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 **AVALIA**

Beyond dashboards: on the many facets of metrics and feedback in agile organizations

Olivier Liechti, Jacques Pasquier & Rodney Reis

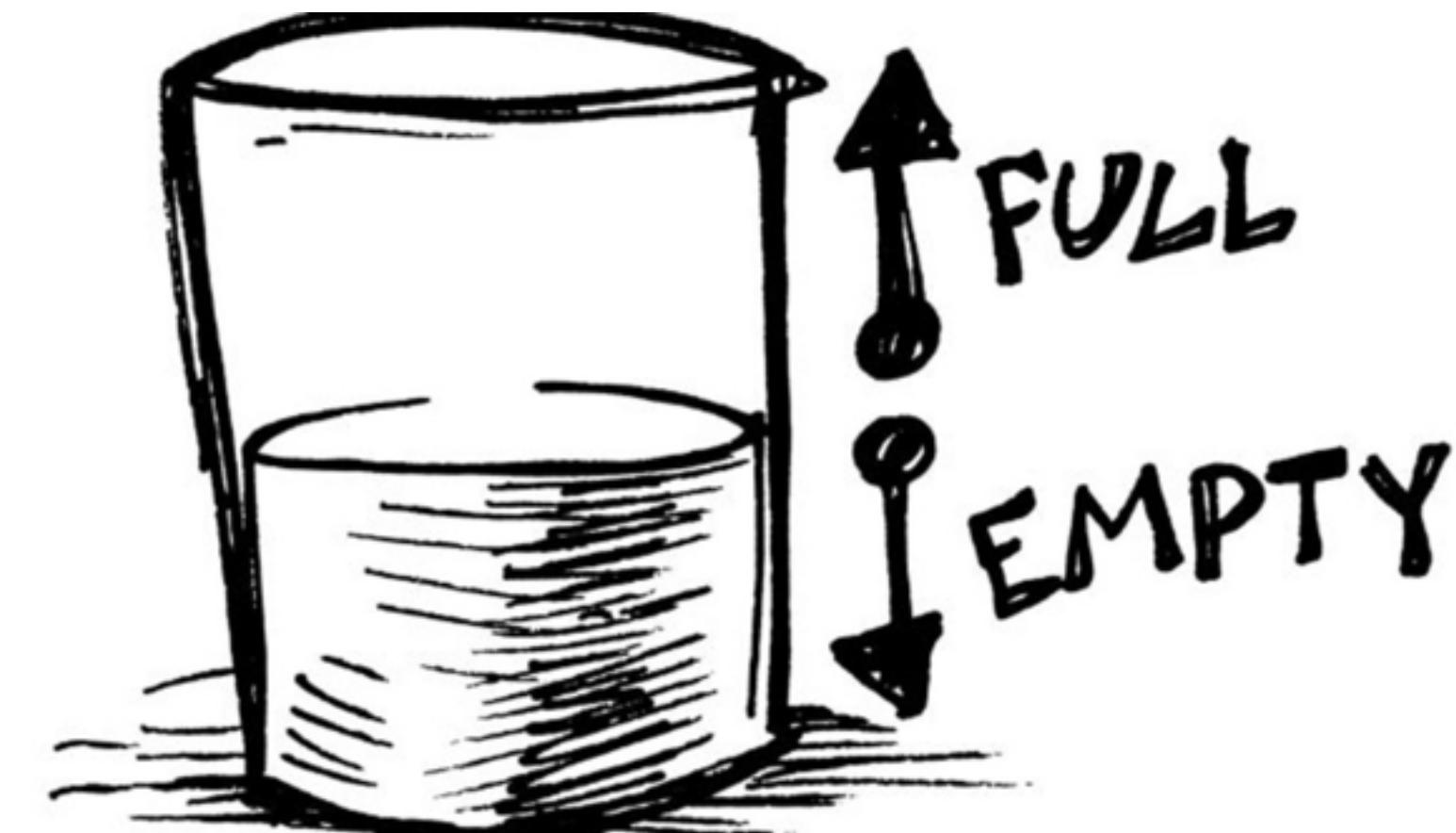
AST 2017



Supporting Agile Teams with a Test Analytics Platform: a Case Study

Olivier Liechti, Jacques Pasquier & Rodney Reis

.metrics





BIG BROTHER



**IS WATCHING
YOU**

are we really agile (yet)?

Setting directions

What do we measure and why?

Who sets the goals?

Who formulates the questions?

Who decides what to measure?

How do we provide feedback to people?

Who sees the data, and how?

Who interprets the data?

How do people talk and act?

.case #1

- **Team:** mobile startup, 30 employees
- **Problem:** quality & insufficient testing
- **Approach:** participative, **awareness + dashboards**

Definition

改善

Test analytics

Analytics on test-related data in order to give actionable insights about product quality and agile practices, with the goal to support a continuous improvement process.

- Continuous improvement
- Feedback mechanisms
- Automated testing

about Lotaris

Company founded in South-Africa in 2007 and relocated in Switzerland since 2008. Headquarters (incl. engineering) located in Yverdon-les-Bains, Switzerland. Offices in Singapore, Japan and the United States. About 30 employees.



Follow your users

Find out how the Lotaris platform helps you to deliver the experience your mobile users want.

Solutions overview

USA

Lotaris Inc.
555 California Street
Suite 4925
San Francisco, CA 94104
USA
[Tel: +1 415 659 1532](tel:+14156591532)

[Map](#)**Japan**

Lotaris KK
Aoyama Suzuki Glass Bldg. 7F
3-5-14 Kitaayama
Minato-Ku
107-0061 Tokyo
Japan

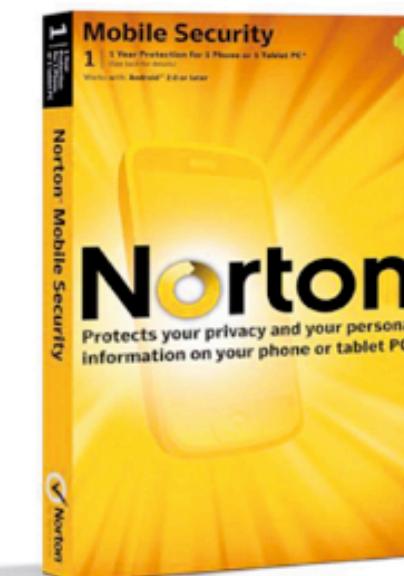
Switzerland

Lotaris SA
Rue Galilée 6
1400 Yverdon-les-Bains
[Tel: +41 24 420 78 35](tel:+41244207835)

[Map](#)**Singapore**

Lotaris Pte. Ltd
Level 31, 6 Battery Road
Raffles Place
049909 Singapore
Singapore
[Tel: +65 6725 6254](tel:+6567256254)

case study - symantec



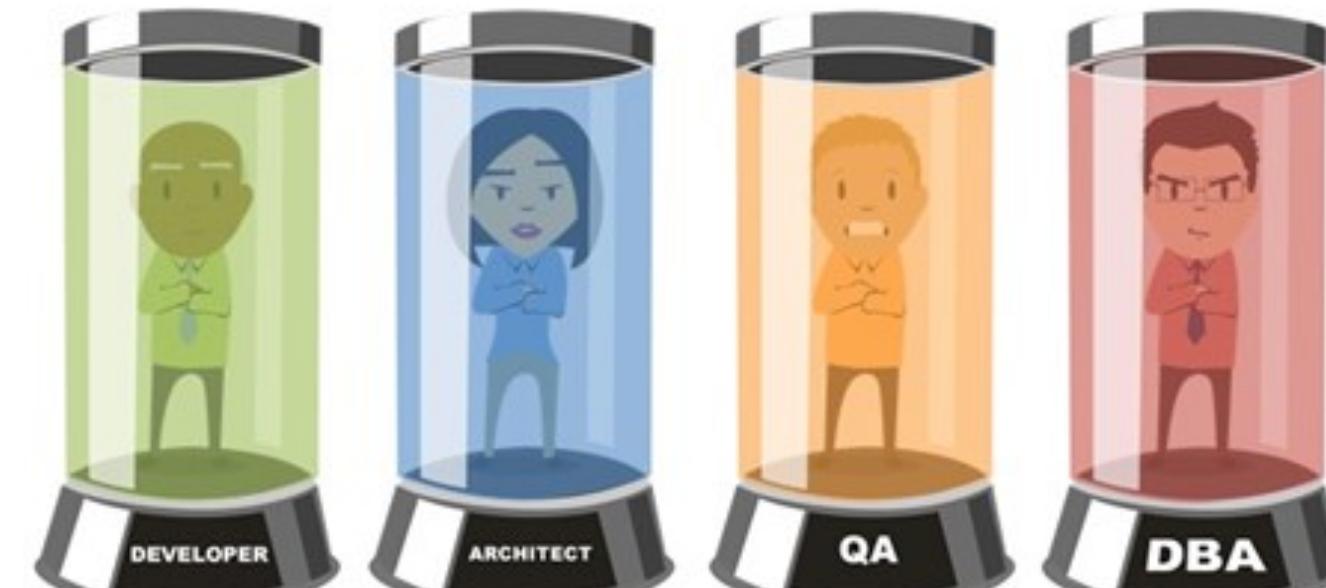
Technical debt

- Hard to get rid of pre-MVP habits
- Negative perceptions about testing
- Degradation of quality

Organizational debt

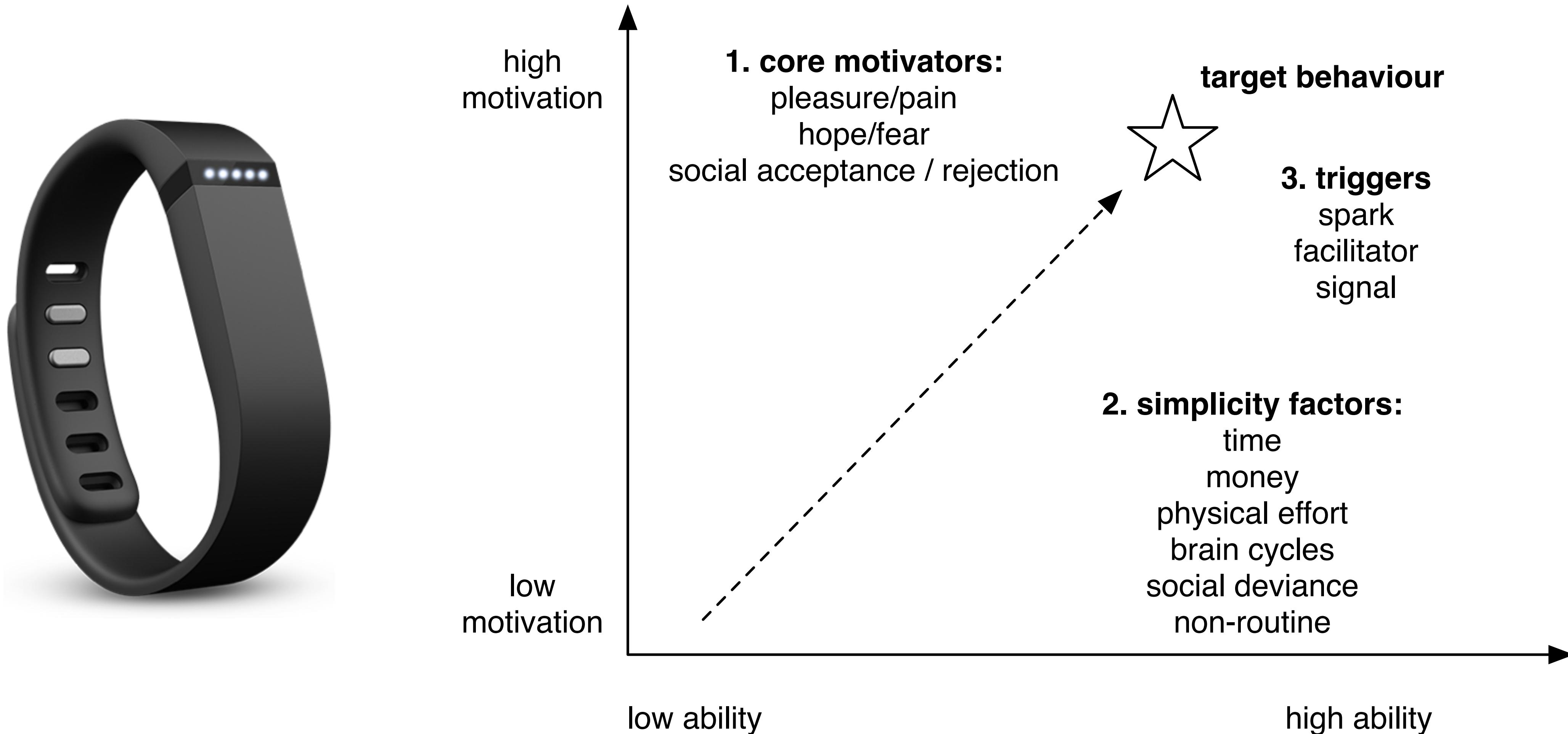
- Silos “by design”
- Cultural mismatch
- Lack of ownership

2008 2009 2010 2011 2012 2013 2014

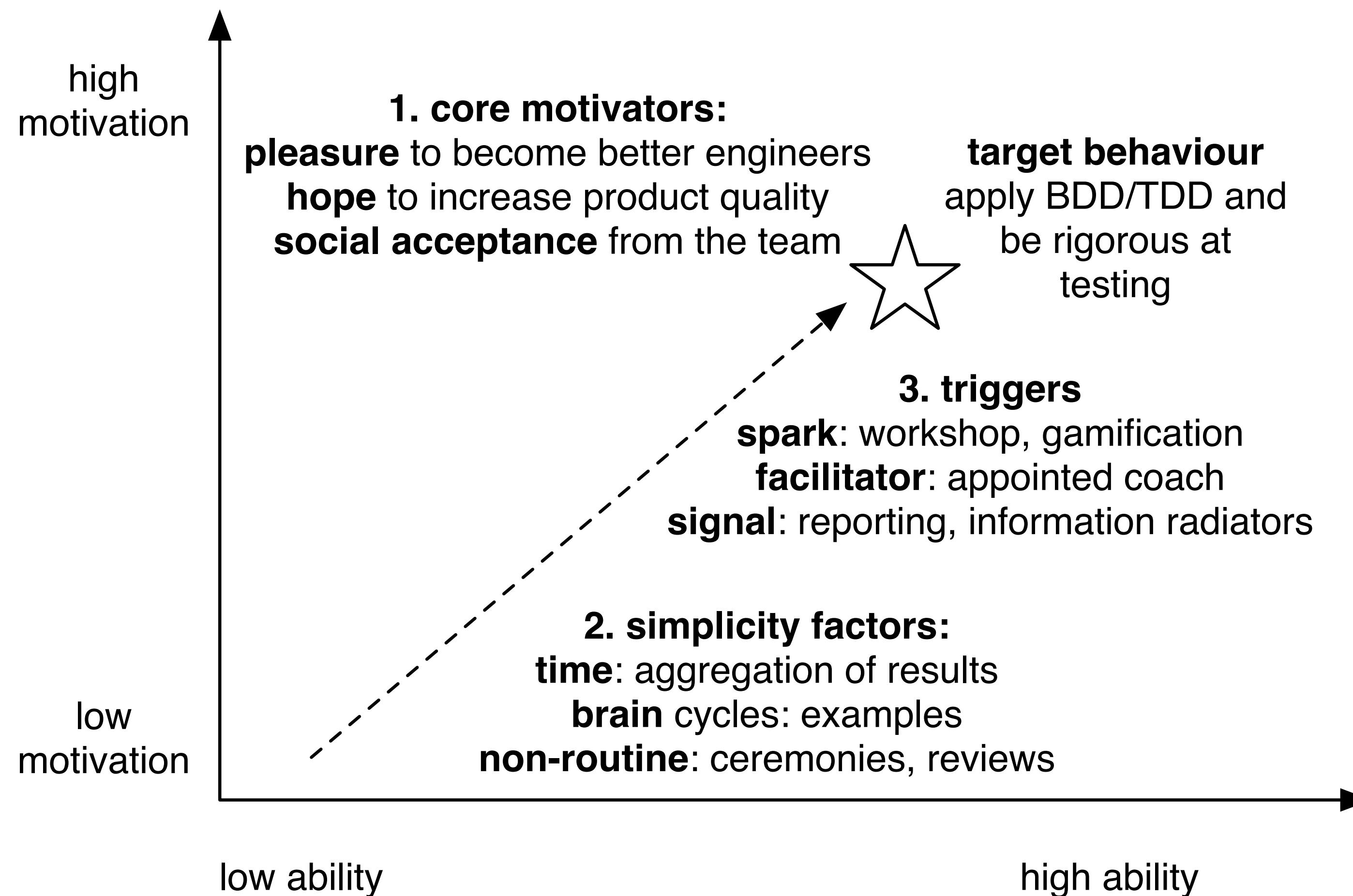


.behaviour

The Fogg Behavior Model



Testing has to become a habit for the whole team



Goal:

Improve quality with systematic TDD & BDD

Questions:

Do we write more tests?

Is team collaboration improving?

Is it faster/easier to release?

Metrics:

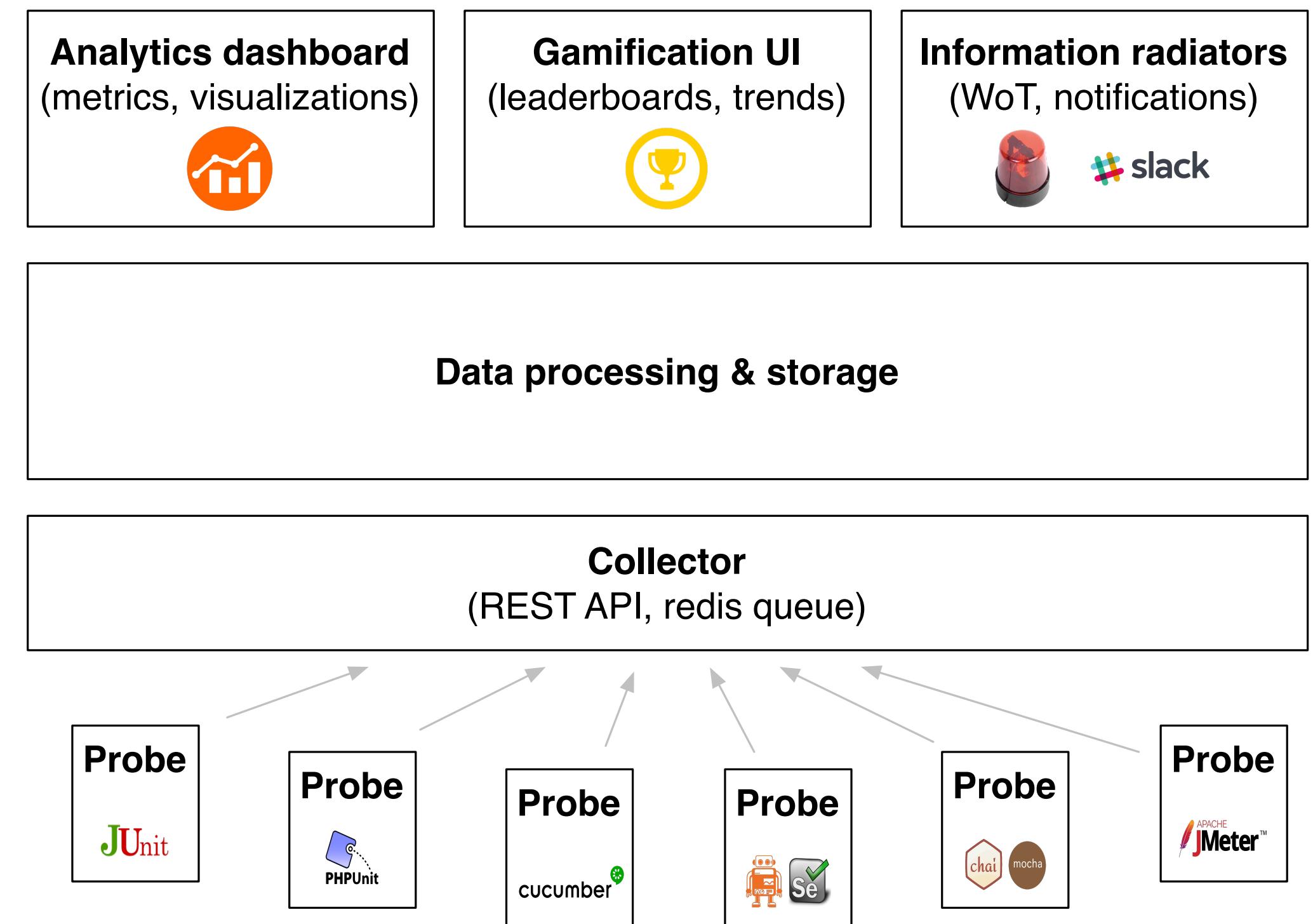
Size of the test suite

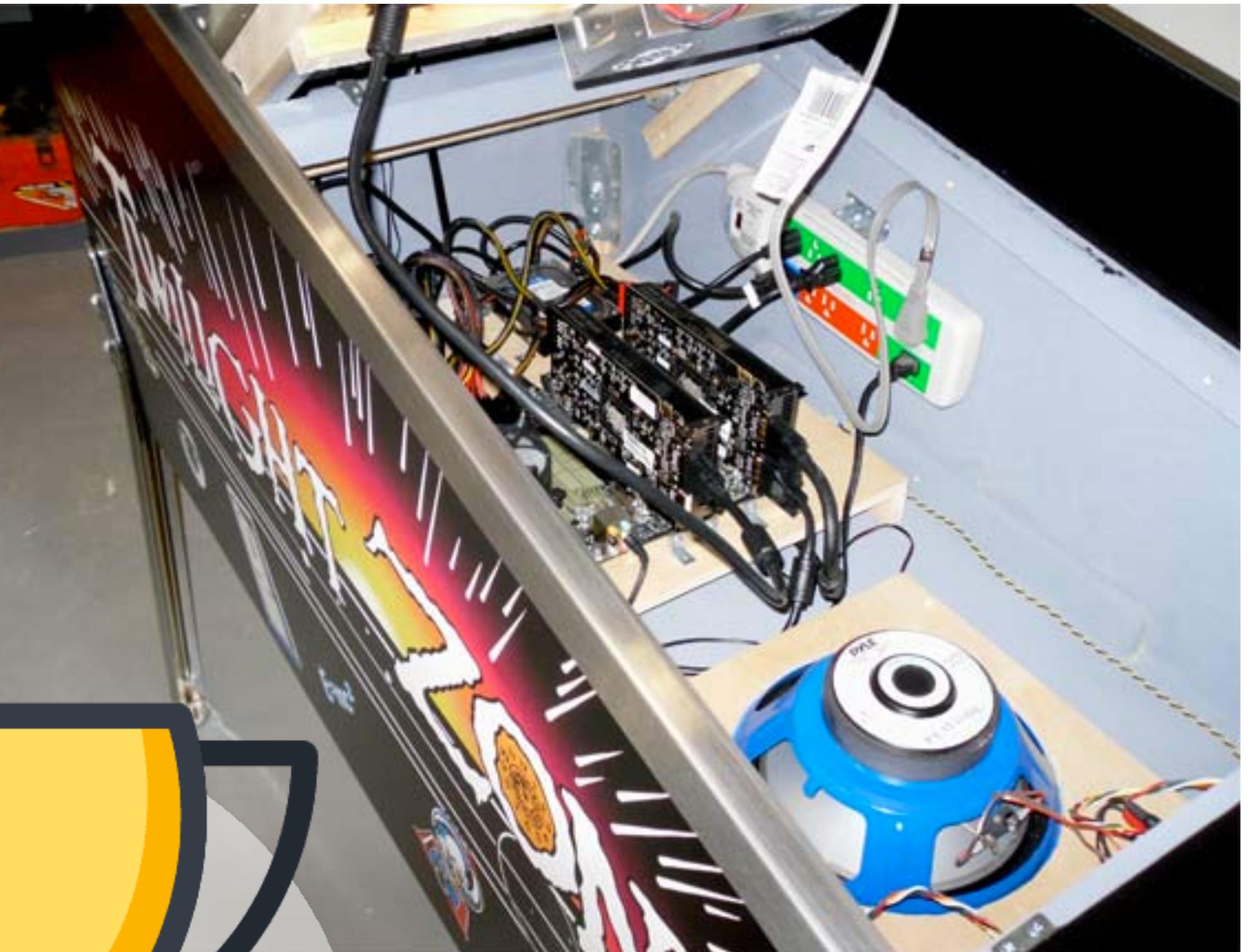
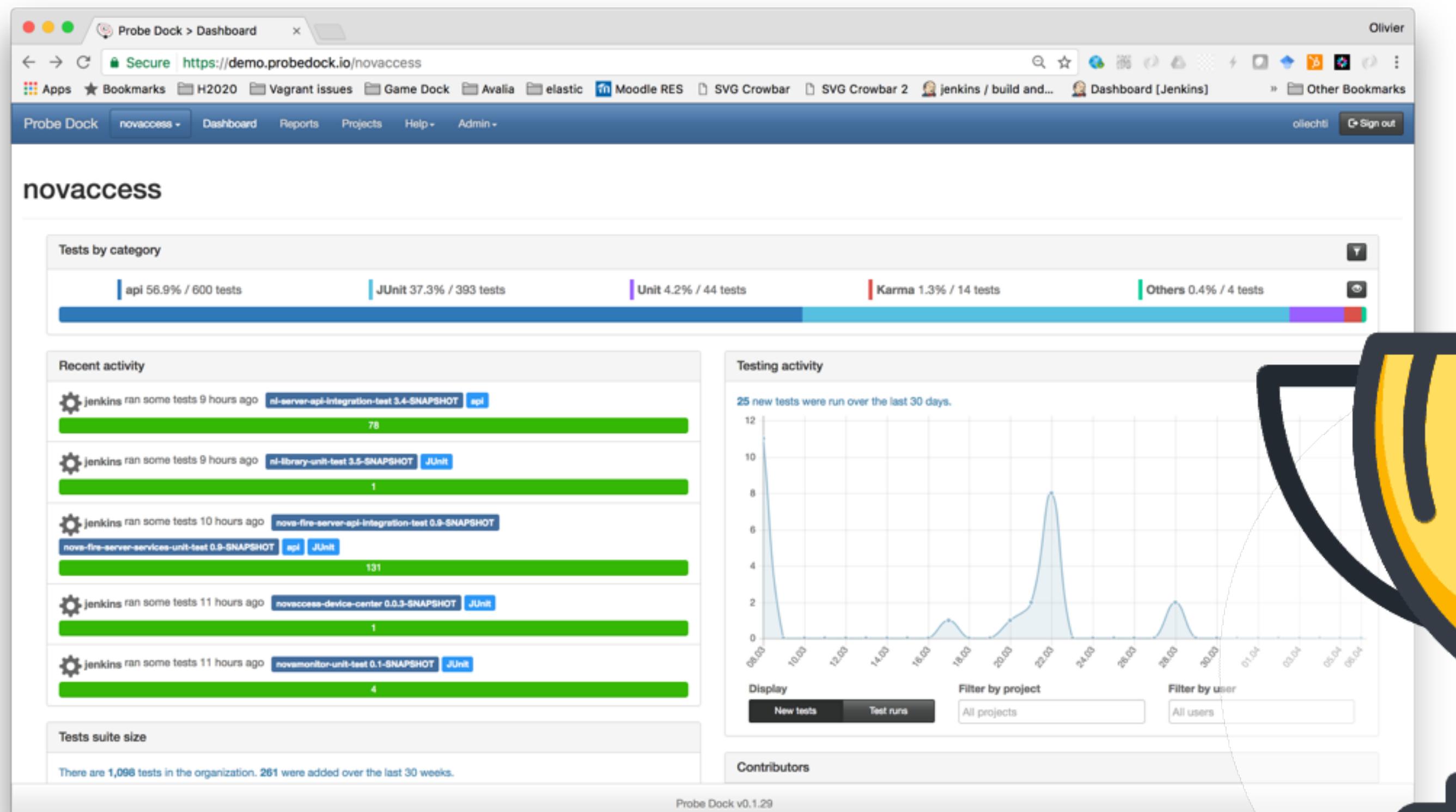
Size of the test suite per category

Top contributors

Number of BDD tests

Number of successful live demos





Probe Dock X

GitHub, Inc. [US] https://github.com/probedock Olivier

Apps Bookmarks H2020 Vagrant issues Game Dock Avalia elastic Moodle RES SVG Crowbar SVG Crowbar 2 jenkins / build and... Other Bookmarks

This organization Search Pull requests Issues Gist

Probe Dock <http://probedock.io>

Repositories People 3 Teams 1 Projects 0 Settings

Search repositories... Type: All Language: All Customize pinned repositories New

probedock-ci
Probe Dock Jenkins based deployment
Groovy ★ 1 Updated on Dec 1, 2016

probedock-sensu
Monitoring solution for VM running Probe Dock on Docker
Ruby ★ 1 Updated on Dec 1, 2016

infra-utils
Utilities for the infrastructure where Probe Dock is hosted
Shell Updated on Nov 23, 2016

Top languages Java JavaScript Ruby Python CSS

People 3 >

AlphaHydrae Simon Oulevay

Prevole Laurent Prévost

wasadigi Olivier Liechti

Learnings

Did it work?

- The **mindset** has changed
- The **quality** has improved
- The **morale** has improved
- **Gamification** was an effective trigger
- The **aggregation** of results is very valuable
- **Awareness** channels are effective
- There is still a lot of hidden information and value!

.case #2

- **Team:** established tech company
- **Problem:** org. scalability & culture
- **Approach:** archeology, discussion, **story telling**

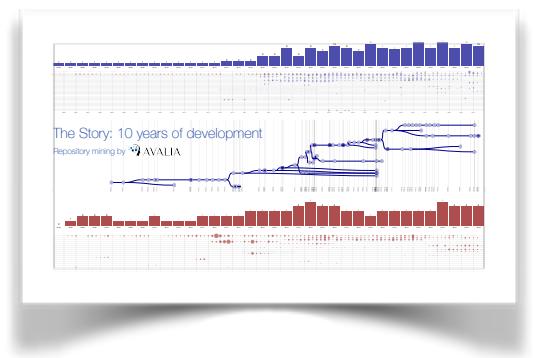
Goal:

Understand if the team is “getting slower”?
If so, are there positive aspects?



Questions:

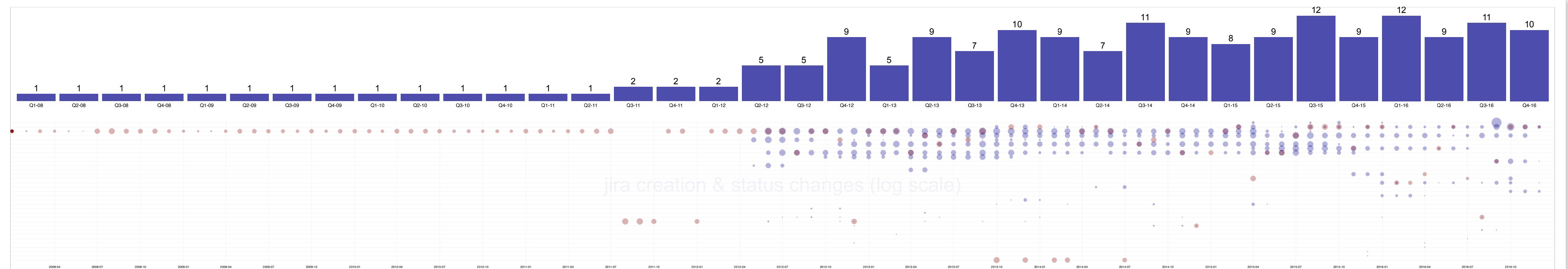
How much functionality did we deliver over iterations?
How has quality evolved?
How has the team structure evolved?



Metrics:

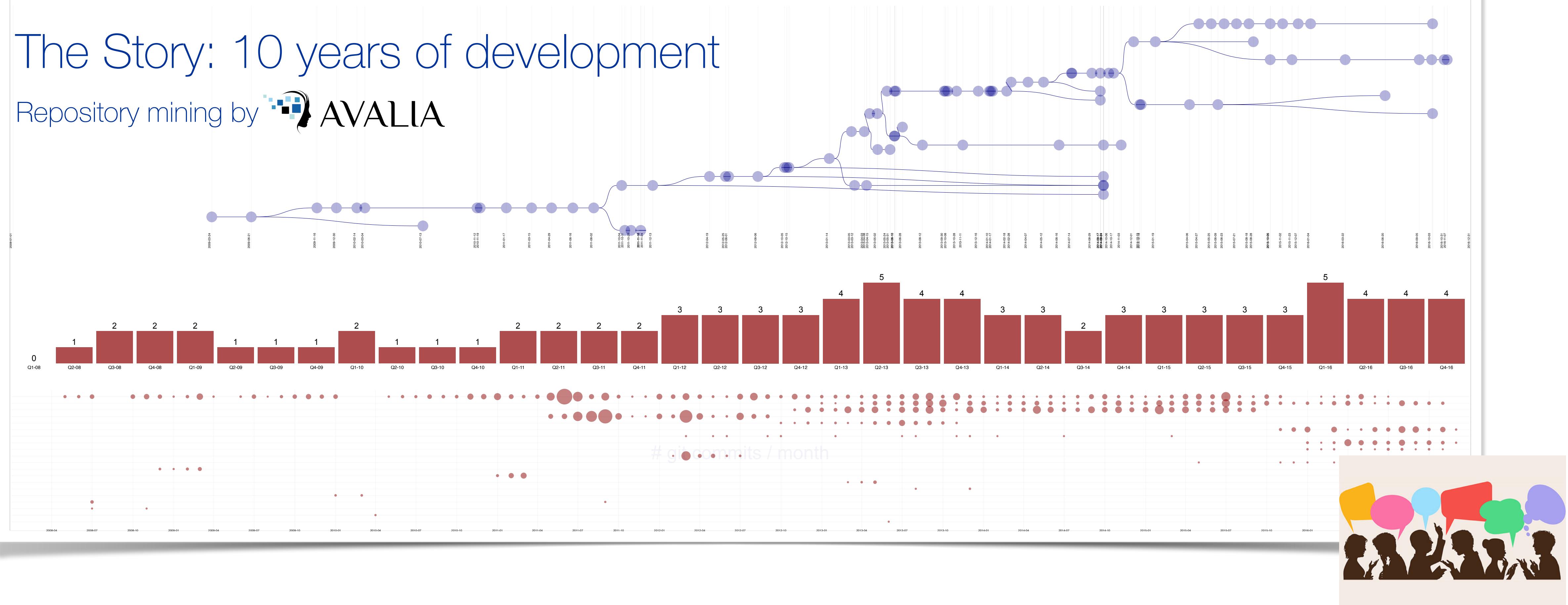
Number/size of commits over time
Number/size of stories over time
Number/size of bugs over time
Number of open issues over time
Cycle time
Release dates





The Story: 10 years of development

Repository mining by  AVALLA



.motivate teams

Metrics & motivation

- 1 Autonomy**
- 2 Mastery**
- 3 Purpose**

Metrics & motivation

1

Autonomy

Metrics are not imposed by “management” to evaluate people with an **obscure dashboard**.

The data-driven process is designed by the team, for the team.

Playfulness helps.

Metrics & motivation

2

Mastery

Metrics are key to measure individual and team **progress**.

Continuous, **ambient** reminders are energising and create shared context.

Analytics **dashboard become an introspection tool**, instead of a supervision tool.

Metrics & motivation

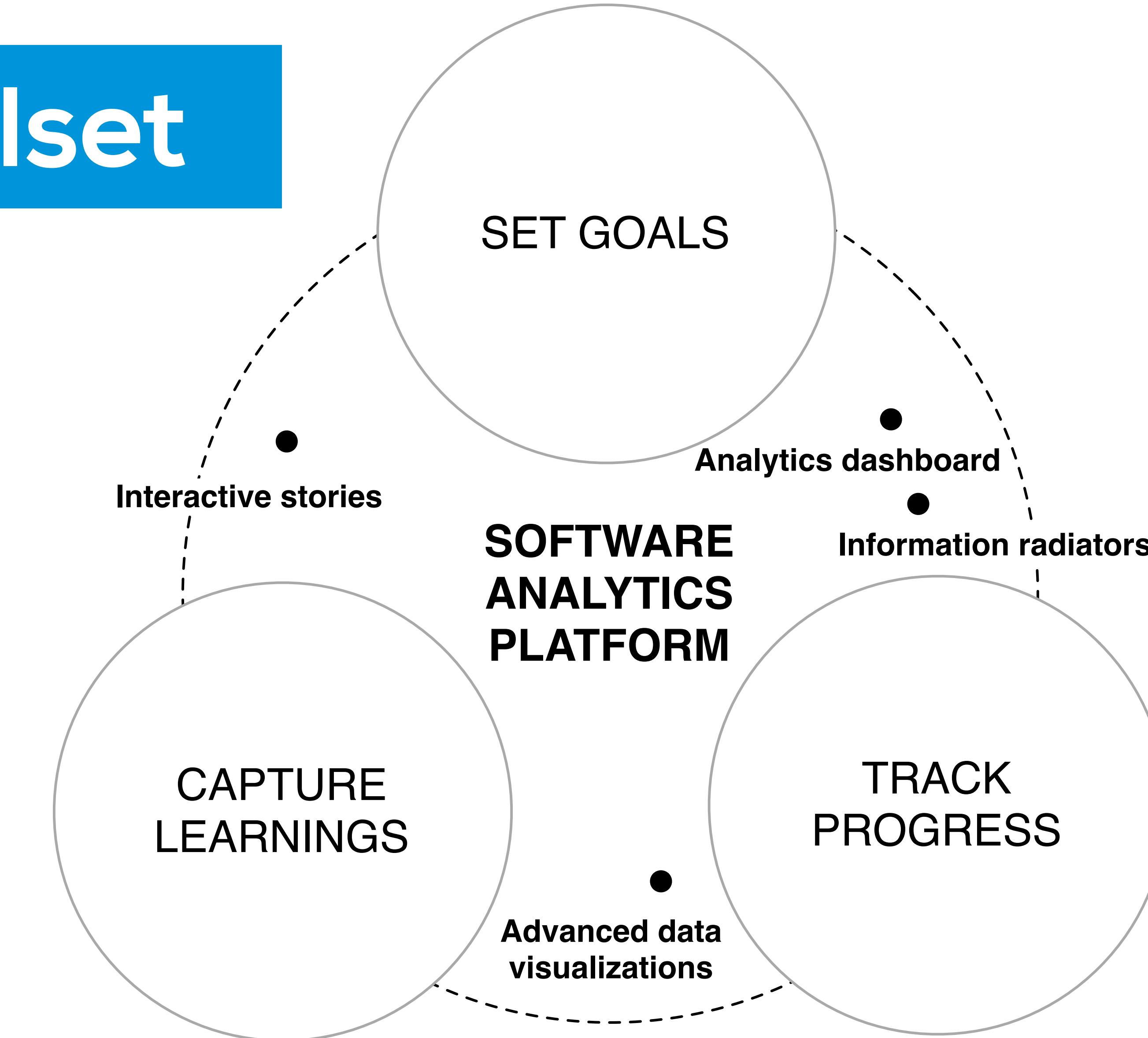
3

Purpose

Deeper analysis and interpretation allows people to understand the impact of their actions.

Experience can be shared through interactive stories.

Unified toolset



.demo