

**STAR** **CANADA**

A TECHWELL EVENT

**W10**

AI and Data Analytics

Wednesday, October 17th, 2018 1:30 PM

# Use BDD and Product Analytics to Change Your Vision of Quality

Presented by:

**Laurent Py and Vincent Pretre**  
**Hiptest**

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## **Laurent Py**

With more than fifteen years of experience as a developer and product manager, Laurent Py is now product manager at Hiptest, a continuous testing platform dedicated to agile and DevOps teams. Hiptest helps product owners, developers, and testers collaborate to build the right product faster.

## **Vincent Pretre**

Vincent Pretre is a cofounder of Hiptest with more than ten years of software experience. He is specialized in web development and is also the creator and main contributor of the open source framework Hiptest-Publisher. He has been a speaker at several conferences around the world to share his experience about testing and behavior-driven development.



**Hiptest**

**SMARTBEAR**

**Go beyond checking with  
BDD and product analytics**

# Presented by



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# Webinar Agenda

- Testing in DevOps
- Step 1: Testing the idea
- Step 2: Testing the code
- Step 3 : Testing in production
- Step 4 : Let's iterate
- Conclusion

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# Testing in DevOps

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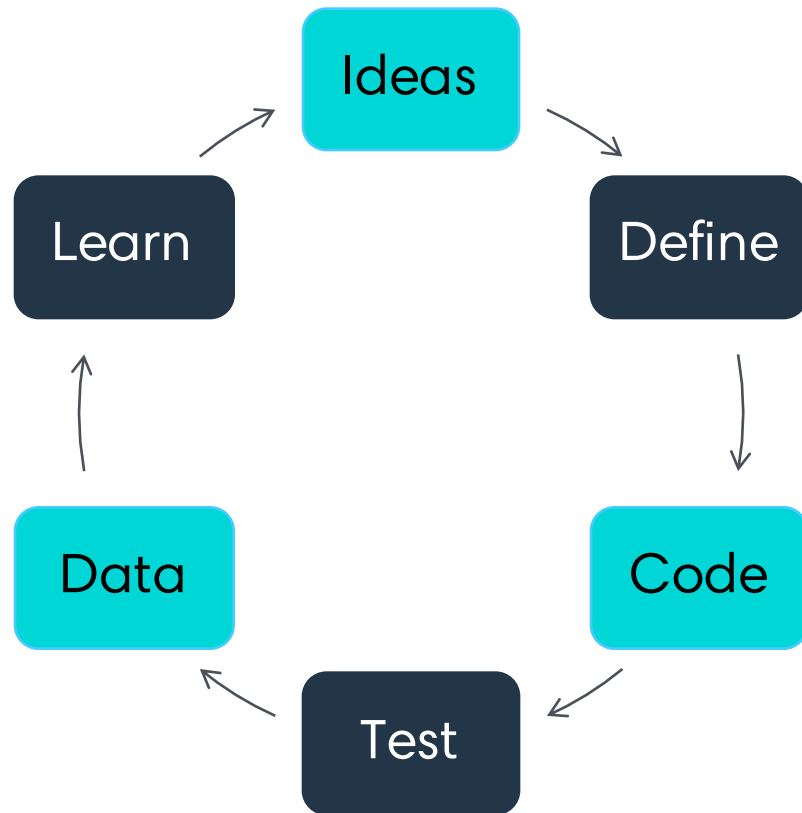
# DevOps: Biggest opportunity?



**SPEED!**

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# DevOps: Biggest opportunity?



Minimize total time through the loop.

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# Testing in DevOps

1. Which value do we want to deliver?
2. Is the feature's implementation aligned with that?
3. Does the feature have a real impact on the end user?
4. Is the UX great and what's the feature usage in time ?

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# Step 1 : Testing the idea

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# Why?



Challenge business assumptions

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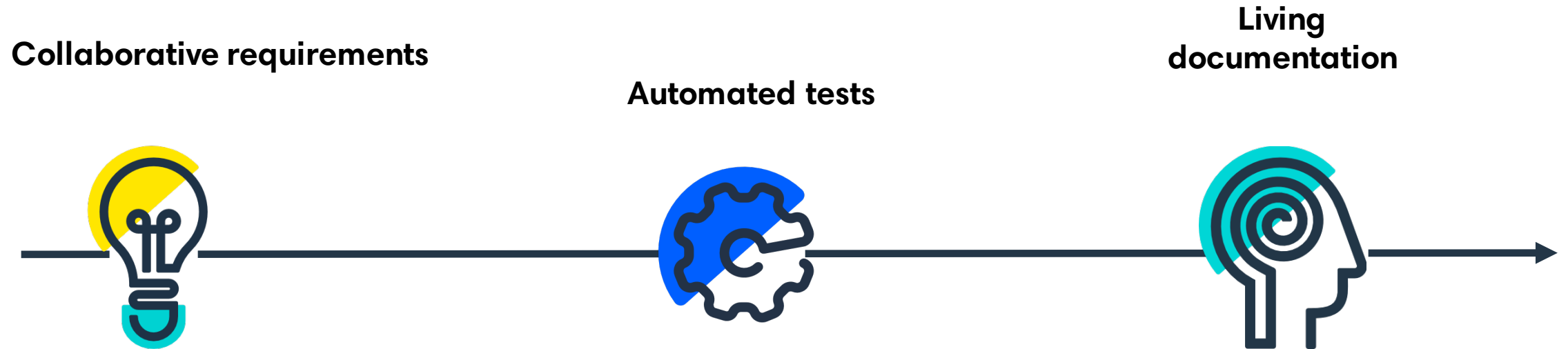
# Which value do we want to deliver?

- Use personae to create intimacy between users and the team
- Define business assumptions
- Behavior Driven Development (BDD) to capture the behavior



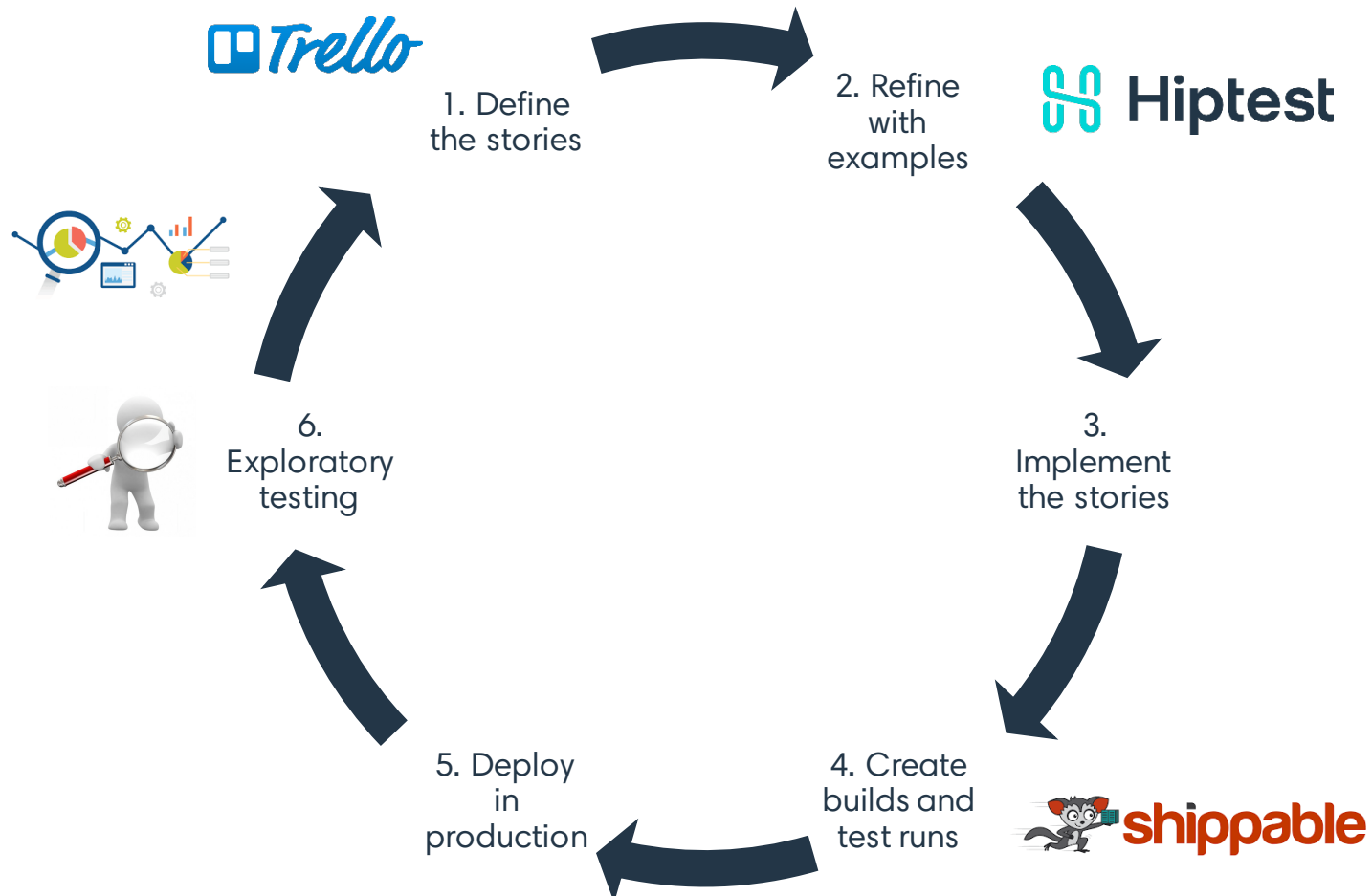
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# What's BDD?



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# Testing process at Hiptest



# BDD – Capture the behavior

The screenshot displays a BDD tool interface with a dark sidebar on the left and a main content area on the right. The sidebar contains a navigation menu with sections: DEFINE (Scenarios, Action words, Metrics), TEST (Test runs, Automation), and LEARN (Living documentation, Project settings). The main content area shows a feature tree for 'Coffee machine - Hiptest pu...' with a search bar and a list of features. The 'Beans' feature is selected and expanded, showing its content in a detailed view.

**Beans**

As a coffee lover  
I have to put fresh beans from time to time  
So I can have coffee when I need it

Feature content | History | Usage

**Background**

**Given** the coffee machine has been started  
**And** I handle everything except the beans

**Message "Fill beans" is displayed after 38 coffees are taken**

priority: high

**When** I take 38 coffees  
**Then** message Fill beans should be displayed

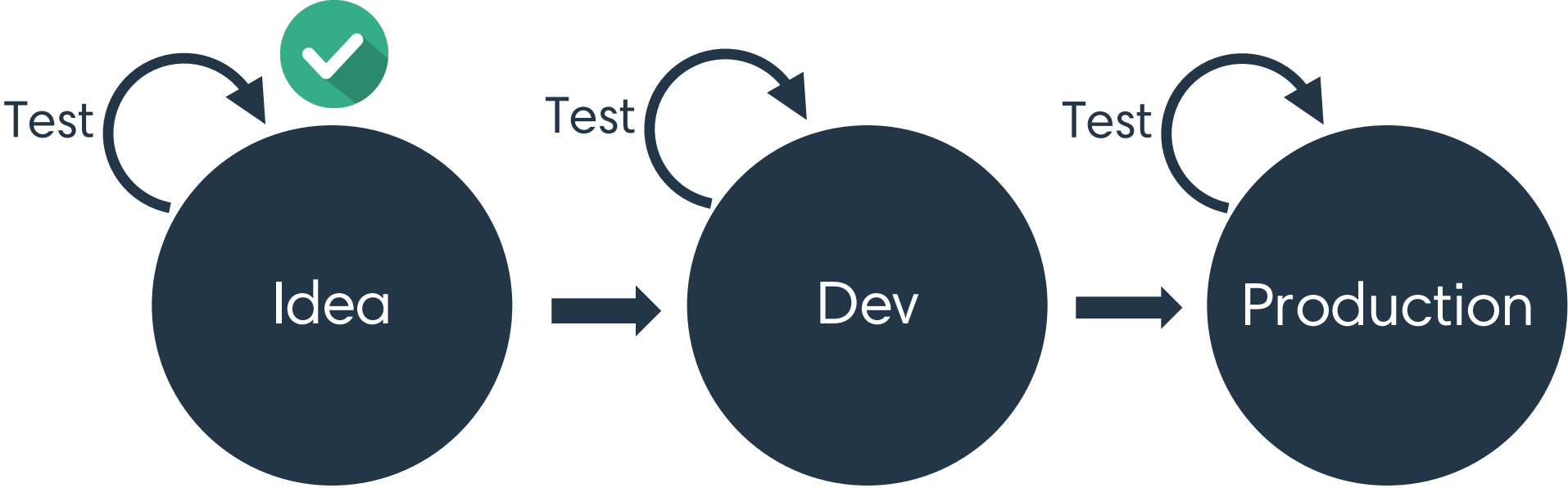
**It is possible to take 40 coffees before there is really no more beans**

priority: low

**When** I take 40 coffees

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# Continuous testing



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# Step 2 : Testing the code

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# Development

1. In step 1 we have created a shared understanding of the feature
2. The dev' team can develop a first increment of the feature
3. Integration to CI/CD pipeline

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# Automation

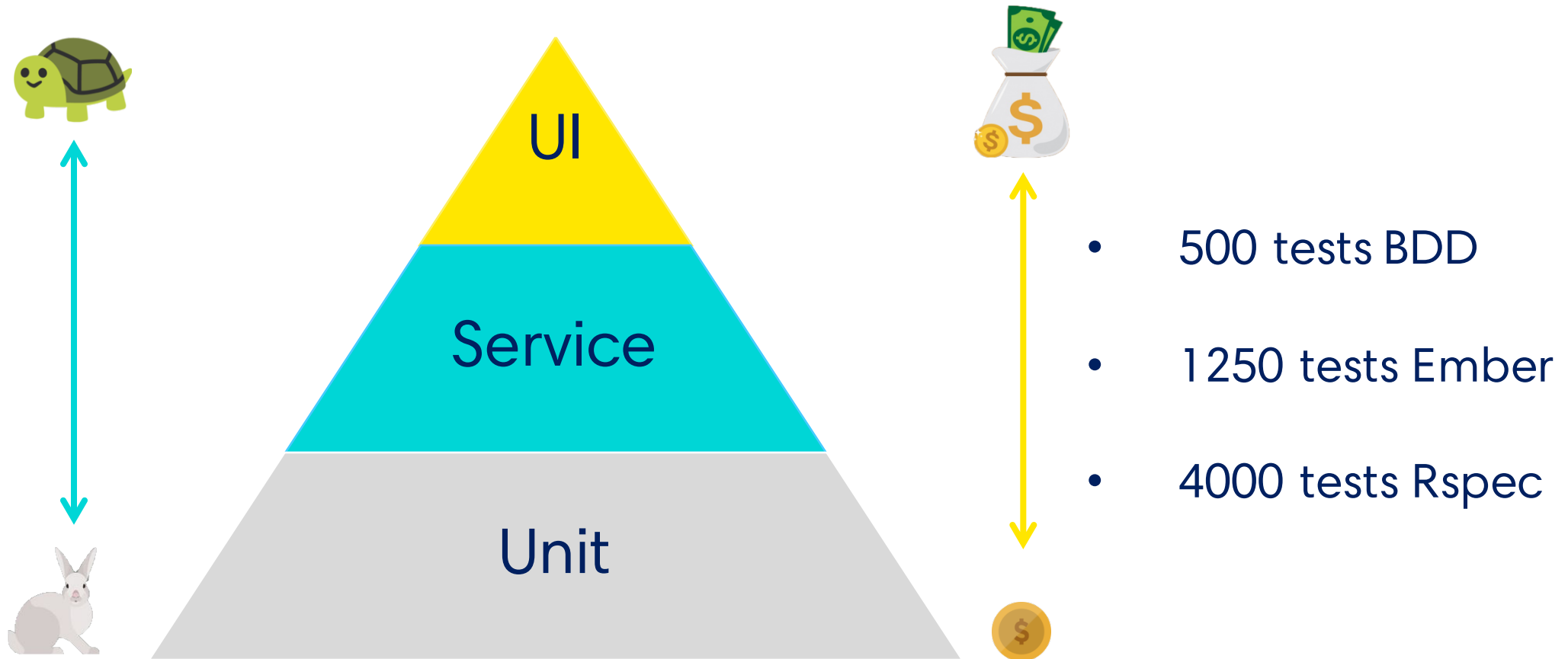
**100%** of our checks (scenarios) are automated

And, it's **expensive!**



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# Our automated tests

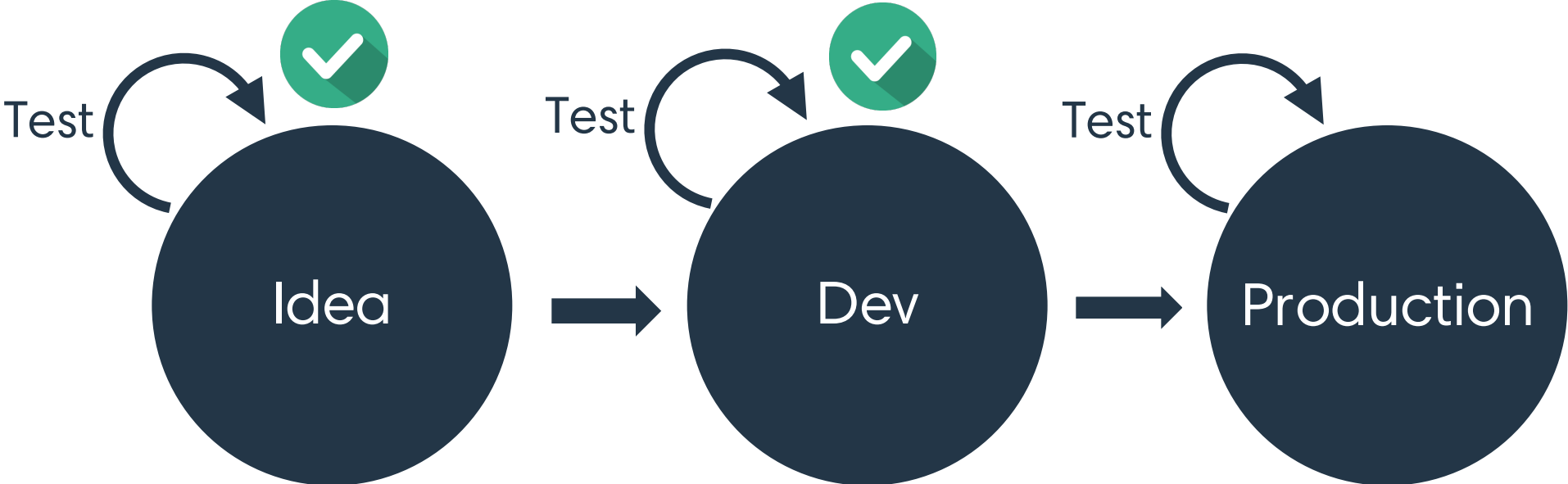


Credit to Martin Fowler



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# Continuous testing



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# Step 3 : Testing in production

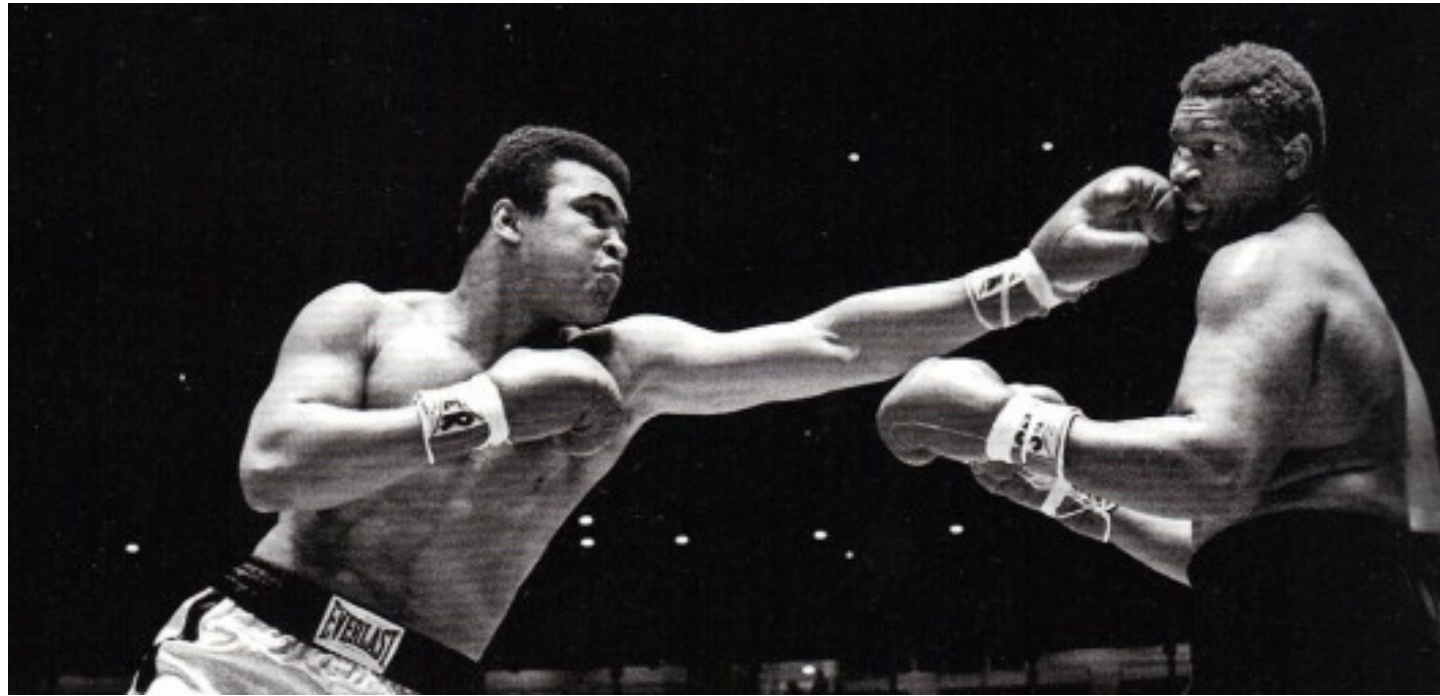
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# Making the feature available

1. In Step 2 we have validated the implementation
2. The feature is rolled out using a switch (GA or progressive)

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# The match



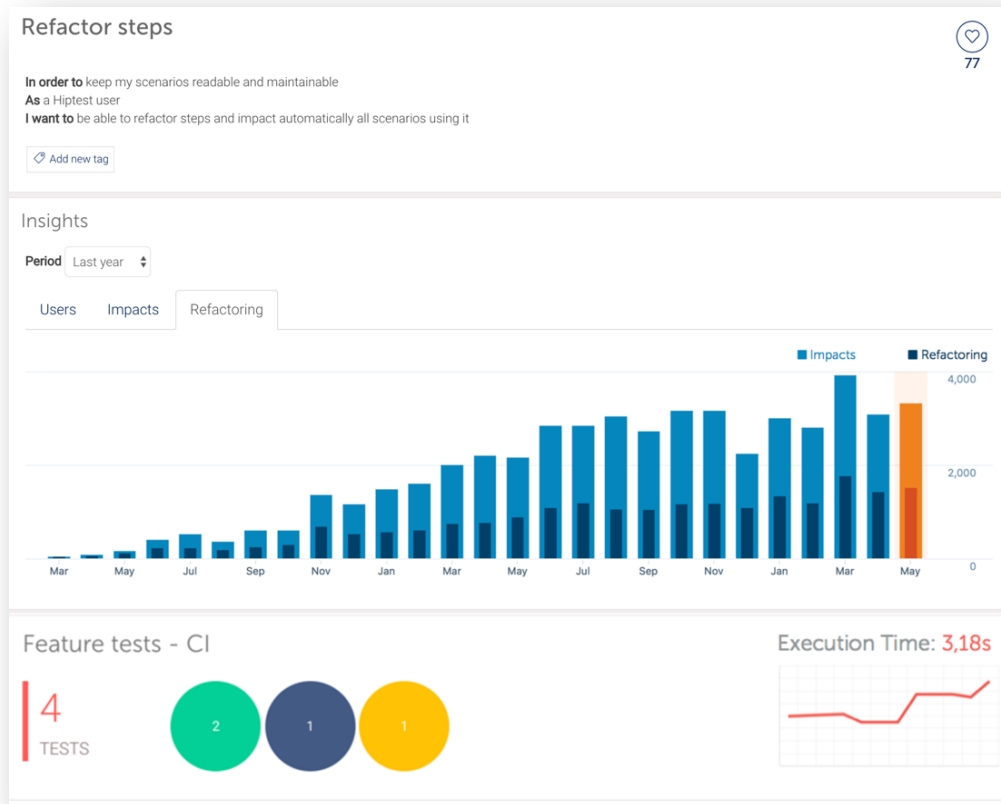
Correctness VS Availability

# Application performance management



*Appsignal, Pingdom, Scalingo & Logmatic/Datadog*

# Measure usage continuously



- Measure usage
- Measure impact

# Living Documentation & Product analytics

Feature content History Usage

## Background

**Given** the coffee machine has been started  
**And** I handle everything except the beans

## Message "Fill beans" is displayed after 38 coffees are taken

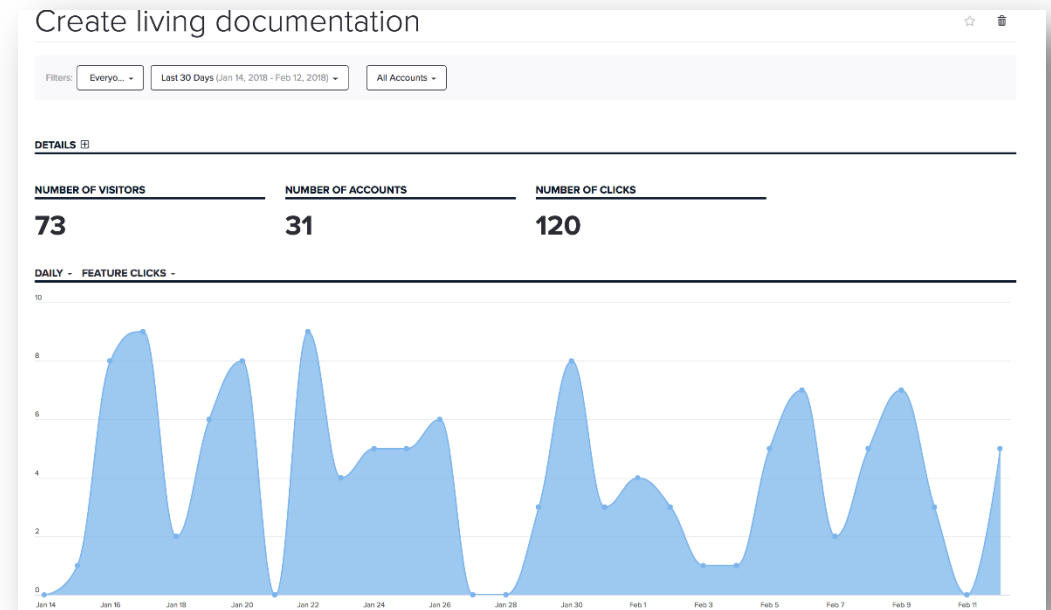
priority: high

**When** I take 38 coffees  
**Then** message Fill beans should be displayed

## It is possible to take 40 coffees before there is really no more beans

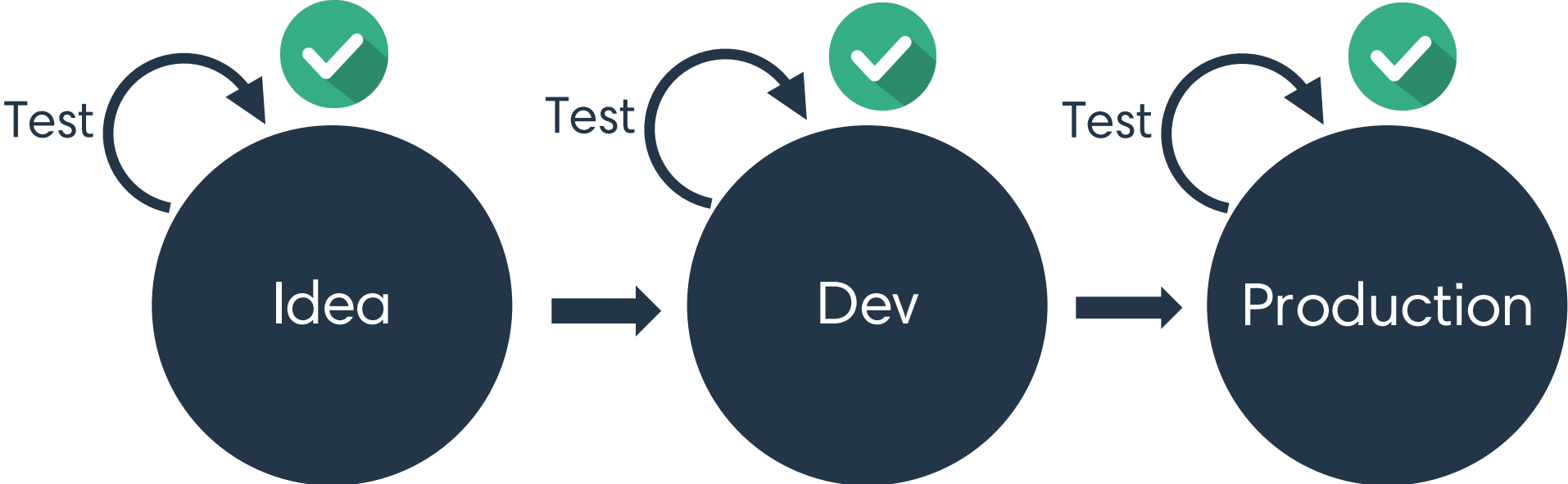
priority: low

**When** I take 40 coffees  
**Then** coffee should be served  
**When** I take a coffee  
**Then** coffee should not be served  
**And** message Missing beans should be displayed



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# Continuous testing





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# Step 4 : Let's iterate

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# Let's iterate

1. In step 3 we have measured the impact
2. The feature can be removed (with the tests), enhanced or validated
3. Go to step 1



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# Conclusion

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# Benefits of testing in DevOps



- 1 Test value first
- 2 Incremental investment in quality
- 3 Context suitable to experiments

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**And remember...**



**The biggest risk is  
making something that nobody want**

# Thank you!



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