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#ServerlessDaysAms




Lian Li



Marc Duiker

69 viewers on YouTube
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/serverless/DAYS
AMSTERDAM 2020



64:07 / 9:05:15 @ServerlessDams discord.gg/d88jSxC ServerlessDays Amsterdam serverlessdaysamsterdam

Kubernetes won't save you

... and neither will Serverless

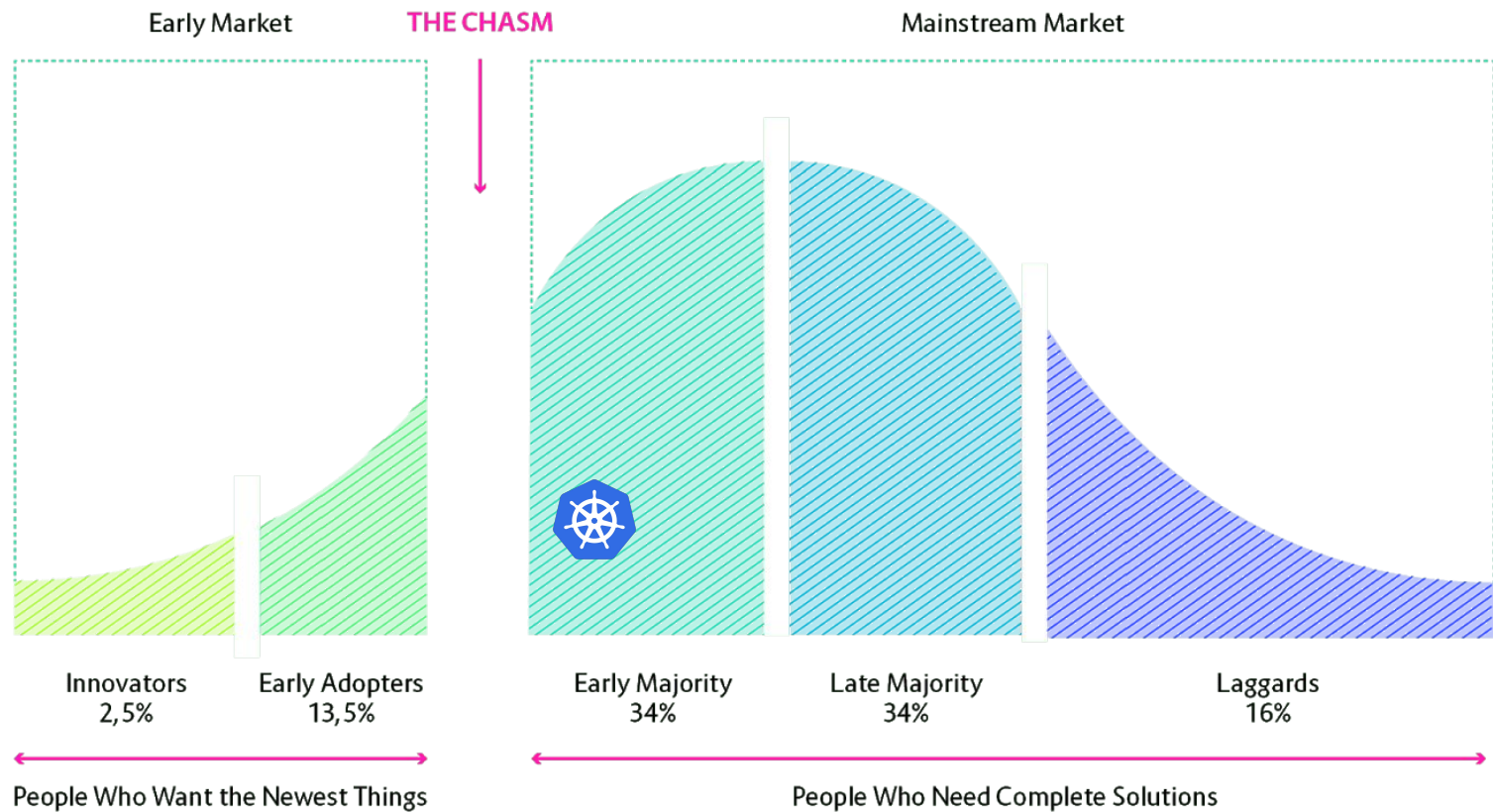


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The state of Kubernetes





<https://info.container-solutions.com/whitepaper-kubernetes-crossing-the-chasm-0>

Car crash
Kubernetes has become 'boring' and
that's good, Google tells devs
Thrill-seeking infrastructure devs accept end of
caffeine-fueled ops frenzy with murmur

<https://www.zdnet.com/article/kubernetes-is-the-new-java-vmware/>

https://www.theregister.co.uk/2019/07/25/pivotal_ford_write_down/

https://www.theregister.co.uk/2018/12/12/kubernetes_has_become_boring/

You're holding it wrong

Misunderstanding the problem(s)

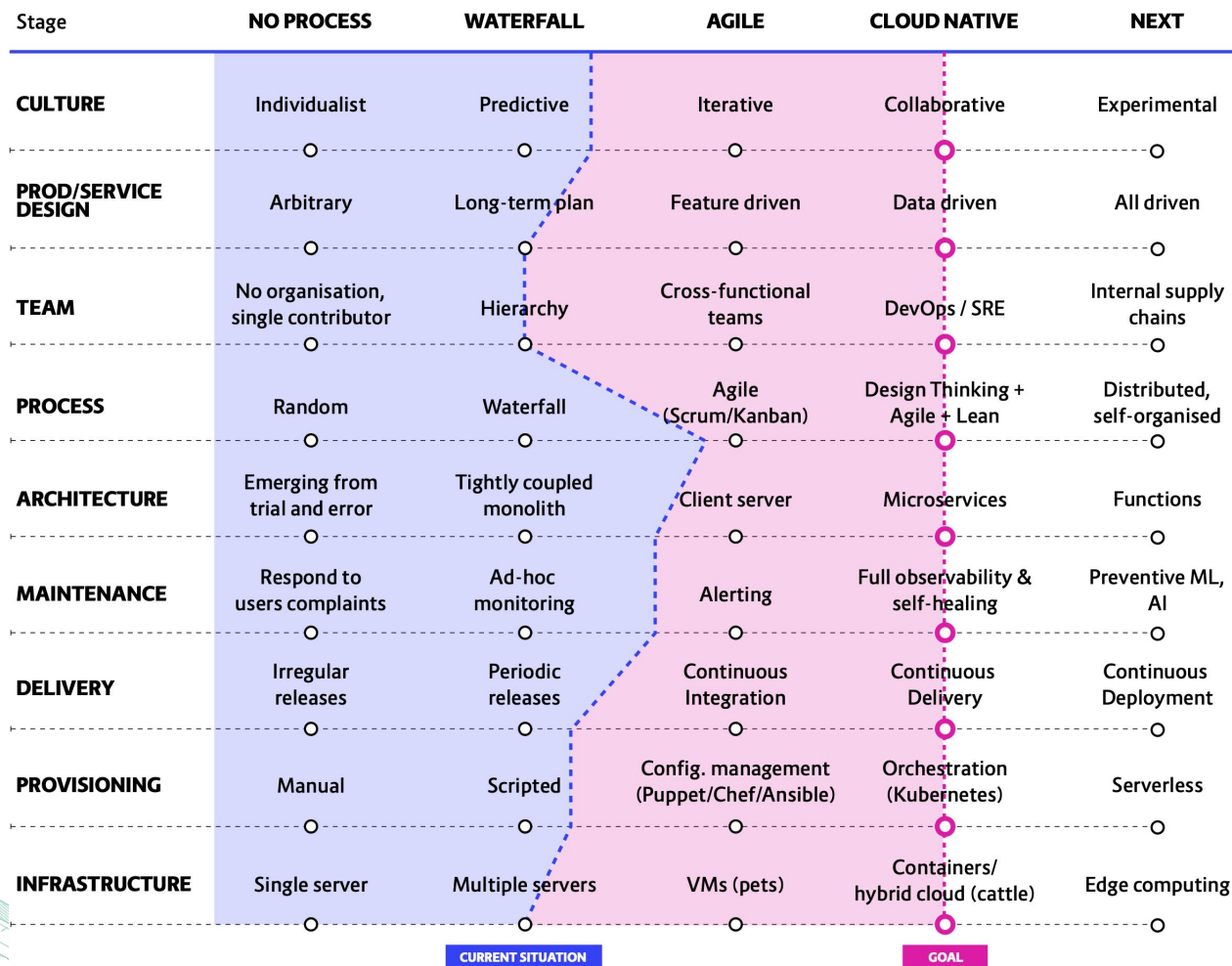


What is Cloud Native?

Cloud native technologies empower organizations to build and run scalable applications in modern, dynamic environments such as public, private, and hybrid clouds. Containers, service meshes, microservices, immutable infrastructure, and declarative APIs exemplify this approach.

<https://github.com/cncf/foundation/blob/master/charter.md>

Stage	NO PROCESS	WATERFALL	AGILE	CLOUD NATIVE	NEXT
CULTURE	Individualist	Predictive	Iterative	Collaborative	Experimental
	○	○	○	●	○
PROD/SERVICE DESIGN	Arbitrary	Long-term plan	Feature driven	Data driven	All driven
	○	○	○	●	○
TEAM	No organisation, single contributor	Hierarchy	Cross-functional teams	DevOps / SRE	Internal supply chains
	○	○	○	●	○
PROCESS	Random	Waterfall	Agile (Scrum/Kanban)	Design Thinking + Agile + Lean	Distributed, self-organised
	○	○	○	●	○
ARCHITECTURE	Emerging from trial and error	Tightly coupled monolith	Client server	Microservices	Functions
	○	○	○	●	○
MAINTENANCE	Respond to users complaints	Ad-hoc monitoring	Alerting	Full observability & self-healing	Preventive ML, AI
	○	○	○	●	○
DELIVERY	Irregular releases	Periodic releases	Continuous Integration	Continuous Delivery	Continuous Deployment
	○	○	○	●	○
PROVISIONING	Manual	Scripted	Config. management (Puppet/Chef/Ansible)	Orchestration (Kubernetes)	Serverless
	○	○	○	●	○
INFRASTRUCTURE	Single server	Multiple servers	VMs (pets)	Containers/ hybrid cloud (cattle)	Edge computing
	○	○	○	●	○



The Cloud Native Maturity Matrix Assessment

Where are you in your Cloud Native journey?

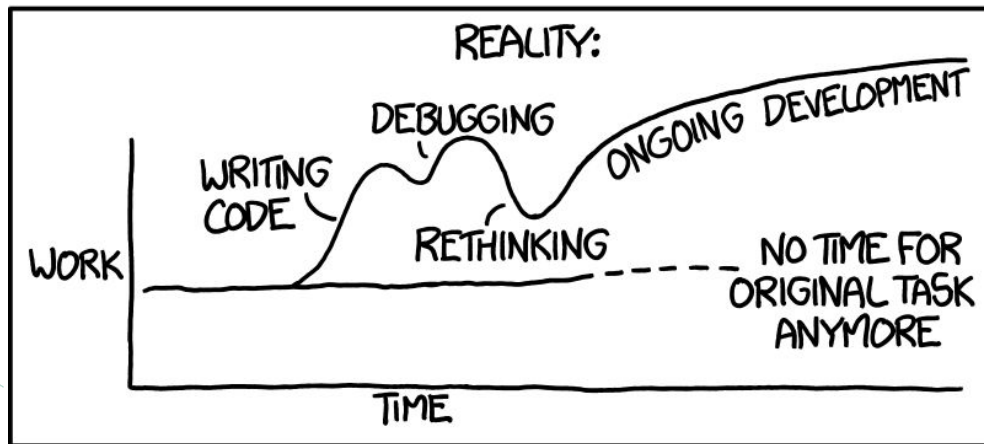
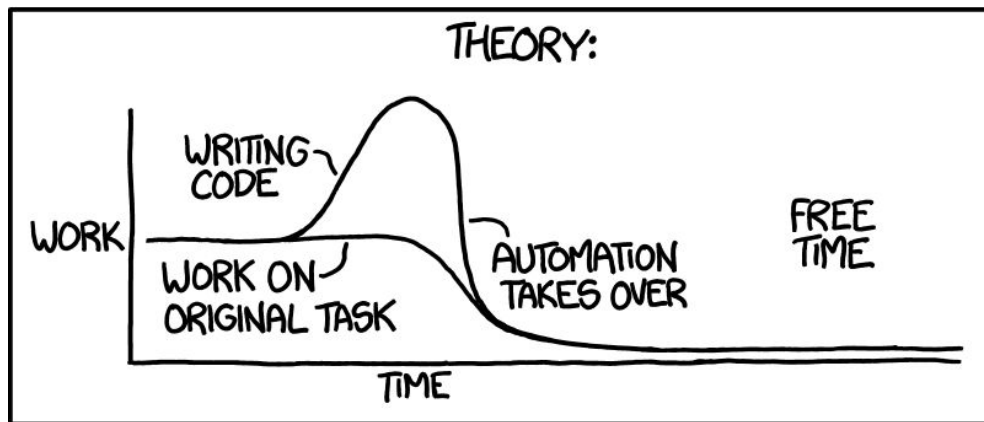
Start

press Enter ↵

<https://www.container-solutions.com/maturity-matrix-assessment>

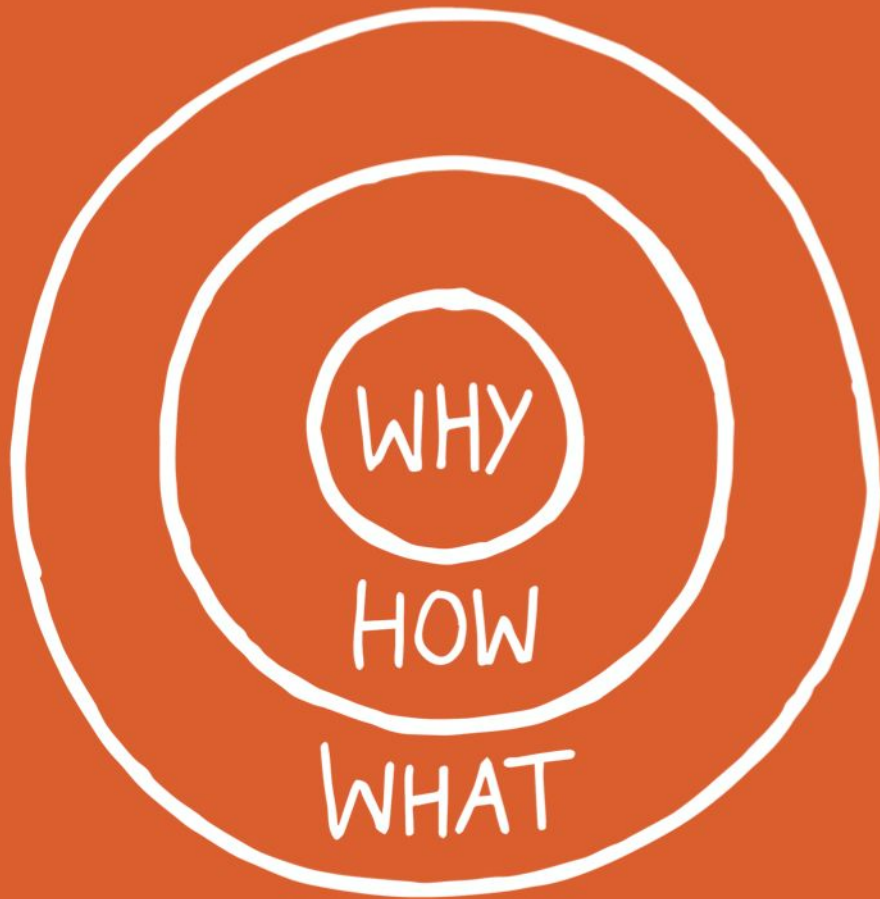
"I SPEND A LOT OF TIME ON THIS TASK.
I SHOULD WRITE A PROGRAM AUTOMATING IT!"

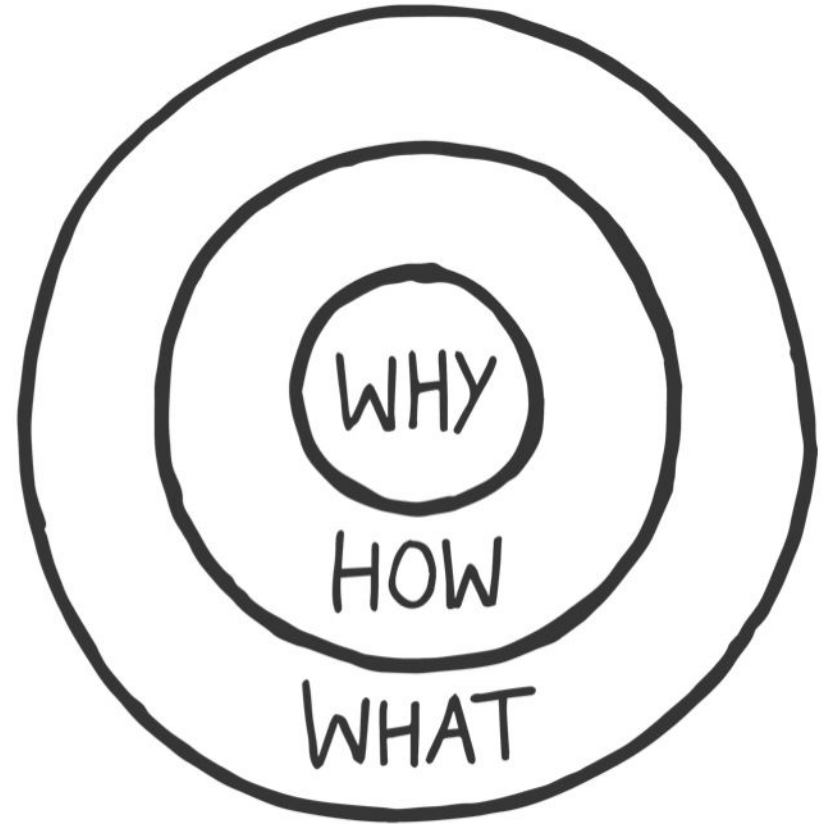
<https://xkcd.com/1319/>



Form follows function

The Golden Circle





A solution is only as good as your framing of the problem

- Tatiana Mac @tatianatmac



The Cloud Native mindset



Continuous Learning

Psychological safety

PSYCHOLOGICAL SAFETY

HIGH

COMFORT
ZONE

LEARNING
ZONE

LOW

APATHY
ZONE

ANXIETY
ZONE

LOW

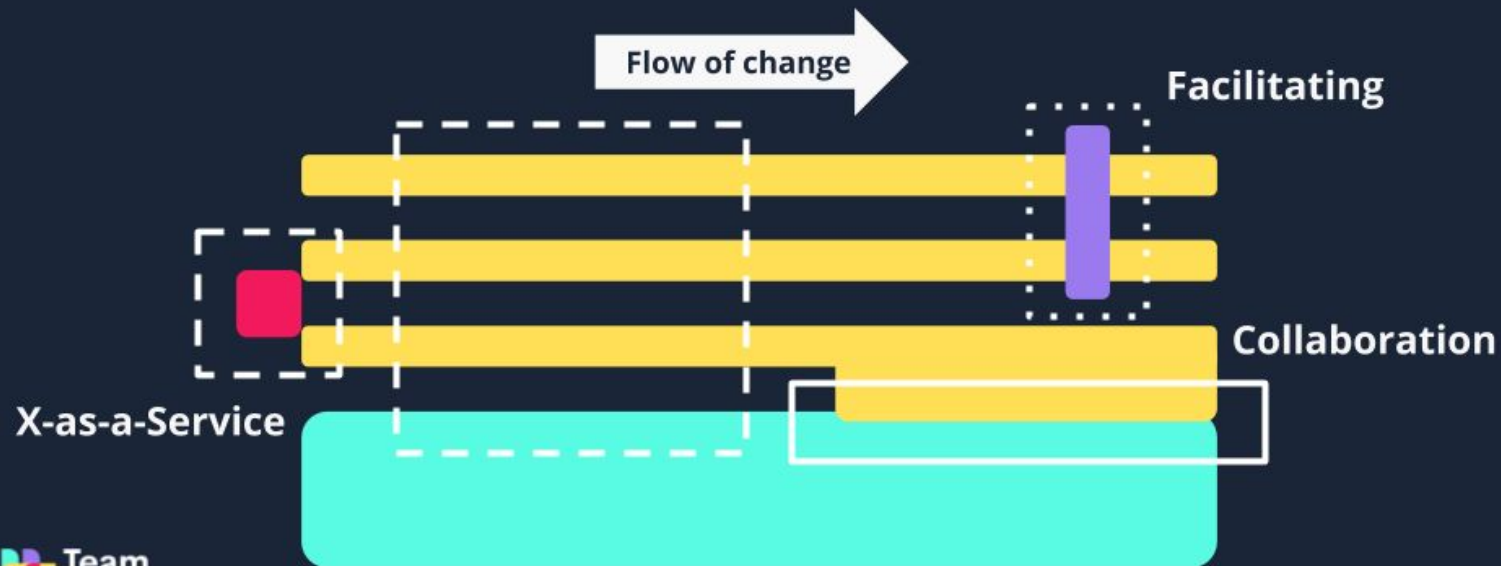
HIGH

ACCOUNTABILITY FOR MEETING DEMANDING GOALS

<https://blog.container-solutions.com/what-psychological-safety-means-in-a-cloud-native-organisation>

Collaboration

3 core interaction modes



 Team
Topologies

<https://teamtopologies.com/key-concepts>

Don't do a transformation because you want to use Kubernetes

Use Kubernetes* because you're doing a transformation

*Or whatever works for your organisation

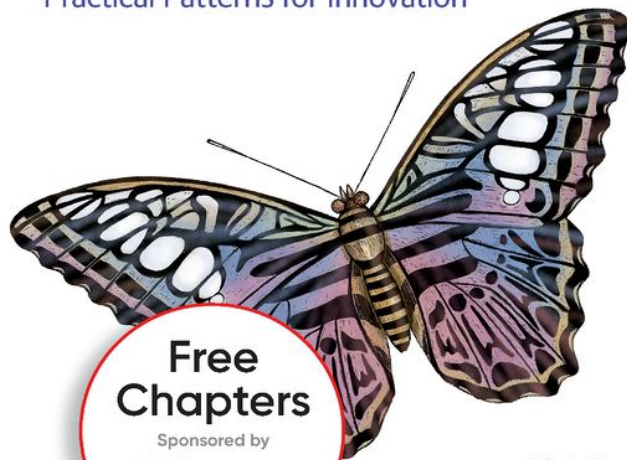


Cloud Native Transformation Kit

O'REILLY®

Cloud Native Transformation

Practical Patterns for Innovation



**Free
Chapters**

Sponsored by



Pini Reznik,
Jamie Dobson &
Michelle Gienow

Strategy & Risk Reduction

INVOLVE THE BUSINESS



The business teams and the tech teams need to collaborate to create an effective customer-feedback loop that drives product improvement.

Strategy & Risk Reduction / 8

Organization & Culture

REMOTE TEAMS




If teams must be distributed, whether across a city or a continent, build in regular in-person retreats/work sessions as well as robust channels for close and free-flowing communication.

Organisation & Culture / 28

Development & Design

MICROSERVICES ARCHITECTURE




To reduce the costs of coordination among teams delivering large monolithic applications, build the software as a suite of modular services that are built, deployed, and operated independently.

Development & Design / 34

Infrastructure & Cloud

PRIVATE CLOUD



A private cloud approach, operated either over the internet or on company-owned on-premises infrastructure, can offer the benefits of cloud computing services like AWS while restricting access to only select users.

Infrastructure & Cloud / 66



@containersoluti



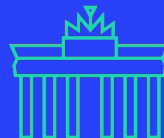
Amsterdam



London



Zurich



Berlin



Montreal



Warsaw



Thank you!

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Questions?

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