

DRUPAL GOVCON 2020

Metrics

We're a full-service DevOps agency focused on creating elegant solutions to solve complex problems.

Federal agencies like NASA, The White House, and NAVY to commercial organizations like Gallup, LECET, and USO choose us every day.

EDUARDO



- Quality Assurance Director
- Improving productive processes, pushing automation forward and raising QA Standards
- Dogs and Sports



WHY METRICS? HOW METRICS? DO I EVEN NEED THEM?



AGENDA

- Introduction
- Why Metrics?
- How Metrics?
- Do I even need them?
- Conclusion



INTRODUCTION



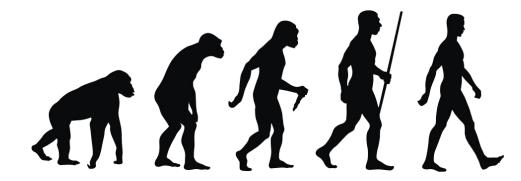
METRICS

More than a buzzword!



VANITY METRICS

It is no longer **just** a buzzword...

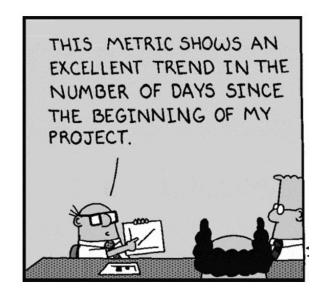




DATA GATHERING # METRICS



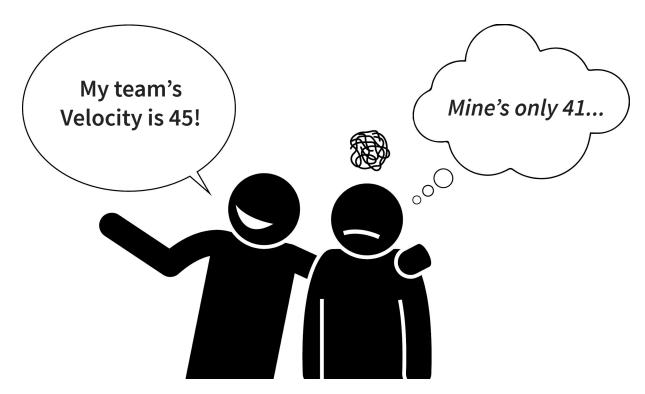




They need to **mean something!**



METRICS DON'T AWARD BRAGGING RIGHTS!



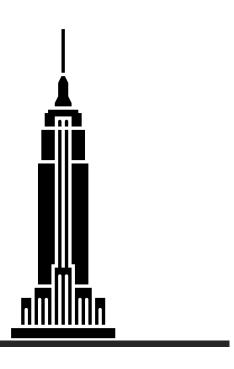




Let's take a step back and embrace the concept.



CASE STUDY: Empire State Building



- 102 stories
- ~80k sq ft per floor
- 41 million USD (1931)More than 550 million now
- 73 lifts/elevators



HOW LONG DID IT TAKE TO COMPLETE IT?



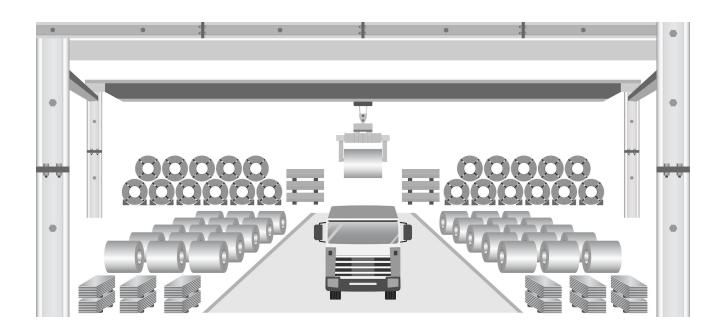
13 months

(4,5 stories per week at one point)



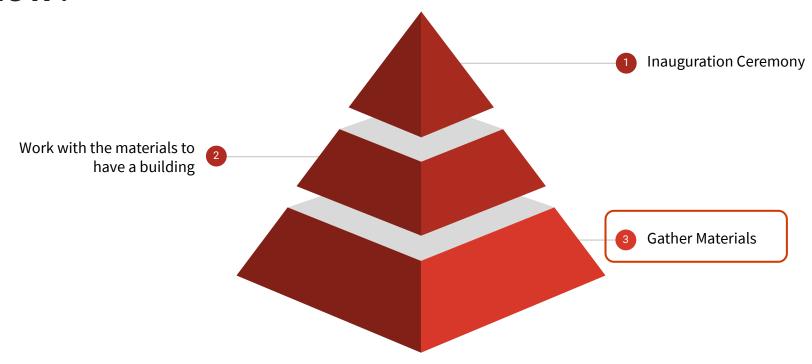
HOW?

Maximizing the tons of steel delivered to the building site.



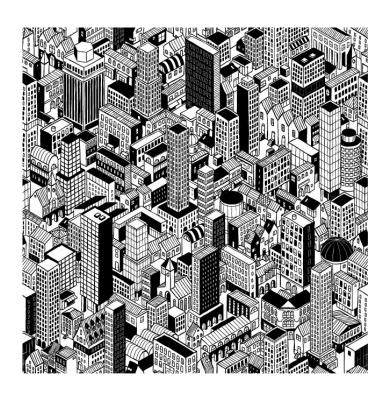


HOW?





GATHER MATERIALS



- Dense city
- Analyze transport of each material
- Avoid stacking
- Review and Improve



METRICS

Not a buzzword anymore!



WHY METRICS?



WHY METRICS?

- Control and Feedback Loop is Driven by Metrics
- Metrics make the Process Objective
- Improvement Goals are in Terms of Metrics



TYPES OF METRICS AND THEIR USES

- Operational
- Financial



HOW METRICS?



PROCESS DEFINITION

The starting line.

- Understand by describing
 - DOCUMENT
 - INTERVIEWS
 - REVIEW PAST INFORMATION

- Make required changes
 - SAME VOCABULARY
 - TRAININGS



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STANDARDIZATION



PROCESS DEFINITION

IDENTITY KEY FACTORS

Once described: DISSECT!

- Risks
- Problems
- Impact

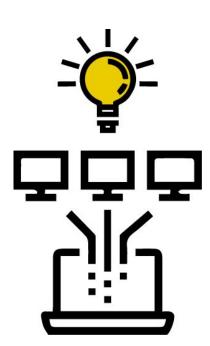




INFORMATION GATHERING

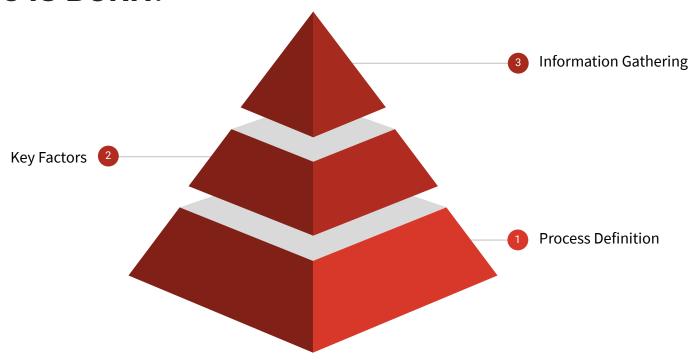
Provide Meaning to it!

- Ambiguity
- Impartiality
- Certainty





A METRIC IS BORN!



TIME FOR AN EXAMPLE!

(Finally some Drupal...)



CONTEXT

- Simple Product
- Trusted modules
- Little to no custom code







PROCESS









CLIENT PROVIDES TICKET

The task to be carried out is described and an Acceptance Criteria (AC) is established

TICKET IS DEVELOPED

The code is written and impacts the environment

TICKET GETS TESTED

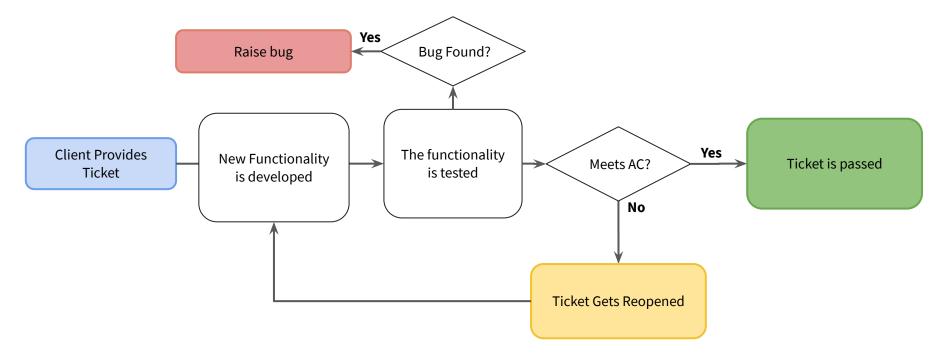
Tester Checks the functionality based on the AC.

Tester can find issues in the system while verifying the AC

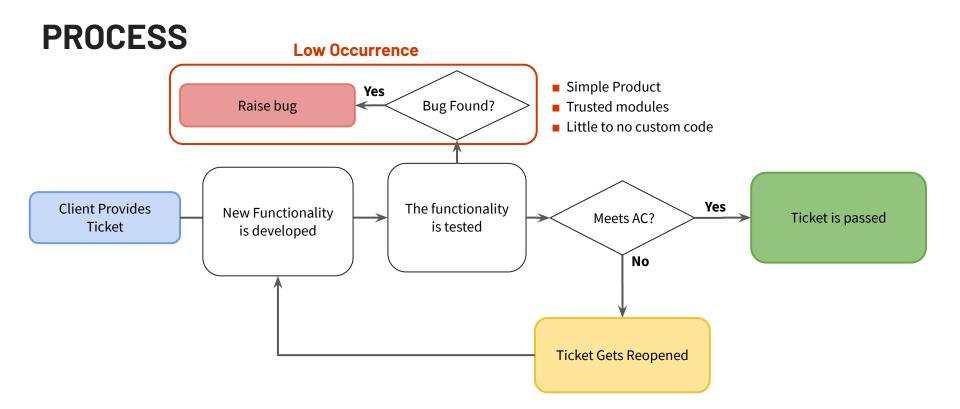
TICKET GETS CLOSED



PROCESS

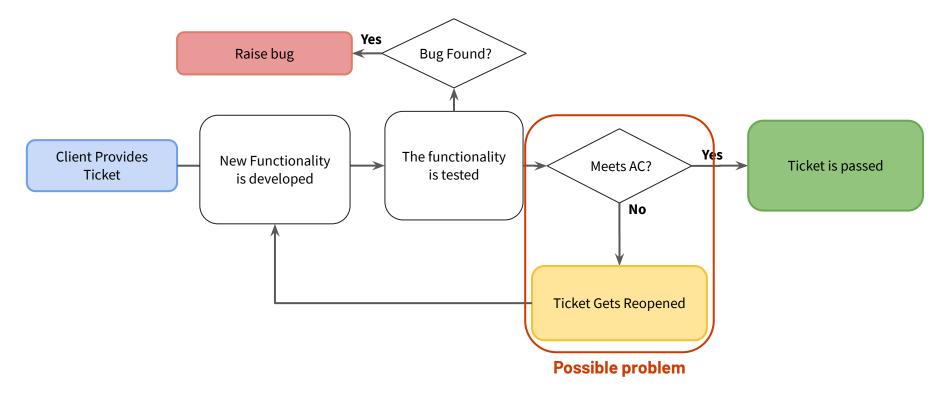








PROCESS



POSSIBLE METRICS

Not the only ones.

- Number of Bugs found
- Number of reopened tickets



POSSIBLE METRICS

Not the only ones.

- Number of Bugs found
- Number of reopened tickets
 Ratio of Reopened Issues

Count tickets that were opened more than once



TAKING CARE OF METRICS

What to do once you have them



CATEGORIZATION

Develop the range.

- Tolerable values
- Estimated values
- Initial Value



METRICS NEED TO BE TRACKED





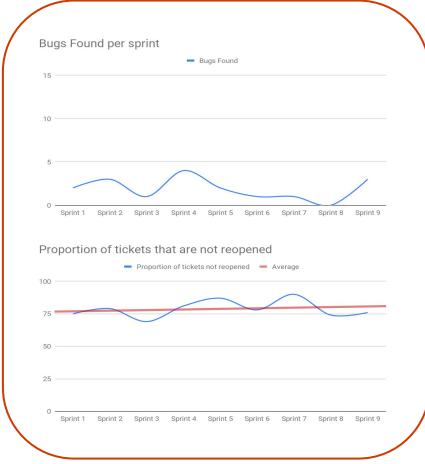
BACK TO THE EXAMPLE!



CONTEXT

So far:

- Agile
- Tracking Bugs found
- Tracking reopenings





WORK ON EFFICIENCY

Reduce the Reopening.

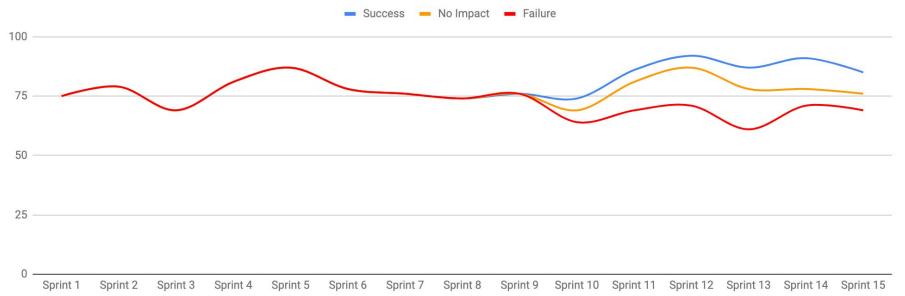
- Possible causes:
 - Code quality
 - Requirement gathering
 - Ticket Writing





PROPOSING BACKLOG GROOMING SESSIONS

Impact on reopened proportion





PRIMARY AND SECONDARY METRICS

Just one more thing!



PRIMARY METRICS: KEY FACTORS.

The ones we've talked about so far!

- Accurately describes the desired condition
- Time lag should be minimum
- Not open to manipulation



WHAT IS A SECONDARY METRIC?

Measures what must NOT be broken.

- Holistic Picture
- Problem Shifting



LAST TIME VISITING THE EXAMPLE!



CONTEXT

- Change Successful: 76% to 81%
- Secondary Metric: Velocity





WHAT HAPPENED TO THE SECONDARY METRIC?





HOW METRICS?

Reasonable Answer.

- Effort
- Patience
- Analysis





DO I EVEN NEED THEM?



MATURITY

A diverse working environment.

- Different Project types
- Multiple Technologies
- Lot of Job Cycling
- Morphing team structure



NO INFORMATION

Can't successfully interpret data.

- No Reporting
- No ticketing system
- No meetings





NO PROCESS INSTABILITY

Metrics help understand processes.



NO PROCESS NO METRICS





NOW METRICS ARE THE MOST USEFUL TOOL FOR HIGH MANAGEMENT

Do I even need them?



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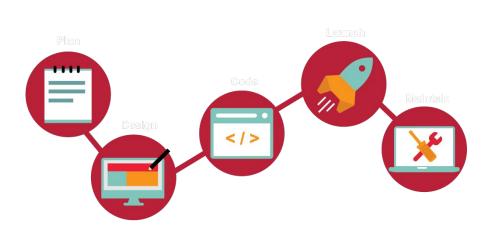
Do I even need them **RIGHT NOW**?



CONCLUSION



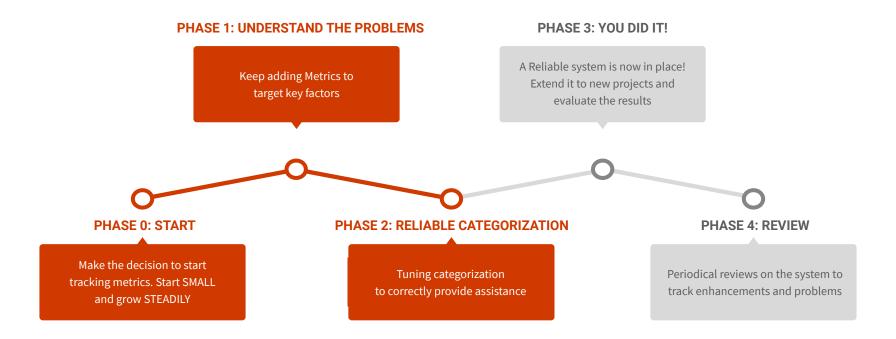
METRICS







HOW DO YOU GET THERE?



HOPEFULLY NOW METRICS HAVE MEANING!









Thank You Gracias Merci Danke 谢谢 ありがとう

