

There is no such thing as vanilla Kubernetes

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 @CrayZeigh

TABLETOP
DEVOPS

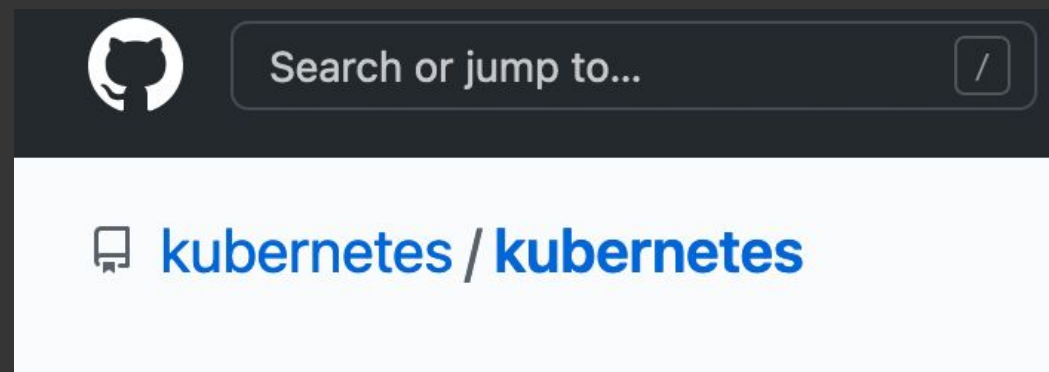
@TabletopDevOps
twitch.tv/desertedislandtv



actually my license plate

What is vanilla Kubernetes?

What is vanilla Kubernetes?



Why bother?

the myths of vanilla kubernetes



Portability



No "lock-in"



Latest features

Kubernetes requires a collection of services

Control Plane Services:

- ▶ kube-apiserver
- ▶ etcd
- ▶ kube-scheduler
- ▶ kube-controller-manager
- ▶ cloud-controller-manager*

Node Services:

- ▶ kubelet
- ▶ kube-proxy
- ▶ container runtime

Add-Ons:

- ▶ DNS Services (required)
- ▶ Resource Monitoring**
- ▶ Logging***

Kubernetes in Practice

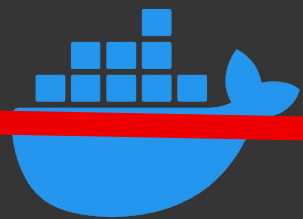
- ▶ Application Logs
- ▶ Application Metrics
- ▶ Storage
- ▶ Network
- ▶ Load Balancing
- ▶ Egress Routing
- ▶ Additional Authentication Providers
- ▶ Infrastructure
- ▶ Infrastructure Automation
- ▶ Infrastructure Management
- ▶ CI/CD
- ▶ Container Registry
- ▶ Dependency Scanning
- ▶ Operating System
- ▶ Container Runtime



containerd



cri-o



~~docker~~



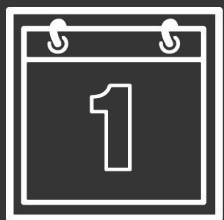
Vanilla Kubernetes Reality



Custom tuned infra



Locked-in to custom build

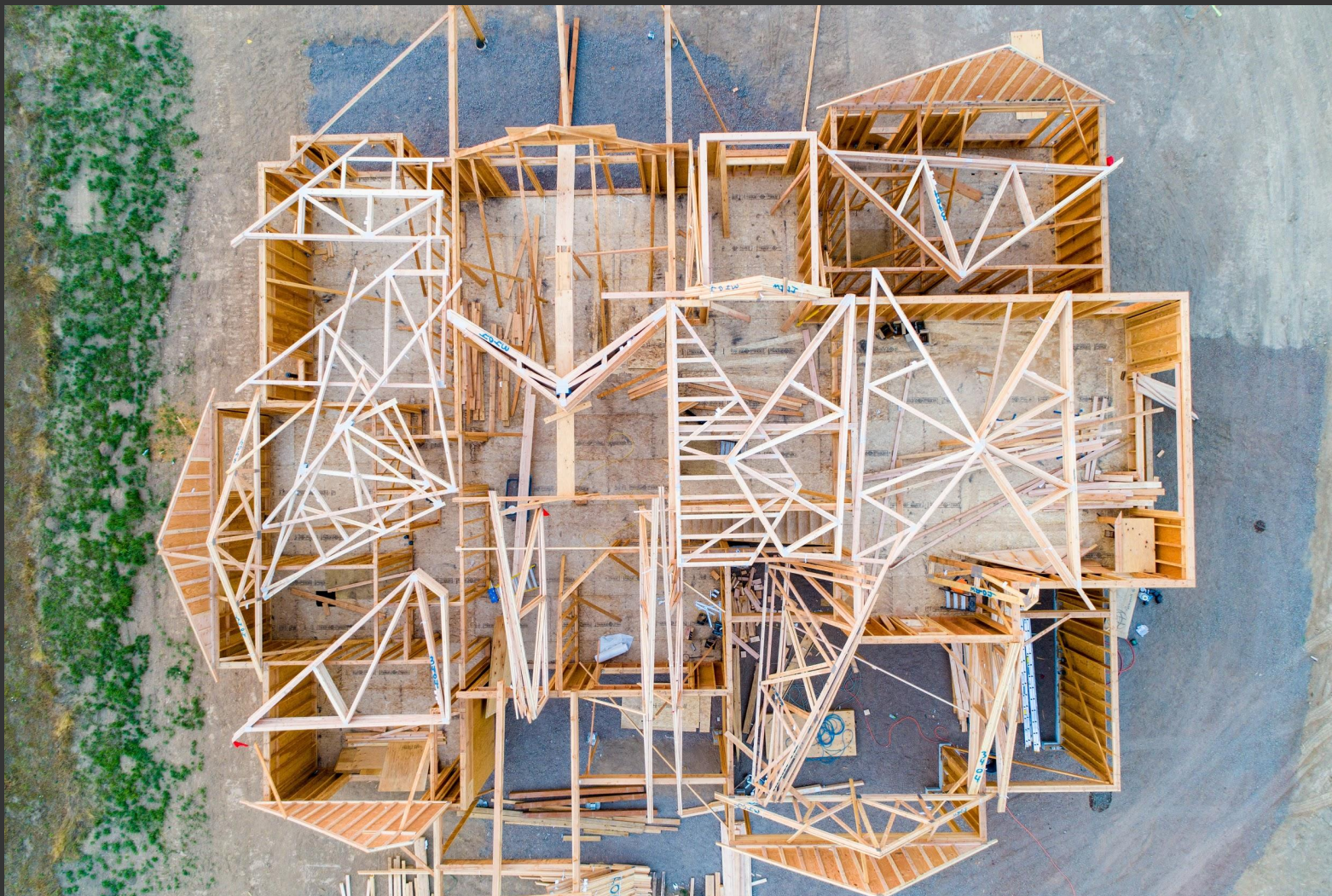


Full-stack maintenance

Build v. Buy

The Case of Build v. Buy

UNITED STATES DISTRICT COURT	
for the	
District of Vermont	
Build)
Plaintiff)
v.)
Buy)
Defendant)
Case No. 2009cv00295	





How do you make a choice?

min/maxing our business decisions



- Workaround Resource Constraints
- Spend Money on implementation details
- Spend Time on Market Differentiation



Kubernetes Distributions



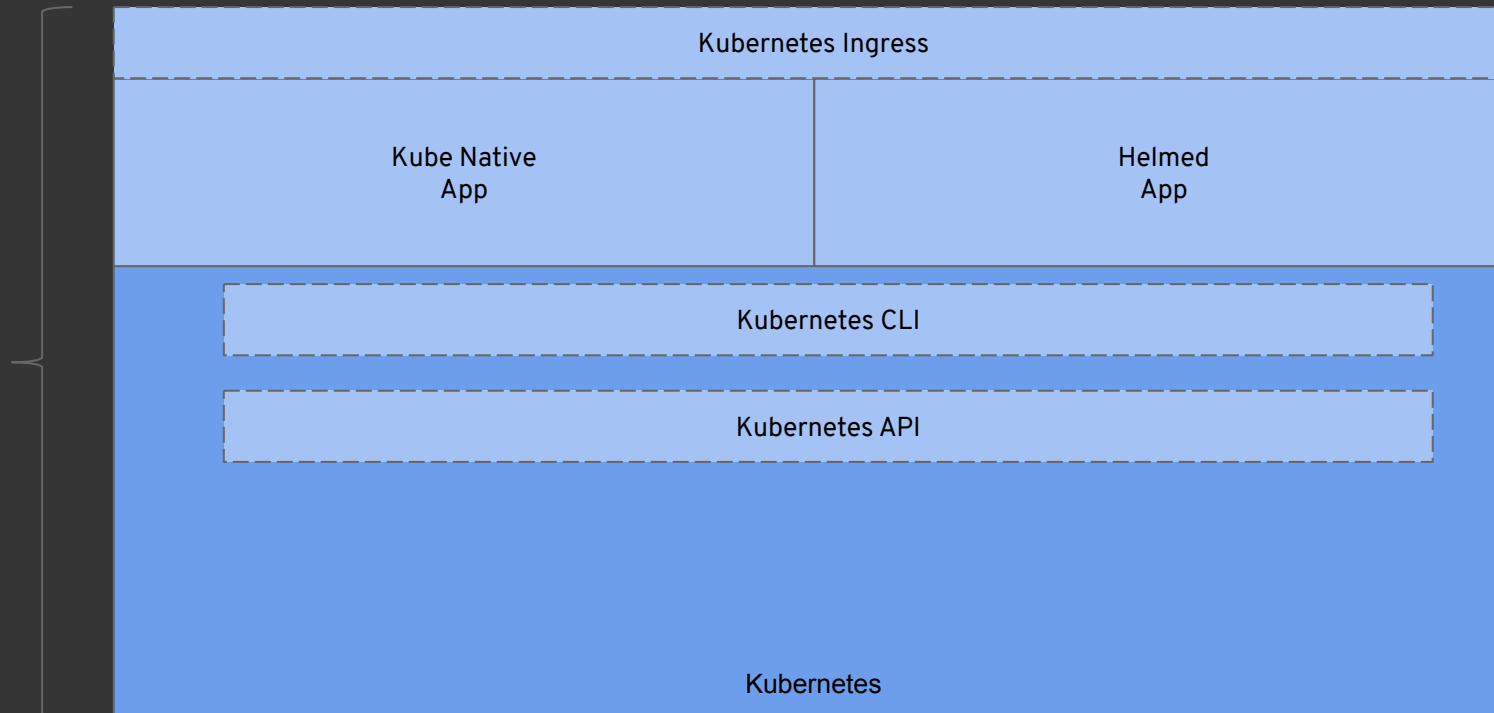
Kubernetes Conformance



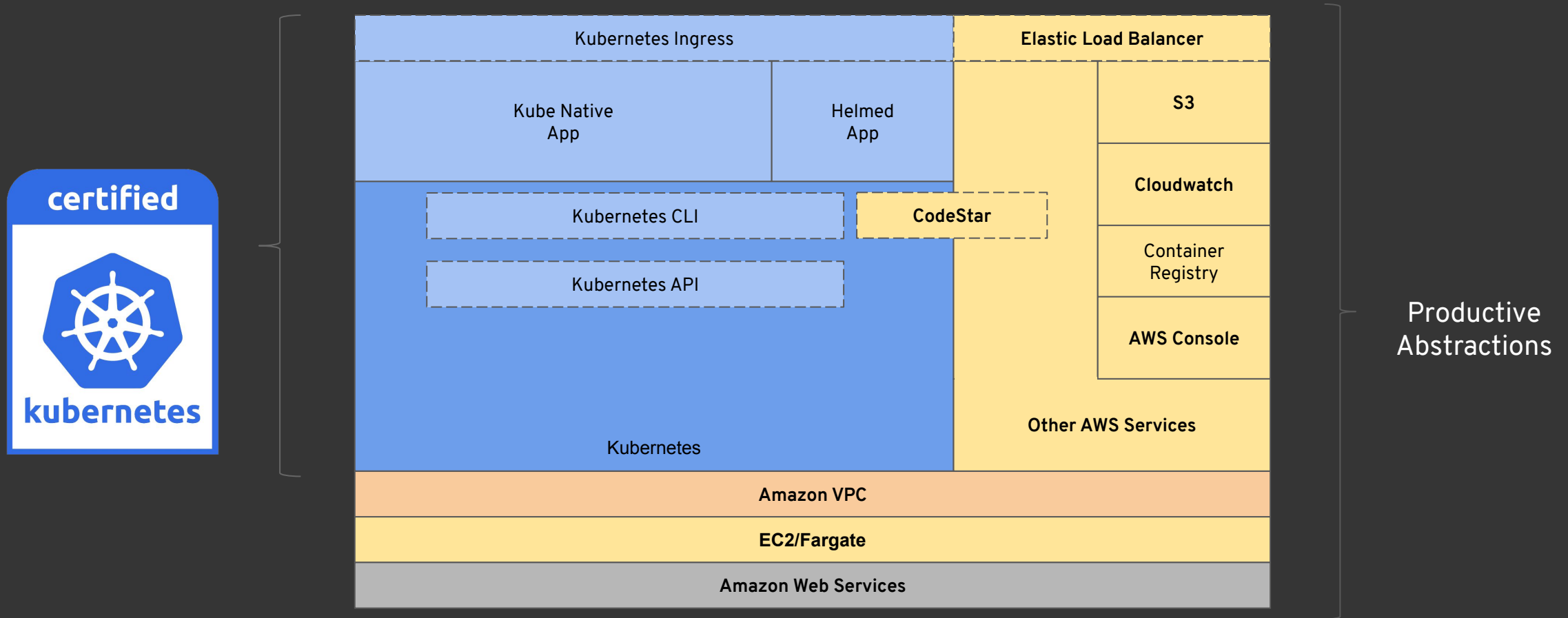
Kubernetes Conformance



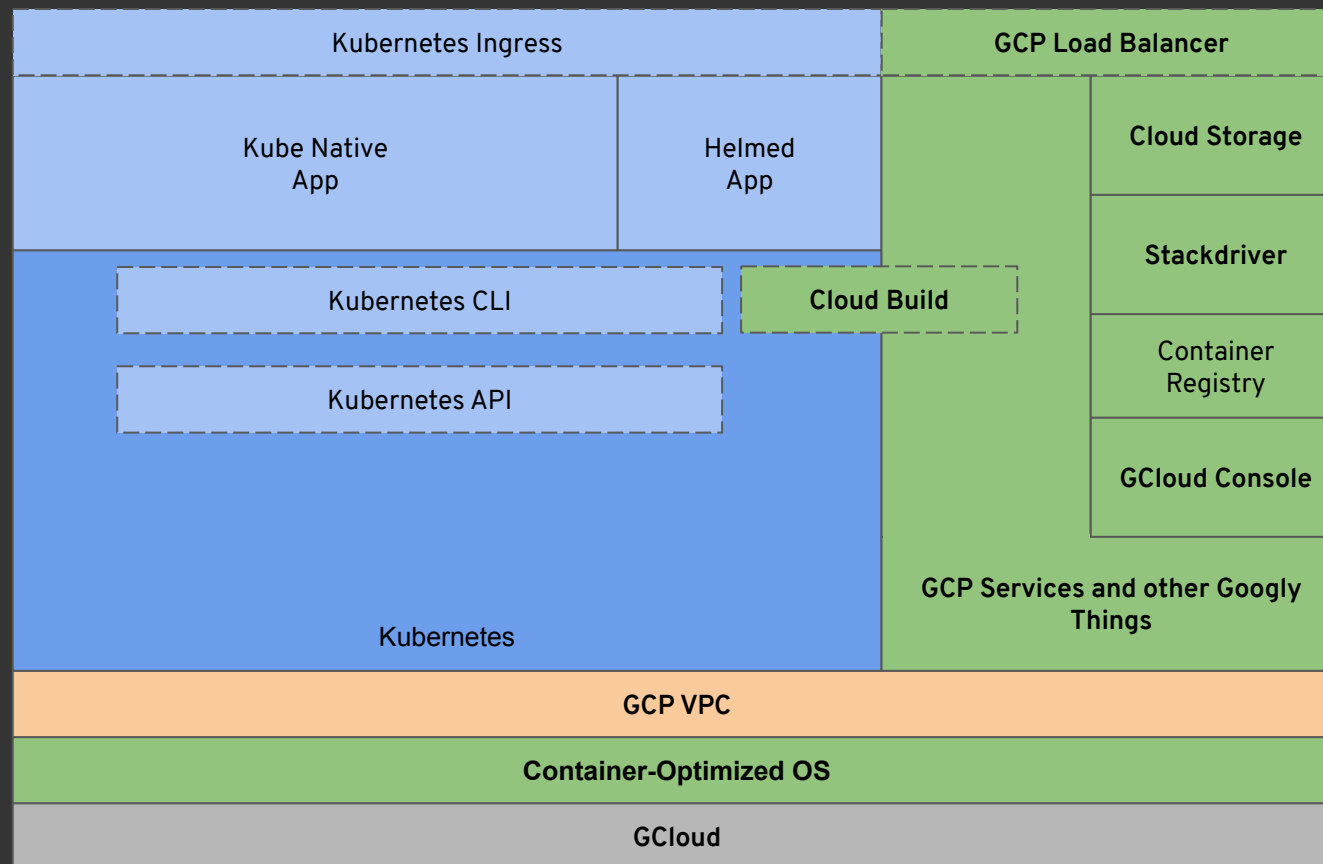
Upstream Kubernetes



Amazon Elastic Kubernetes Service (EKS)

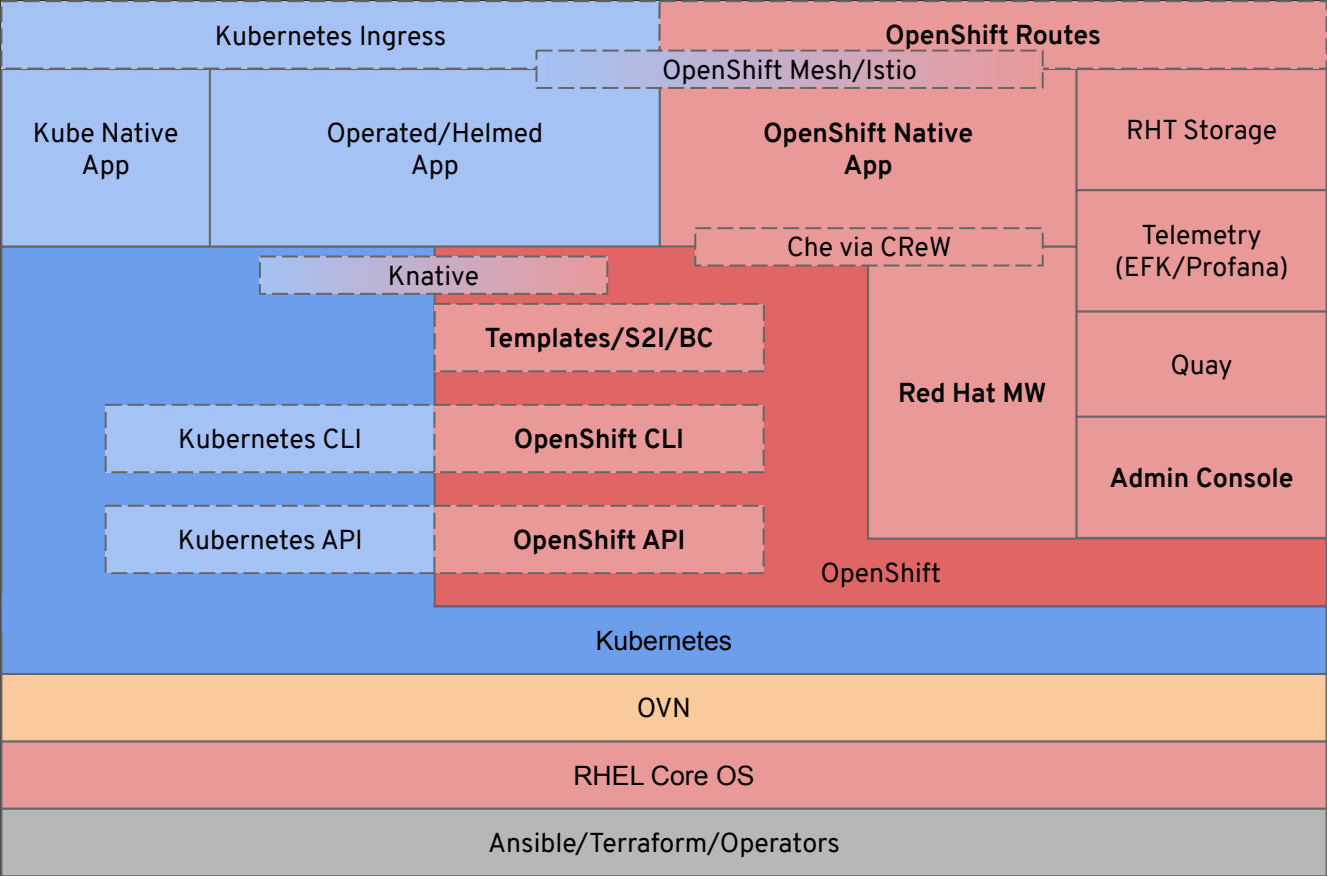


Google Kubernetes Engine (GKE)



Productive
Abstractions


Red Hat OpenShift



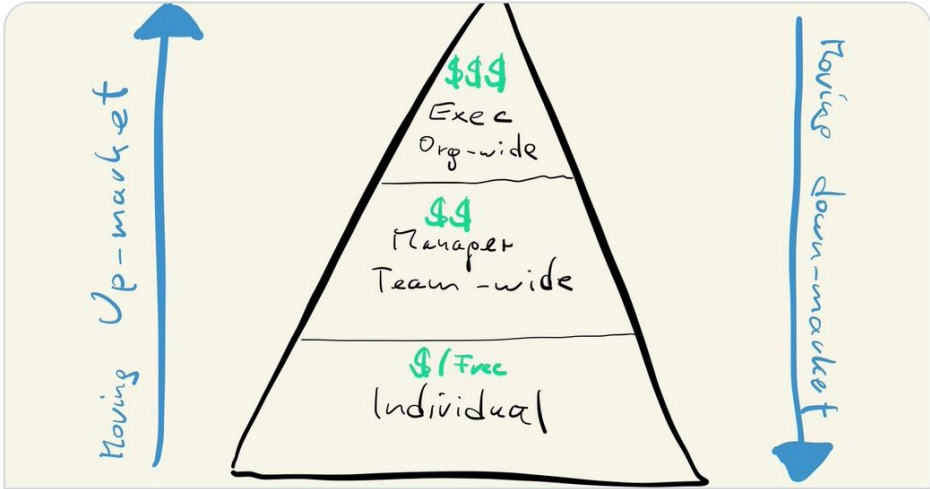
Productive Abstractions





 **Moritz Plassnig**
@moritzplassnig

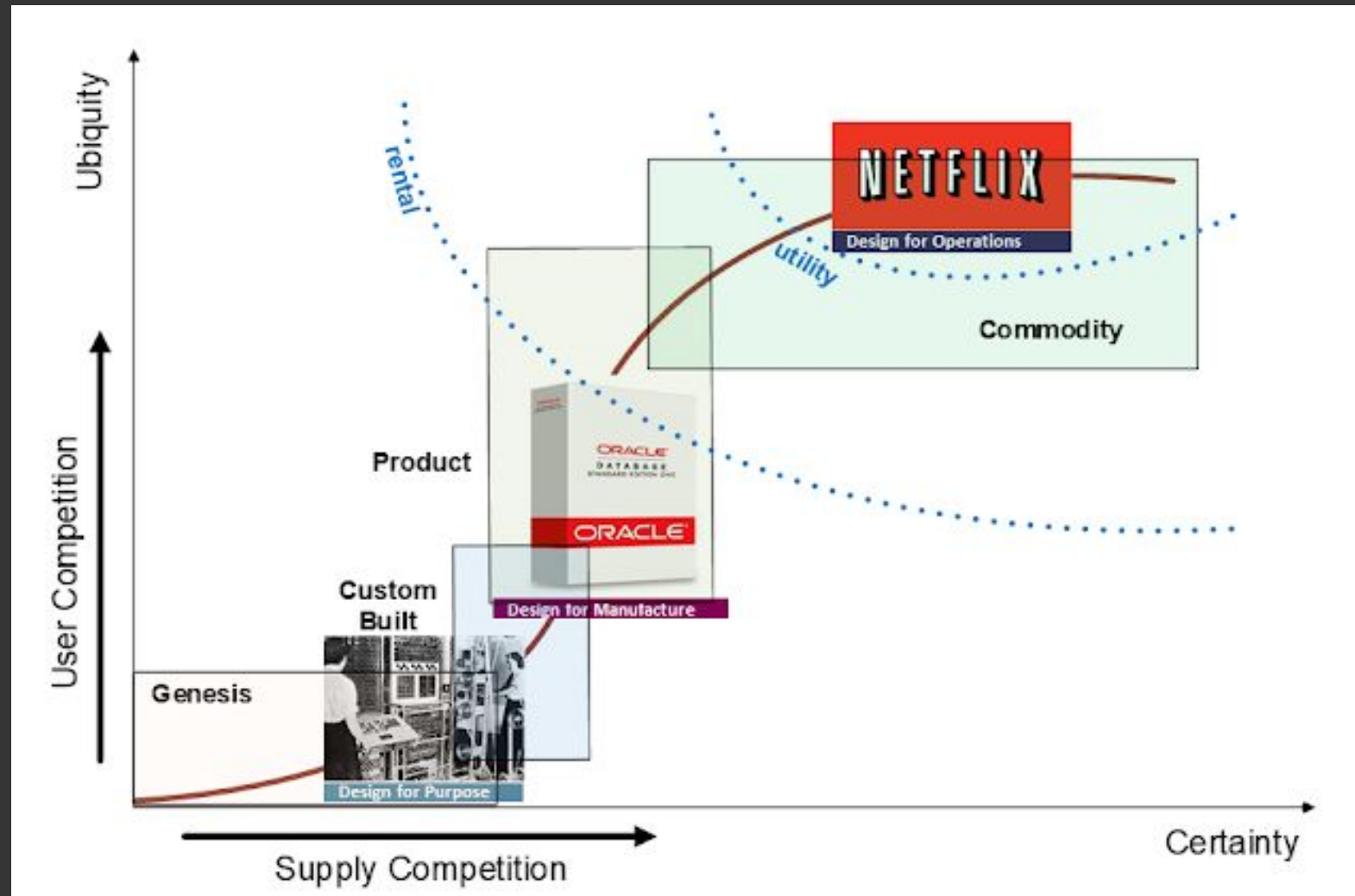
SaaS and Moving Downmarket - MongoDB's Transformation



SaaS and Moving Downmarket - MongoDB's Transformation
MongoDB went public as a self-managed software vendor in 2017. In the following years, it transformed itself as a SaaS vendor and moved ...
[moritzplassnig.com](https://www.moritzplassnig.com)

1:38 PM · Sep 8, 2020

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“Serverless is the target of every DevOps project”

~Andrew Clay Shafer, Map Camp, DevOps/Serverless Days



Kelsey Hightower ✓

@kelseyhightower



Kubernetes is a platform for building platforms. It's a better place to start; not the endgame.

4:04 PM · Nov 27, 2017 · [Twitter Web Client](#)

Kubernetes isn't just an ice cream



Kubernetes is part of a sundae



Thank you

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