Xebia

Software Development Done Right

Seminar: The Missing Link in Agile Transitions

March 23rd, 2017 @ Hilversum

Programme for Today

- 16.00: Welcome
- 16.30: Introduction
- 16.40: Successful product creation by Jorrit van der Laan of Quby
- 17.40: Network dinner in Grand Café
- 18.30: Agile Product Management by Chris Lukassen
- 19.30: Shortening time-to-market by Viktor Clerc
- 20.15: Drinks & Networking in Grand Café

Xebia

Software Development Done Right

Shortening Time to Market

Using Instant Feedback

Seminar “The Missing Link in Agile Transitions”

Viktor Clerc, Xebia Quality and Test Automation

March 23rd, 2017

So, Who Am I?

- Viktor Clerc
  - Background in Computer Science (MSc, PhD) at VU University
  - Traversed through all phases and activities of the software delivery lifecycle
  - Aimed at refurbishing the innovation lifecycle
  - Heads Xebia's Quality and Test Automation team

in https://www.linkedin.com/in/clerc/

@viktorclerc

What's up?

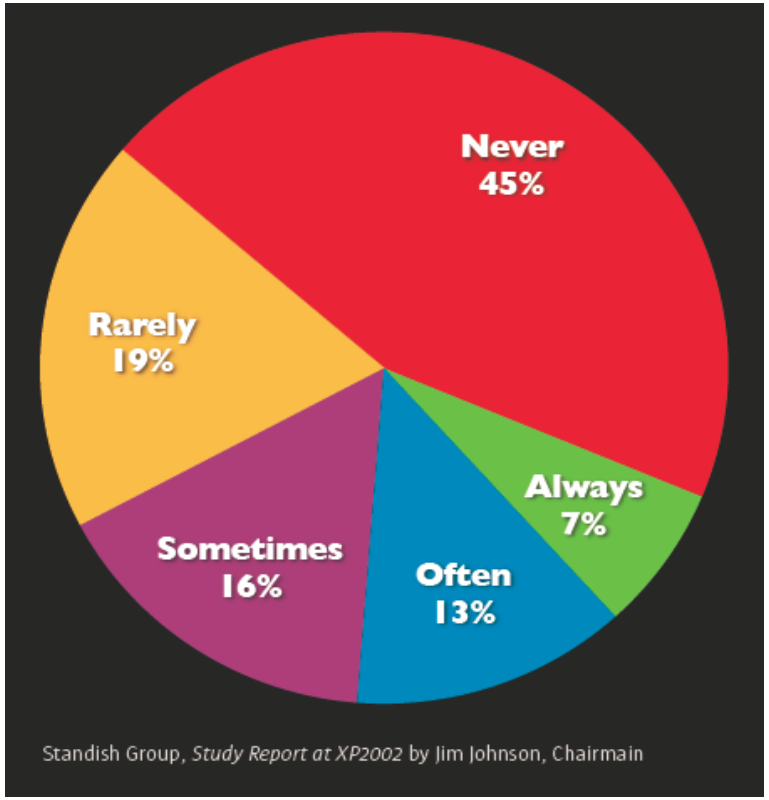
Reality

THE PROBLEM

45% of the features are NEVER used

Only 20% of the features are used

ALWAYS or OFTEN



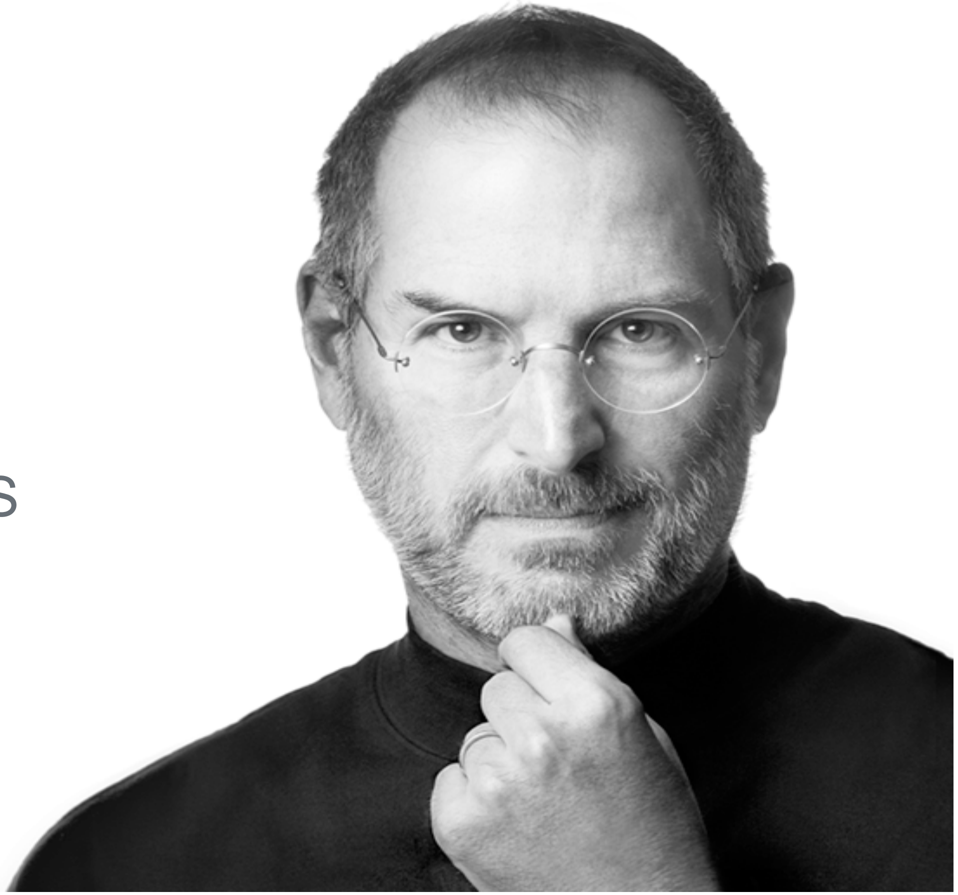
Standish Group, *Study Report at XP2002* by Jim Johnson, Chairmain

Xebia

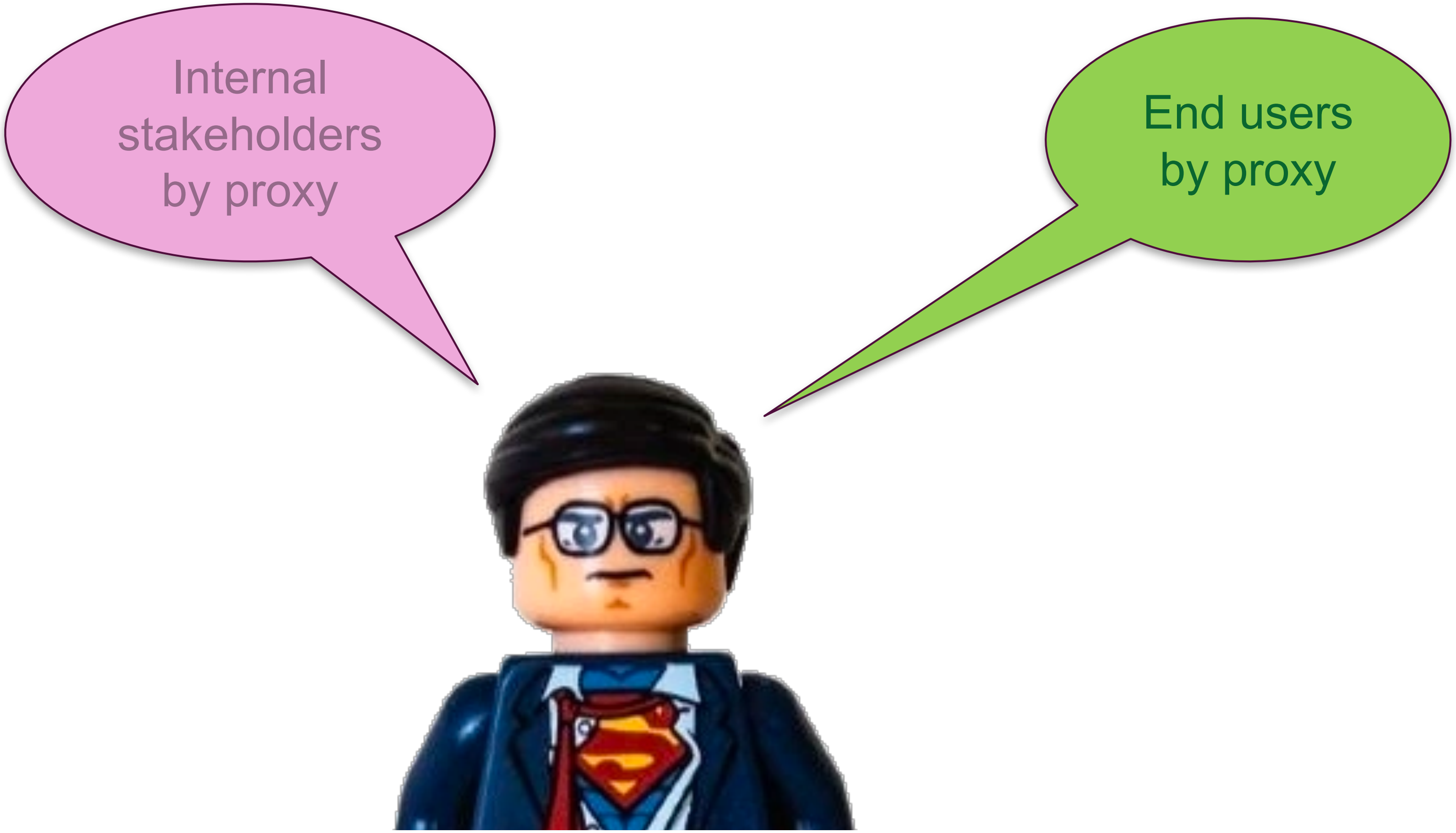
WHAT MAKES IT SO DIFFICULT TO IDENTIFY THE 20%?

“IT’S NOT THE CUSTOMER’S JOB TO KNOW WHAT THEY WANT.”

STEVE JOBS



Xebia



Internal stakeholders by proxy

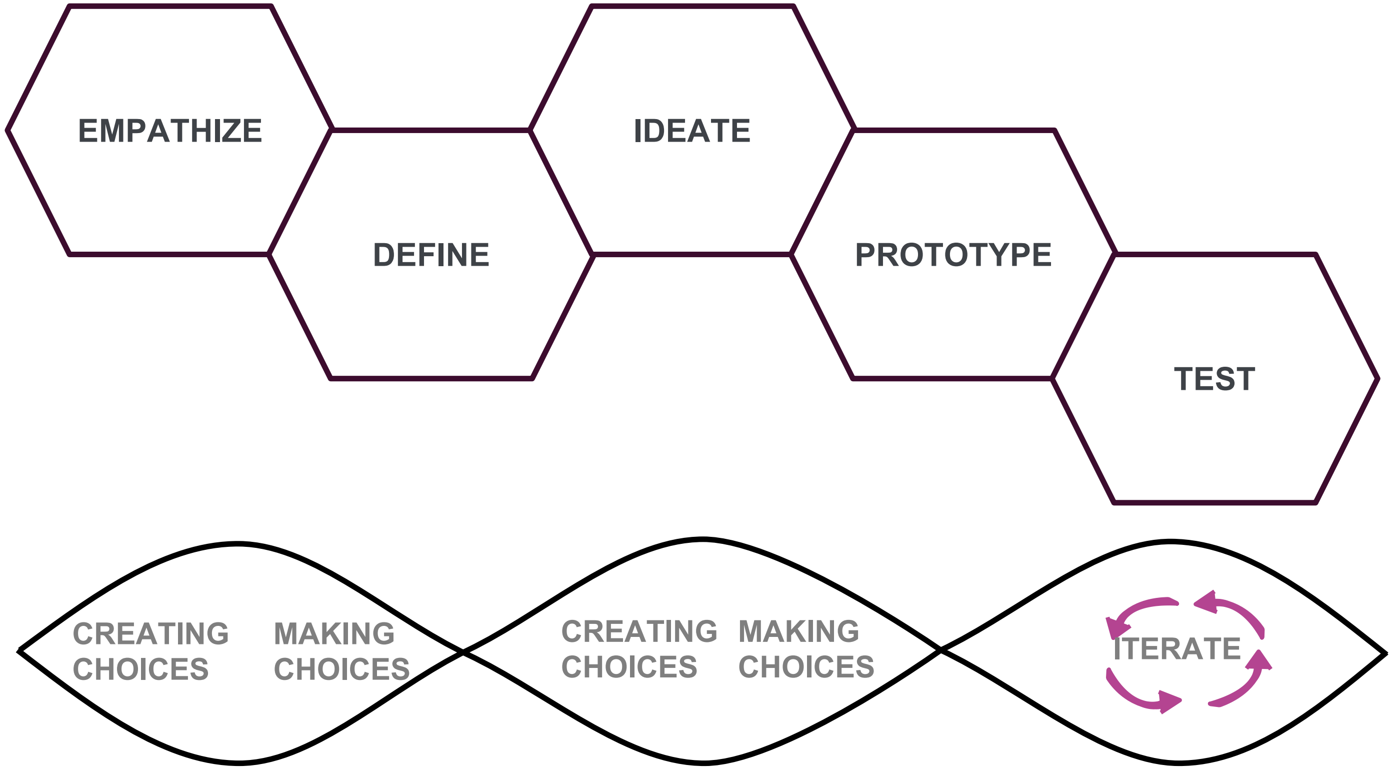
End users by proxy

Establish common innovation ground ❯

Xebia

DESIGN THINKING

A HUMAN-CENTERED DESIGN APPROACH



EMPATHIZE

DEFINE

IDEATE

PROTOTYPE

TEST

CREATING CHOICES

MAKING CHOICES

CREATING CHOICES

MAKING CHOICES

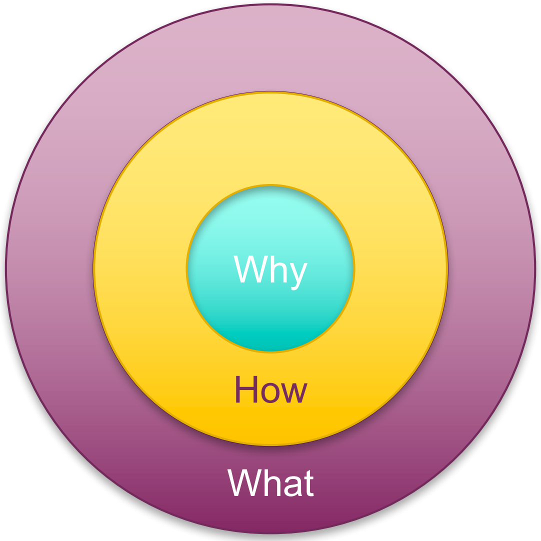
ITERATE

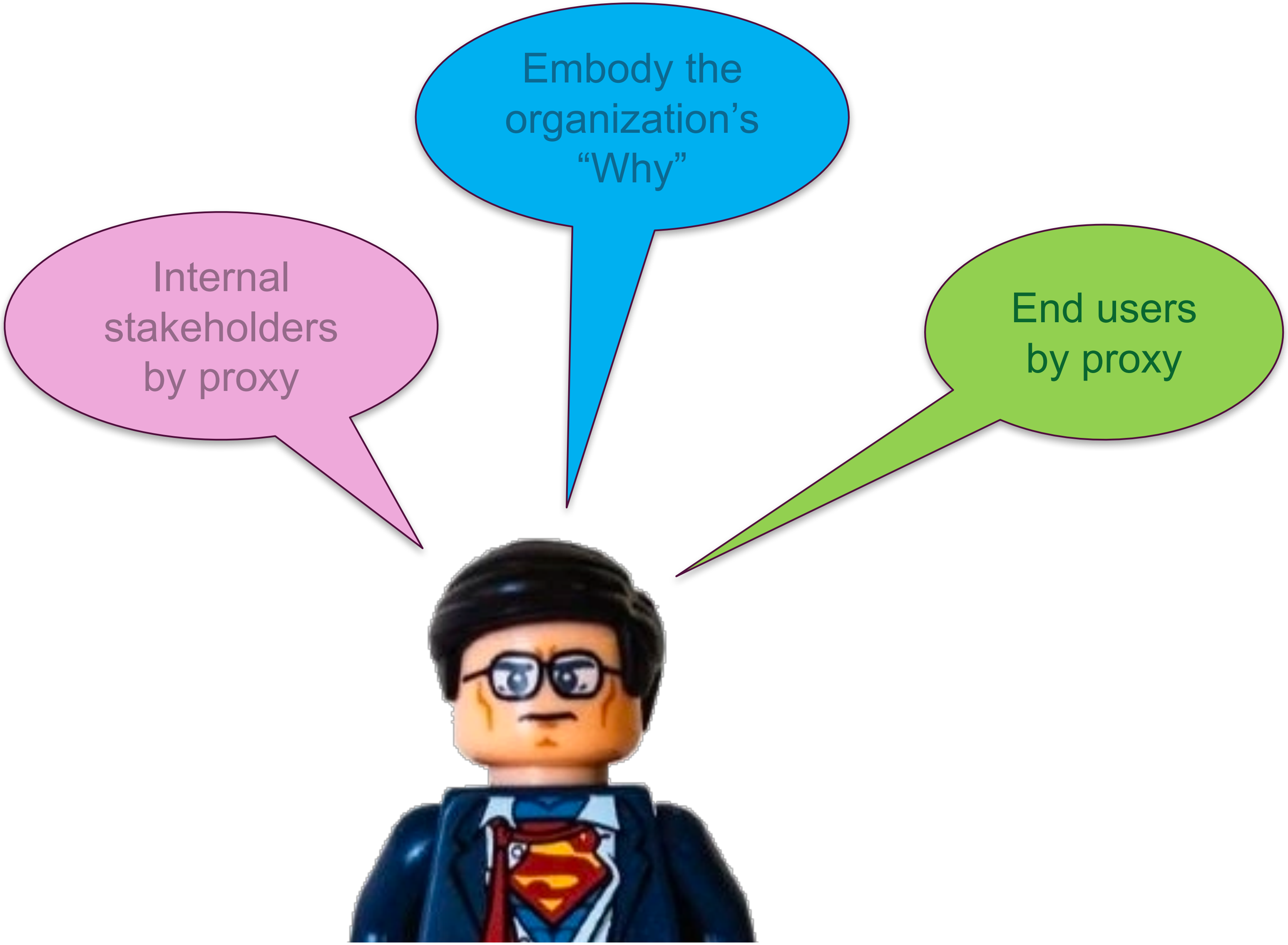
What Simon Sinek learned us

https://www.youtube.com/watch?v=sioZd3AxmnE

You have to start with *Why*

- Simon Sinek - the Golden Circle
- Example Apple:
  - Why: *“Make a dent in the universe”*
  - How: *“Beautiful engineered, designed, just works”*
  - What: *“Computers, music, phones, watches etc.”*





Internal stakeholders by proxy

Embody the organization’s “Why”

End users by proxy

When do you want to know that your software is broken?

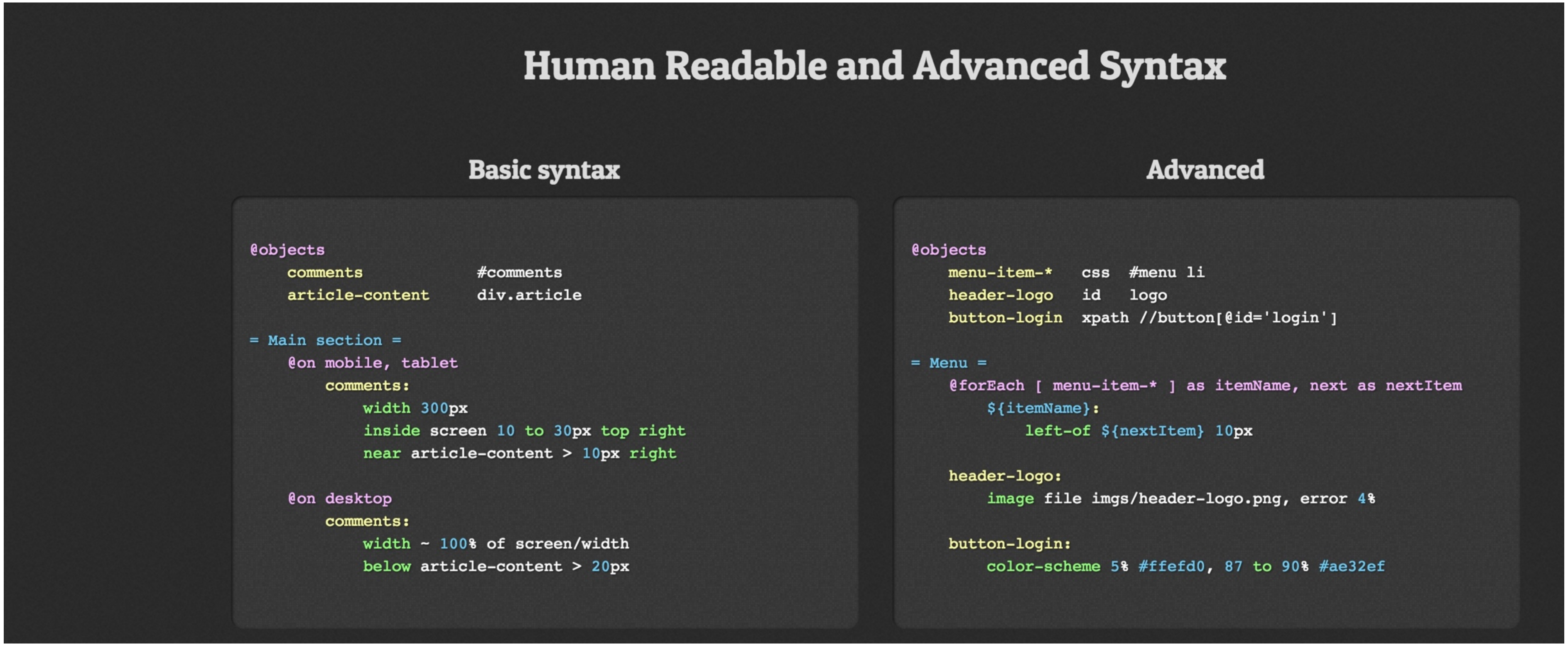
Organize feedback to ship better stuff more often ›

Production Monitoring

- Learn from the actual behavior of your customers

Shift Left ❯

Testing Responsive Design



Human Readable and Advanced Syntax

Basic syntax

```
@objects
    comments            #comments
    article-content     div.article

= Main section =
    @on mobile, tablet
        comments:
            width 300px
            inside screen 10 to 30px top right
            near article-content > 10px right

    @on desktop
        comments:
            width ~ 100% of screen/width
            below article-content > 20px
```

Advanced

```
@objects
    menu-item-*    css   #menu li
    header-logo    id    logo
    button-login   xpath //button[@id='login']

= Menu =
    @forEach [ menu-item-* ] as itemName, next as nextItem
        ${itemName}:
            left-of ${nextItem} 10px

    header-logo:
        image file imgs/header-logo.png, error 4%

    button-login:
        color-scheme 5% #ffefd0, 87 to 90% #ae32ef
```

http://galenframework.com/

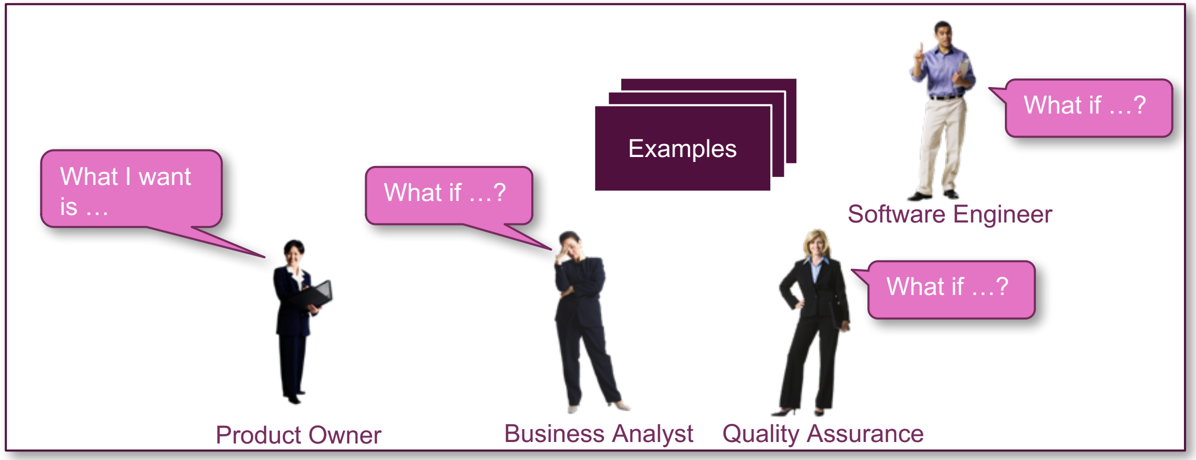
Shift (Shift Left);

Automated Checking

- Always run all your checks!
- Well-balanced series of checks (unit, integration, end to end)
- Starting point – understand stakeholders' requirements and establish a definition of done

Behaviour Driven Development

- Software development methodology aimed at improving the common understanding between PO, and team members
- Functionality is described using plain text and examples
  - Ensure relevant test cases are captured*



Behaviour Driven Development

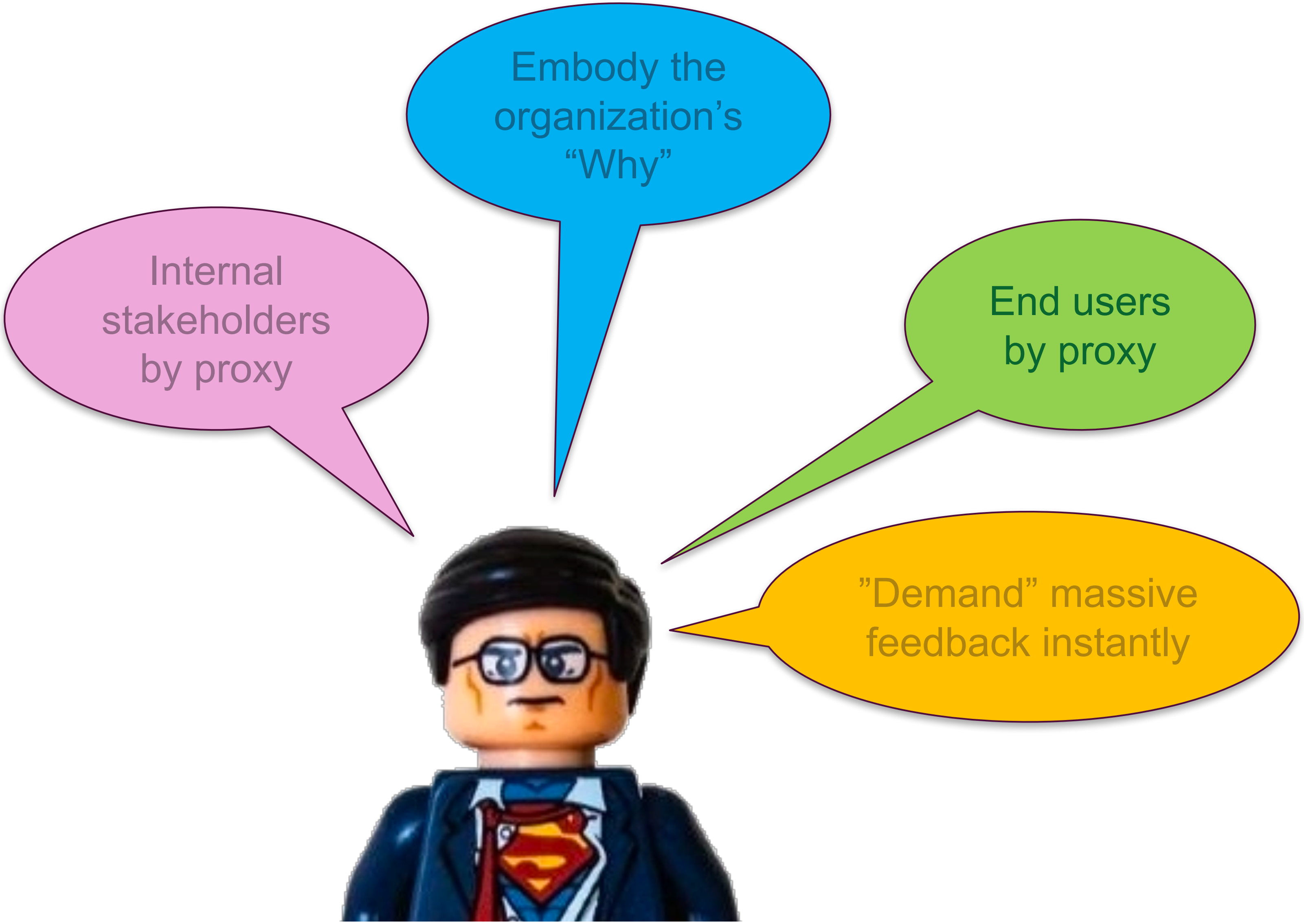
Specification By Example

```
Title (one line describing the story)

Narrative:
As a [role]
I want [feature]
So that [benefit]

Acceptance Criteria: (presented as Scenarios)

Scenario 1: Title
Given [context]
  And [some more context]...
When  [event]
Then  [outcome]
  And [another outcome]...
```



Embody the organization’s “Why”

Internal stakeholders by proxy

End users by proxy

”Demand” massive feedback instantly

Shift (Shift (Shift Left));

Impact Mapping

Why	Why How What	Goal
Who		Actors
What		Impact
How		Deliverable

Impact Mapping (2)

Why
How
What

Why

Who

What

How

1. Identify the problem your product is solving?
2. Who can influence the outcome?
3. What impacts our actors behavior?
4. What can we do to support this?

Impact Mapping (3)

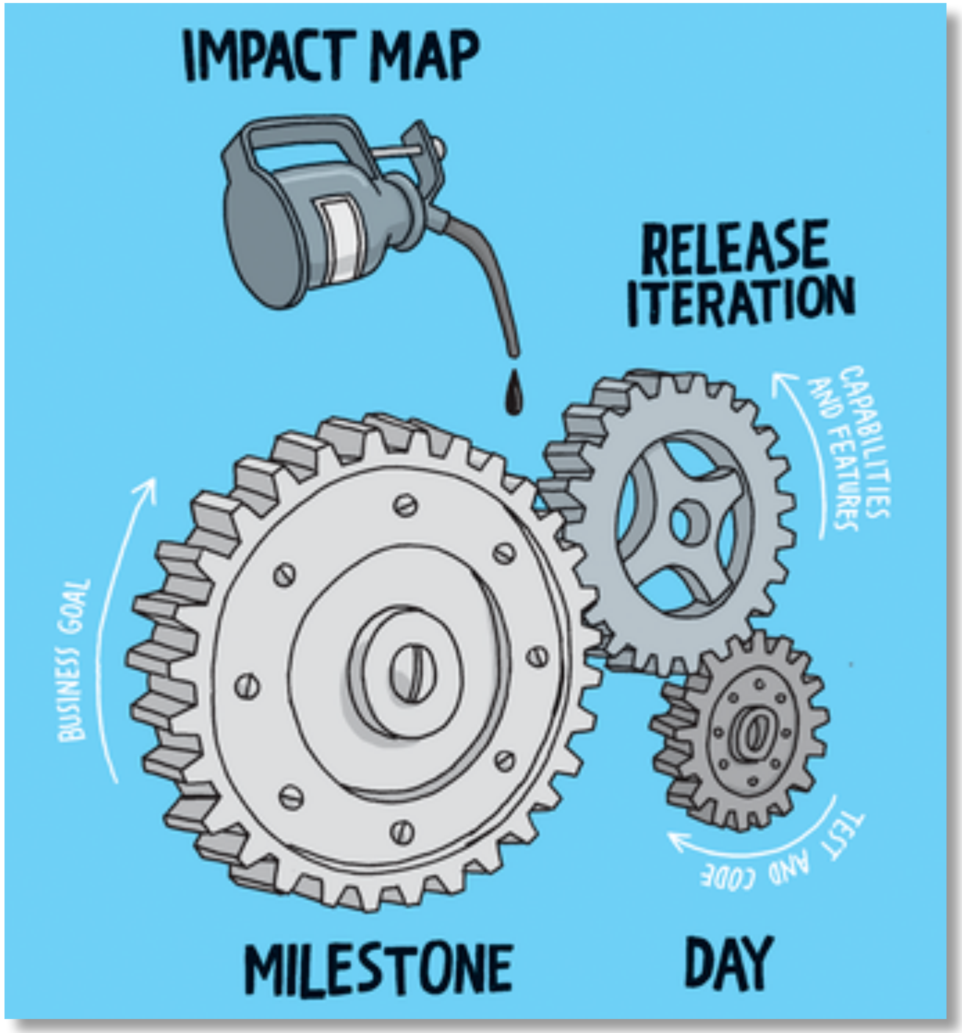
PRO

- Works when you can completely oversee a feature

CON

- If you need multiple teams that participate in developing information exchange
- Use Value Stream Mapping

Organize this with your team



Embody the organization's "Why"

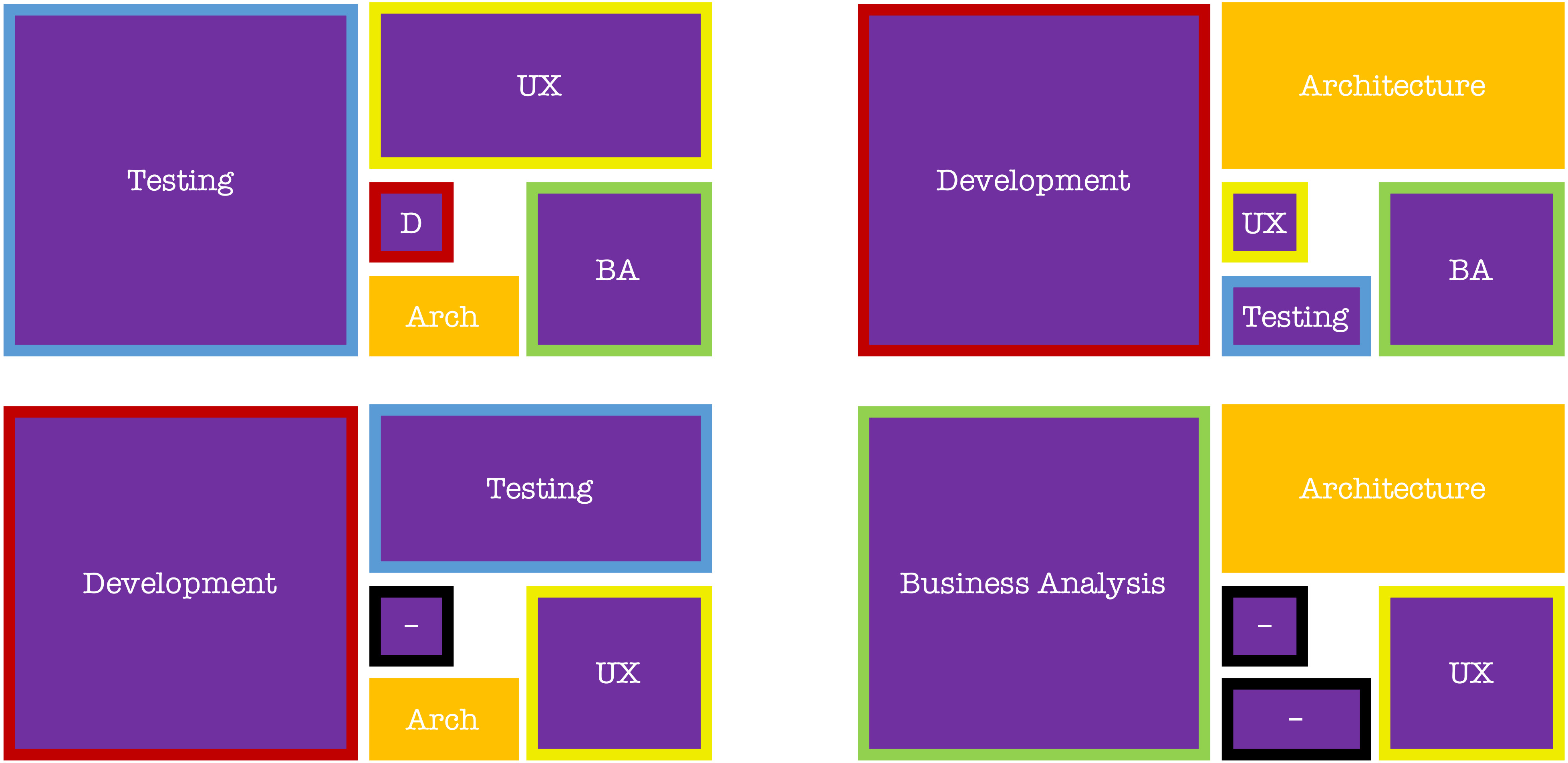
Internal stakeholders by proxy

End users by proxy

Motivate, sharpen, enlighten the team

"Demand" massive feedback instantly

Example DevOps Team Skills

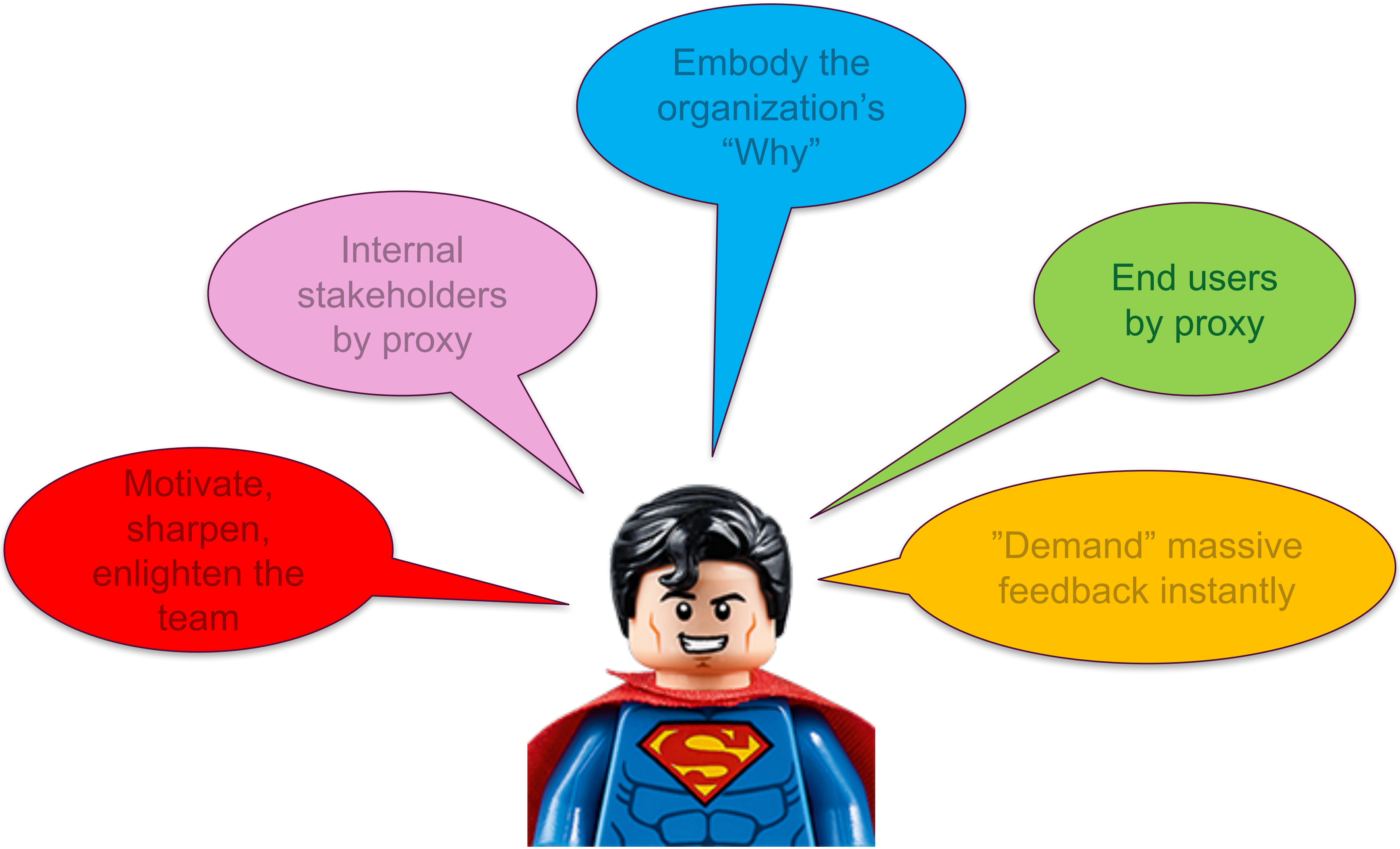


Testing
UX
D
BA
Arch

Development
Architecture
UX
BA
Testing

Development
Testing
–
UX
Arch

Business Analysis
Architecture
–
UX
–



Embody the organization’s “Why”

Internal stakeholders by proxy

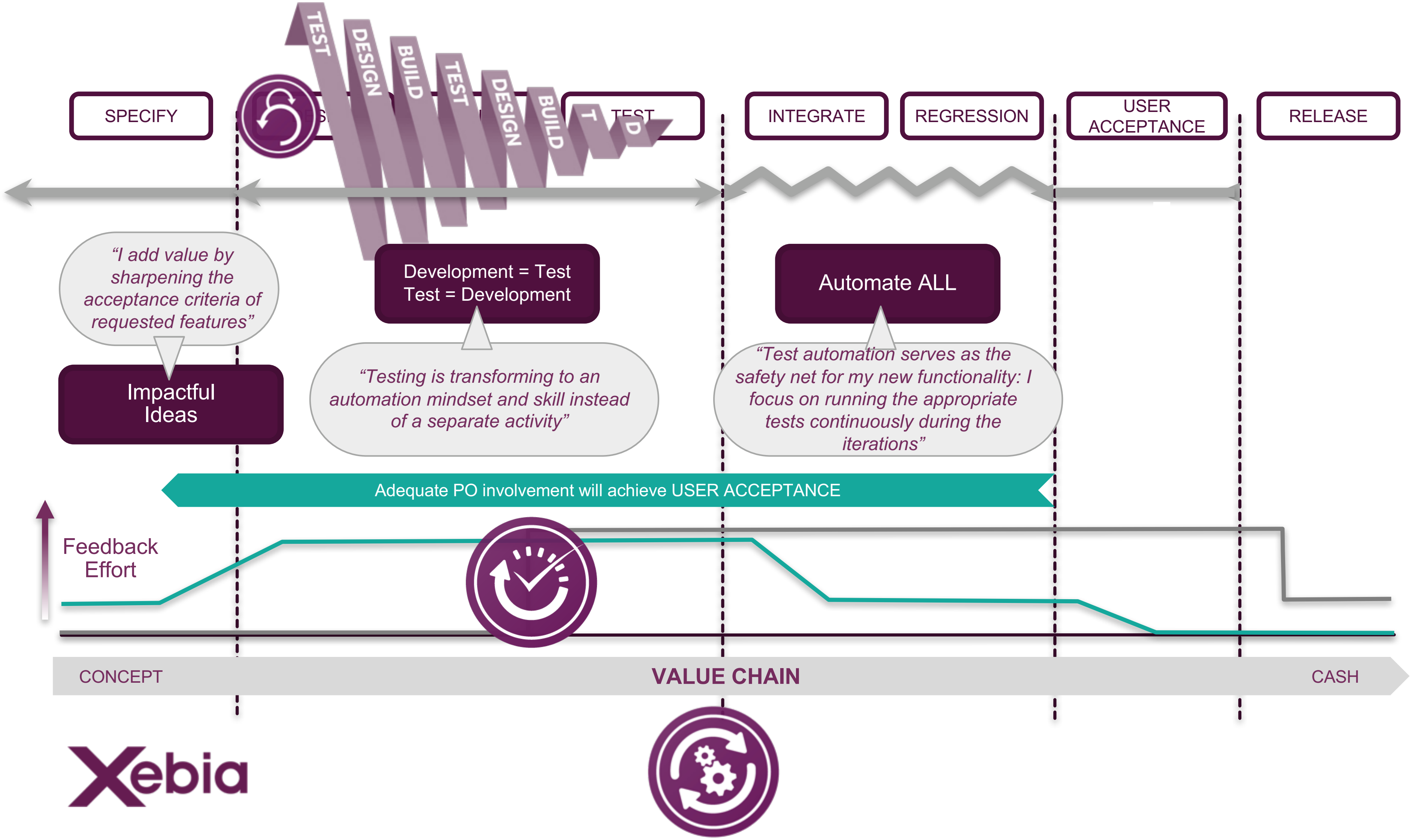
End users by proxy

Motivate, sharpen, enlighten the team

”Demand” massive feedback instantly

Tying it all together

Deliver Continuous Feedback



"I add value by sharpening the acceptance criteria of requested features"

Impactful Ideas

Development = Test
Test = Development

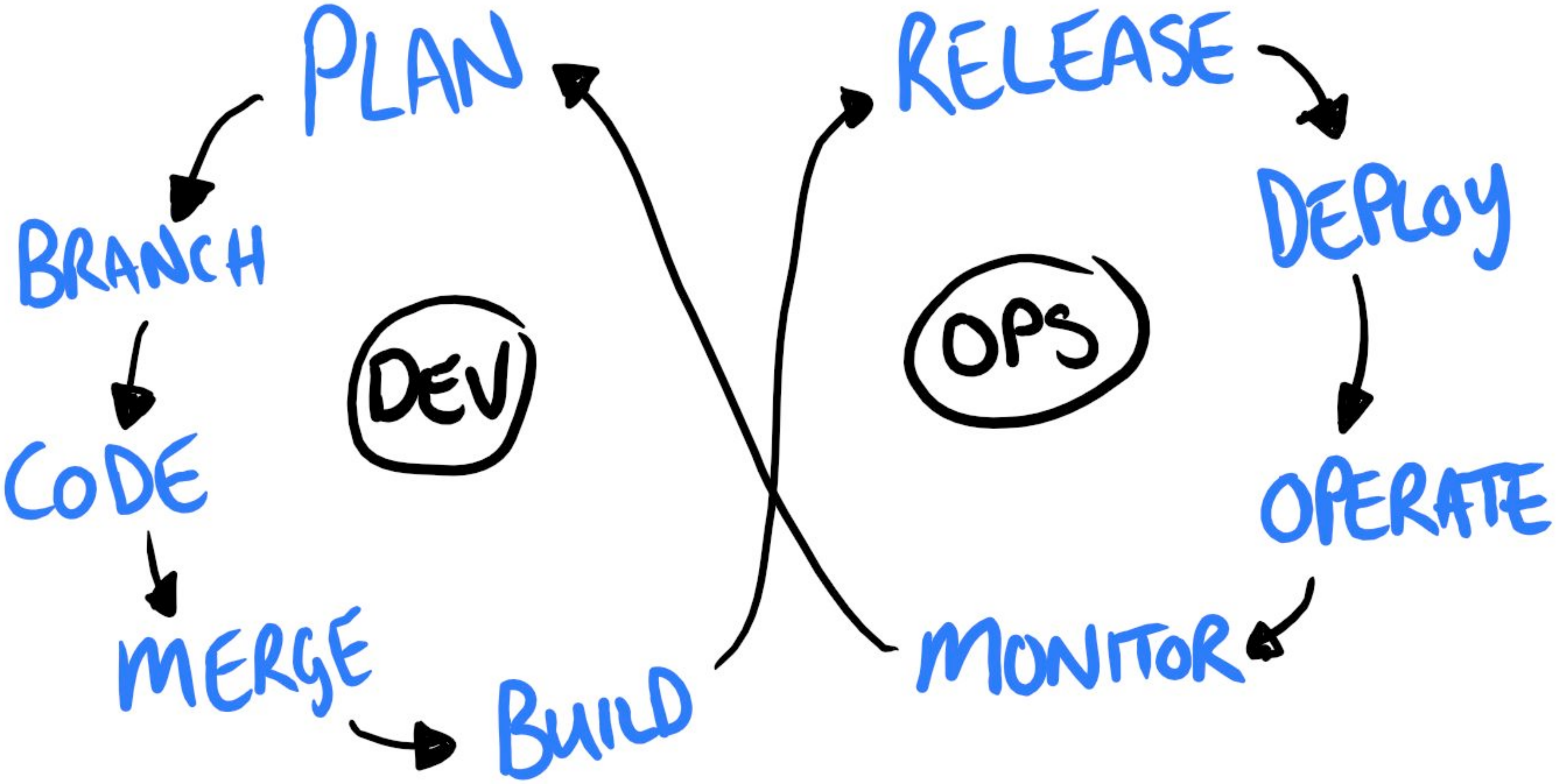
"Testing is transforming to an automation mindset and skill instead of a separate activity"

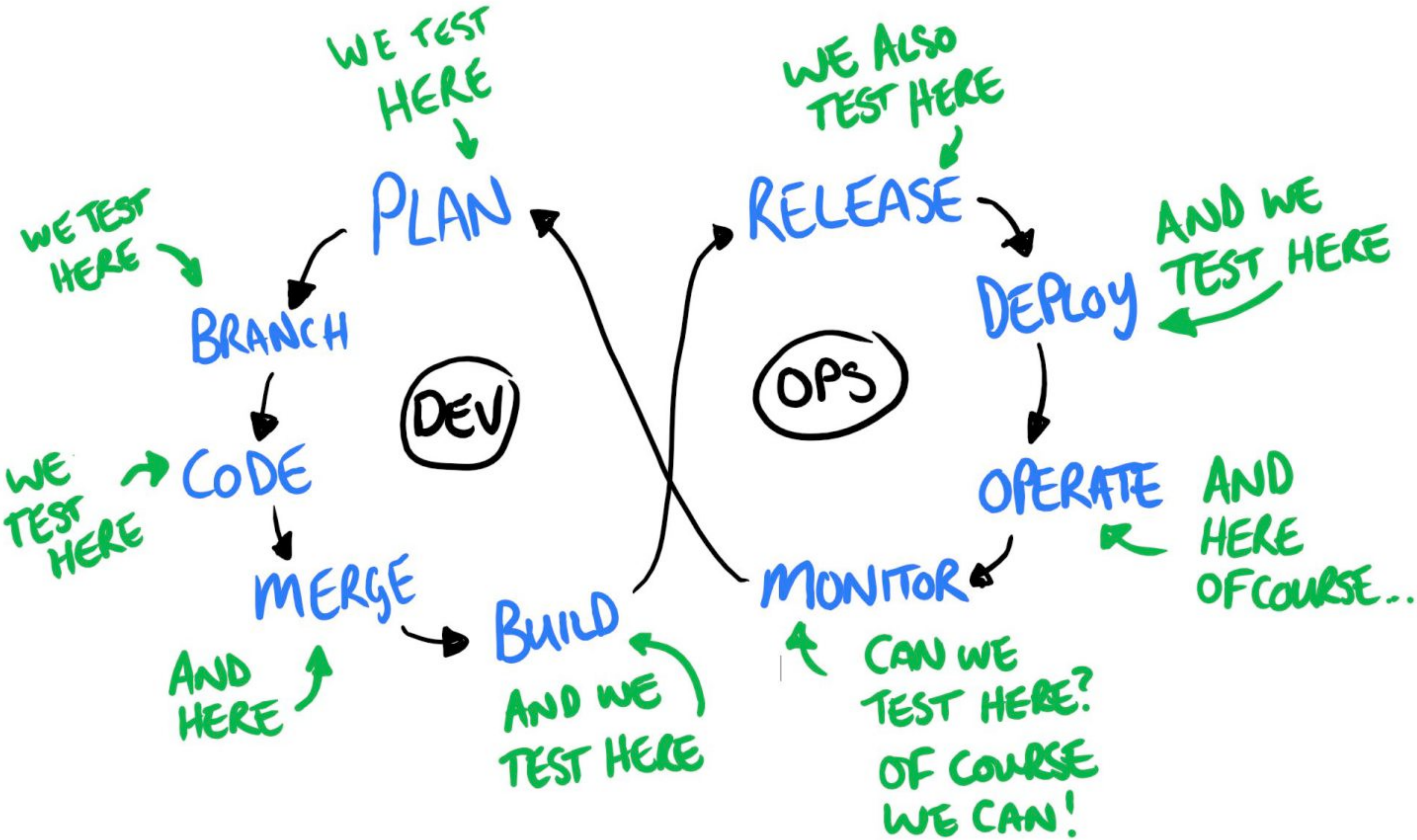
Automate ALL

"Test automation serves as the safety net for my new functionality: I focus on running the appropriate tests continuously during the iterations"

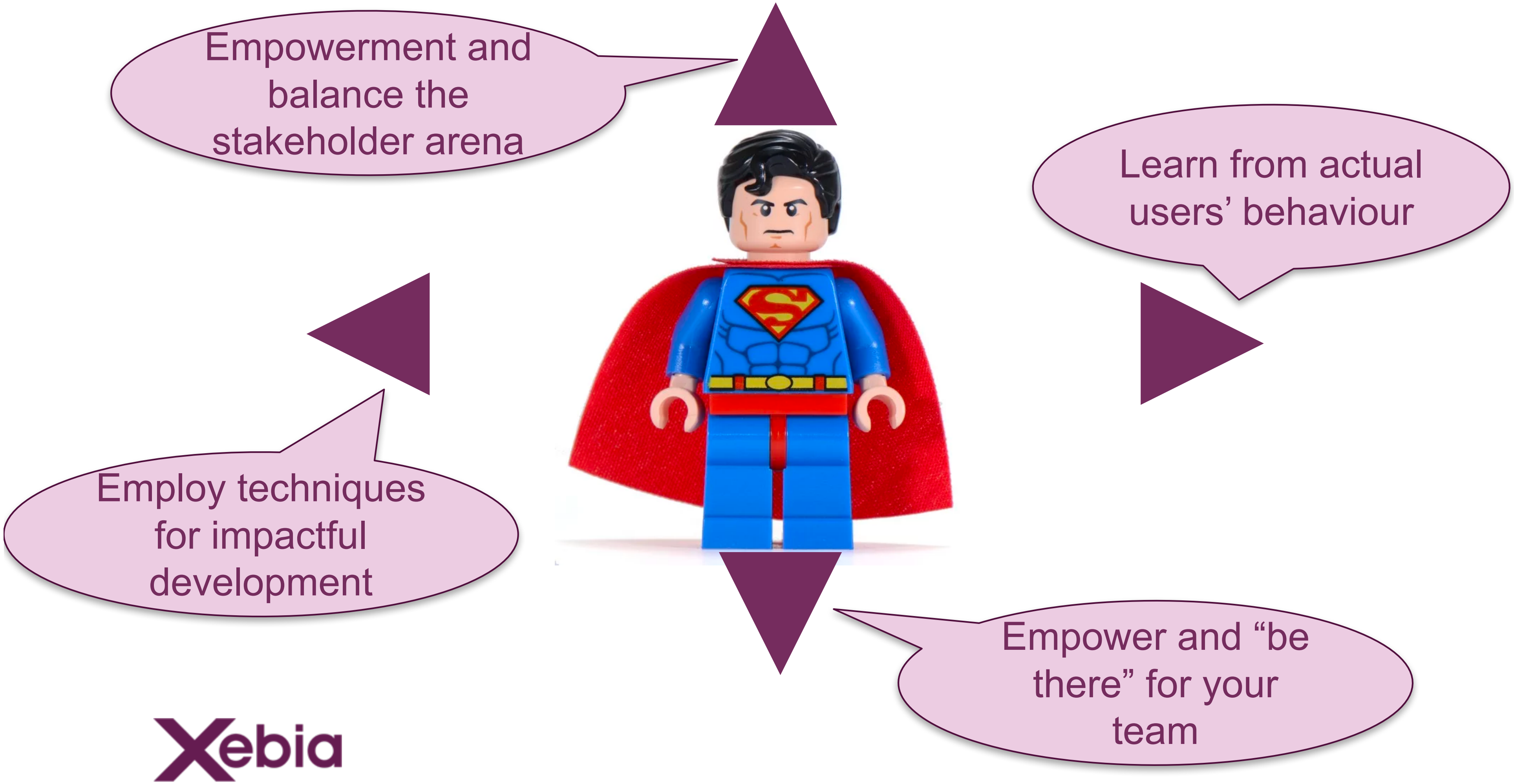
Adequate PO involvement will achieve USER ACCEPTANCE

Xebia


PLAN
BRANCH
CODE
MERGE
BUILD
DEV
RELEASE
DEPLOY
OPERATE
MONITOR
OPS


WE TEST HERE
PLAN
WE ALSO TEST HERE
RELEASE
WE TEST HERE
BRANCH
AND WE TEST HERE
DEPLOY
DEV
OPS
WE TEST HERE
CODE
OPERATE
AND HERE OF COURSE..
MERGE
MONITOR
AND HERE
BUILD
AND WE TEST HERE
CAN WE TEST HERE?
OF COURSE WE CAN!

Summary - The PO’s Stretch



Empowerment and balance the stakeholder arena

Learn from actual users’ behaviour

Employ techniques for impactful development

Empower and “be there” for your team

Summary - Take-Aways

- “Dear PO, get your calendar up to par”
- Demand empowerment
- The demo-effect – who is running your demo?
- … and start to organize out of the box creative sessions with actual users; that’s where revolutions await

Feedback is the most essential part of every (IT) delivery process

What’s Next?

- Visit
  - http://xebia.com/agile-transformations
  - http://xebia.com/test-automation-quality
- Become a Product Samurai
  - http://blog.xebia.com/author/clukassen
- Visit (you, your colleagues) our next seminar (March 30th, next week!)
  - Learn from the (technical) trenches on Quby’s implementation
  - http://pages.xebia.com/build-quality-in