

DEVELOPER EXPERIENCE (DX)

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DEVELOPER EXPERIENCE WHAT?

01

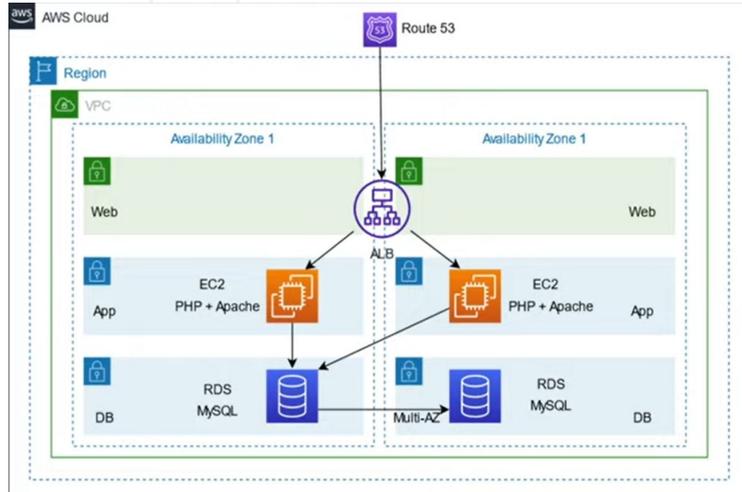
But after all, what is Developer Experience?



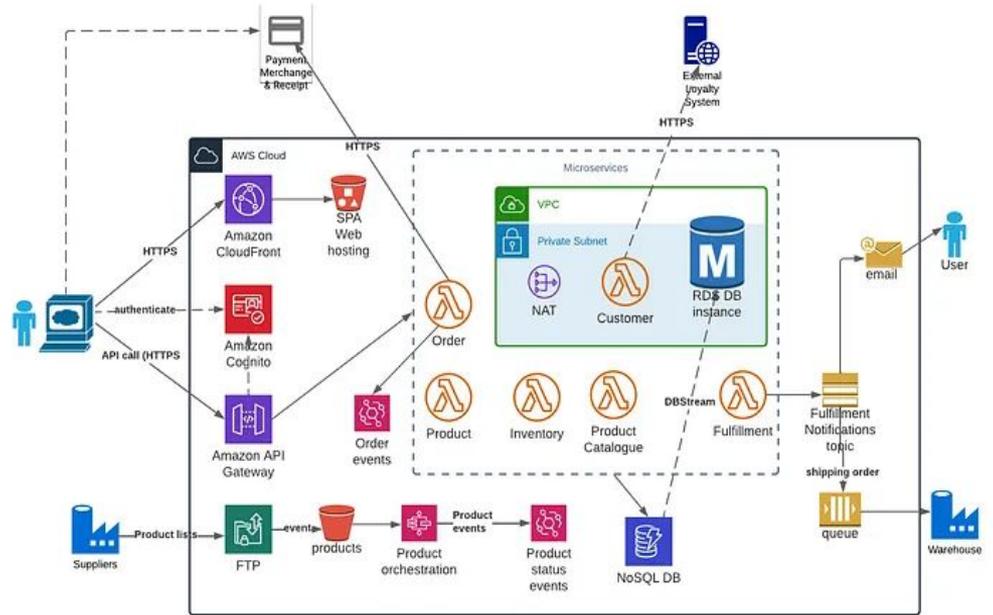


**COMPLEXITY &
COGNITIVE LOAD**

EXAMPLE: ARCHITECTURE



N-TIER



SERVICE CLOUD NATIVE

EXAMPLE: CNCF

The image displays a grid of logos for various cloud native technologies, categorized into several functional areas:

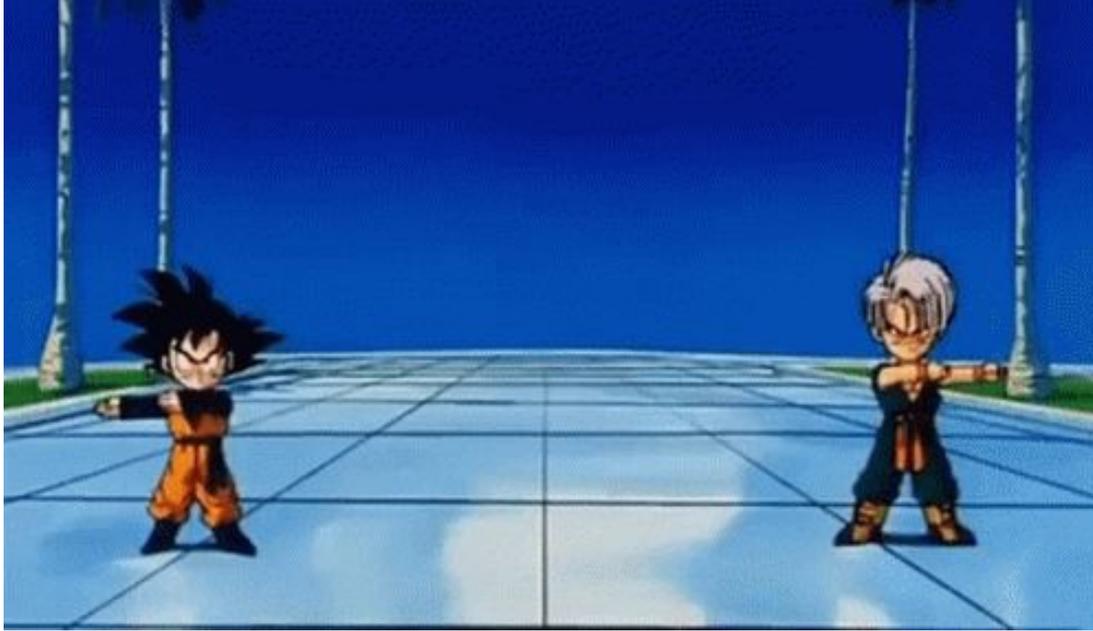
- App Definition & Development:** Includes Database (e.g., KV, Vitess, Cockroach Labs, Couchbase, IBM DB2, Iguazio, InfluxDB), Streaming & Messaging (e.g., cloudevents, NATS, nifi, Apache Pulsar), Application Definition & Image Build (e.g., HELM, Buildpacks.io, OPERATOR FRAMEWORK, Tekton, OpenShift), and Continuous Integration & Delivery (e.g., argo, flux, agola, ADOPTOR, Bamboo, BRIGADE, Buildkite).
- Orchestration & Management:** Includes Scheduling & Orchestration (e.g., kubernetes, Crossplane, Fluid, KARMADA, Namad), Coordination & Service Discovery (e.g., CoreDNS, etcd, NACOS, NETFLIX OSS), and Gateway (e.g., akana, AP-IGALS, LINKERD, Consul, EastMesh, Istio, Kuma, RED-KEY, Open Service Mesh, traefik).
- Runtime:** Includes Cloud Native Storage (e.g., ROK, LONGHORN, DELL/EMC, ALLUXIO, CLUSTER, HITACHI, HUAWEI, IBM, INFINIDAT, IOMesh, Ionix, K8up, MinIO, MAYASTOR, MINIO, MINIO, NetApp, HPE/3PAR, OPENIO, ORACLE, PURE, SWINER, Qumulo, Qyote, REBIN), Container Runtime (e.g., cri-o, Firecracker, kata, SmartOS, Sysbox), and Cloud Native Network (e.g., cilium, CNV, CNV-Genio, CUMULUS, flannel, OVS, SRIENET, NSX, WEAVE).

A central text box features a profile picture of Kelsey Hightower and the text: "Rolling your own platform has never been easier. All you gotta do is pick 200 items from this list and you're good to go. landscape.cncf.io".

YOU CAN'T TALK ABOUT ONE WITHOUT THE OTHER

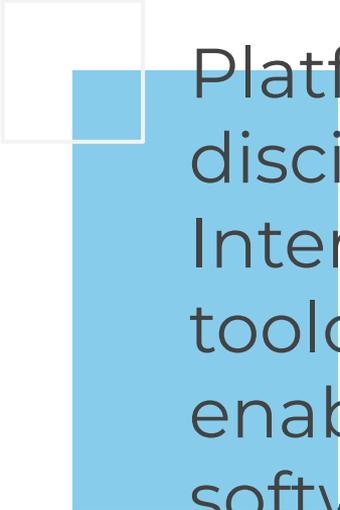
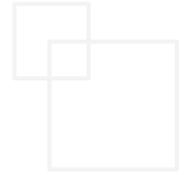


PLATFORM ENGINEERING



DEVELOPER EXPERIENCE

PLATFORM ENGINEERING



Platform engineering is the discipline of designing and building Internal Developer Platforms, toolchains and workflows that enable self-service capabilities for software engineering organizations

DEVELOPER EXPERIENCE

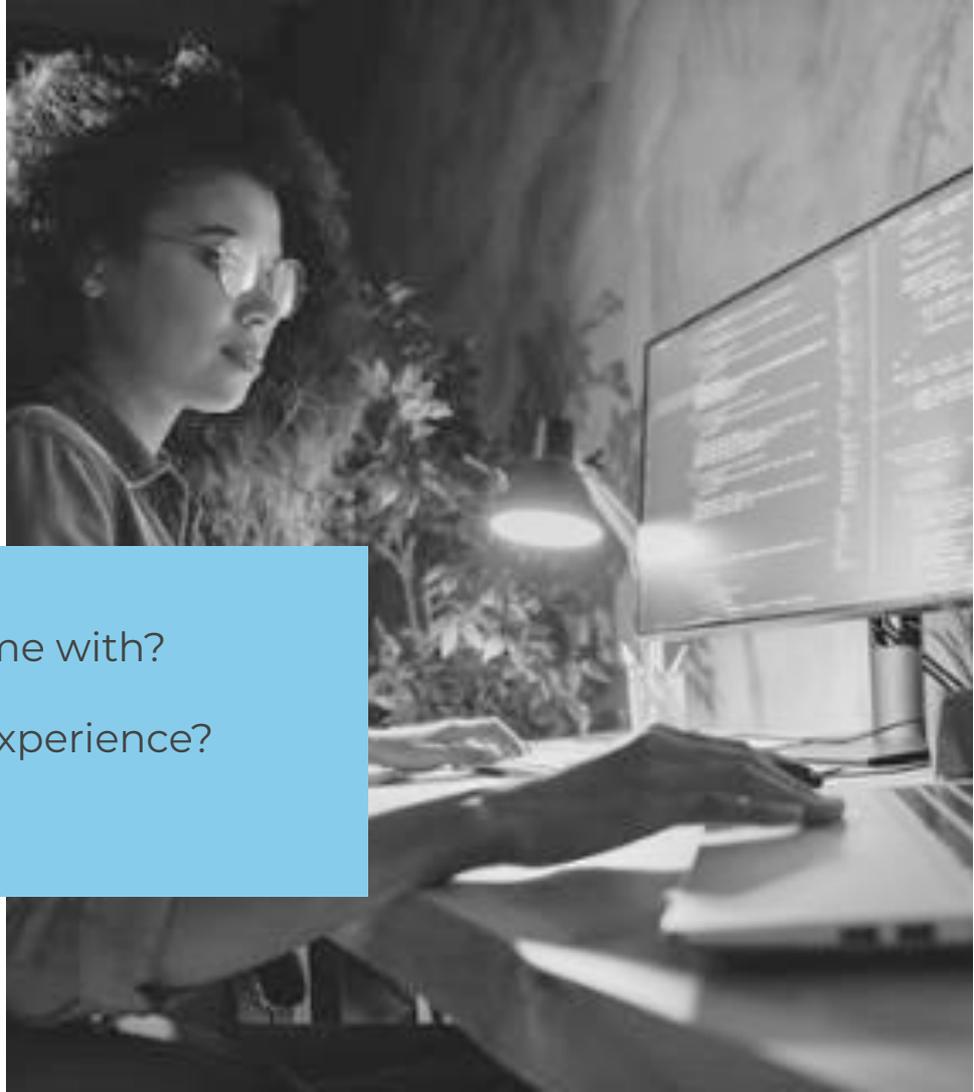


Developer Experience (DX) is about creating an environment in which a developer can do their best work. It comprises all activities that developers must partake in as part of their role in the software development process

WHY DX MATTERS? 02

And what does that help me with?

Why invest in Developer Experience?



IMPROVE DEVELOPER EXPERIENCE IF YOU WANT:



PRODUCTIVITY

Making it simpler for a developer to perform his job it increases overall capacity



FASTER DELIVERY

Reducing friction in the Software delivery lifecycle accelerates time to market



SATISFACTION

Happier developers = More satisfaction, less turnover, more engagement, more knowledge sharing...

WHERE SHOULD I START?

03

Cool! I want!

But... where should I start?



STOP DOING “SHIFT LEFT” & ~~DEVOPS~~ DEVSECOPS WRONG



“Shift left is about the information, and that's what we did wrong”

Yeah, you need to write the Infrastructure as Code (IaC)

You have to learn and manage the kubernetes cluster

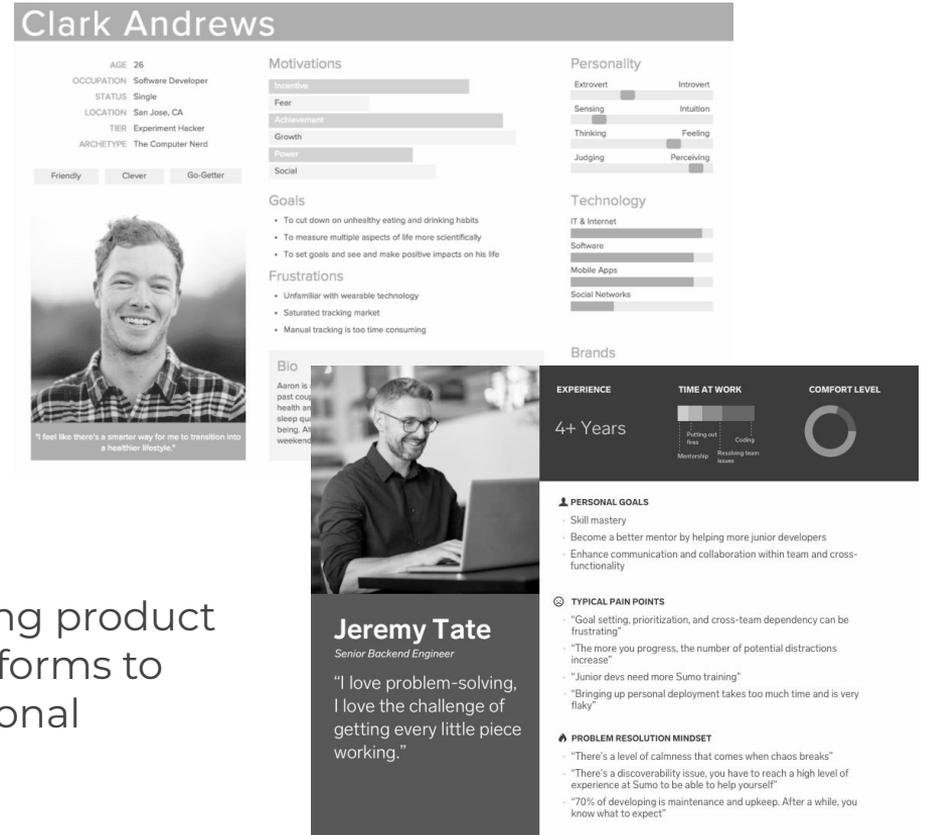
Unit test, performance test, integration test, do it all!

You are responsible for the container image security

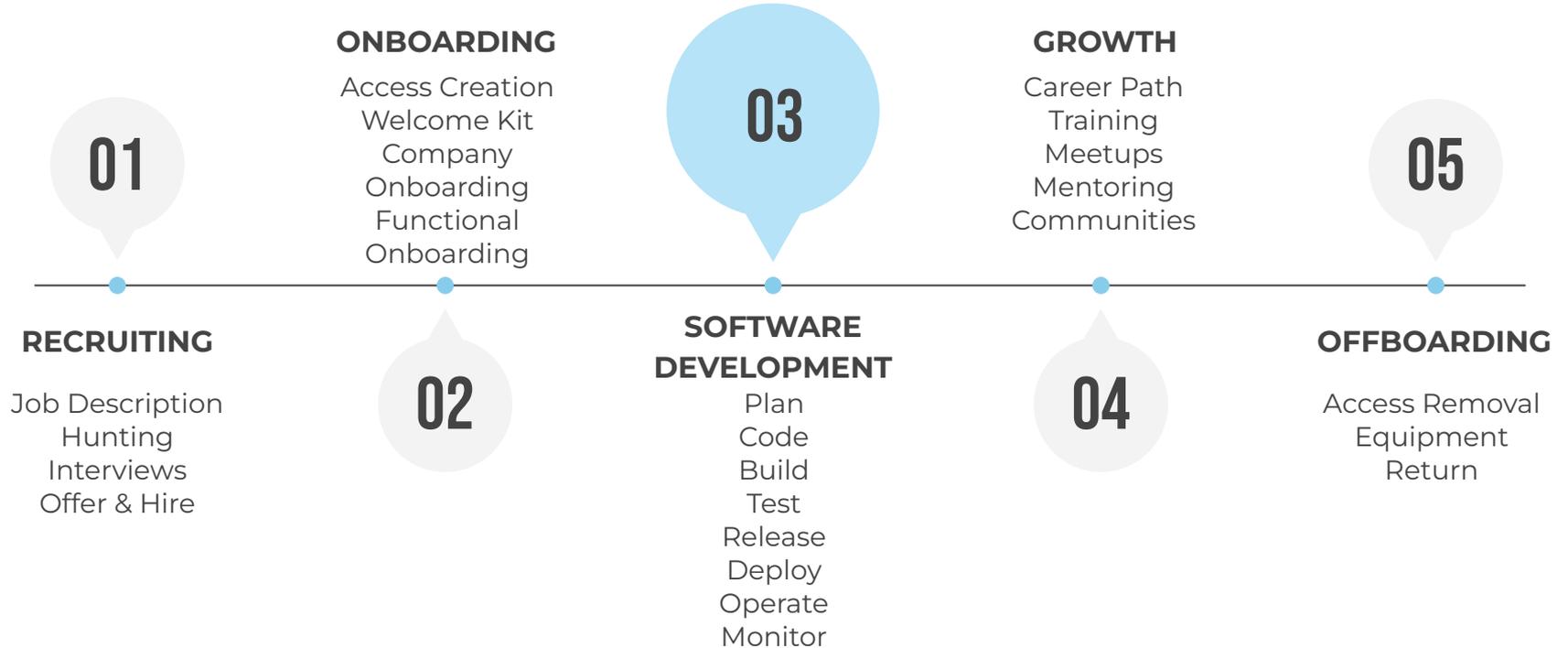
ADOPT A PRODUCT THINKING MINDSET

The power of bringing Product & Design capabilities to a platform

Highly evolved organizations are adopting product thinking for technical products and platforms to accelerate development, reduce operational complexity and improve time to market



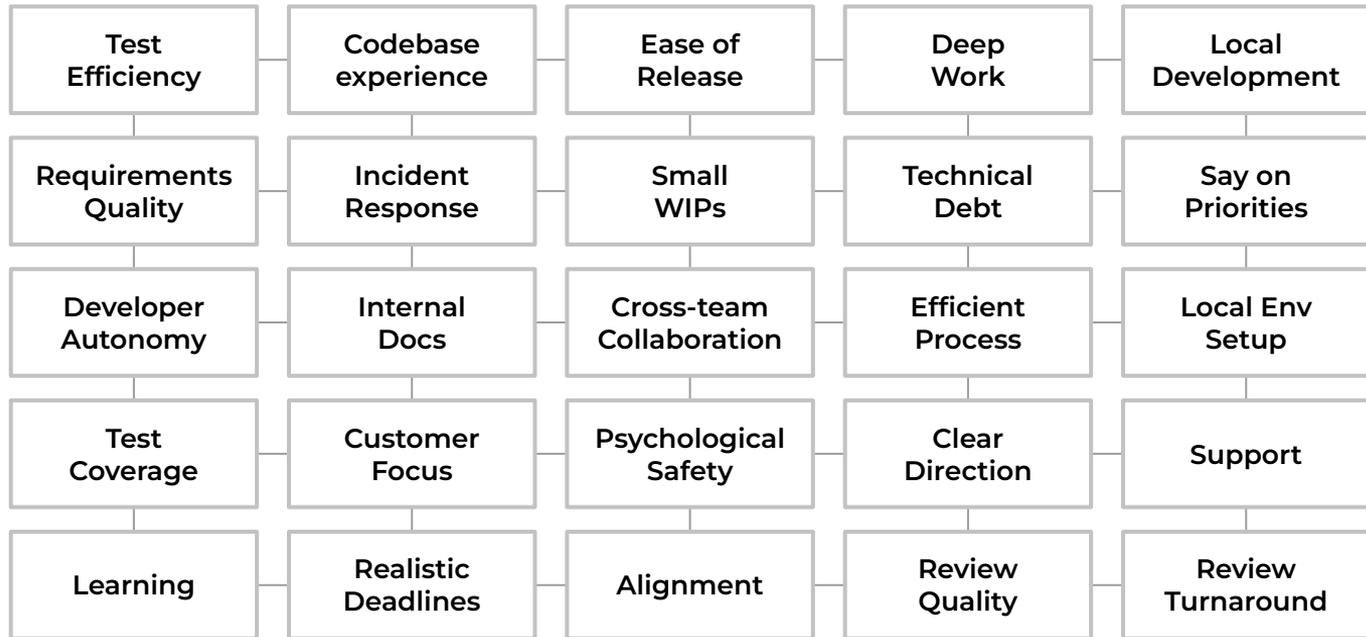
MAP YOUR DEVELOPER JOURNEY



**DEVS SPEND THE SAME
AMOUNT OF TIME WAITING
FOR BUILDS AND TESTS AS
THEY DO WRITING NEW CODE**



FACTORS THAT MATTER MOST TO THE DEVELOPER EXPERIENCE



PICK A FEW METRICS AND CREATE OKRS

DORA

4 KEYS METRICS 2020

Deployment Frequency
Lead Time for Changes
Change Failure Rate
Time to Restore Service

SPACE

5 DIMENSIONS 2021

Satisfaction and wellbeing
Performance
Activity
Communication & collaboration
Efficiency and flow

DEVEX

3 DIMENSIONS 2023

Feedback Loops
Cognitive Load
Flow State

DEVEX METRICS

EXAMPLE



	FEEDBACK LOOPS	COGNITIVE LOAD	FLOW STATE
PERCEPTIONS <i>Human attitudes and opinions</i>	<ul style="list-style-type: none"> • Satisfaction with automated test speed and output • Satisfaction with time it takes to validate a local change • Satisfaction with time it takes to deploy a change to production 	<ul style="list-style-type: none"> • Perceived complexity of codebase • Ease of debugging production systems • Ease of understanding documentation 	<ul style="list-style-type: none"> • Perceived ability to focus and avoid interruptions • Satisfaction with clarity of task or project goals • Perceived disruptiveness of being on-call
WORKFLOWS <i>System and process behaviors</i>	<ul style="list-style-type: none"> • Time it takes to generate CI results • Code review turnaround time • Deployment lead time (time it takes to get a change released to production) 	<ul style="list-style-type: none"> • Time it takes to get answers to technical questions • Manual steps required to deploy a change • Frequency of documentation improvements 	<ul style="list-style-type: none"> • Number of blocks of time without meetings or interruptions • Frequency of unplanned tasks or requests • Frequency of incidents requiring team attention
KPIS <i>North star metrics</i>	<ul style="list-style-type: none"> • Overall perceived ease of delivering software • Employee engagement or satisfaction • Perceived productivity 		



**AND THEN... IT IS
“JUST”**

**IMPLEMENT AND
MEASURE RESULTS**

10X

What is the secret to becoming a 10x more productive organization?

Make 10 engineers 2x more productive. Focus on unlocking other engineers and help them solve their toughest problems

~~CLARICE LISPECTOR~~

(ok... ok... we found this cool phrase on google but we couldn't find the source)

THANK YOU!

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