



# Beyond Regression Testing: Observability for QA

Gabor Benedek

9 October 2024, HUSTEF

## Problem Statement

“

Exhaustive testing is impossible.”

The Seven Principles of Testing  
International Software Testing Qualifications Board



# Testing without Monitoring: A Recipe of Failure



7:15  
test & release



last verification



7:15 - 11:15

prod interactions

travel, hand-washes, -shakes, disinfection, clap, grab ...



occurrence of the bug's



11:15  
first use-case



business impact

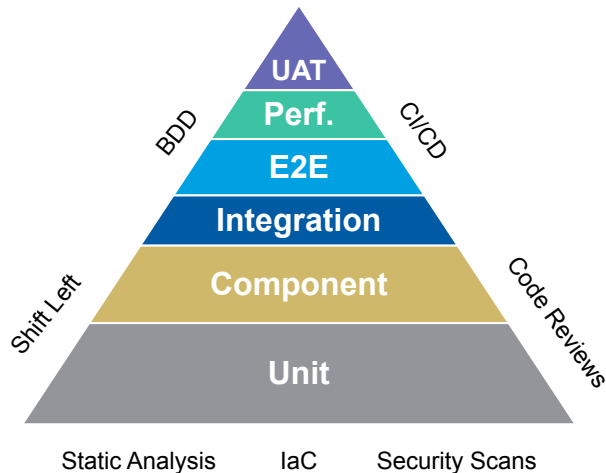
# My Journey from Testing to Observability

Greenfield Project  
with huge excitement



## My Testing Approach

ensure confidence



Failures in PROD  
impacting the business



- Run out of DB connection threads
- Expired permissions
- Leaks on storage, memory
- Service discovery failure
- Crazy one timer issues

# What is Observability?



## DEFINITION

Observability is a practice, providing the ability to monitor, measure, and analyse how a system behaves real-time by capturing logs, metrics, and traces.



## FEELING

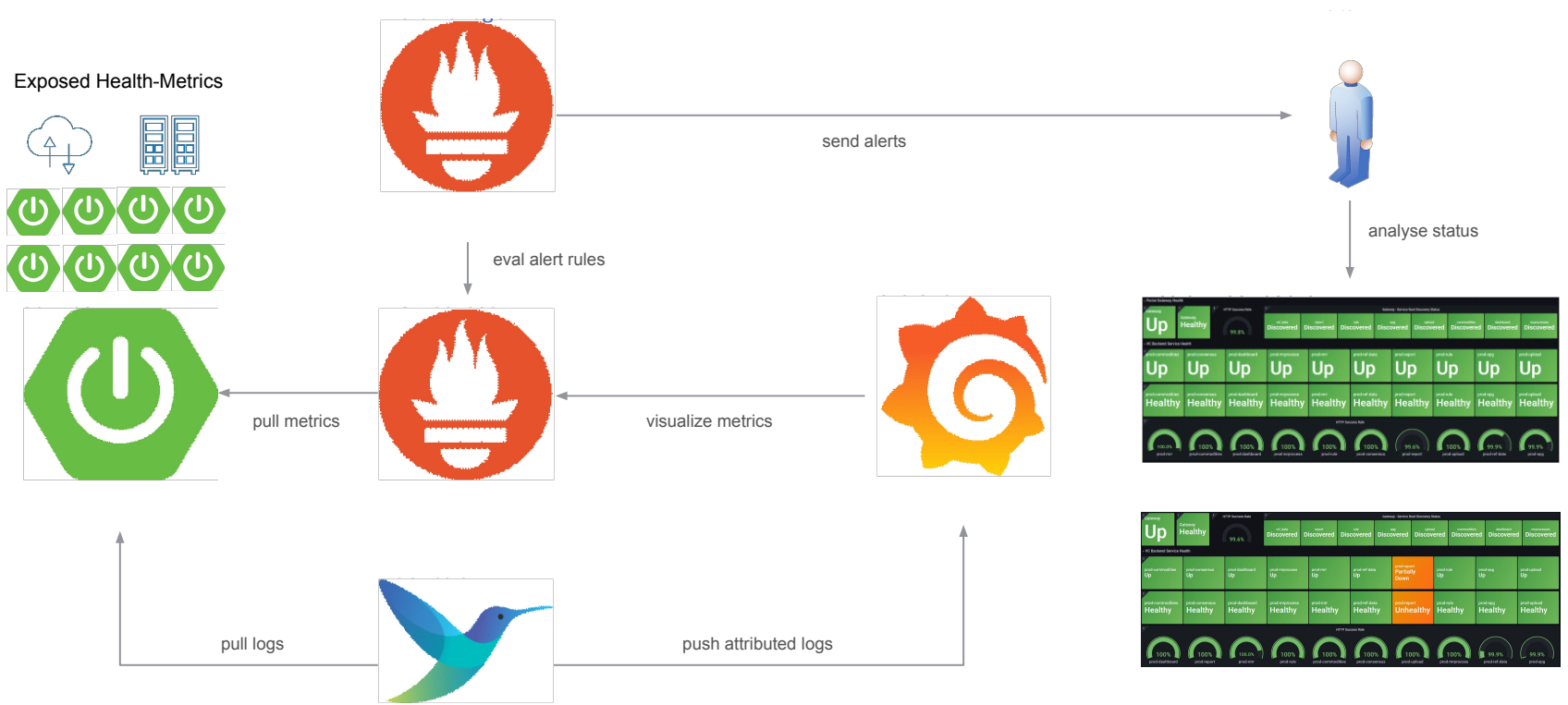
- A System Reliability Engineering thing keeping the system alive. I'm not SRE!
- Another exciting buzzword.
- Interesting, but sounds complex.



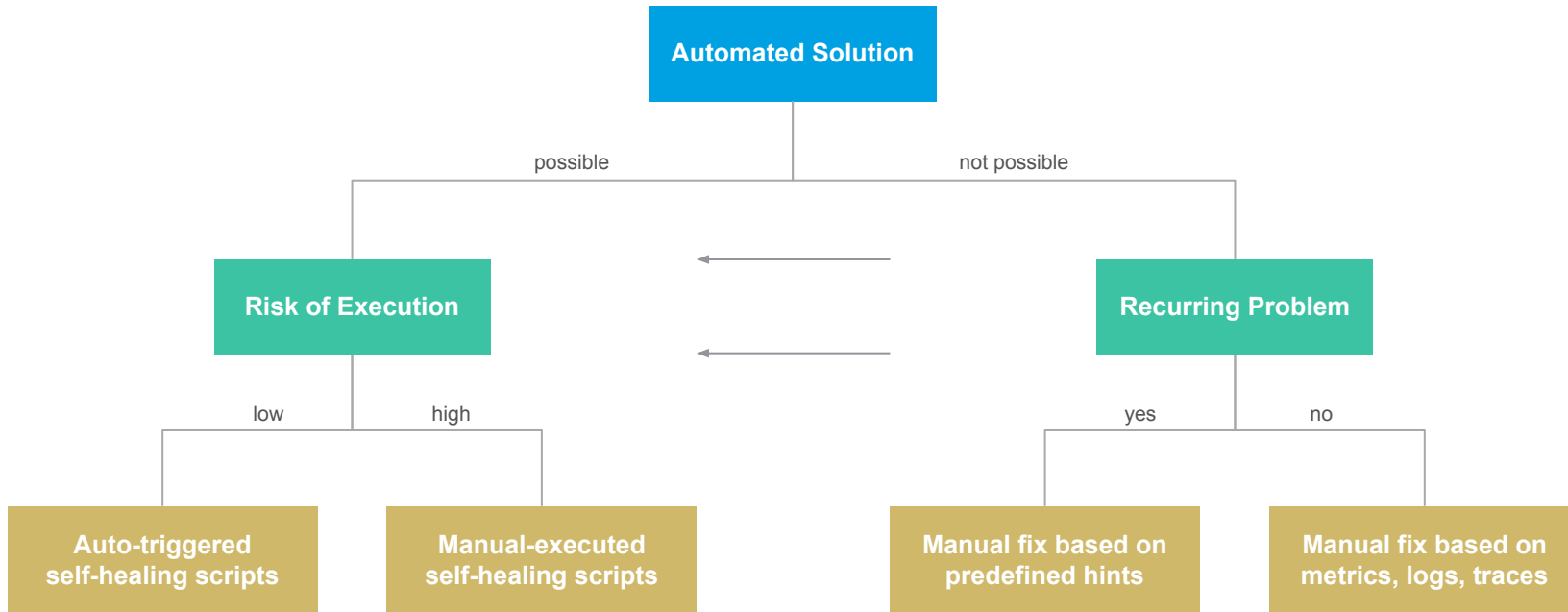
## OPPORTUNITY

... that can extend the standard QA practices measurably improving quality and reliability.

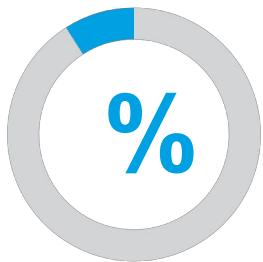
# My Self-Detection System



# My Self-Healing Logic



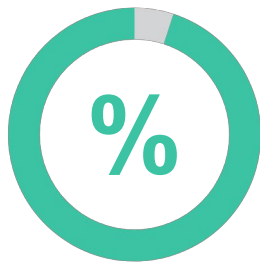
# Measure the Impact!



## DevOps Metrics

Suggested DORA metrics:

1. Failure Rate
2. Time to Restore



## SRE Metrics

Error Budget, SLOs on:

1. Availability
2. Healthy Time
3. Exceptions
4. Latency

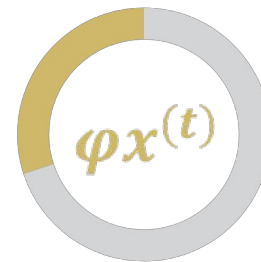


## Return of Investment

Analysis on:

1. Cost of Efforts & Infra
2. Returning qualitative, quantitative values

To Explore



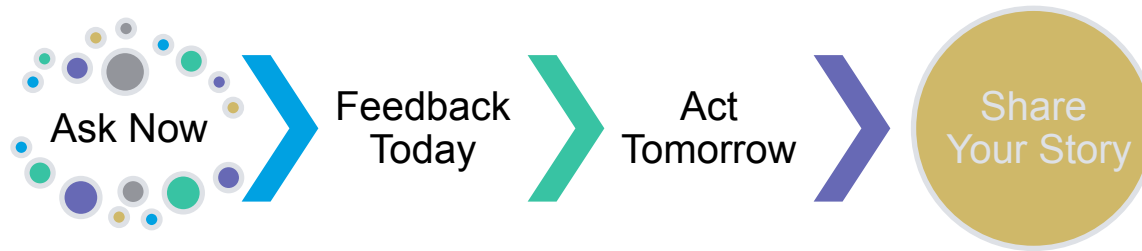
## Predictive Maintenance

Machine Learning fed by:

1. Metrics
2. Logs
3. Correlations



# Thank You!



LinkedIn: [gaborbenedek](#)

