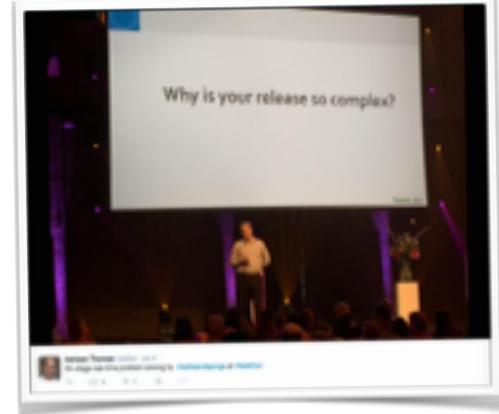


DEVOPS PART 1: CORE CONCEPTS

MANISH KUMAR THAKUR
MTHAKUR@XEBIA.COM

Manish Kumar Thakur

Senior Consultant @ Xebia



2014 ZorgDomain Netherlands



2013 ING Bank Netherlands

2016 Dubai Emirates



■ Global Headquarter ■ Operational Presence ■ Sales Presence



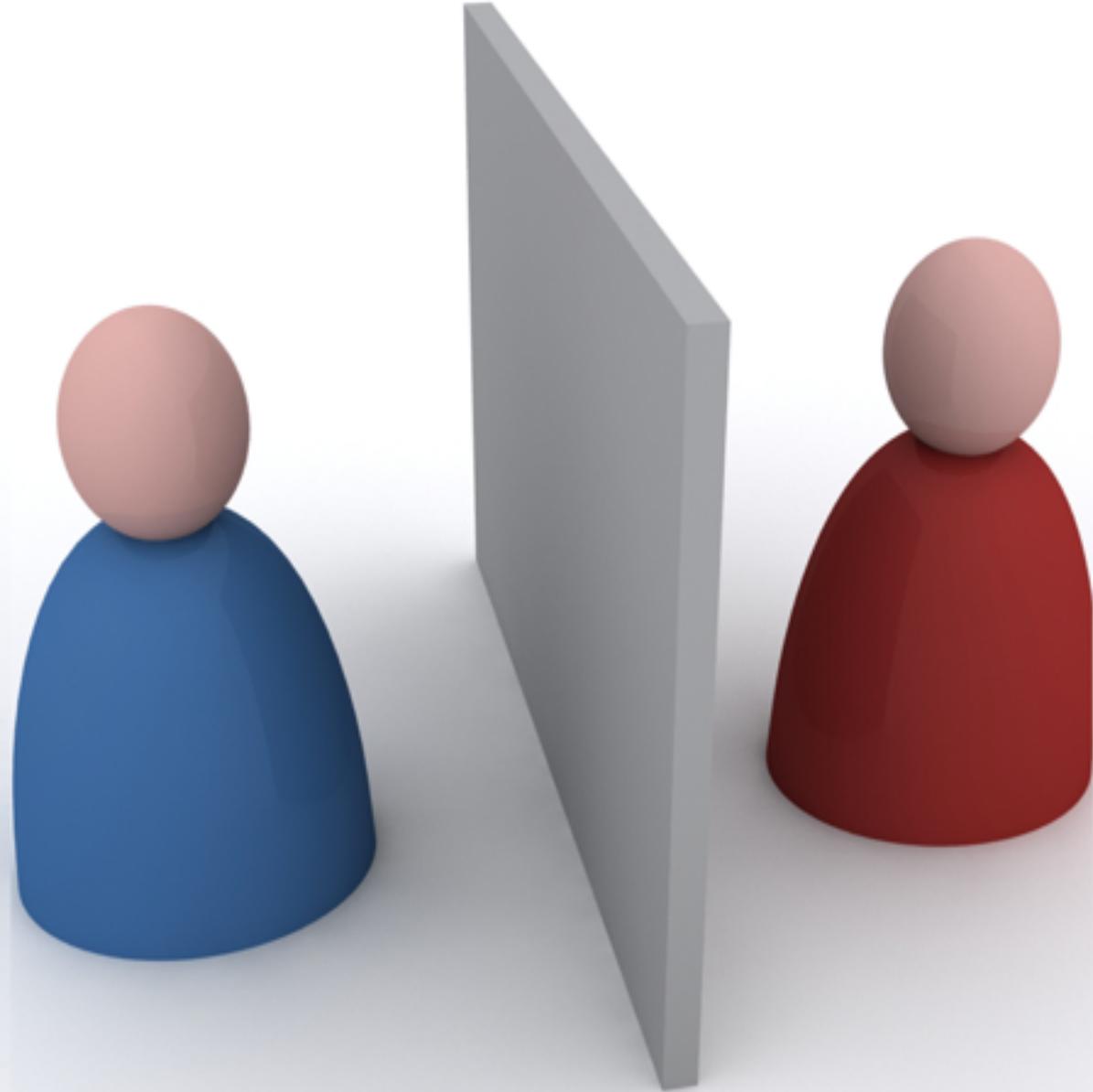
Xebia INSPIRE CHANGE ACT ON RESULTS

INTRODUCTION

■ Who are you?

■ What are your expectations for the day?

WHAT IS DEVOPS?



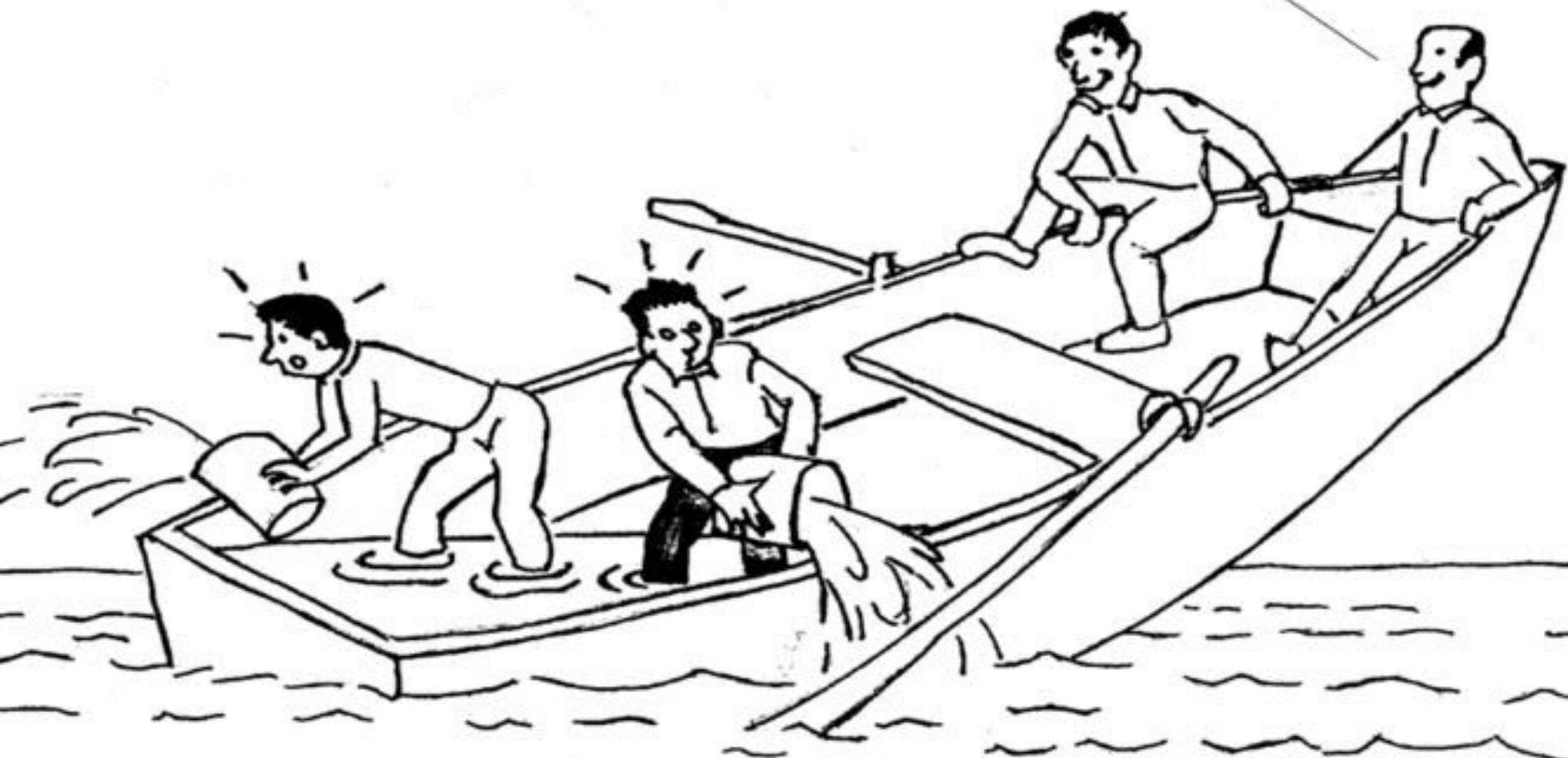


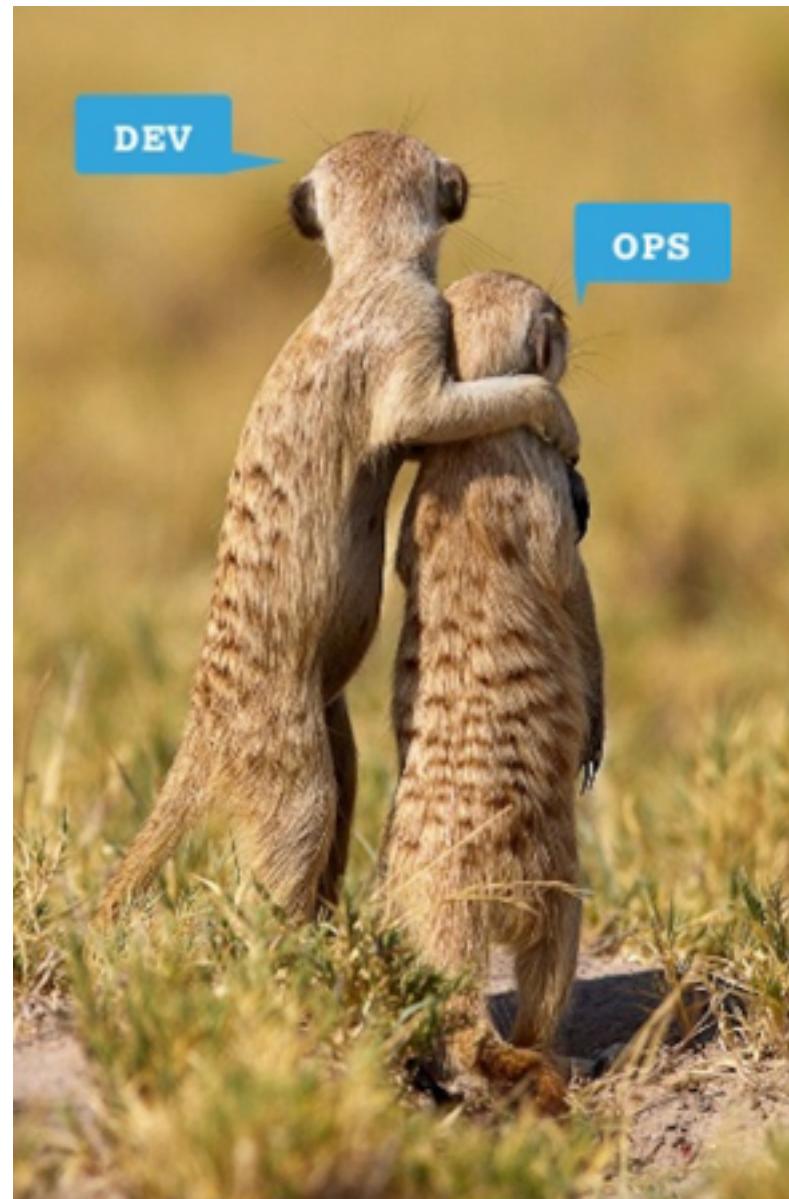


TANDBERG

Xebia INSPIRE CHANGE ACT ON RESULTS

Sure glad the hole isn't at our end.





YOU BUILD IT, YOU RUN IT!

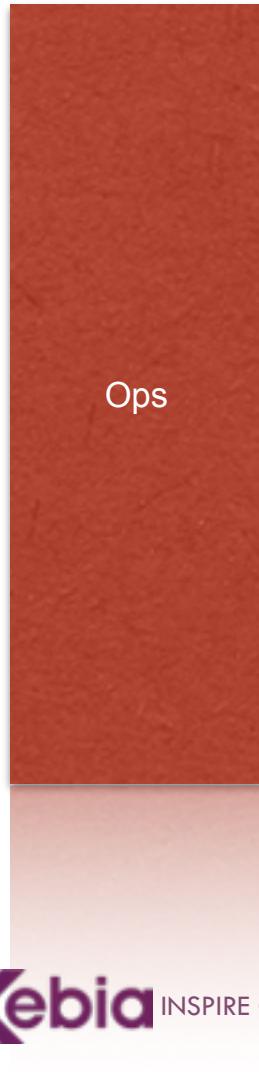
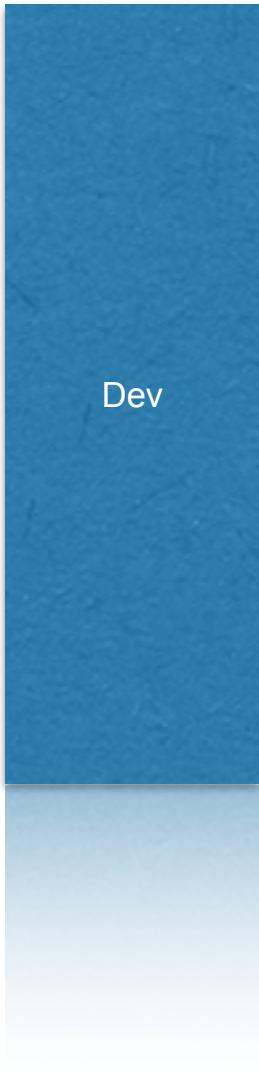


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Xebia INSPIRE CHANGE ACT ON RESULTS

“THERE IS NO SUCH THING AS A DEVOPS TEAM.”

—Jez Humble, author of Continuous Delivery





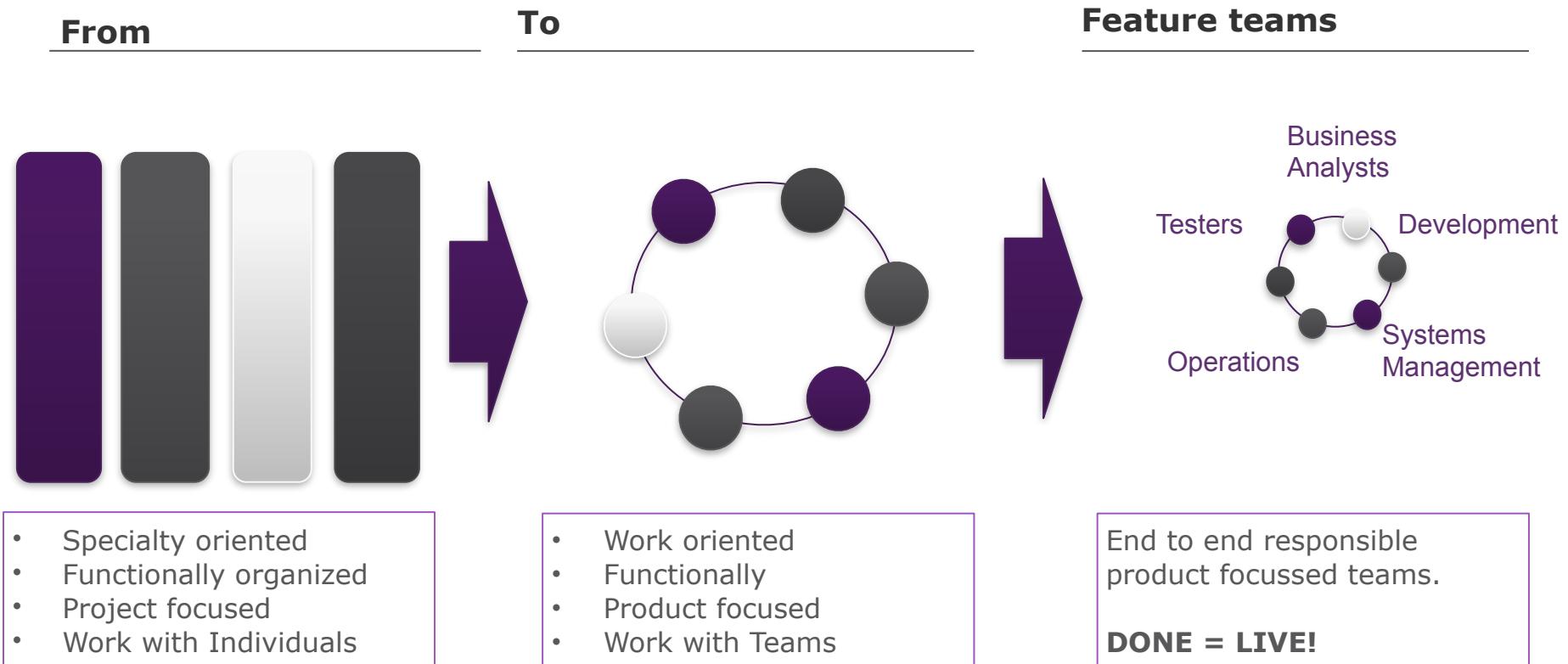
Dev

DevOps

Ops



THE AGILE PROCESS: “MULTI DISCIPLINARY FEATURE TEAMS”



Responsibility of your product-team extended all the way into production

- All are responsible and accountable for a fully working product.





Xebia INSPIRE CHANGE ACT ON RESULTS



Xebia INSPIRE CHANGE ACT ON RESULTS



Lean

Automation



Culture



Measuring



Sharing



DevOps:

**MULTI-DISCIPLINARY TEAMS WHO TAKE END-TO-END
RESPONSIBILITY TO DELIVER CUSTOMER VALUE
EARLY AND OFTEN WHILE CONTINUOUSLY IMPROVING
THEIR PROCESS.**

–Adriaan de Jonge

DevOps:

**DEVOPS IS NOT A GOAL, BUT A NEVER ENDING
PROCESS OF CONTINUAL IMPROVEMENT.**

–Jez Humble

FIRST PRINCIPLE AGILE MANIFESTO

“Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.”

- *The first of 12 principles making up the Agile Manifesto.*



Who?

A photograph of Jez Humble, a man with a beard and short hair, wearing a dark t-shirt. He is gesturing with his right hand while speaking. The background is a blurred blue screen with some text visible.

Jez Humble
Author of
“Continuous Delivery”
(the book)

CONTINUOUS DELIVERY

“Continuous Delivery is about putting the release schedule in the hands of the business, not in the hands of IT. Implementing Continuous Delivery means making sure your software is always production ready throughout its entire lifecycle – that any build could potentially be released to users at the touch of a button using a fully automated process in a matter of seconds or minutes.

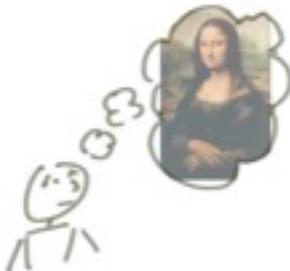
This in turn relies on comprehensive automation of the build, test and deployment process, and excellent collaboration between everyone involved in delivery – developers, testers, DBAs, systems administrators, users, and the business. In the world of Continuous Delivery, developers aren’t done with a feature when they hand some code over to testers, or when the feature is “QA passed”. They are done when it is working in production. That means no more testing or deployment phases, even within a sprint (if you’re using Scrum).”

[Source Jez Humble, August 13th, 2010]

WHAT DOES CONTINUOUS DELIVERY PROVIDE?

ROI DURING DEVELOPMENT

TRADITIONAL



First: completely work out an idea
Then: extremely accurate estimation

time →

CONTINUOUS DELIVERY



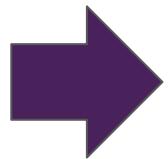
Maybe this was already sufficient!!

First: think of an idea - outline
Then: work out the idea, try out and adjust

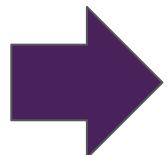
time →

Always production ready

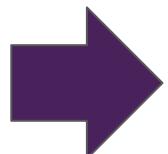
RESULTING IN



Automate software delivery process



Remove error-prone steps in process



Measure and create a feedback loop

YOU WANT TO KNOW!

HYPOTHESIS TESTING

Apples



Oranges



Which is better?

Who?



SO WHAT DOES THIS LOOK LIKE IN TERMS OF
‘RELEASING SOFTWARE’?

Traditional

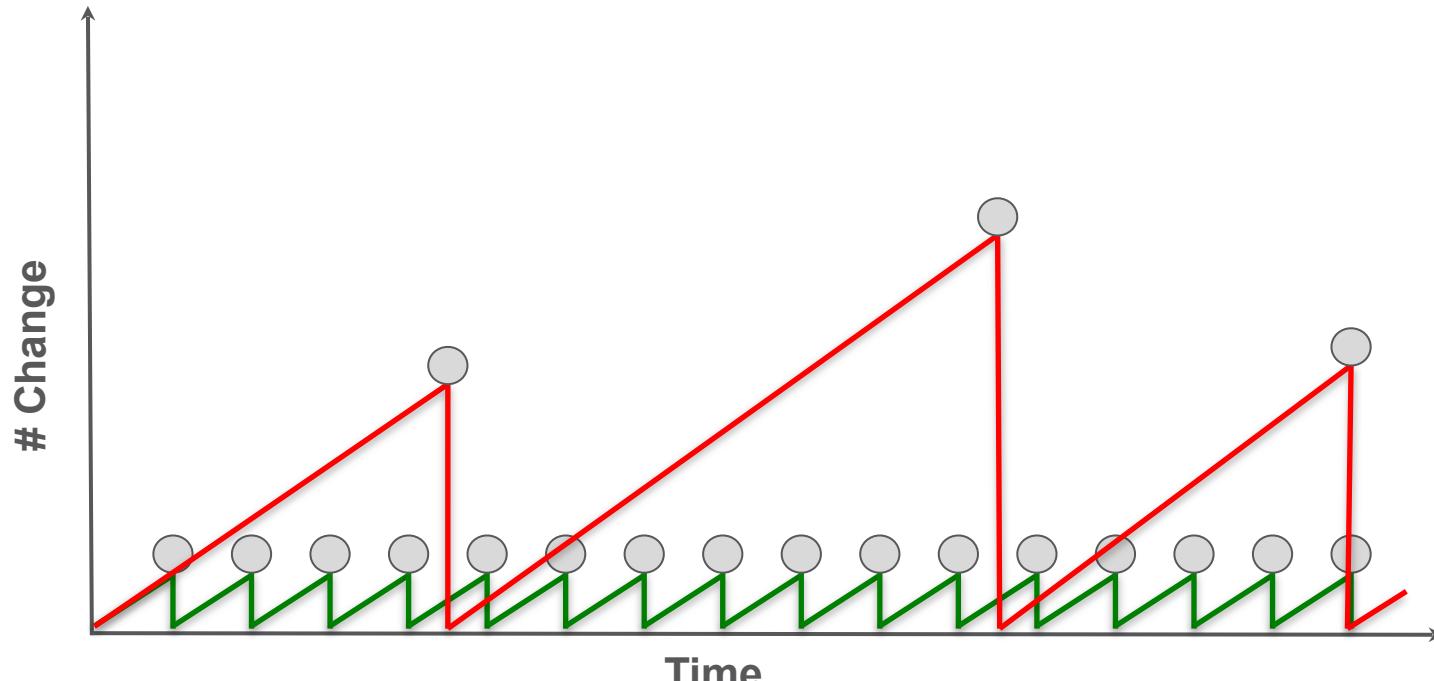


Continuous Delivery



“IF IT HURTS, DO IT MORE OFTEN”

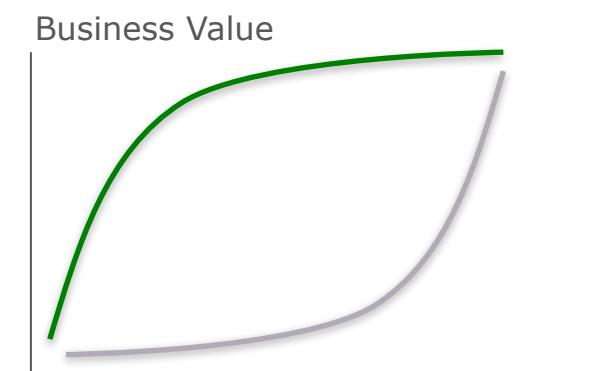
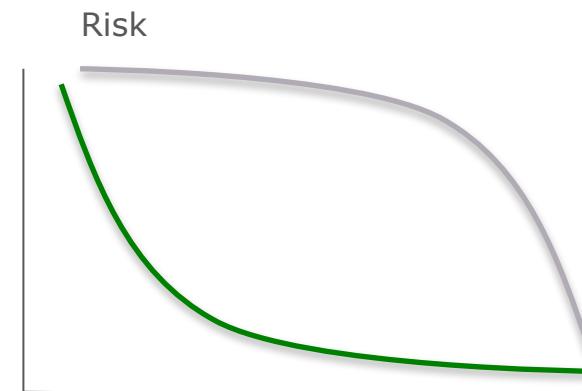
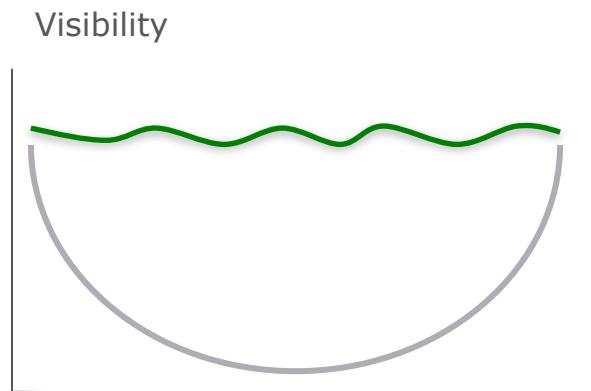
AVOIDING RISK BY DELIVERING MORE FREQUENTLY



— Traditional

— Continuous Delivery

CONTINUOUS DELIVERY VS. TRADITIONAL DEVELOPMENT



- █ Agile development (Continuous Delivery)
- Traditional development

7 WASTES OF LEAN

T ransportation

I nventory

M otion

W aiting

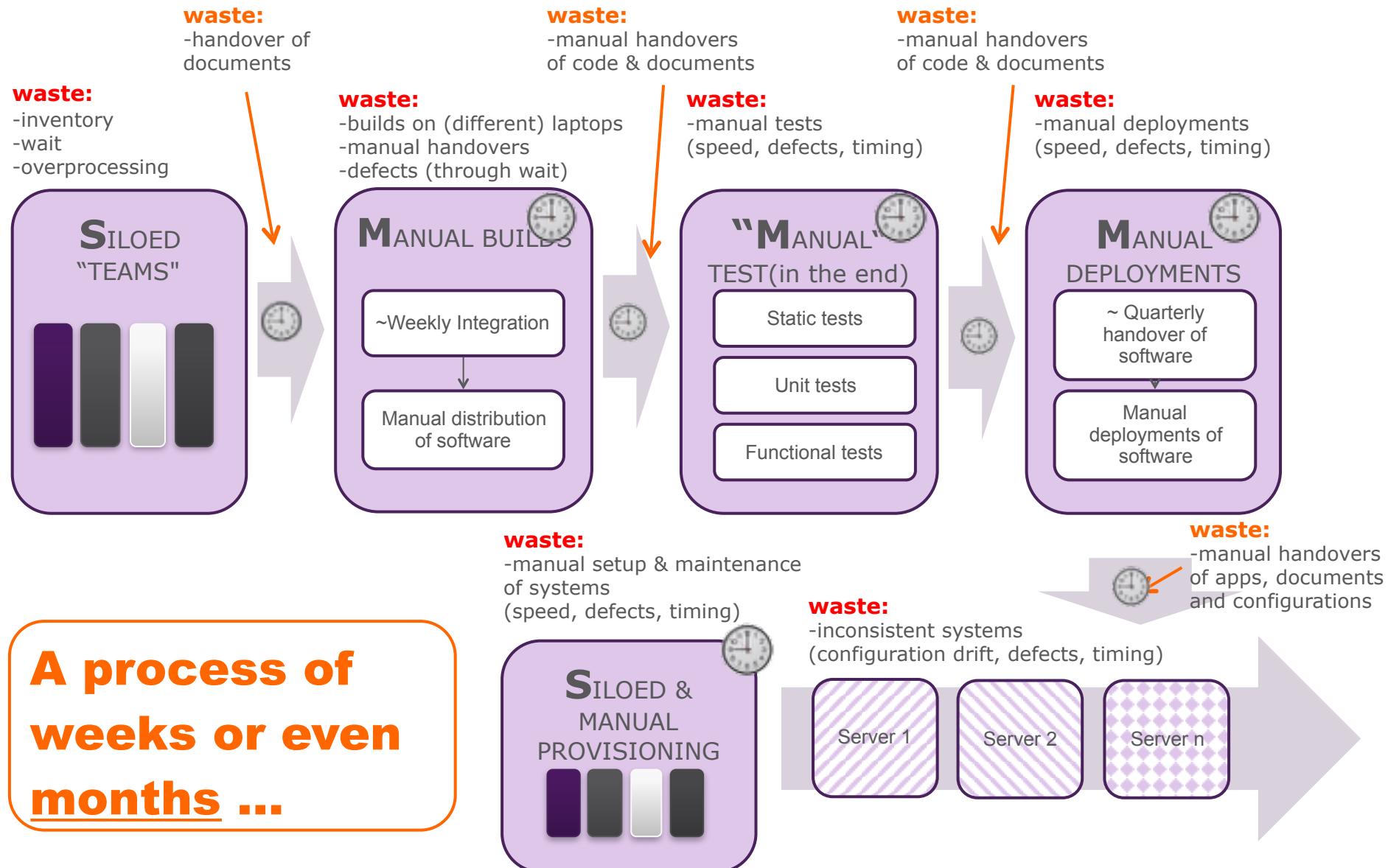
O verproduction

O verprocessing

D efects

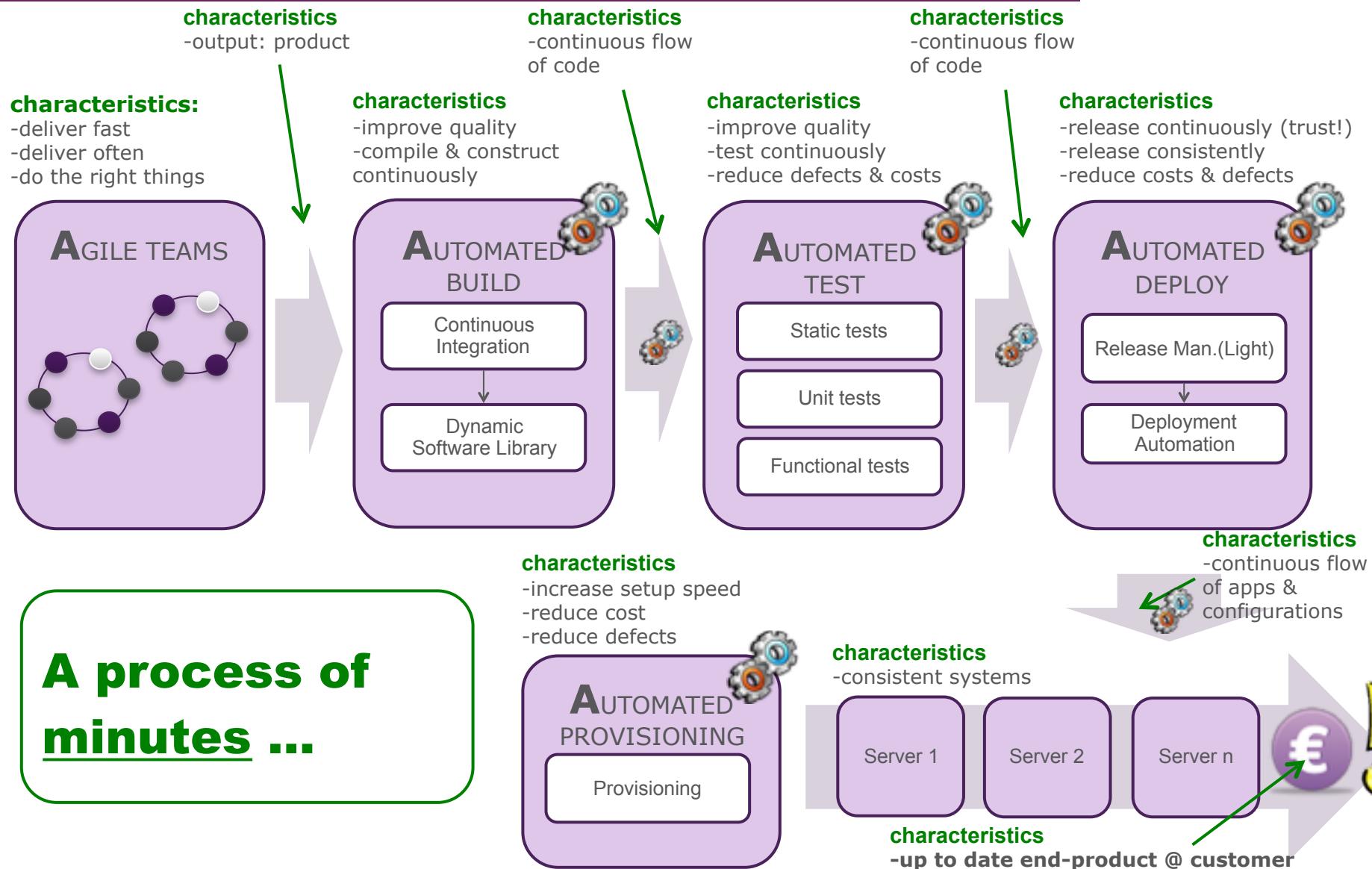
FOR THIS TO WORK: SOFTWARE HAS TO FLOW.

A TRADITIONAL SOFTWARE DELIVERY PROCESS

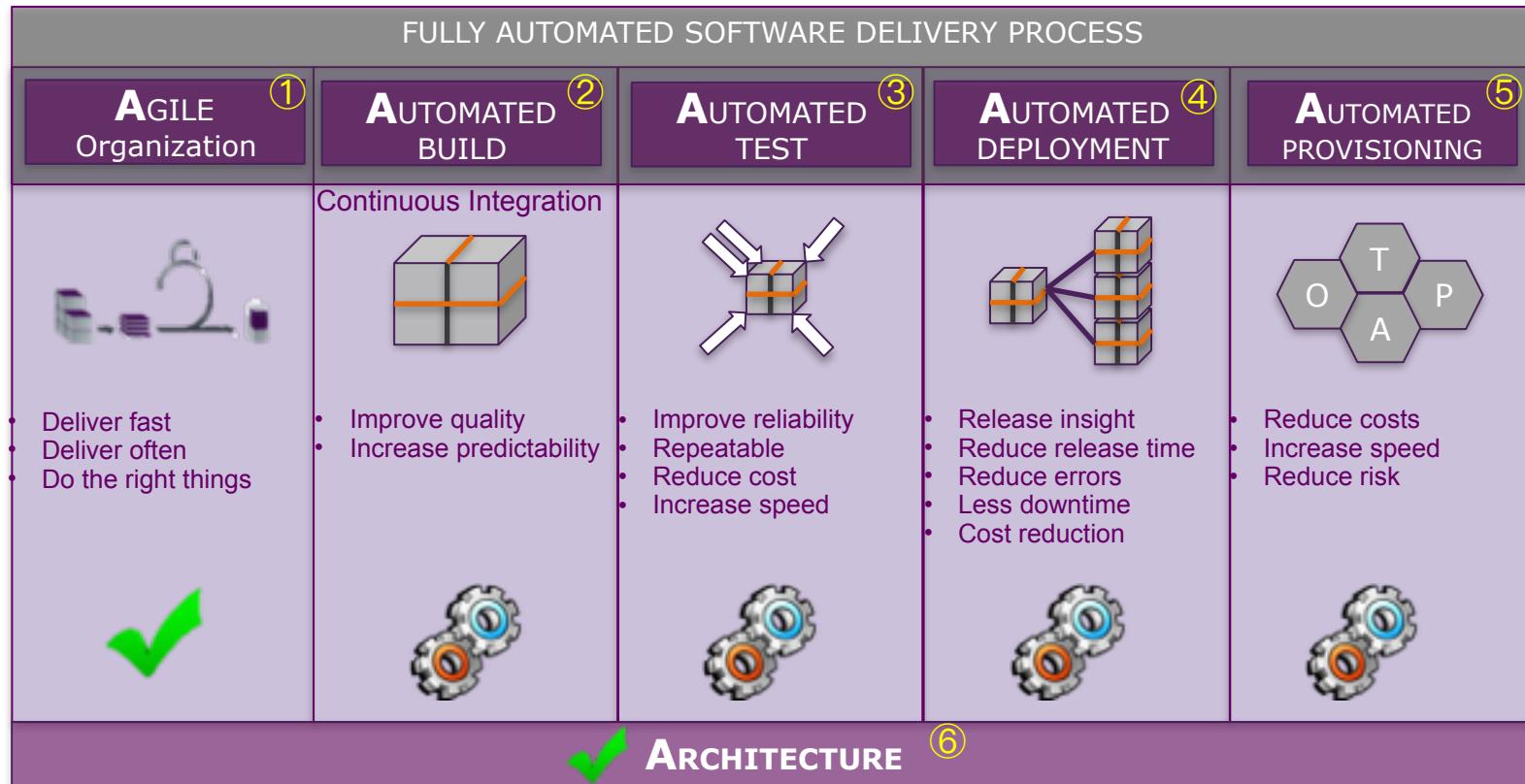


FOR THIS TO WORK: SOFTWARE HAS TO FLOW.

AN OPTIMIZED SOFTWARE DELIVERY PROCESS



REMEMBER THE SIX A'S TO CONTINUOUS DELIVERY & DEVOPS



FOKKE & SUKKE

ALWAYS MAKE A TIGHT
PROJECT PLANNING

AND THE CULTURAL SHIFT?

THAT IS ON THURSDAY 17TH
AT HALF PAST THREE



RGvT

THE PATH 5. (1) FORMING A CULTURE ...

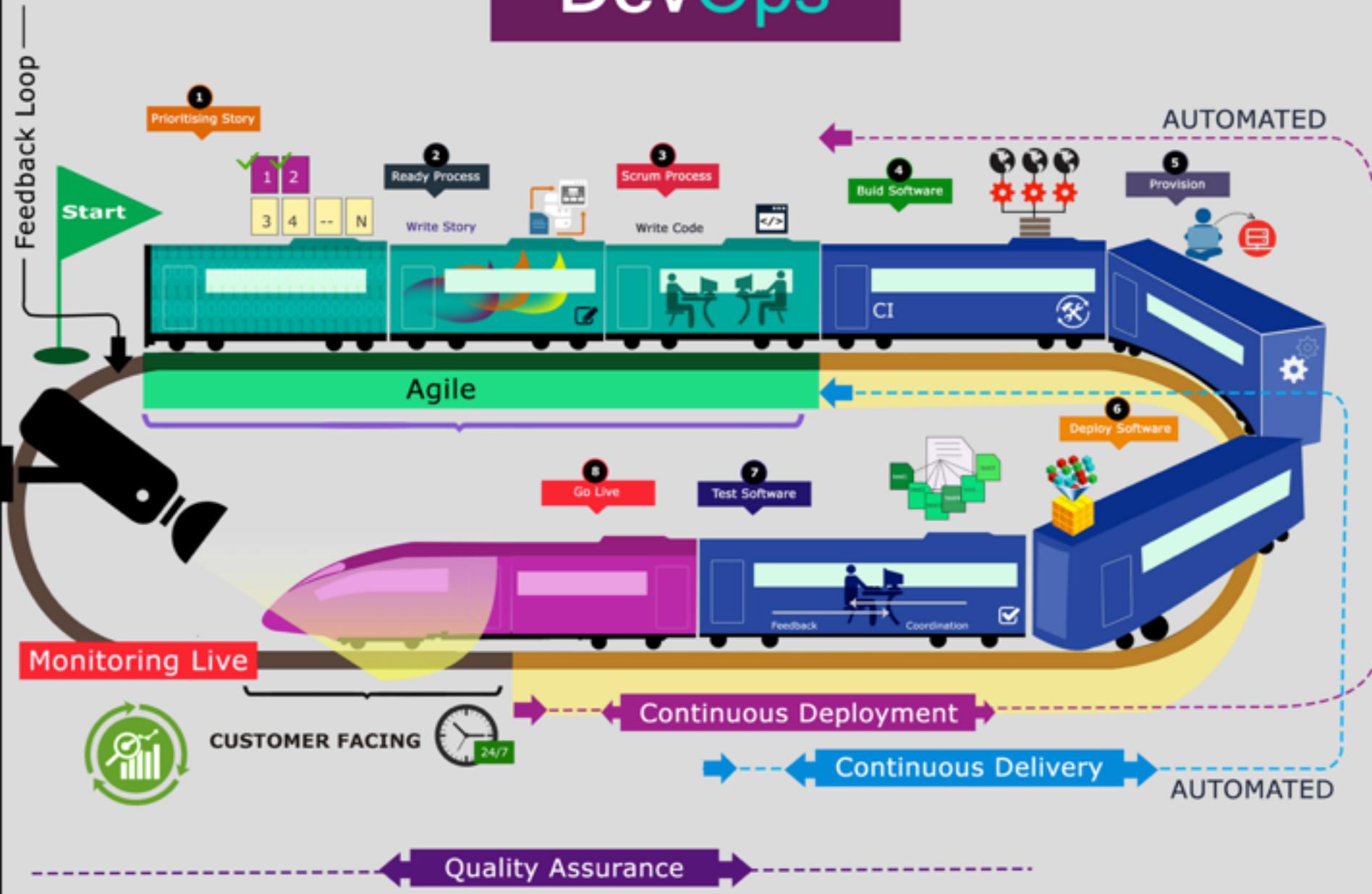


THE PATH 5. (2) FORMING A CULTURE ... PROVIDE THE CONTEXT!

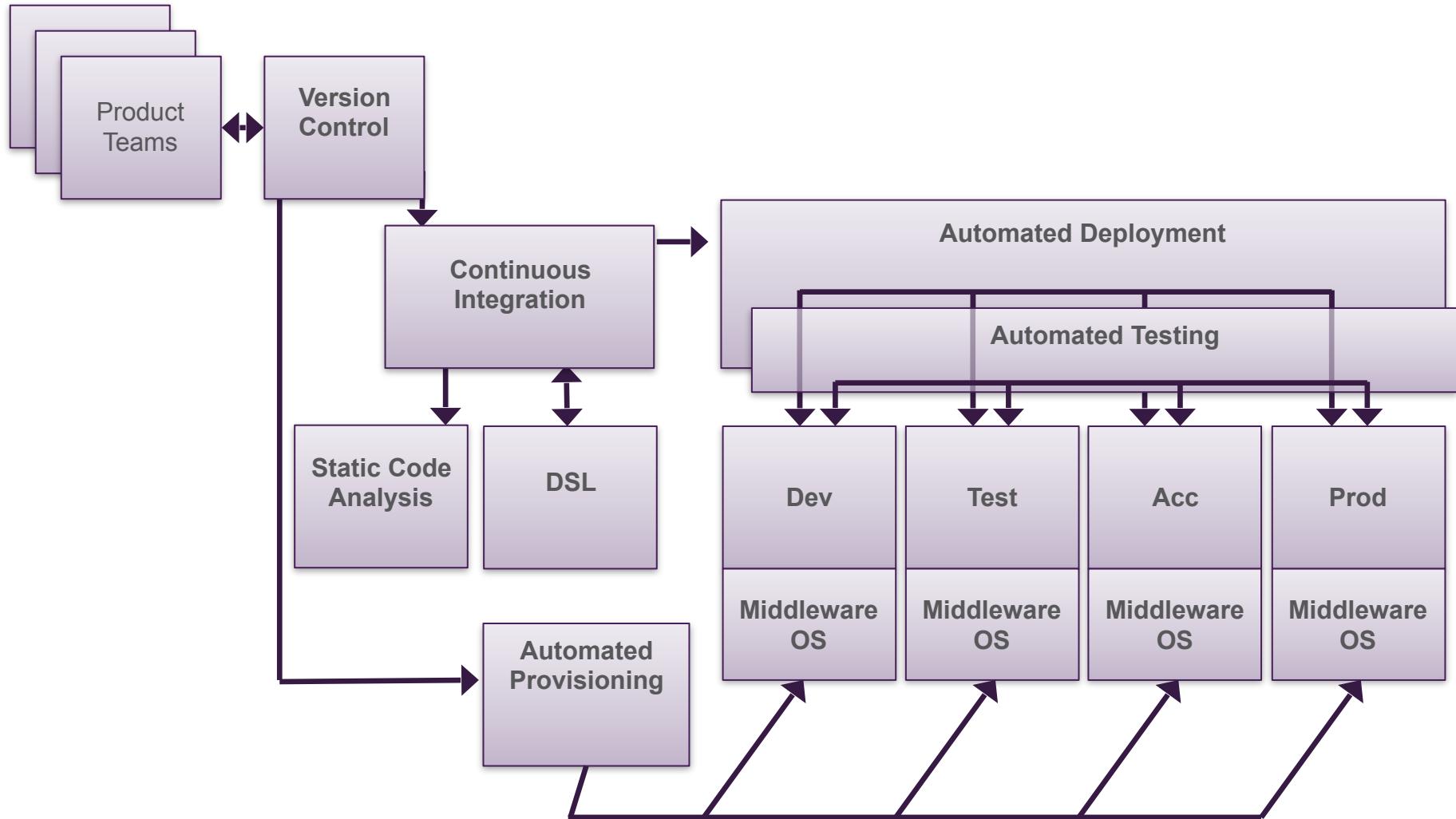


Jezz Humble@Twitter: I can't emphasize enough how important this slide from @brantcooper is #LeanUX15

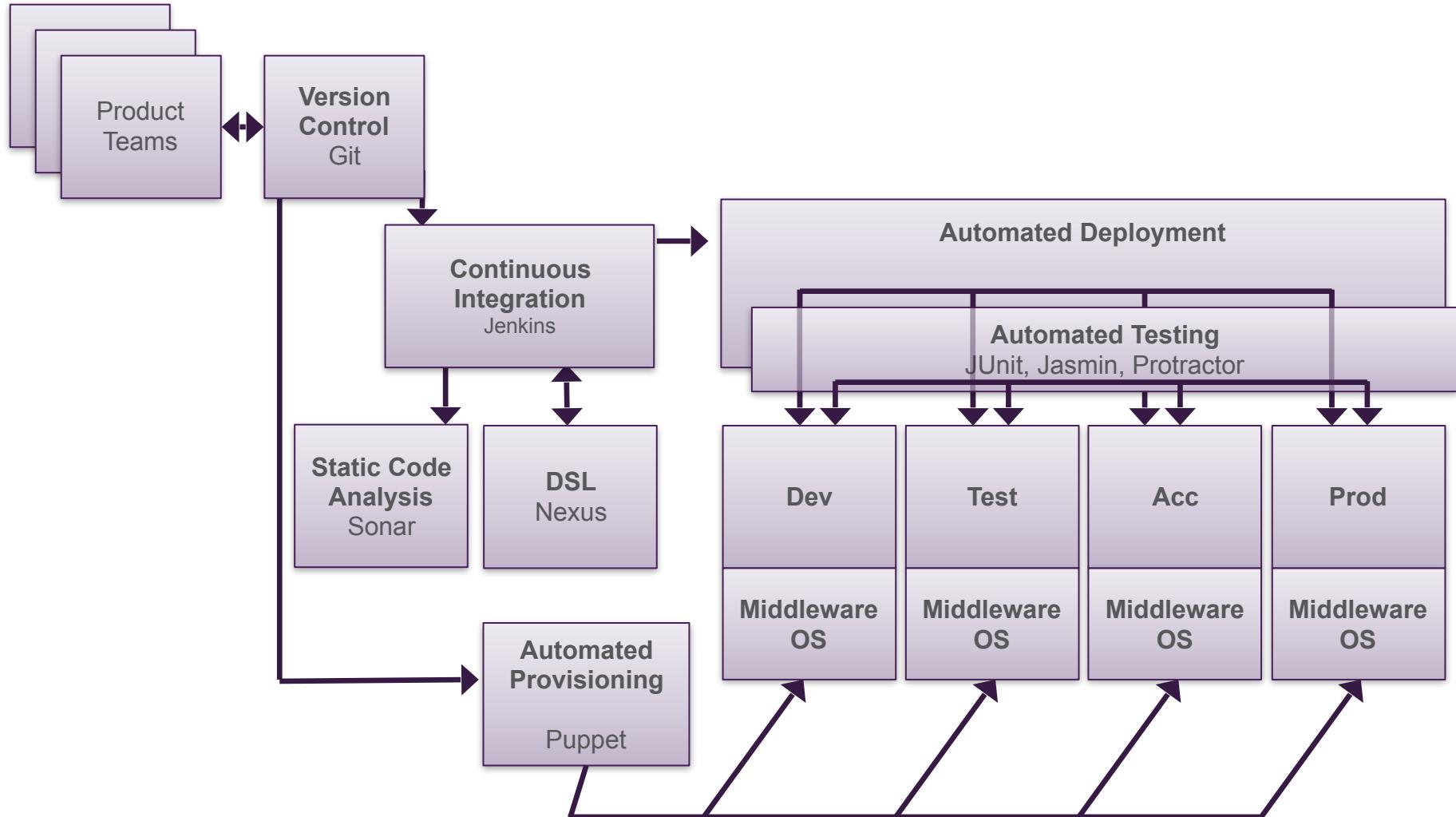
DevOps



THE TOOL SET



THE TOOL SET



OVERVIEW: DEVOPS TECHNOLOGIES

Continuous Delivery:

maven  



Platform:



Infrastructure:



Microsoft Azure



Containers:



kubernetes



END OF PART 1