

expo QPA 24

MADRID
May 28th,
29th, 30th
2024



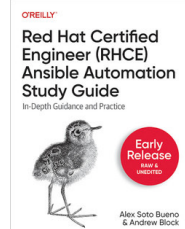
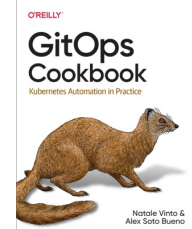
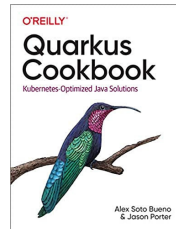
expoqa.com



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- Currently Red Hat's Director of Developer Experience
- Featured speaker at technology events
- A Java Champion since 2017
- Writer, University Professor, Radio collaborator



This shouldn't be too hard...

Let's build an application!



Let's build an application!

We'll just grab our editor
and write the code... period.

Let's build an application!

We'll just grab our editor

and write the code. Seriously dude?

Yeah... We'll just need ...

... to create container images,
and a container registry to share them,
and a place to run all our containers ...

Yeah... We'll just need ...

... oh, and a lot(!) of YAML 🤪,

and some CI/CD to build & deploy it,

and a repository to store our code

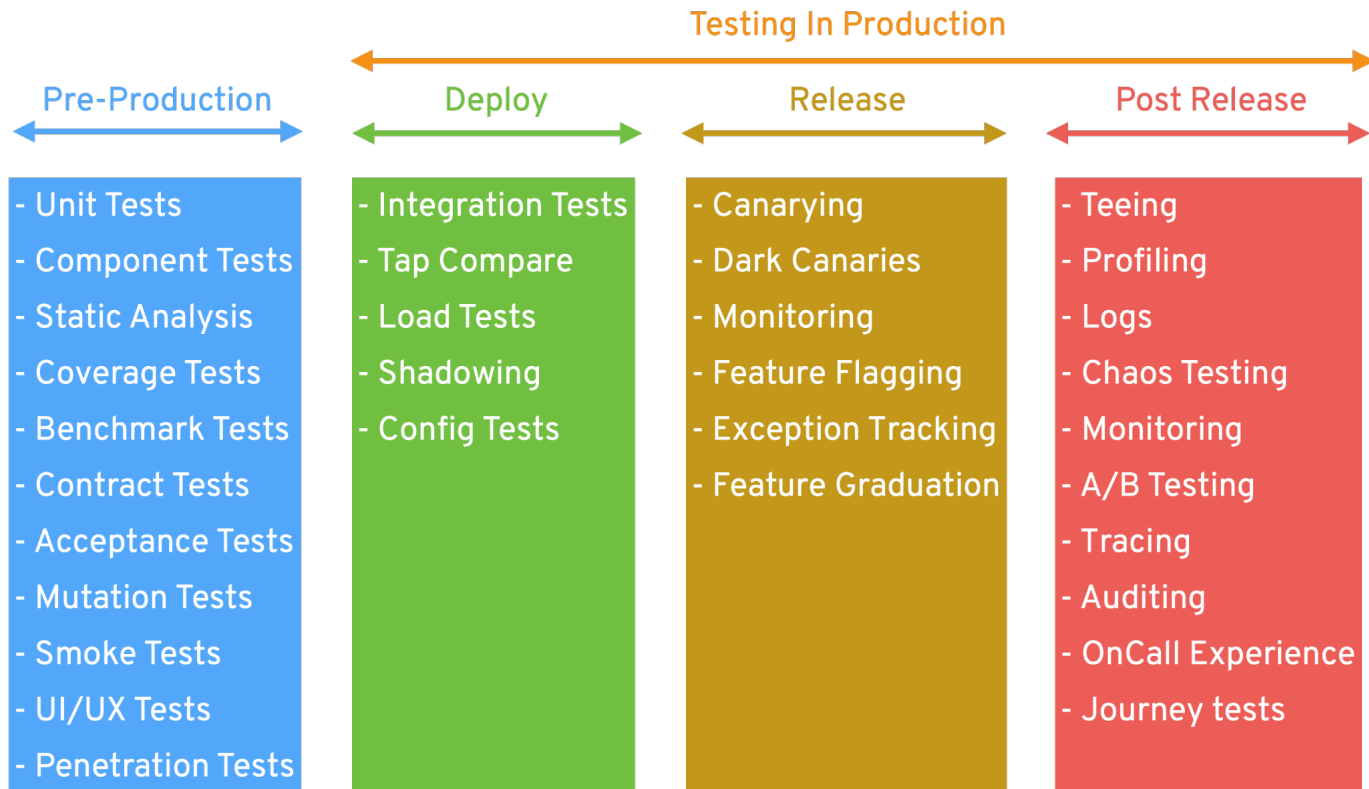
... and all our YAML



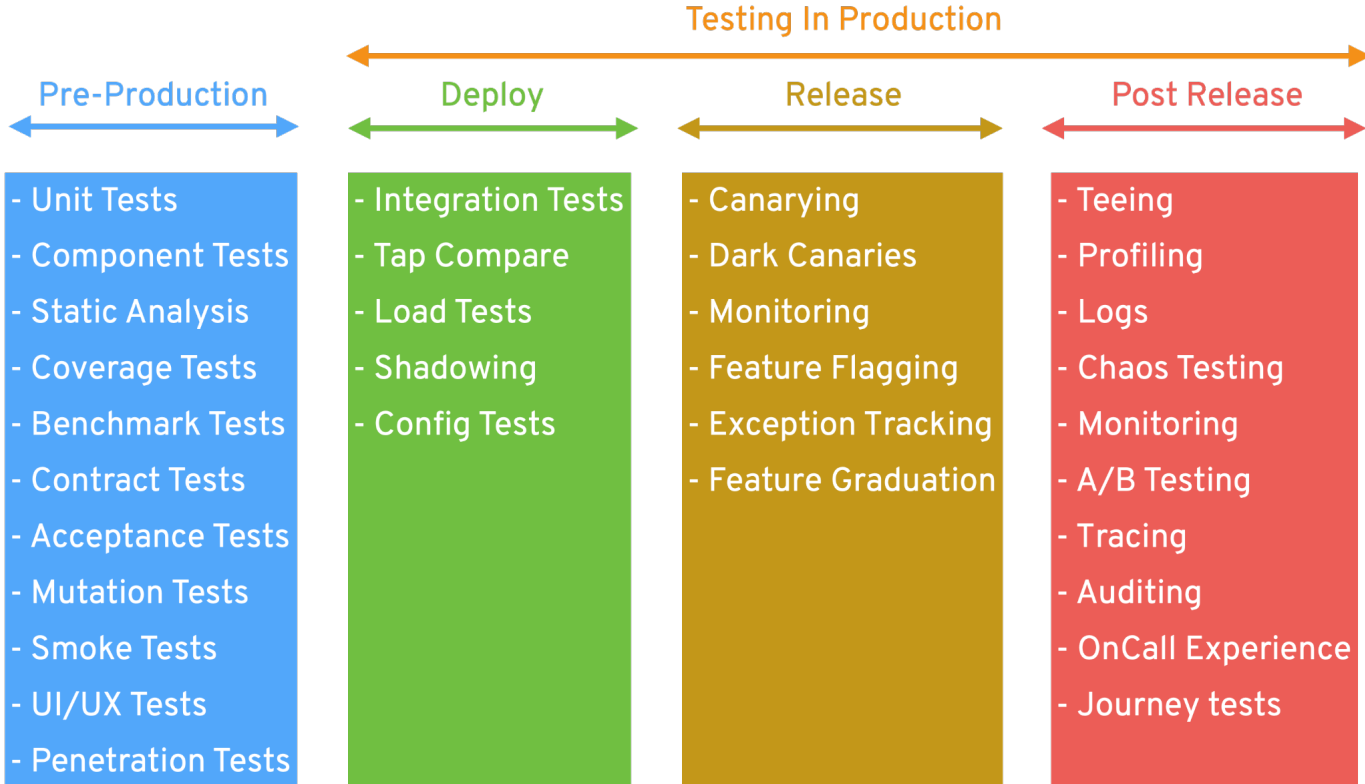
Yeah... We'll just need ...

...oh remember to test the app too 🙈.

Yeah... We'll just need ...



Yeah... We'll just need ...

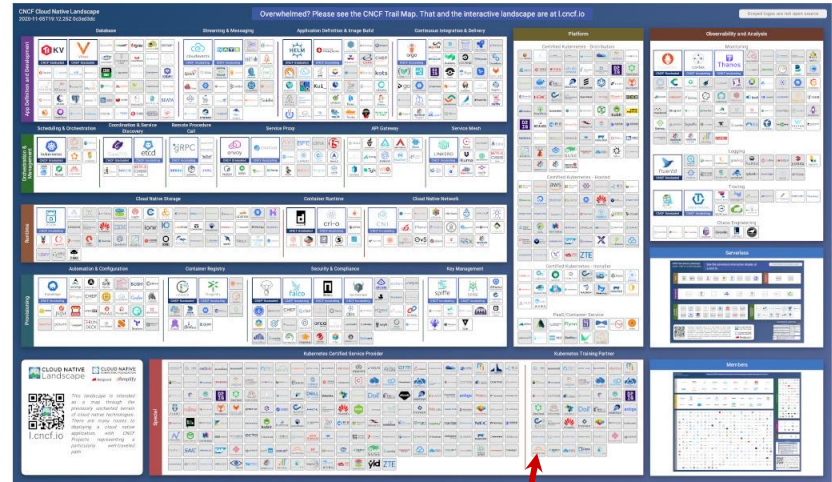
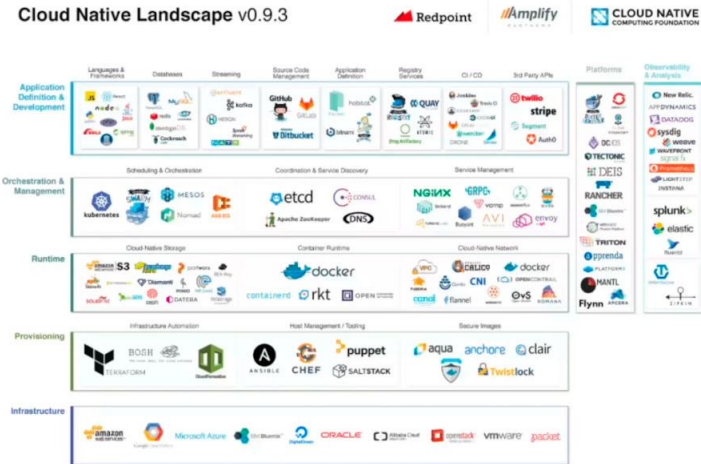


CLOUD NATIVE COMPUTING

WHERE WE STARTED

HOW IT'S GOING

Cloud Native Landscape v0.9.3



Yeah... We'll just need ...



Lack of organization can lead to a **lengthy** and **inconsistent onboarding** experience - it's **costly** and also **frustrating for developers, testers, ...!**

Is “shifting left” (still) a good thing going forward?



What's the problem?

Software Engineering are under pressure, and their productivity is slowing down.

Organizations are looking for a platform to reduce the tedium of mundane tasks and increase productivity.

39%

Increasing workload / demand from other teams lead to increased overhead.¹

76%

More than three-quarters of organizations say the **cognitive load is high enough to negatively impact productivity.**¹

37%

Adapting to the pressures of digital transformation is third biggest challenge.¹

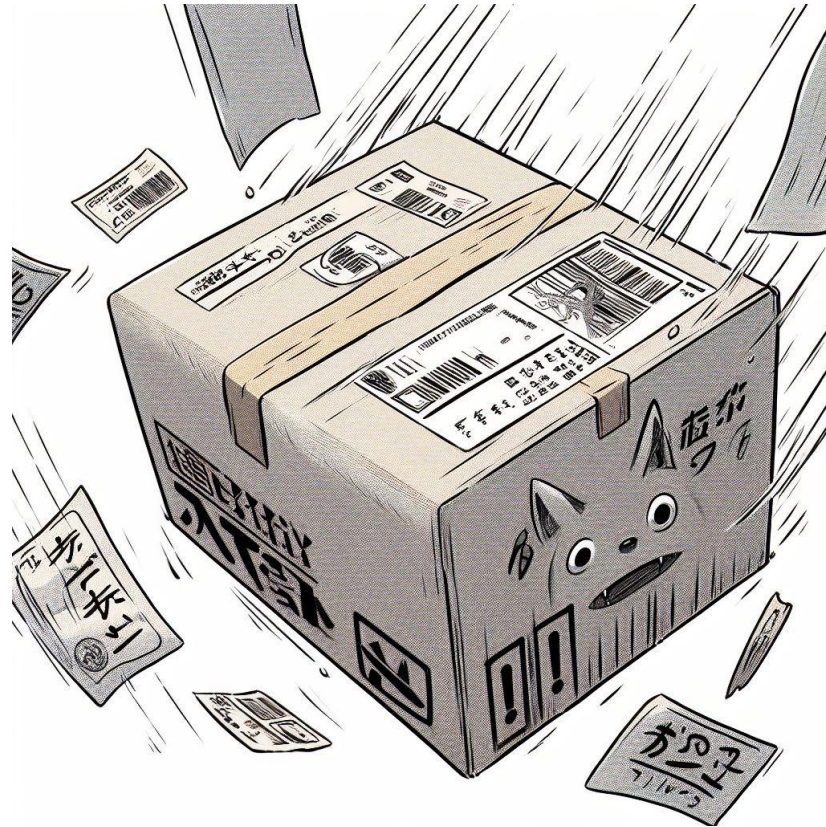
35%

Learning skills to adapt to new technologies and approaches.¹

^[1] [Salesforce productivity survey](#)

Probably better to start “shifting down” ...

But how ?



Internal Developer Platforms

What is a Developer Portal?



“A Single pane of glass that consolidates all the tools, resources, and documentation developers need to build, test, and deploy applications.”

- ▶ **built by a platform team to enable self-service**
- ▶ **provides developers with** guided and supported **paths to success**
- ▶ typically **composed of different technologies** and tools



Empowering engineering to deliver business value faster

The Rise of Platform Engineering = The Evolution of DevOps

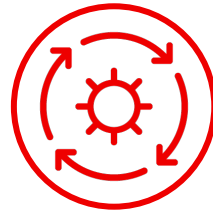
Single pane of glass to increase engineering productivity.



Self-service **with guardrails** for cloud-native development.



Best practices with **GitOps** and **automation**.



Real-time view of application and infrastructure **health and security**.





Golden Path

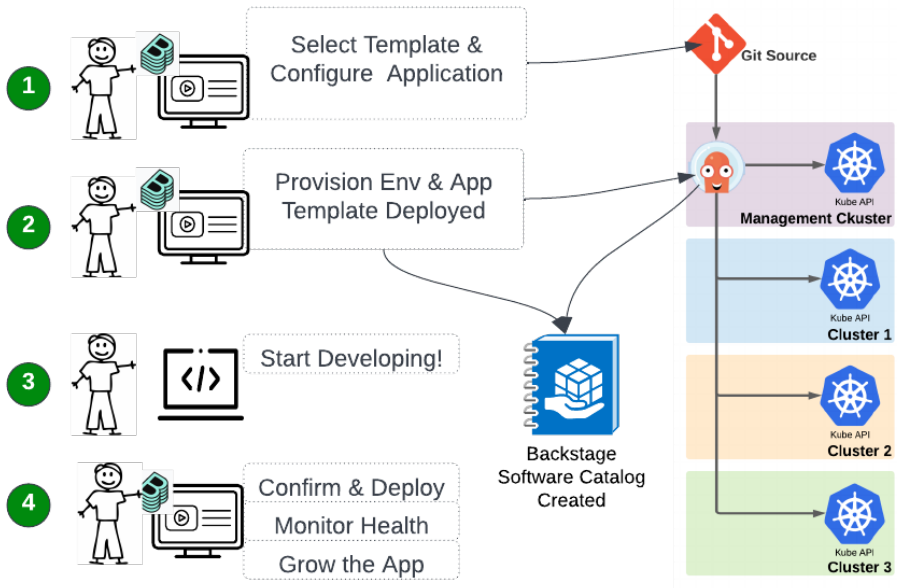


Pre-architected and supported approach to building and deploying a particular piece of software

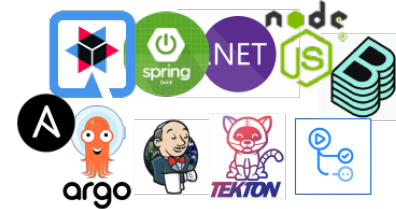


Golden Path Use Case

We've defined the ideal template to help your teams onboard

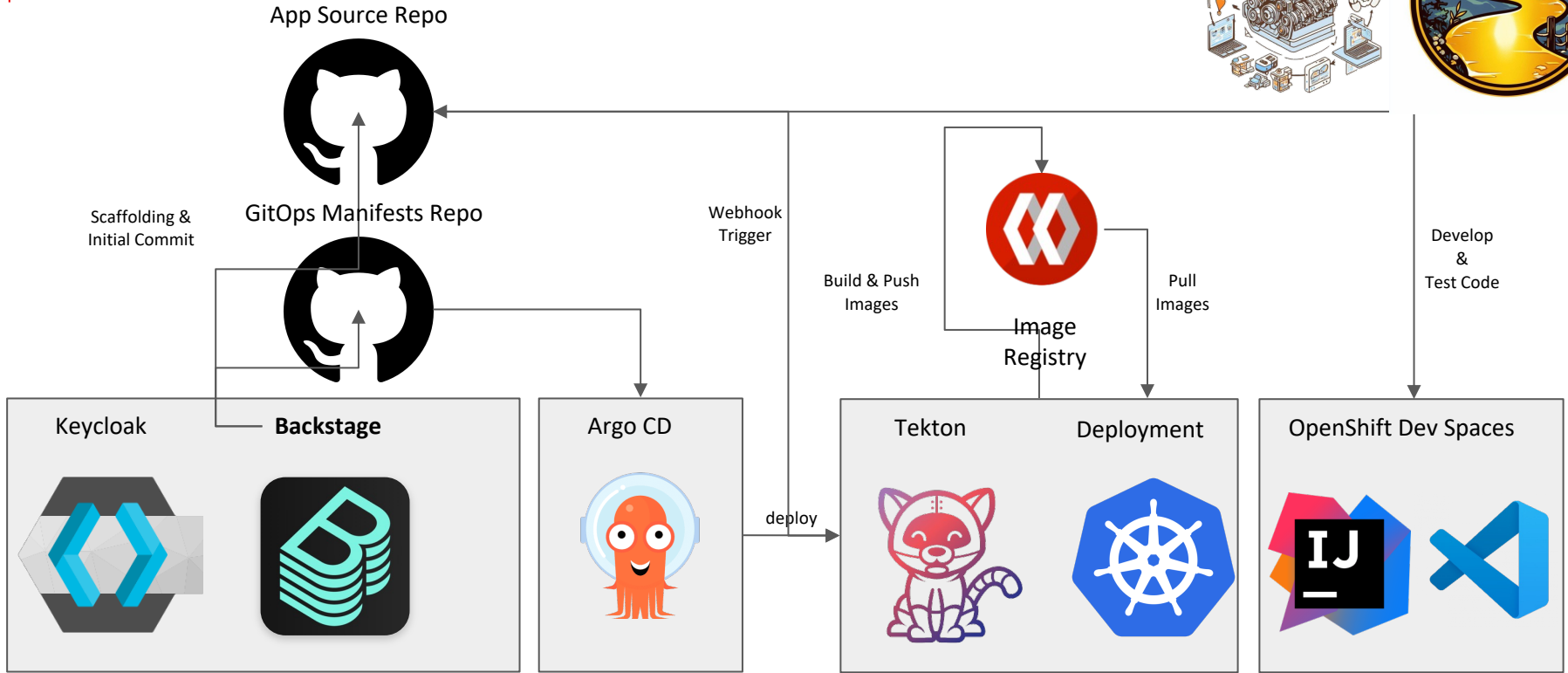
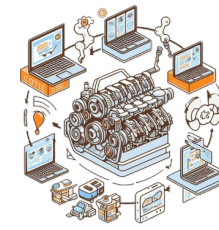


Prescriptive Software Templates



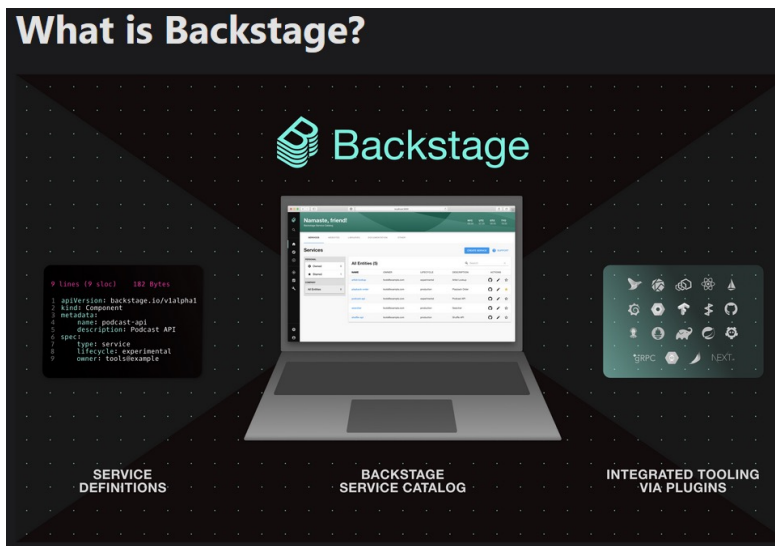
Simplify Development & Ensure Compliance

How it all comes together ...





What is Backstage?



<http://backstage.io>

“Backstage is an open platform for building developer portals. It was created at Spotify, to give developers a great experience.”

Backstage unifies all your tooling service and documentation to create a streamlined development environment

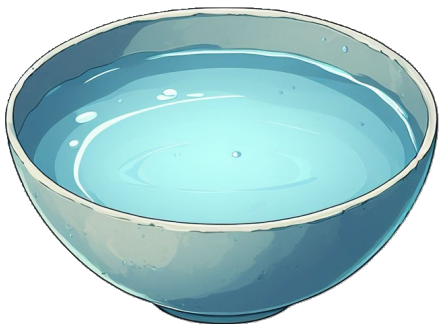
Allowing developers to focus on what they want to ... coding, rather than navigating to all the different tools

Resulting in lowering the cognitive load and unlocking developer productivity

Happy developers makes happy code!



The downside



- ▶ Ongoing Maintenance
- ▶ No “set and forget”
- ▶ Coding Required for Installation of Plugins (ugh)
- ▶ How well do you know TS? NodeJS? React?
- ▶ No Automatic Service Discovery



Backstage Core: Plugin



100+ plugins, some examples:

- ▶ SCM
- ▶ CI/CD
- ▶ Monitoring
- ▶ Issue tracking
- ▶ Code quality



..... MANY MORE



Project Janus








Open Source Community

- ▶ Deployment targets & installation methods
- ▶ Golden paths & templates
- ▶ Developing & enhancing plugins
- ▶ Improving Backstage platform






Demo Time



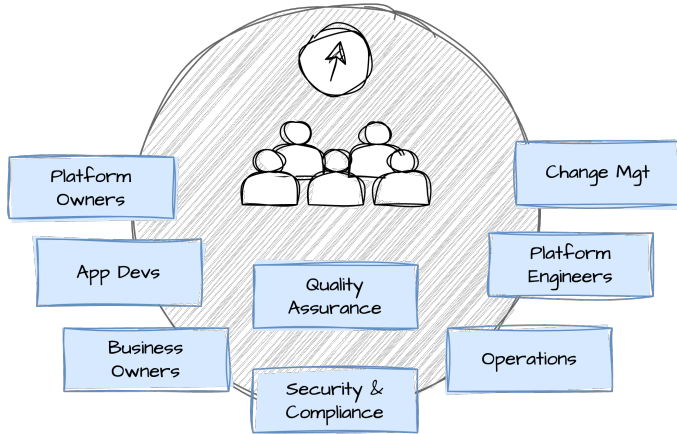
Traditional delivery

-  Maintaining a stable state
-  Requirements defined up front
-  Problems are remediated as a response
-  Requests are handled via tickets
-  Slow to adapt to changing needs

Platform as a Product

-  Continuous improvement
-  Continuous review of business and user needs
-  Problems are pre-emptively engineered out
-  Requests are managed automatically and on-demand
-  Greater agility and incremental improvement aligned with user needs

Develop shared understanding,
build consensus, align on vision.



Collaboration and Understanding

Key traits for Platform Teams



Empowered

The team has ownership of the platform and its distinct brand identity



User-Centric

User needs shape the direction of platform development



Iterative

The product and approach are continuously inspected and improved



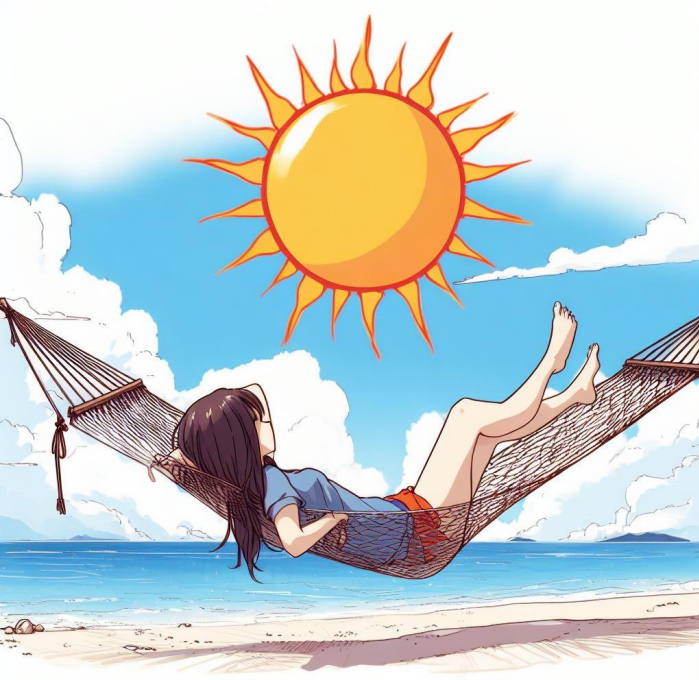
Data-Informed

Data is gathered continuously to inform measures of success



Aligned

Value is maximised by collaborating towards organisational goals



Let's Wind Down

- ▶ Still in the early stages, but over 200 adopters
- ▶ Active Community (Plugins, Templates,...)
- ▶ Slow at the beginning but ramp-up when ready
- ▶ Group of experts
- ▶ Developers love clicks

SIEMENS



LinkedIn

Expedia

NETFLIX



American Airlines

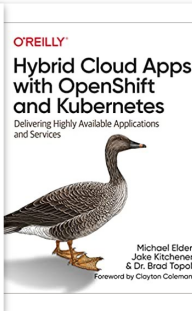
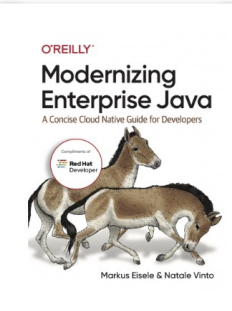
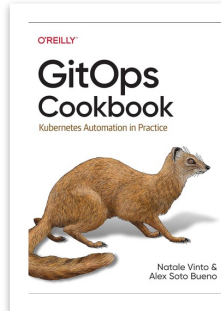
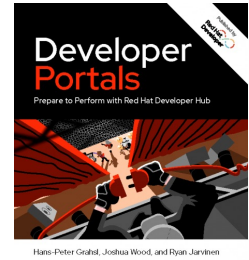


ferrovial

splunk>

+ MANY MORE

Free Developer e-Books!



Questions?



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Thank you for attending

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