

Testing Portugal 2018

DevOps: A Future Proof to Testing



Today's Agenda

- DevOps story:
 - The World of DevOps
 - Making the Cultural Transition into DevOps
 - How to Deploy Quality Software, Faster with DevOps
 - Findings and interesting takeaways
 - DevOps and where the future lies
- Finally.....

The background of the slide is a vibrant underwater scene. In the foreground, there's a rocky coral reef with several small, colorful fish swimming around it. The water is a deep blue, and the background is filled with a large school of fish swimming towards the right side of the frame.

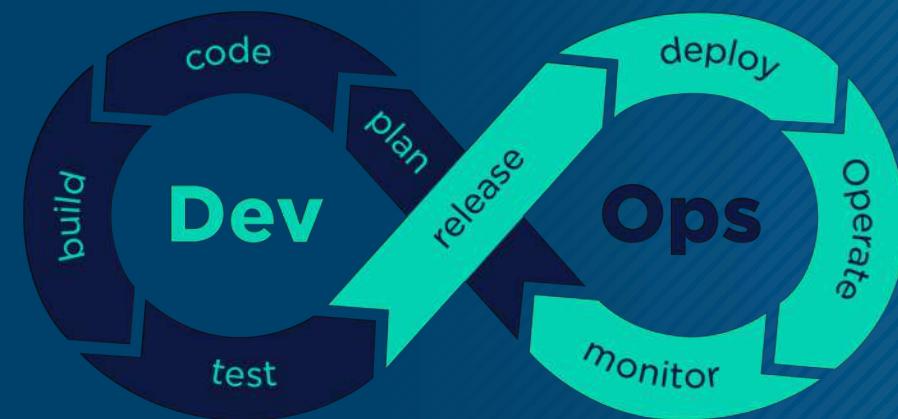
**The art of simplicity is a
puzzle of complexity.**

Douglas Horton

When you hear the mention of DevOps!!!!



What is DevOps?

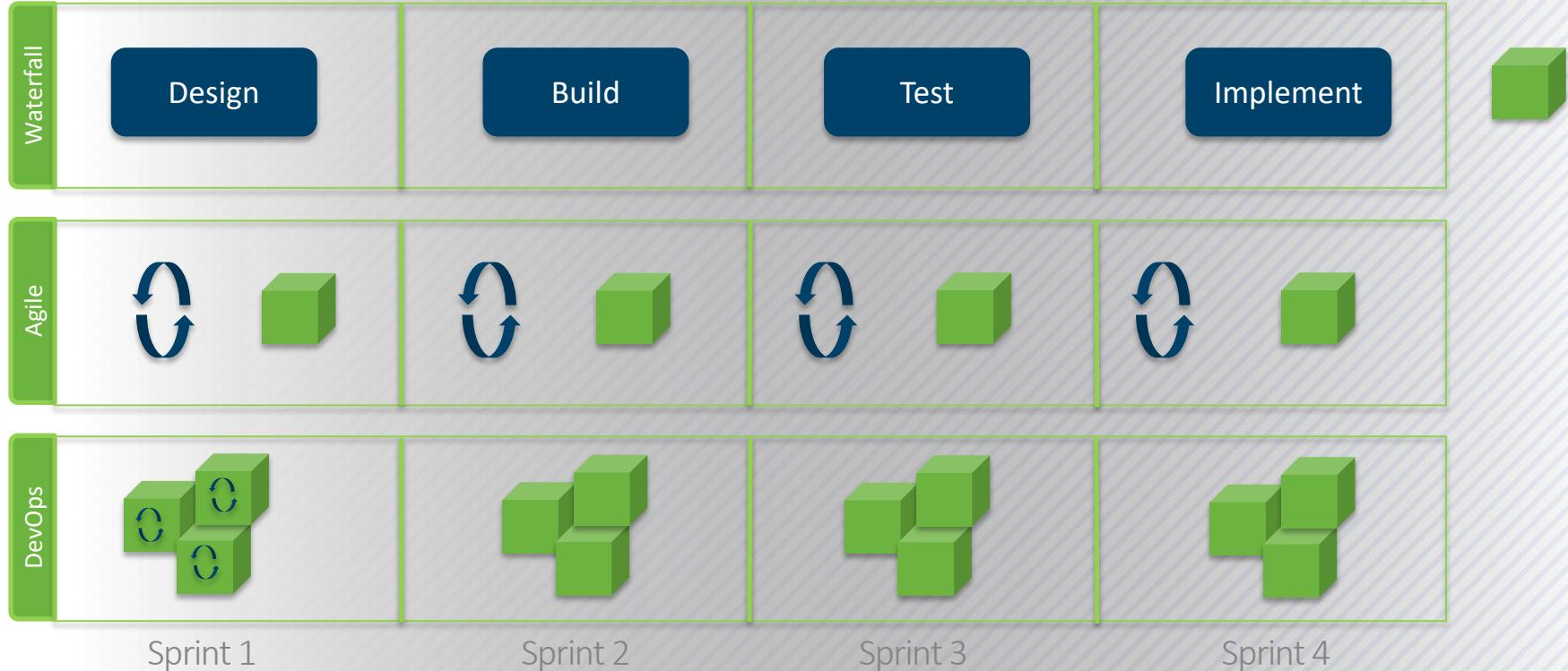


DevOps is a holistic culture of collaboration between development and operations teams, achieved by optimizing people, tools and processes.

Dev teams: Business stakeholders, product managers, designers, developers and testers

Ops teams: Release engineers, network specialists, systems engineers, operations and security teams.

DevOps enables teams to push value continuously



Benefits of DevOps



**Software delivery with
minimum risk and
disruption**

**Builds cross-team
collaboration and
culture**

**Faster software
releases and value
creation**

Making the Cultural Transition into DevOps

How to transition into DevOps

1 Do your homework

Study your organization and look for areas of improvement.
Measure current performance and efficiency



Bridge the gap

Explain the benefits of DevOps
Acknowledge that teams have barriers in communication and conflicting priorities



3 Sharing is caring

Hold cross-team brainstorming sessions
Share pain-points and objectives to promote understanding



Start small

Start with small experimental groups of people who are cross-functional and collaborative
Measure their performance



5 Retrospect

Study the challenges and benefits of implementing DevOps in experimental teams



Expand iteratively

Make improvements to the process and try again
Expand DevOps practices outside small test groups



Common Pitfalls to Avoid when Moving to DevOps



Faster releases but
neglecting user value



Lack of optimum
toolchain



Different perceptions
among stakeholders

How to Deploy Quality Software, Faster with DevOps

Best Practices to Ensure Quality while Moving Faster with DevOps



Collaboration



Automation

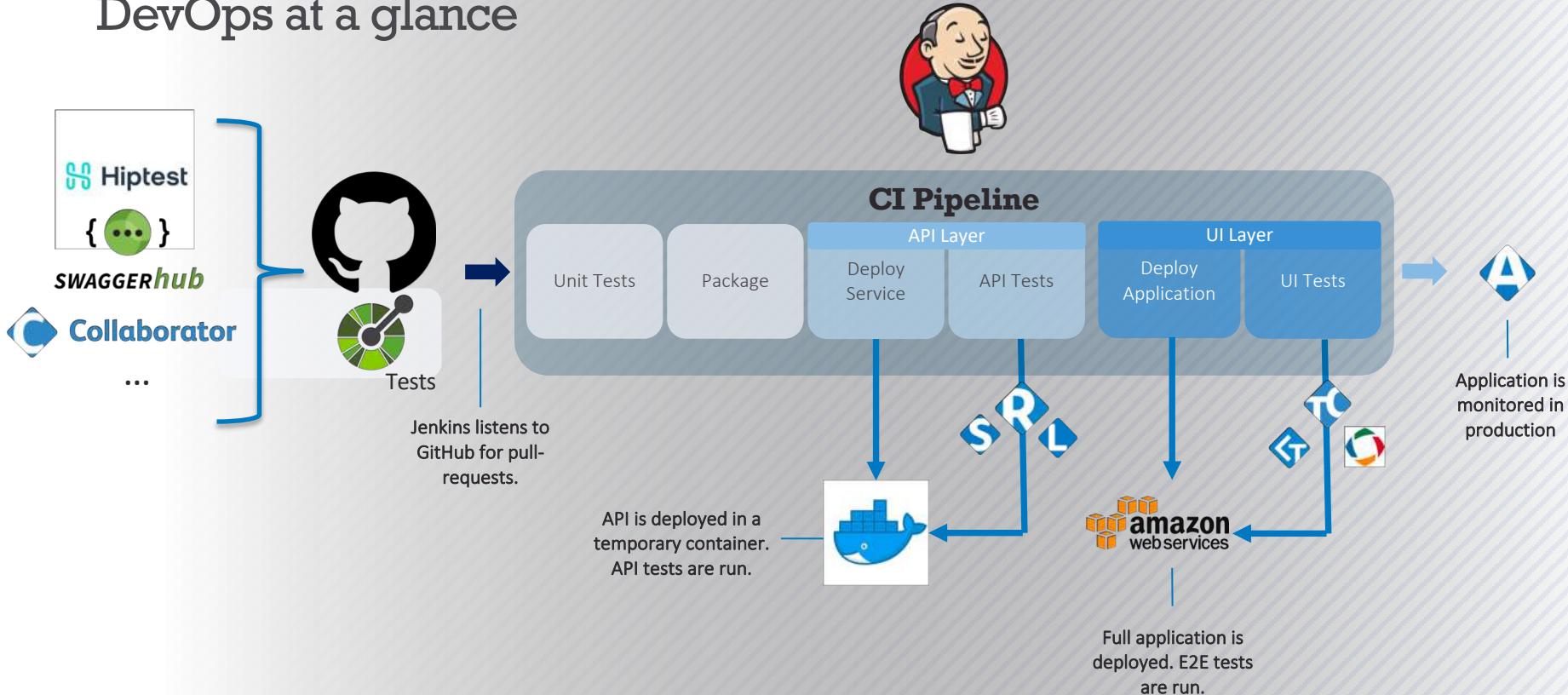


Feedback and Monitoring



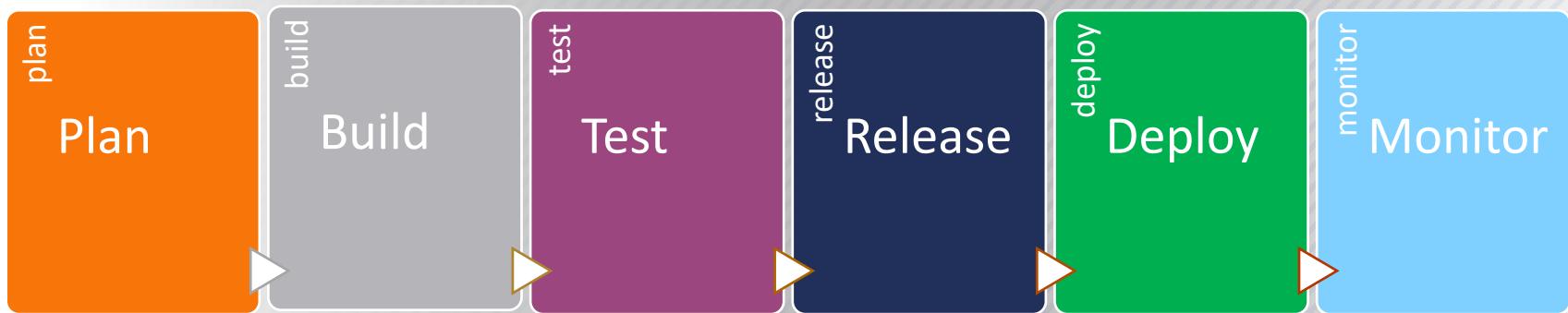
Service Virtualization

DevOps at a glance



Findings and interesting takeaways

6 Steps to Go Faster, Build Better and Avoid Disaster Software quality



Findings and interesting takeaways

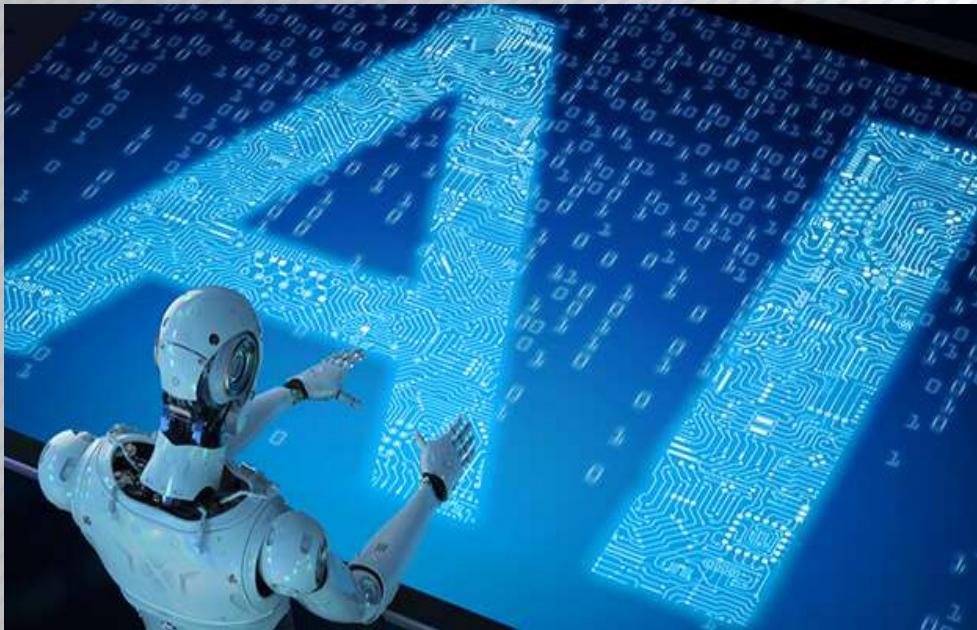


Findings and interesting takeaways

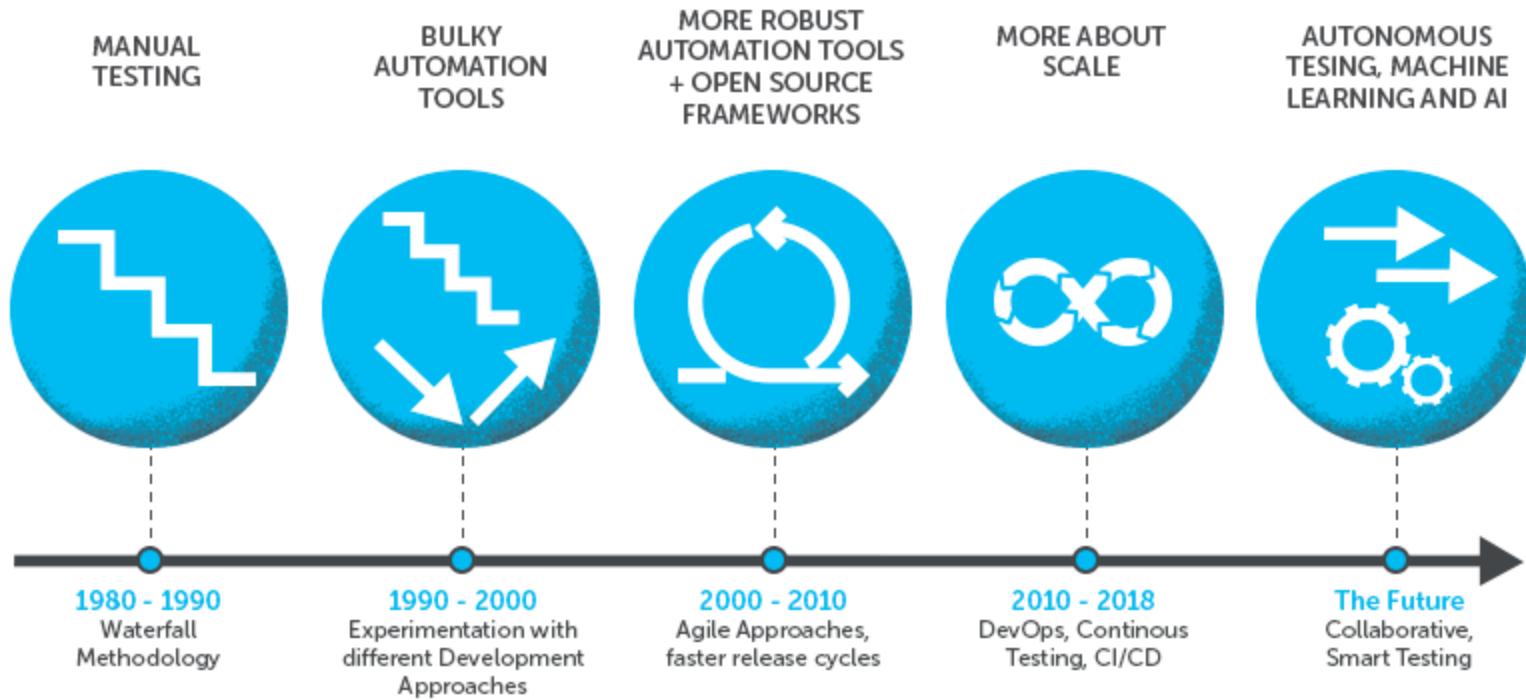
Benefits	Challenges
<ul style="list-style-type: none">• Immediate ROI• Quicker• Less resource intensive	<ul style="list-style-type: none">• Buy in• Communication• Infrastructure• ROI – Time and money
Tools	Processes
<ul style="list-style-type: none">• Jenkins• CircleCI• Jira• Maven• SoapUI	<ul style="list-style-type: none">• Automating tests• Types of communication• Managing data• Removing dependencies

DevOps and where the future lies

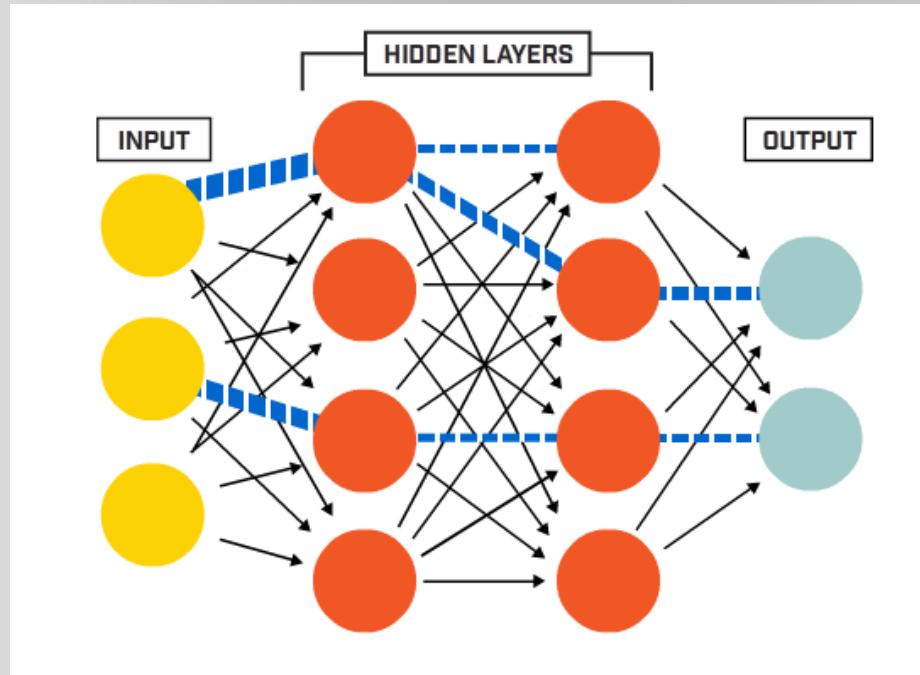
DevOps and where the future lies



EVOLUTION OF TESTING



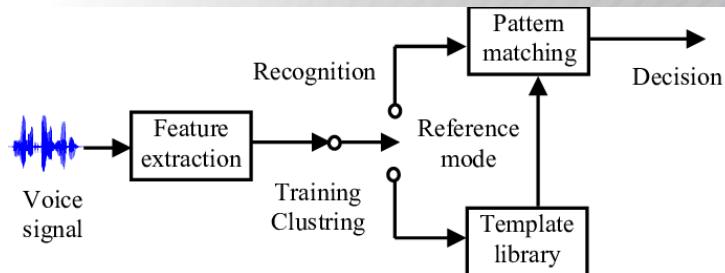
The more an intelligent system can improve its output based on additional inputs, the more advanced the application of AI becomes.



AI-Driven technology is reshaping our day-to-day lives, changing the way we see the world.



Rise of Popular Artificial Intelligence Use Cases



Speech recognition



Recommendation systems



Object/image recognition

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(Continued from page 41.)

whether the other was or not. He felt considerable sympathy with committees who give power into the hands of one individual. There was a great danger of allowing a despot to grow up in their midst. If they placed intelligent men on the committees they would select such managers as they required, but would never allow themselves to be bound in a corner. (Applause.)

Mr. PRINCIPAL (Manchester) thought the paper of the right sort, inasmuch as it left other people something to say. He agreed with the remarks made by Mr. Slater to a very considerable extent. If the directors of the Wholesale entertained any suspicion as to the reason why the buyers did not support the Wholesale, it was in the direction indicated by Mr. Slater. He thought, however, that the idea put forth by Mr. Waring might be carried out

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(Continued from page 41.)

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Extract information from text

AI and DevOps within the testing community

- AI –Powered recognition
- Predictive self-healing
- Bug hunting

Think about it

DevOps is all about automation of tasks. ...

AI and ML are perfect fits for a **DevOps** culture. They can process vast amounts of information and help perform menial tasks, freeing the IT staff to do more targeted work. They can learn patterns, anticipate problems and suggest solutions

Predicting the Future



Finally.....



Ultimate goal



How it was



How it should be

Imagine....



12am Saturday

8pm Saturday



8:30pm Saturday



Thank You