Bringing product culture to the backend



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Agenda

INTRODUCE ZENDESK

ENGINEERING RE-ORG IN 2018

EMBRACING PRODUCT MANAGEMENT

PROJECT EXAMPLE

PRODUCT METRICS

WHERE ARE WE AT TODAY





MORTEN PRIMDAHL



ALEXANDER AGHASSIPOUR









2007

3 Guys, 1 desk Zendesk launch Copenhagen 2009

HQ in SF 10 People 1,000 Customers 2014

NYSE - IPO 600+ Employees 42,000+ Customers 2024

16 Global Offices 5,000+ Employees 150,000+ Customers/Logos

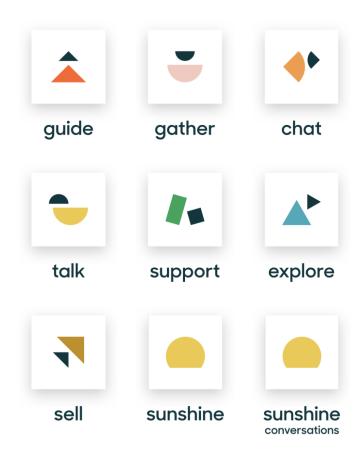
Products

zendesk

support suite

zendesk

sales suite



5,500+

Employees

16
Global offices

150,000+

Customers

SFHeadquarters





Zendesk operates at web-scale

CLOUDFLARE

14 Billion

Daily Requests

11.2 Billion

Total Users

3.8 Million

Total Agents + Admins

17.8 Billion

Total Tickets

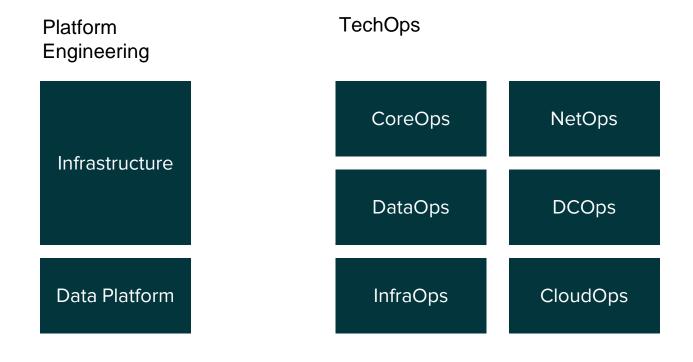


7 AWS Regions

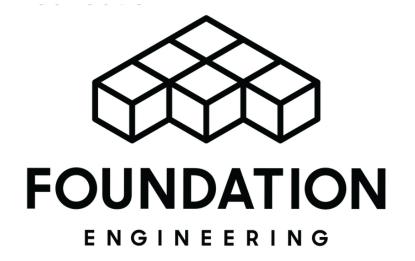
250 Cloudflare Data Centers

12 Partitioned Environments (Pods)

3 Availability Zones/Pod







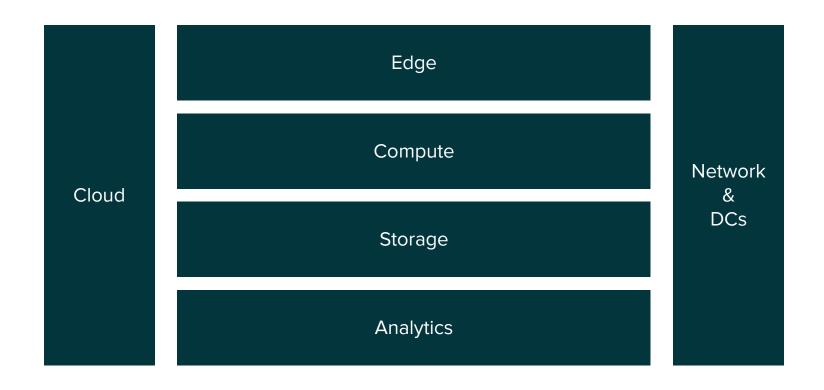
Our mission: provide the infrastructure for Zendesk engineers to safely and efficiently deliver reliable products at scale. What is Foundation?

Foundation

!=

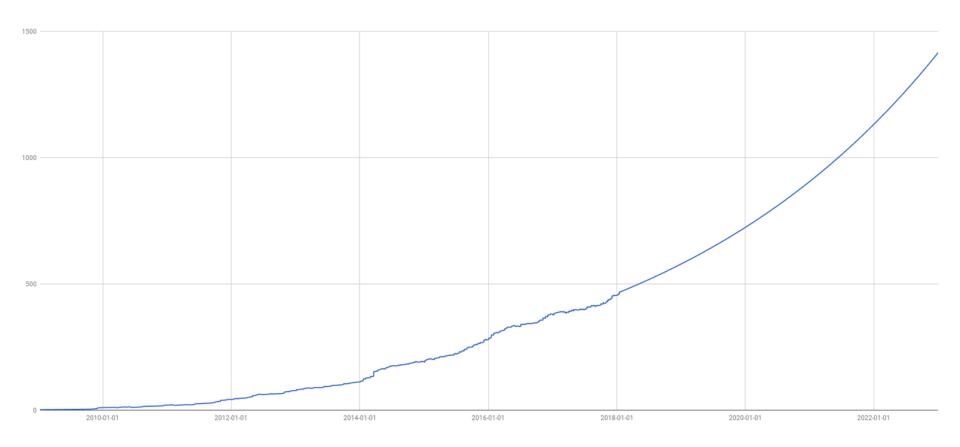
Infra + Ops + Data Platform

Going forward - Foundation Engineering





Engineering Growth Modelling



Build solutions at scale! Autonomy (self service) Ownership - You own it, you run it! **Shared patterns** Golden path - automate the common paths **Customer focus**

Vision, mission, teams restructured = success?





https://miro.medium.com/v2/resize:fit:1224/format:webp/1*36a0o5xPFbeHmKUqeqsvvA.jpeq

Thoughtworks Technology Radar volume 17 & 18

November 2017 - Trial

Technology Radar

An opinionated guide to technology frontiers

MANAGEMENT TO INTERNAL PLATFORMS means establishing **empathy** with **internal consumers** (read: developers) and **collaborating** with them on the design. Platform product managers establish roadmaps and ensure the platform delivers **value to the business** and enhances the developer experience.

/thoughtworks

Some owners even create a brand identity for the internal platform and use that to **market** the benefits to their colleagues. Platform **product managers** look after the **quality** of the platform, gather usage **metrics**, and continuously improve it over time. Treating the platform as a product helps to create a thriving ecosystem and avoids the pitfall of building yet another stagnant, **underutilized** service-oriented architecture.

May 2020 - Adopt



More and more companies are building internal platforms to roll out new digital solutions quickly and efficiently. Companies that **succeed** with this strategy are **applying product management** to internal platforms. This means establishing empathy with internal consumers (the development teams) and collaborating with them on the design. Platform product managers create roadmaps and ensure the platform delivers value to the business and enhances the developer experience.

Unfortunately, we're also seeing **less successful** approaches, where teams create a platform in the void, based on **unverified assumptions** and **without internal customers**. These platforms, often despite aggressive internal tactics, end up being **underutilized** and a **drain** on the organization's delivery capability. As usual, good product management is all about building products that consumers love.

ProdDevOps for the WIN!



Exodus EU (Ireland) EU (Frankfurt) US East 2 (Ohio) US West (Oregon) US East 1 (N. Virginia)

To Pods Project

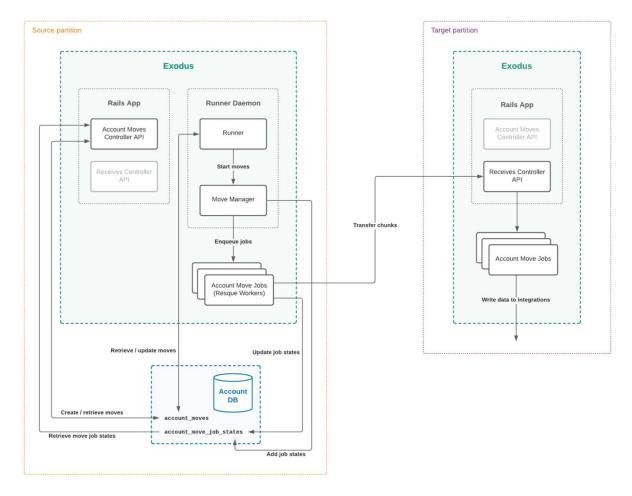
Exit DCs

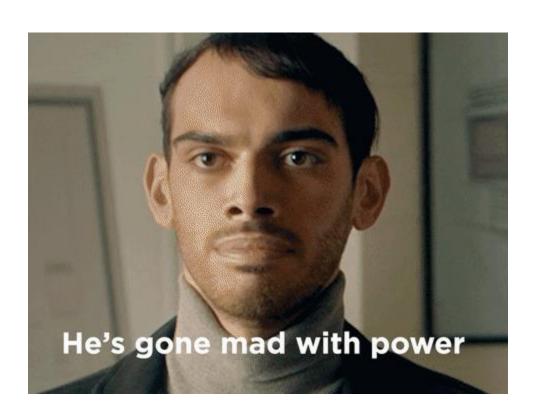
100k+ accounts To AWS

No downtime
Happy customers

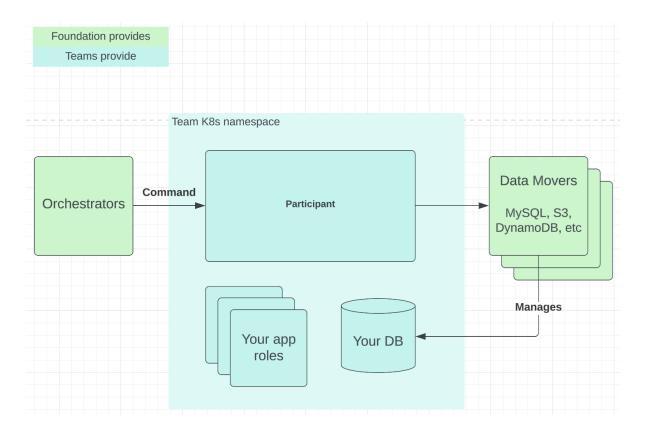
Asia Pacific (Sydney)

ArchitectureZoomed in





Architecture





Architecture

Foundation provides Teams provide Team K8s namespace Data Movers Command Orchestrators **Participant** MySQL, S3, DynamoDB, etc Manages Your app Your DB roles

Customer Outreach

Know thy customer

Engineering wide surveys

Customer interviews

Personas

How can we help you?



EAP to GA Programs

Patient early adopters

Build the right thing

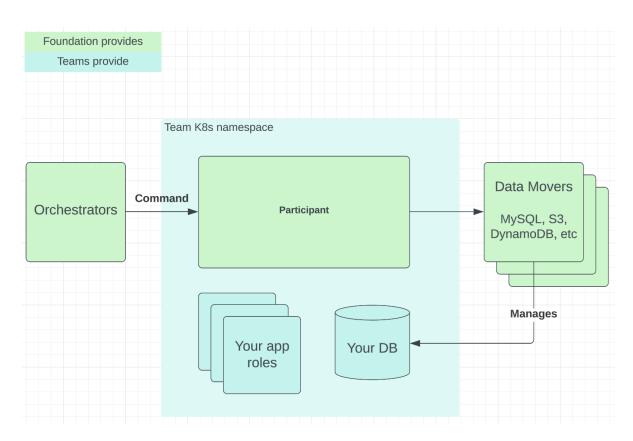
Build a quality thing

Let's do this together!



Architecture







"If You Can't Measure It, You Can't Improve It" Peter Drucker

Metrics Before and after

Adoption
0 to 22 integrations

2 Integration time 2 months to 2 days

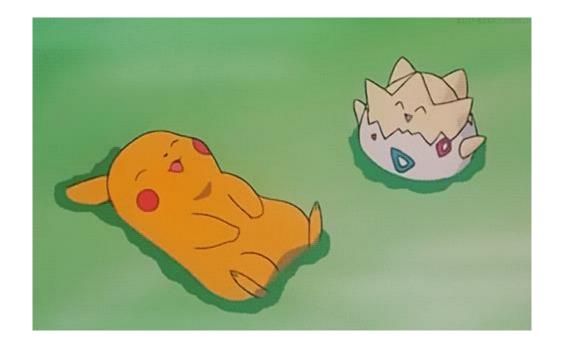
Incidents
Lots to few

Nice work team!





Happy team, business, and customers



Goodbye to account move stress



Where we're at today in our Self Service Journey

Aurora MySQL

630

530 Aurora MySQL clusters managed by Self-Service **S3**

230

209 S3 buckets managed by Self-Service Elasticache

980

890 Elasticache Redis clusters managed by Self-Service DynamoDB

335

335 DynamoDB tables buckets managed by Self-Service

The Zendesk OS Organization - Now



Application & Platform Teams

Builder Tools

Foundation

- Foundation Cloud (Edge, Network, Compute, Secure, Optimize, Insights, Spend & Vendor Management)
- Foundation Data (Storage, Analytics, Interface)

Engineering Productivity

- Deploy and Release (Platform, Toolkit, Experience)
- Design, Build, Test (CI Platform, Develop & Test Environments, Productivity Test)

Reliability & Resilience

- Reliability (SRE, ZNOC, Observability, Capacity/Perf)
- Resilience (Incident) Management, Bus. Continuity, Tech. Continuity, Resilience Tooling & Data)

Core Services

- Trust and Safety (Identity & Access Management: Customer Data Management; Security & Auditing)
- Account and Team (Account Domain; Team Management; Internationalizaton product)



BVP Nasdaq Emerging Cloud Index



LESSONS WE LEARNT



Org

Org structures need to constantly evolve as you grow.



Ownership

You own it you run it, set SLOs and put teams on call



Customers

Understand **ALL** your customers and see things from their perspective



Self Service wins

Automation and consistency can bring great benefits, improvements are available for all customers



Product metrics

Key to showing a return on your investment



Trusted advisors

We don't run everything ourselves anymore but our expertise is still needed



STATE OF DEVOPS REPORT 2023



Chapter 2

Focusing on users predicts organizational performance

Takeaways

Organizations can get caught up in the latest technology and management trends as they seek to improve developer productivity and organizational performance. Our research shows that a user-centric approach to building applications and services is one of the strongest predictors of overall organizational performance. To improve performance, develop a deep understanding of your users and iteratively adjust and incorporate their feedback.

Introduction

The DevOps movement started as a way to encourage better collaboration between development teams and operations teams in service of providing better user value. This alignment drove early successes and enabled DevOps ideas and capabilities to expand beyond those two departments. Today, high-performing technology-driven organizations recognize the importance of alignment across all teams to reach organizational goals.

We investigated three critical characteristics of being user focused:

- How well teams understand the needs of their users.
- How well aligned the team is toward meeting user needs.
- How user feedback is used when prioritizing work.

Teams with strong user-focus have

Sonk

