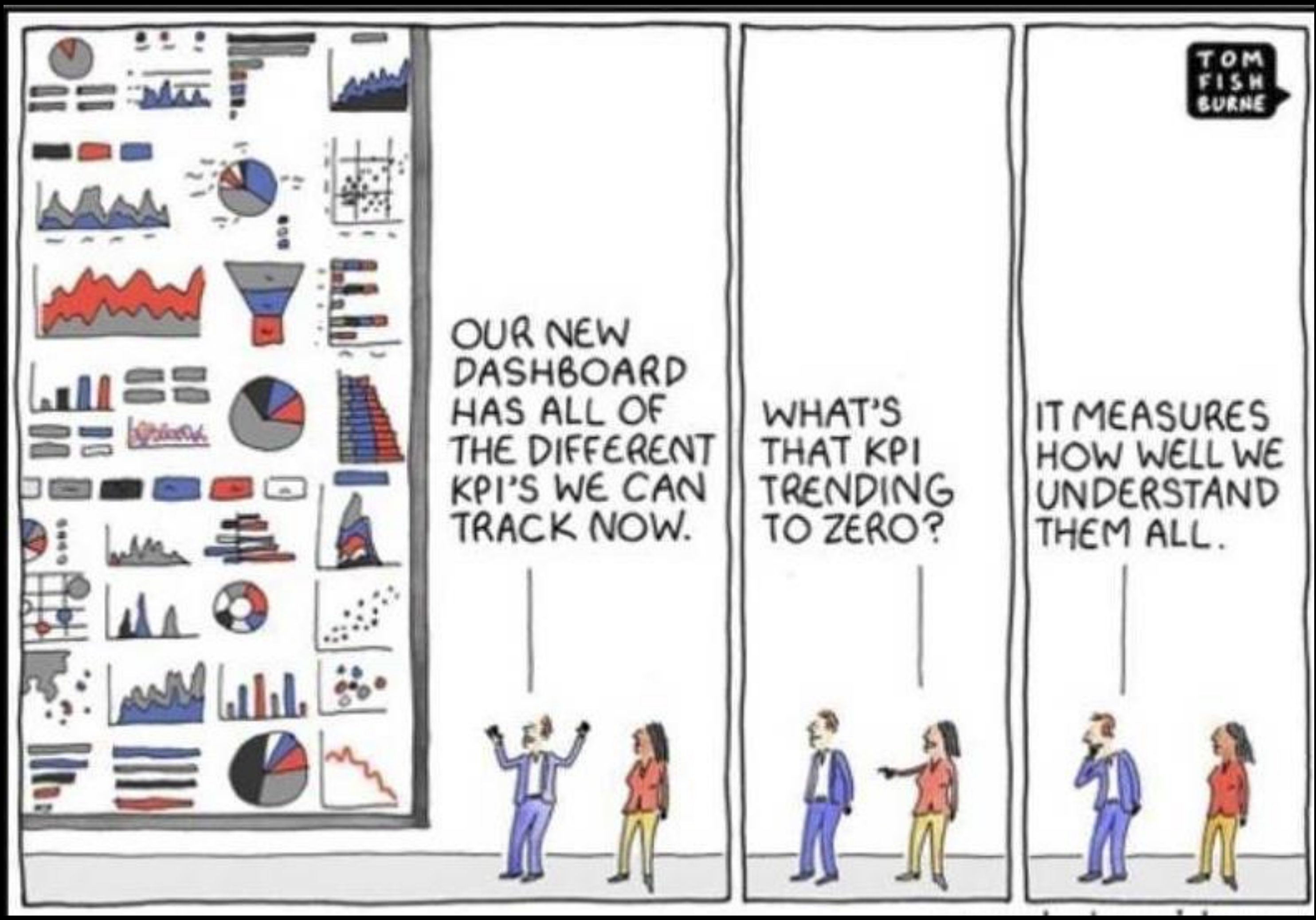
Dashboard Extravaganza

- ➢ Hindrance to derive meaningful insights

- ➢ Waste resources

- ➢ Maintenance Challenges

Just because you can doesn't mean you should!


OUR NEW DASHBOARD HAS ALL OF THE DIFFERENT KPI'S WE CAN TRACK NOW.
WHAT'S THAT KPI TRENDING TO ZERO?
IT MEASURES HOW WELL WE UNDERSTAND THEM ALL.
TOM FISH BURNE

Best Practices

- ✓ Streamlining dashboards
- ✓ Consolidating information
- ✓ Ensuring that dashboards align with organizational goal

No Consistent Trace ID

- Incomplete Insights
- Impaired Root Cause Analysis
- Increased MTTR
- Dependency mapping complexity

Best Practices

✓ Ensure Top level component is generating a unique token (trace or correlation ID) that is passed throughout the solution

Misunderstanding Metrics

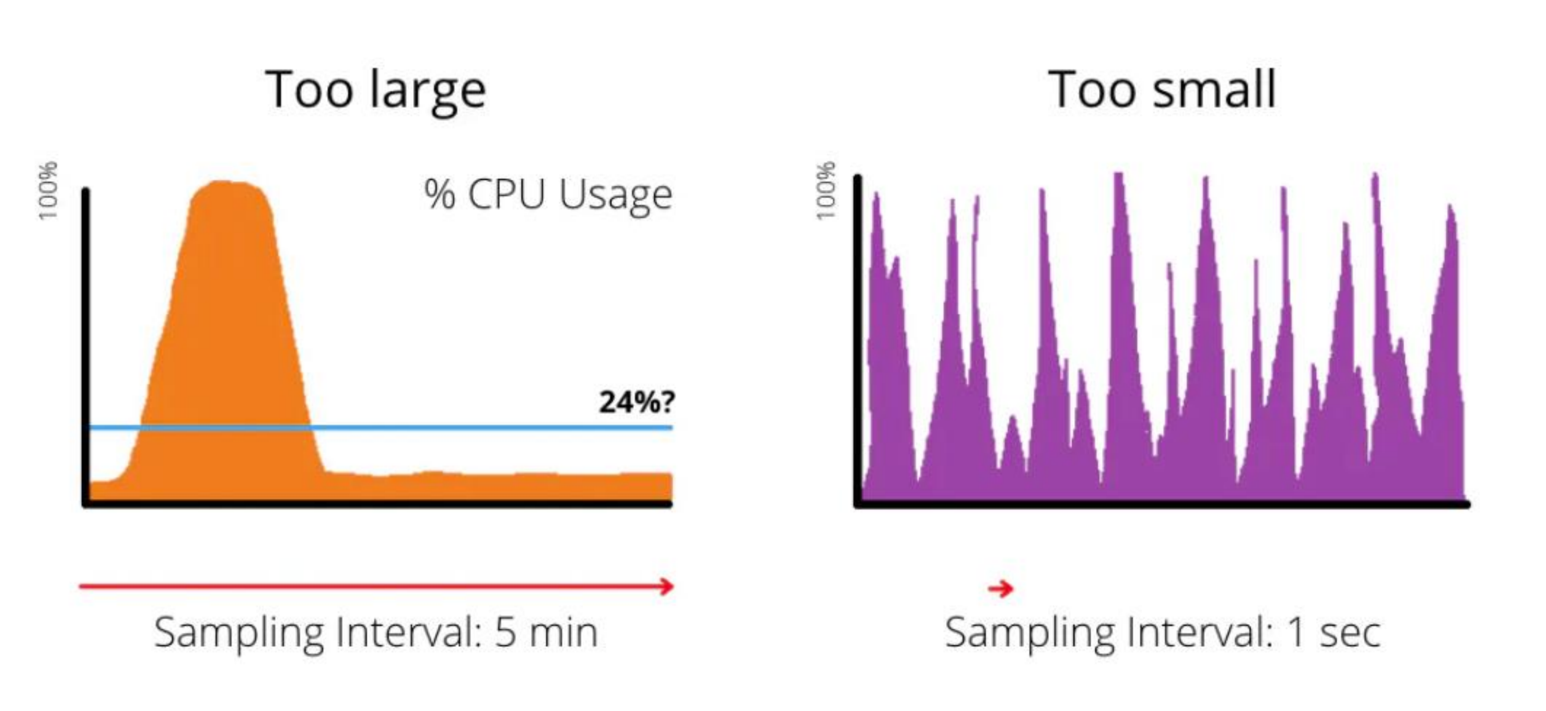
- ➢ Fixation on the wrong problem
- ➢ Investment in things you don’t need
- ➢ Unnecessary panic

Best Practices

✓ Focus on what the metric is telling you, not how high or low it is

Bad sampling intervals

- ➢ Misleading Insights
- ➢ Over-provisioning of infrastructure
- ➢ False positives/negatives



Best Practices

✓ Contextual/Adaptive Sampling

✓ Avoid Overemphasis

✓ Strive for Balance

Disconnected Teams

- ➢Collaboration Breakdown
- ➢Suboptimal resolution of issues
- ➢Impact on system health
- ➢Silos and Blind spots

Best Practices

- Fostering culture of collaboration
- Cross-Functional discussion

Customer Disregard

- ➢ Focused on only fancy features
- ➢ Poor customer satisfaction
- ➢ Discrepancy between System Monitoring & UX

I have Gitops, cloud, containers, serverless computing, New API.. **What do you have**?
I HAVE CUSTOMERS

Best Practices

- ✓ Tracking metrics related to User
- ✓ User feedback integration
- ✓ Collaborative communication

Remember - 5 9’s don’t matter if Users aren’t happy

No such thing as The Observerman!

- Depending on “someone else” to fix the problem
- Distinct, siloed monitoring team who have little to no knowledge about your tools
- Focusing on only one part of the puzzle

Best Practices

✓ *Observability is a shared responsibility*

✓ Focus on your piece of the puzzle

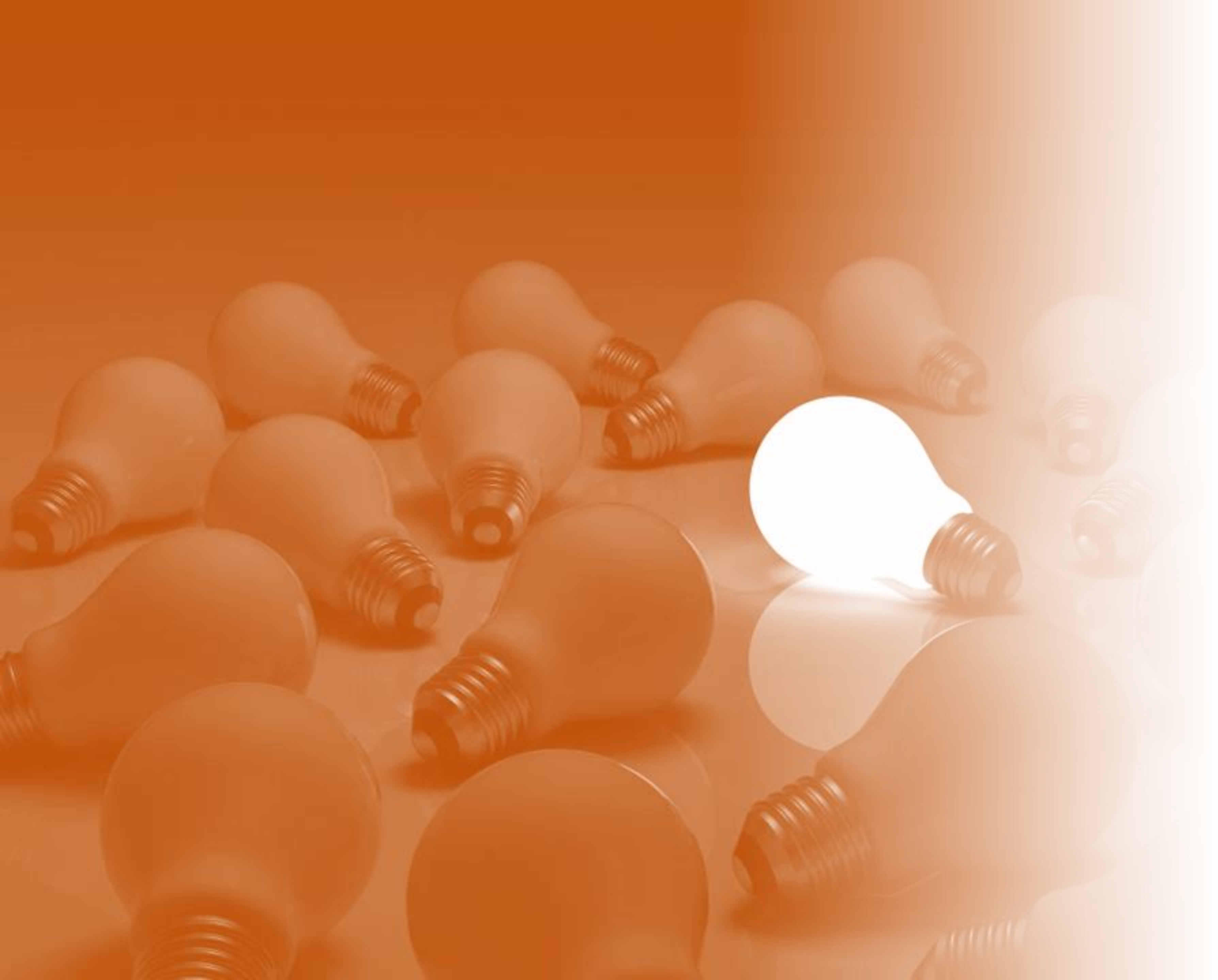
Final Thoughts

Observability ain't easy, but keeping the following things in mind will help guide you in your Observability journey:

- Identifying pitfalls
- Risk Mitigation
- Optimizing Observability Practices
- Continuous learning

Thank you!

Let's keep the conversation going!



Resources

Slight Reliability Podcast by **Stephen Townshend**

Bad Observability - SquaredUp