

# Getting 100,000 employees to DevOps

Olivier Jacques  
DevOps Transformation Principal  
[@ojacques2](https://twitter.com/ojacques2)

Joan Watson  
DevSecOps Director  
[@joandwatson](https://twitter.com/joandwatson)

B



B



# Thrive on change



## DXC.technology

DXC Technology is the world's leading independent, end-to-end IT services company. We guide clients on their **digital** transformation journeys, **multiply** their capabilities, and help them harness the power of innovation to **thrive on change**.

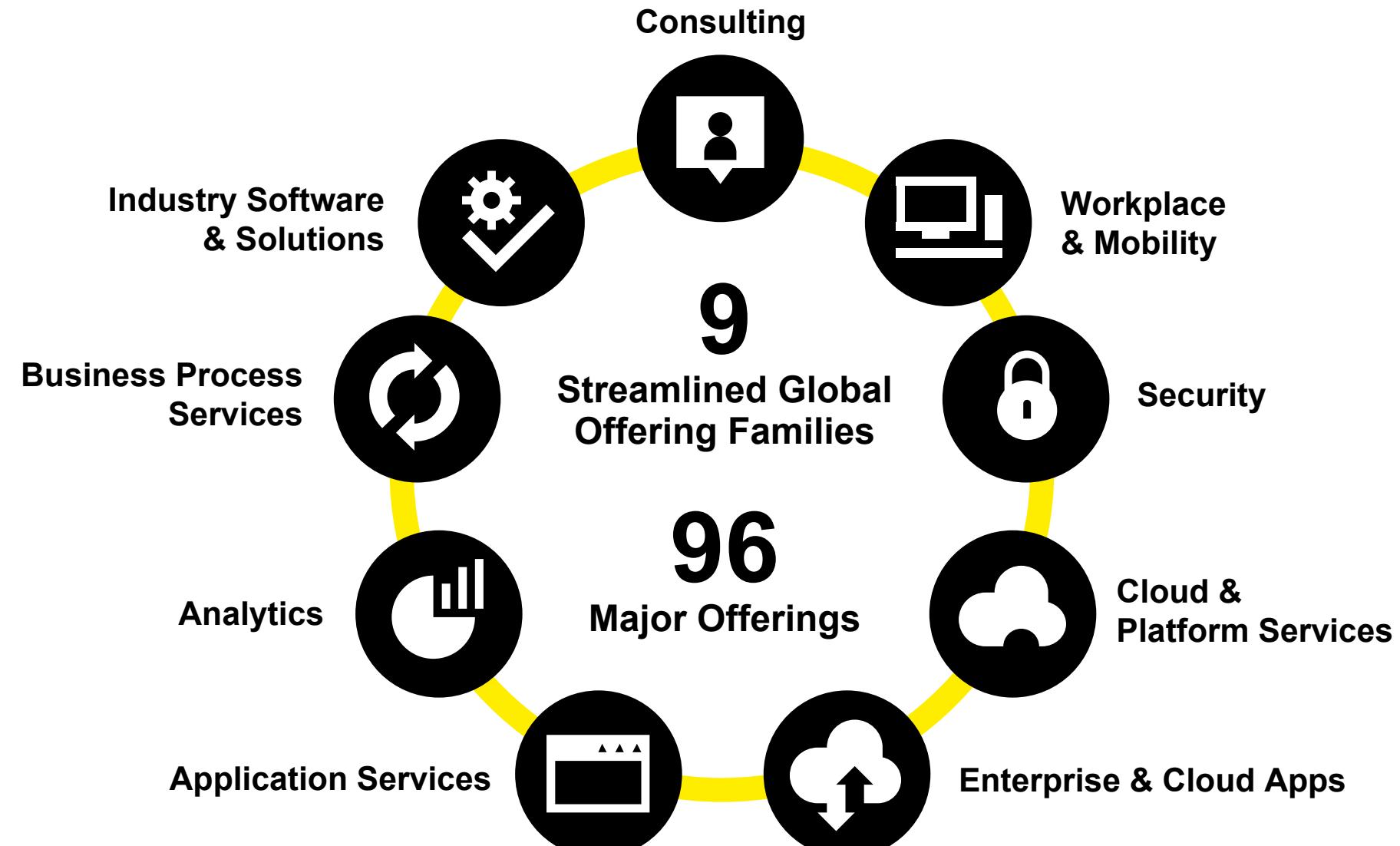
Bringing **innovation** to  
clients for **60+ years**

Serving **nearly 6,000**  
**private and public sector**  
**enterprises across 70**  
**countries**

Our clients benefit from our  
**technology independence,**  
**global talent, expertise** and  
**extensive partner network**

We are **uniquely positioned** to  
**lead digital transformations,**  
creating greater value for our  
people, clients and partners

# Streamlined offerings



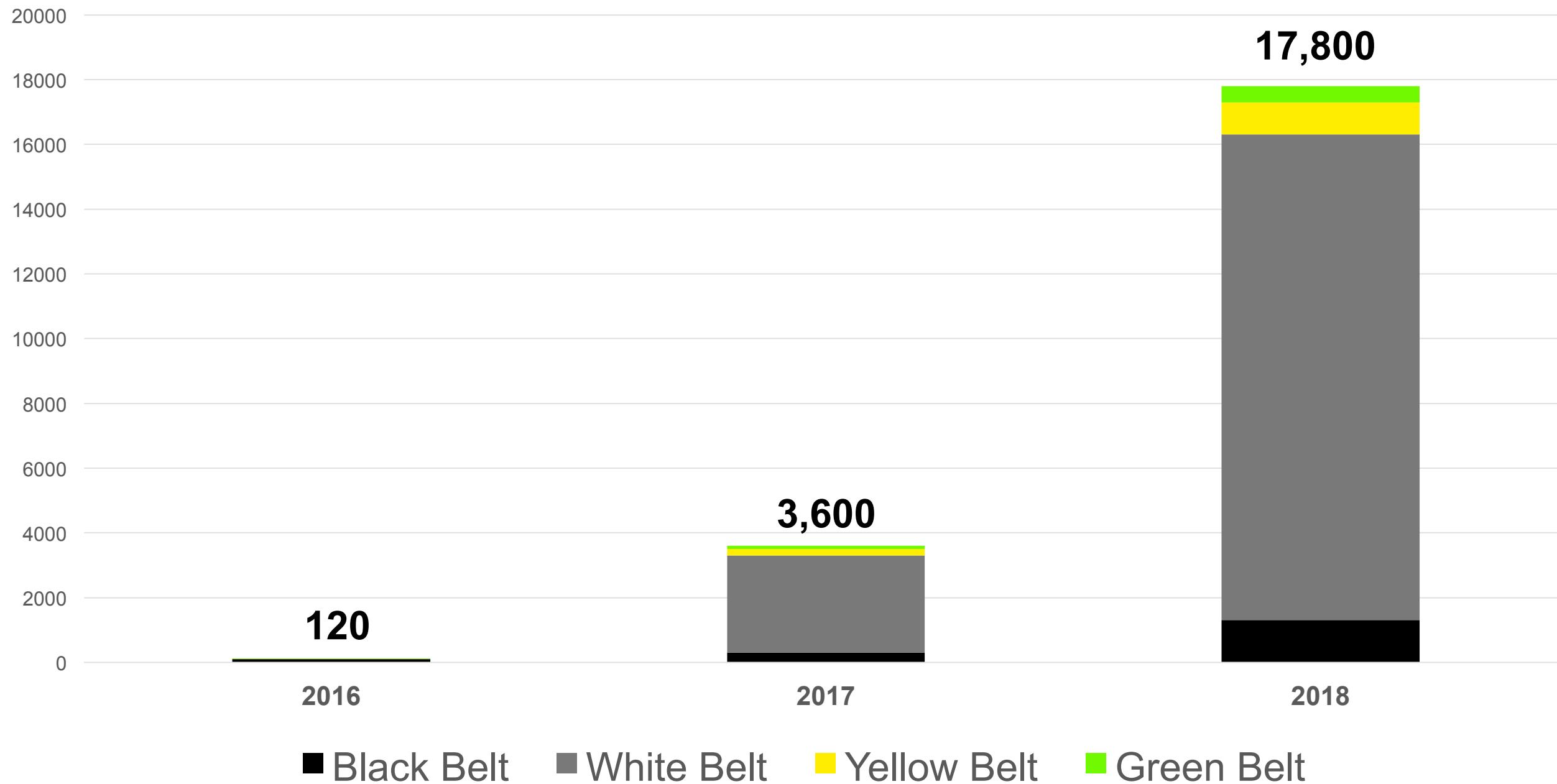
Build on the best of innovation

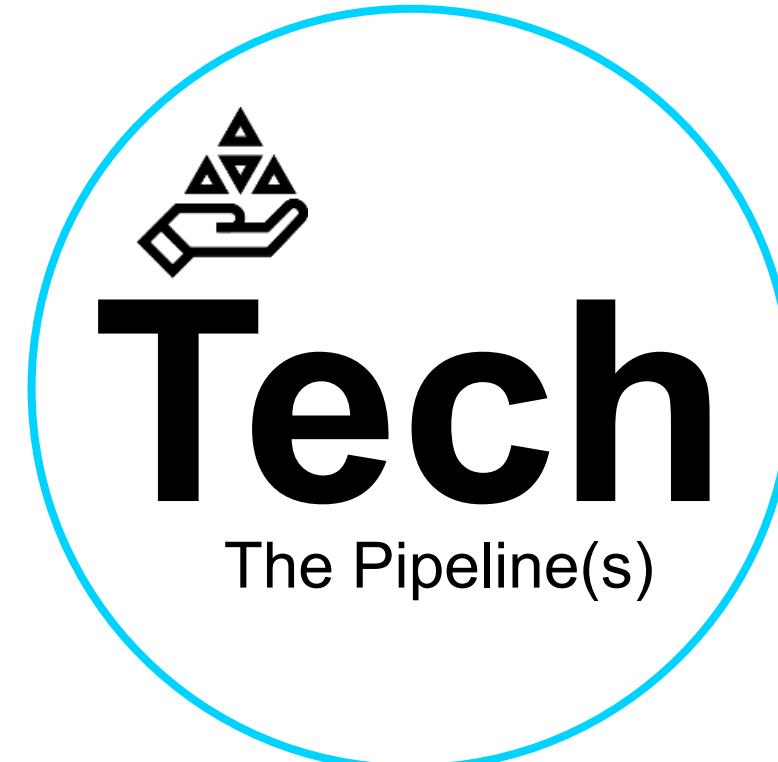
Align with customer preferences

Provide clarity for clients

We are here

# Employees and DevOps Dojo belts





# How do we spread the culture and the skills throughout the company?

(aka: the elephant in the room)

# How do we learn?



**Relate to what we already know**

# How do we learn?



Understand the path  
to success

# How do we learn?



**Tell a story**

# DevOps Dojos

What

White

How

Yellow

Why

Green

In Practice

Black

Internal DevOps days, Hackathons

# DevOps Dojos - details

## White

### What

For leaders and executives

Understand what DevOps is, how it is different

Leading DevOps teams

Leading change for the organization

## Yellow

### How

- Culture and Technical hands on labs
- Version control, CI / CD, TDD, Shift left on security, Post Incident practices, DevOps Kaizen, Value Stream Mapping, Trunk based development, Small batches, MVP, ChatOps, Infrastructure as Code, Blue/Green deploys, Canary releases and A/B testing, Measuring DevOps

## Green

### Why

For Leaders and executives

Understand the purpose and the benefits

Leading change

## Black

### Coaching

For Dev and Ops

For 1 or 2 application teams

Team's own work

DevOps coach help hands on

Start DevOps Kaizen



# Expanding face to face trainings...

**Yellow**

**5 Days** of labs,  
exercises, lecture (culture,  
tools, pipelines, practices)



**83** Survey comments to help  
us continuously improve Dojo



**68%** now ready to  
champion within team

**30** Participants (Dev, QA,  
Ops, PM's, Support, Consulting)

"I would like to recommend  
this training as offering to  
DXC external clients. Lets  
discuss"

No Test Phases  
CD Pipelines  
**Infrastructure as Code**  
Blue-Green Deploys  
**GIT Flows**  
Rapid Feedback Loops  
**Change Record**  
Auto-Deployment  
**DevOps Culture**  
Minimal Viable Product  
ChatOps  
**DevOps Kaizen**



**90%**  
would  
recommend  
to others

**80-90%** state:  
"adopting will definitely  
increase our **velocity**,  
**quality, productivity**"



"Best course I've attended in  
my 19 years here"

"I strongly recommend we  
conduct the training in other  
major sites"

# To Virtual

Fork me on DXC GitHub

## Articles by tag: yellowbelt

All

DevOps Dojo White Belt

DevOps Dojo Yellow Belt

3rd Party



### Welcome and Setup

The team story, and setting you up for the other modules



### Leading Change

### Leading Change

Leading a DevOps transformation



### Version Control

### Version Control

Version control and GitHub



### Continuous Integration

A complete continuous integration workflow



### Value Stream Mapping

Learn how Value Stream Mapping can be used to help you and your team optimize your processes for value delivery and speed.



### DevOps Kaizen

Learn how DevOps Kaizen events can be used to help you and your team continuously improve your process.



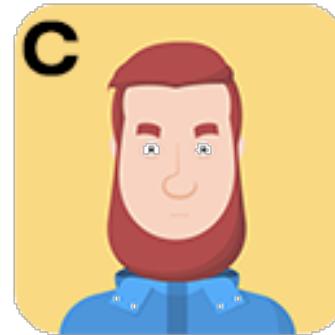
With



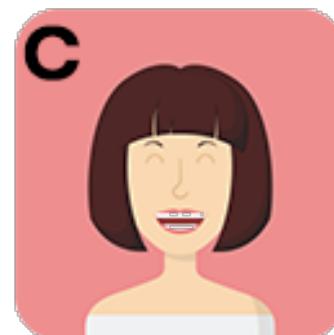
KataKoda

# The Team

Charlie (CEO)



Chun (Coach)



Brenda (Business)



Dan (Developer)



Tina (Tester)



Paulo (Product Owner)



Adam (Admin / Site Reliability Engineer)



Hal (Hacker)

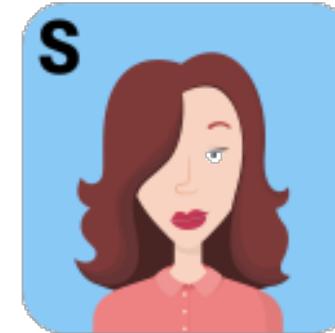


Santhosh (Scrum Master)



Selma (Security)

Selma is from Security.



# The Application

A screenshot of a web application interface. At the top, there is a dark header bar with a green bar on the left. The green bar contains the Spring logo (a stylized leaf icon) and the word "spring" in white, with a small "D1B739" badge next to it. To the right of the green bar are three menu items: "HOME" with a house icon, "FIND OWNERS" with a magnifying glass icon, "VETERINARIANS" with a grid icon, and "ERROR" with a triangle icon. Below the header, the main content area has a light gray background. It features a "Welcome" message in bold black text. Below the message is a photograph of a brown puppy and a white cat with blue eyes sitting together. In the center of the page, there is a logo for "spring by Pivotal." which includes the Spring logo, the word "spring" in green, and the text "by Pivotal." in smaller letters.

# The Continuous Delivery Pipeline

✓ pet-clinic < 3

Pipeline Changes Tests Artifacts

Branch: us-2-searchbyfirstname 1m 33s Changes by devcloud\_support

Commit: f4d5556 a few seconds ago Push event to branch us-2-searchbyfirstname

Logout X

A horizontal timeline with six stages: Start, Build, Archive Unit Tests Results, Publish Unit Test results report, Deploy, and End. Each stage is represented by a grey dot connected by a horizontal line. The 'Build' stage has a green circle with a checkmark, indicating success. The 'Deploy' stage also has a green circle with a checkmark, indicating success.

X pet-clinic 1

Pipeline Changes Tests Artifacts

Branch: us-2-searchbyfirstname 1m 42s No changes

Commit: 8f920ff a few seconds ago Push event to branch us-2-searchbyfirstname

Logout X

A horizontal timeline with six stages: Start, Build, Archive Unit Tests Results, Publish Unit Test results report, Deploy, and End. Each stage is represented by a grey dot connected by a horizontal line. The 'Build' stage has a red circle with an 'X', indicating failure. The 'Archive Unit Tests Results', 'Publish Unit Test results report', 'Deploy', and 'End' stages have white circles with black outlines, indicating they have not yet run.

# Demo

Katacoda

Value Stream Mapping

Step 4 of 12

## Act 1: Getting Started

Follow the dialog in the terminal window...

CONTINUE

Terminal +

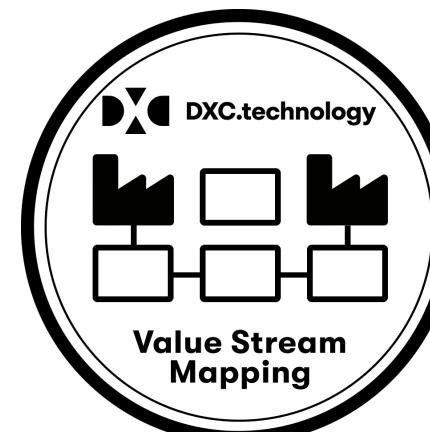
Brenda> VSM sounds interesting what exactly is it?  
Chun> A Value Stream describes the process used to create and deliver goods, services, entation of a value stream.  
Santhosh> A VSM will enable us to see the end to end flow of software from idea to del eedback loops and queues in our process.  
Dan> We already understand our process why do we need to draw it? We already work as fast as we can, this just seems to be a distraction from writing code.  
Paulo> I agree we all understand the general process as it applies to our functional a reas and our interactions with our direct upstream and downstream activities but I thi nk we don't have a shared understanding of the complete end to end flow. The understan ding I am referring to would include the nature of handoffs between functions, the lea d times, the activity times and the quality of work reaching each of us. I think that lack of understanding is contributing to the problems we have been experiencing.  
Santhosh> Maybe another way to look at this is to agree what contributes to the time i t takes for a feature to be delivered?  
Chun> Exactly, basically for a work item the Total Duration = Processing Time (Actual Time spent working ) + Waste Time (Handoffs etc.)  
Chun> A VSM is a pictorial representation, using a standard set of symbols, of an end to end process including lead and activity times for all steps in the process.  
Dan> OK I think I am starting to understand where you are going with this, what do we do with the VSM once we create it?  
Paulo> We use it to identify and eliminate waste, waste is any non value add activitie s in the value stream including handoffs, rework, manual activities, wait times etc.  
Brenda> We need to do that yesterday, how do we begin?  
Brenda> First, let's ask some questions to Olivier.  
Press enter

# Badges and Gamification

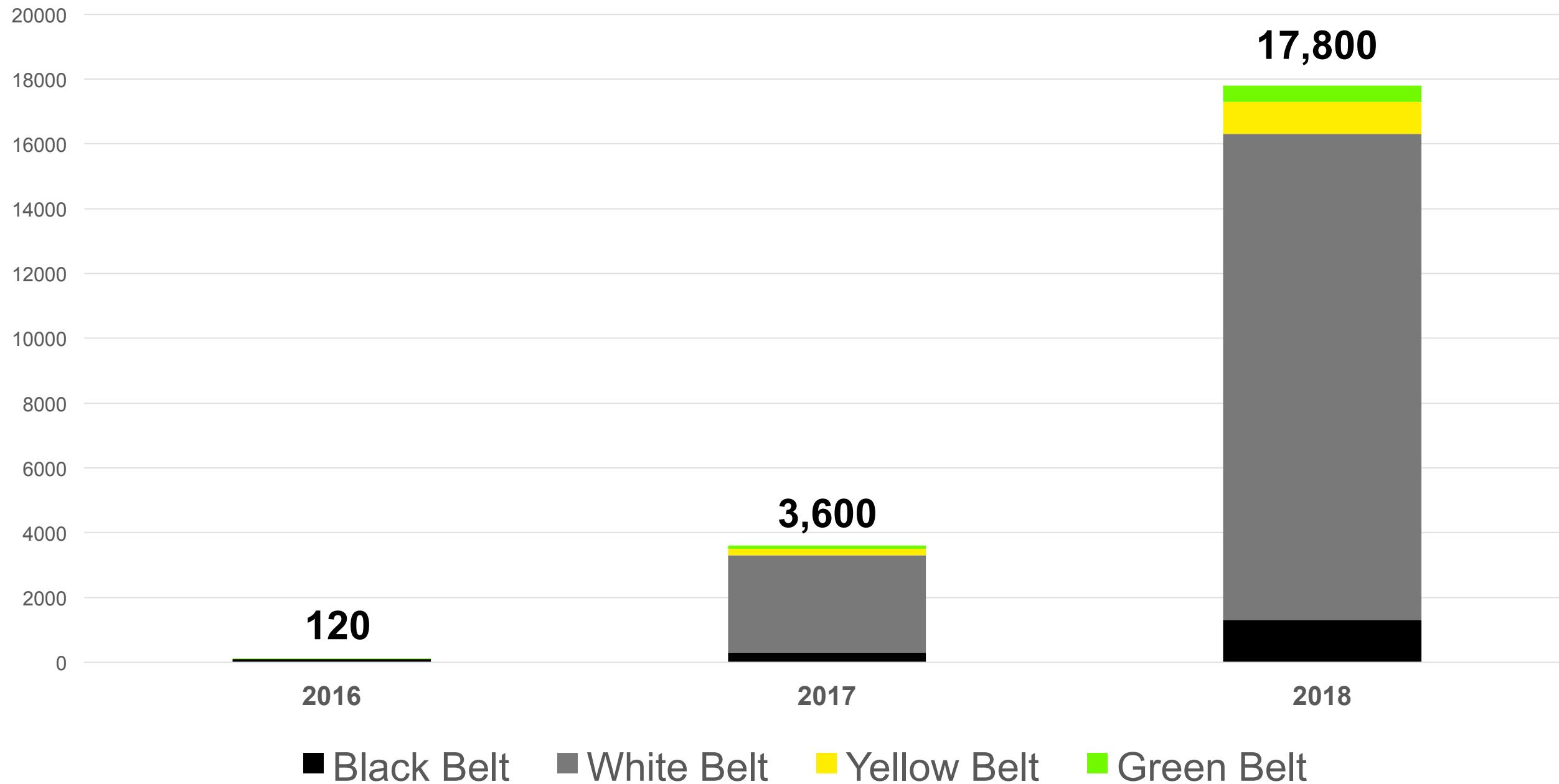


Internal DevOps days, Hackathons

# Badges and Gamification: Majors and Minors



# Employees and DevOps Dojo belts



# Feedbacks – White Belt DevOps Dojo



You should try it



24-JUL-2018 3:00 AM



: nice way of giving a hands on experience :D



23-JUL-2018 10:59 AM



This course is very good for newcomer, who need understanding of GIT/GitHub, Jenkins and Ansible.



23-JUL-2018 10:45 AM



This course very helpful for new employee knew about how GIT and Jenkins work !!!



23-JUL-2018 10:29 AM

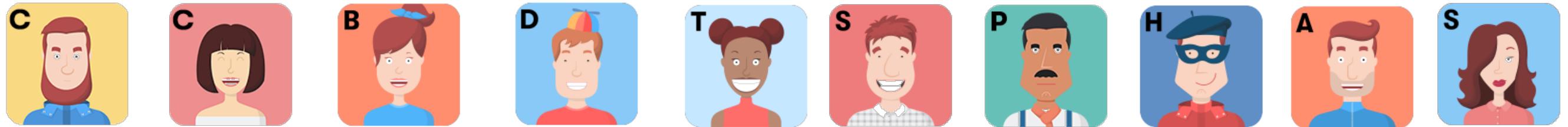
# Feedbacks – Black Belt DevOps Dojo

For a product organization standpoint, Dojo framework is an efficient model to federate the team on an transformation project. It acts as catalyster between different individual to bootstrap the change.

Focusing on immediate and concrete outcome (mid-week demo, end week prototype) allows to immediately being in motion. Getting access to R&D IT experts and leveraging their experience in involved technologies is definitively re-ensuring and accelerate the production of viable and future proof results.

*Yannick R., Engineering Manager*

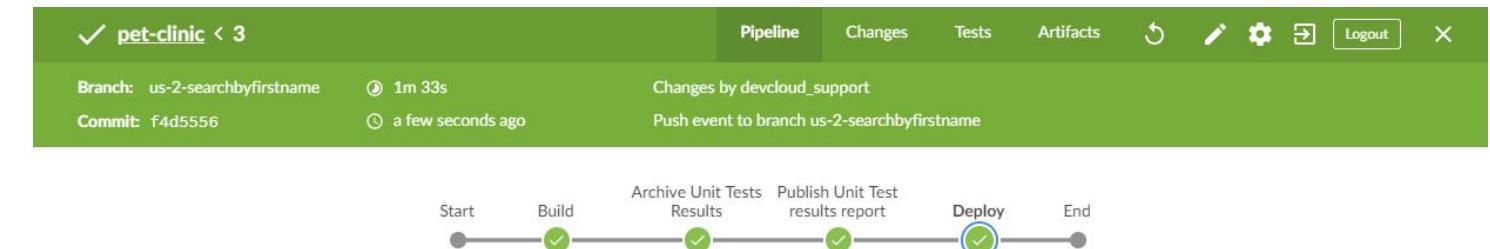
# A story



# An application

A screenshot of a web application interface. At the top, there is a dark header bar with the "spring" logo, a "HOME" button, a search bar ("FIND OWNERS"), a "VETERINARIANS" button, and an "ERROR" button. Below the header, the page title is "Welcome". There is a small image of two dogs (a brown puppy and a white cat) on the left. In the bottom right corner, there is a watermark-like logo for "spring" with the text "Pivotal".

# A pipeline



# A game



# Here's the help we're looking for

- **We want to hear from you**
  - How do **you** teach DevOps tools and culture?

# Thank you!