Strategies, Challenges, and Value of Kubernetes Platform Teams

Oct 2020

Goals and Timing of Platform Teams

Cloud-Native has huge and many business values

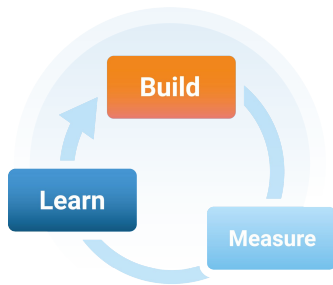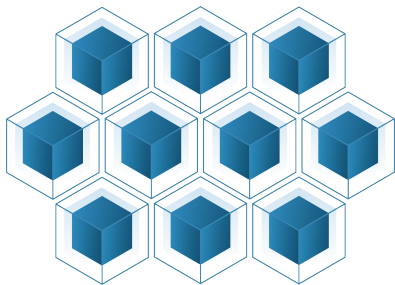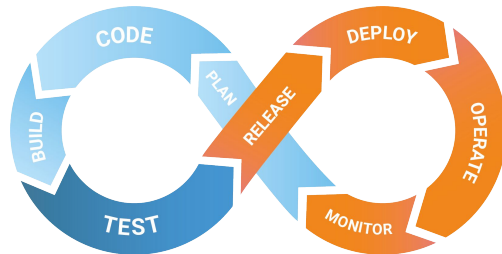|		
⚙️	Developer Speed	*Significantly more time for innovation*
📊	Improved Business Agility	*More and faster deployments*
🕐💲	Faster Time-to-Market	*Roll-outs to production faster than planned*
🔲	Higher Flexibility	*Scale easily across private and public clouds*
✔️	Improved Resiliency	*Better availability and full uptime during patches and upgrades*

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Achieving High Innovation Rates

Continuous Integration / Deployment

You Build it you Run it

Microservices

Container

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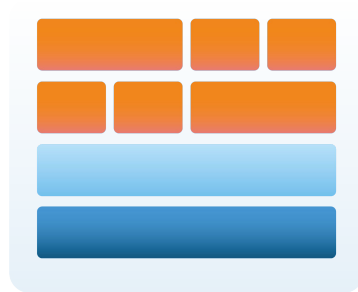
Complete Platform Life-Cycle Management

Vanilla Kubernetes + 30
Components + Apps

RBAC, PSP for complete
stack + Apps

Dedicated Solution Engineer +
Chat + Weekly Calls

Install → **Secure** → **Manage**

Upgrade ← **Fix** ← **Monitor**

Rapid Security Fixes,
Upgrades, Fixed Versions

99.95% SLA,
Fix Everywhere

24x7 for Master and
Tenant Clusters

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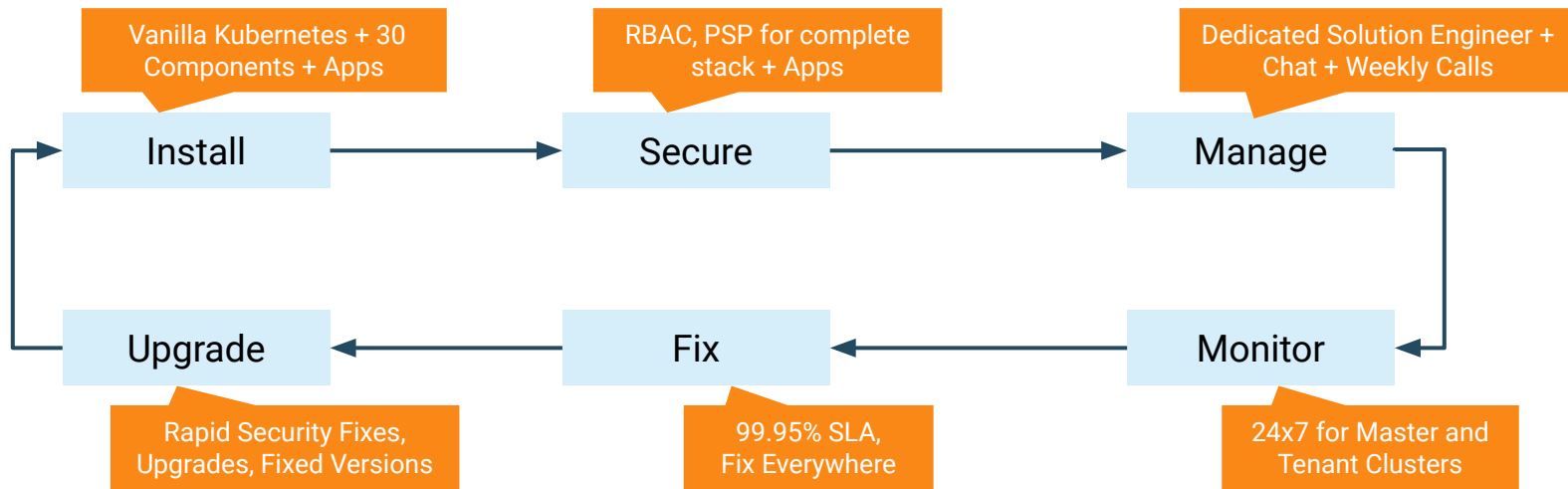
When Project Teams cover Kubernetes Platform
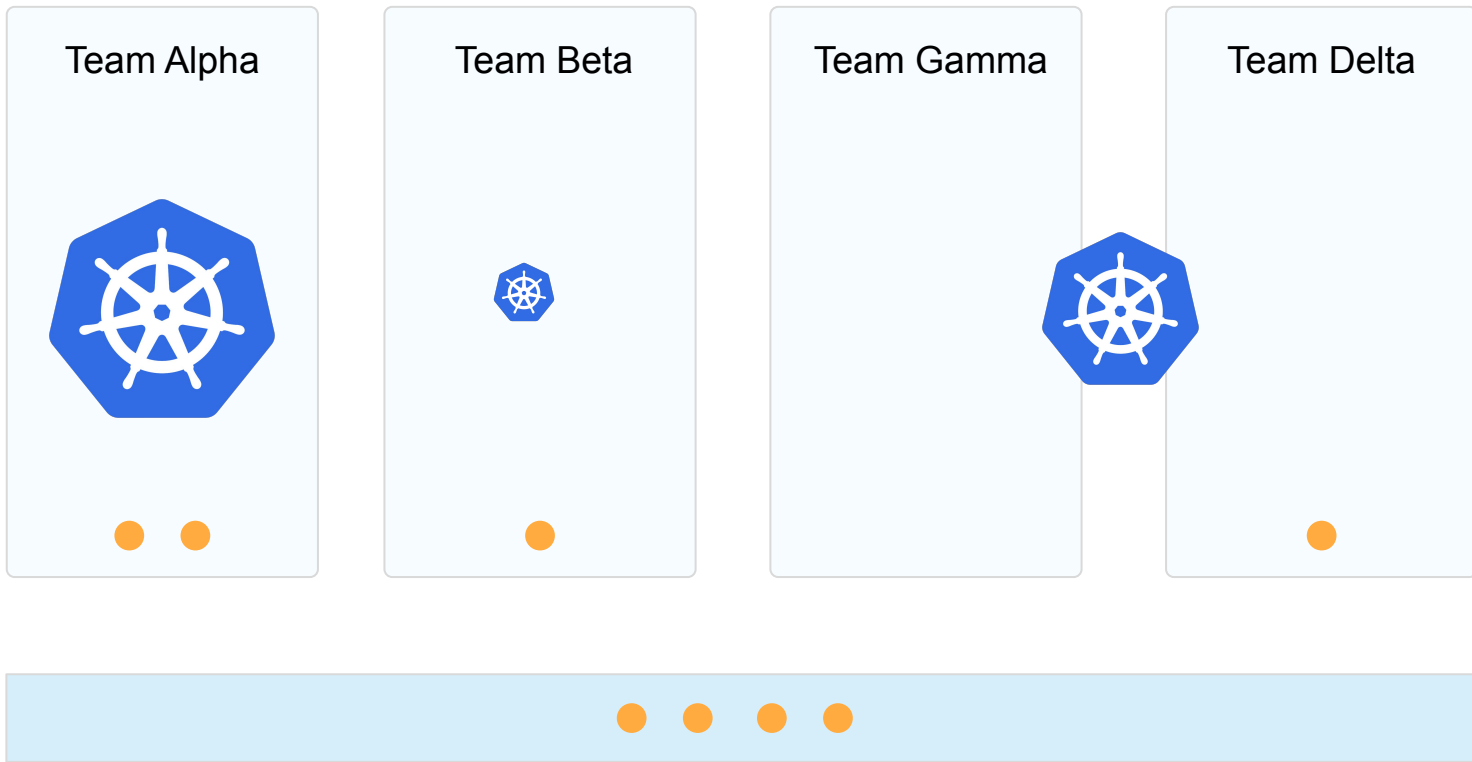
Platform Team Maturity on Cloud Native Journey

Value

5   Development Teams Enablement

4   Additional Use Case Specific Apps and Technologies

3   Multi-Cluster Automation / Provisioning / Security / Networking / Upgrades / Fixing

2   Continuous Integration / Continuous Deployment / Automation

1   Kubernetes and related technologies / Security and Deployment Basics / Operations

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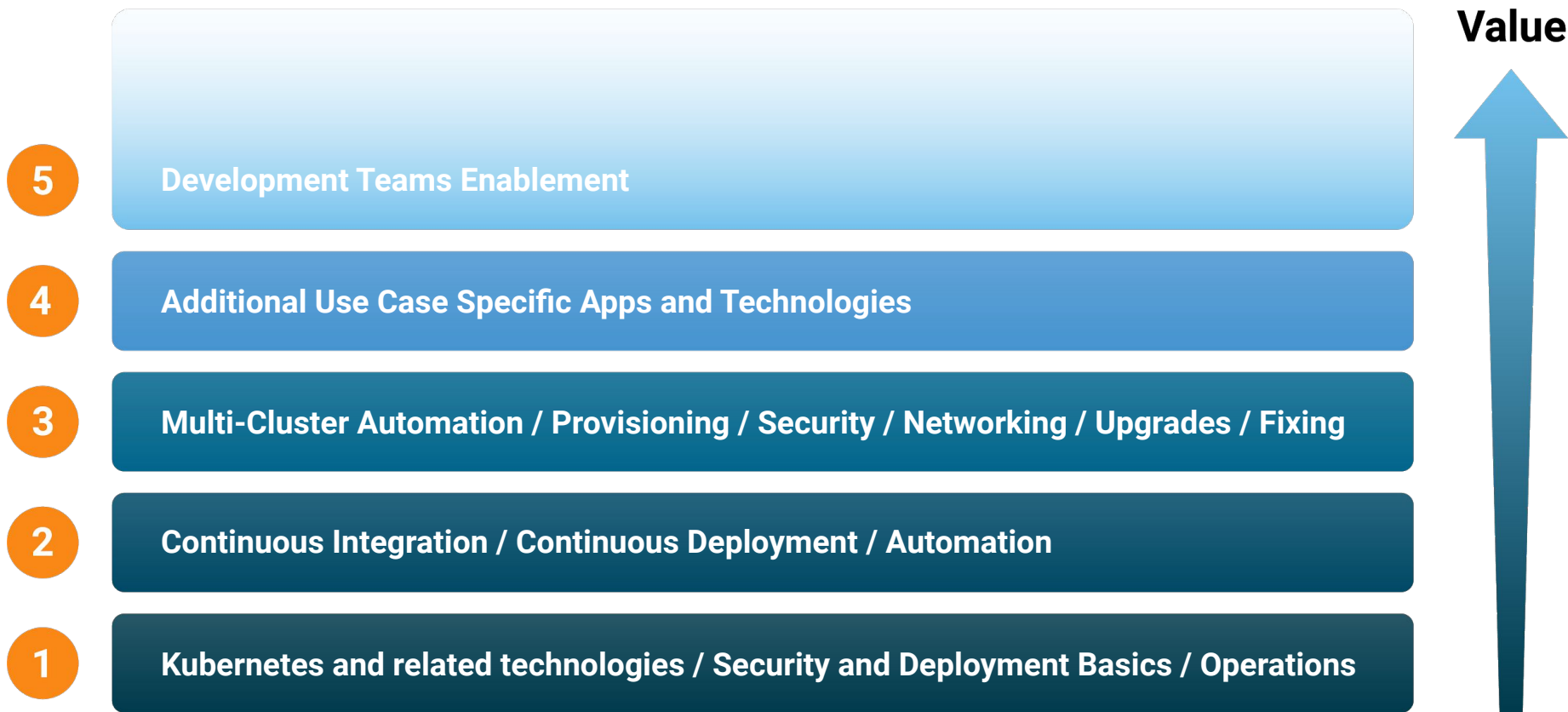
When to Build a Platform Team - Time to Value

Value from cloud-native approach (%)

Time (years)

Technology and operations are handled by experienced team

Do-it-yourself

Use a product and manage yourself

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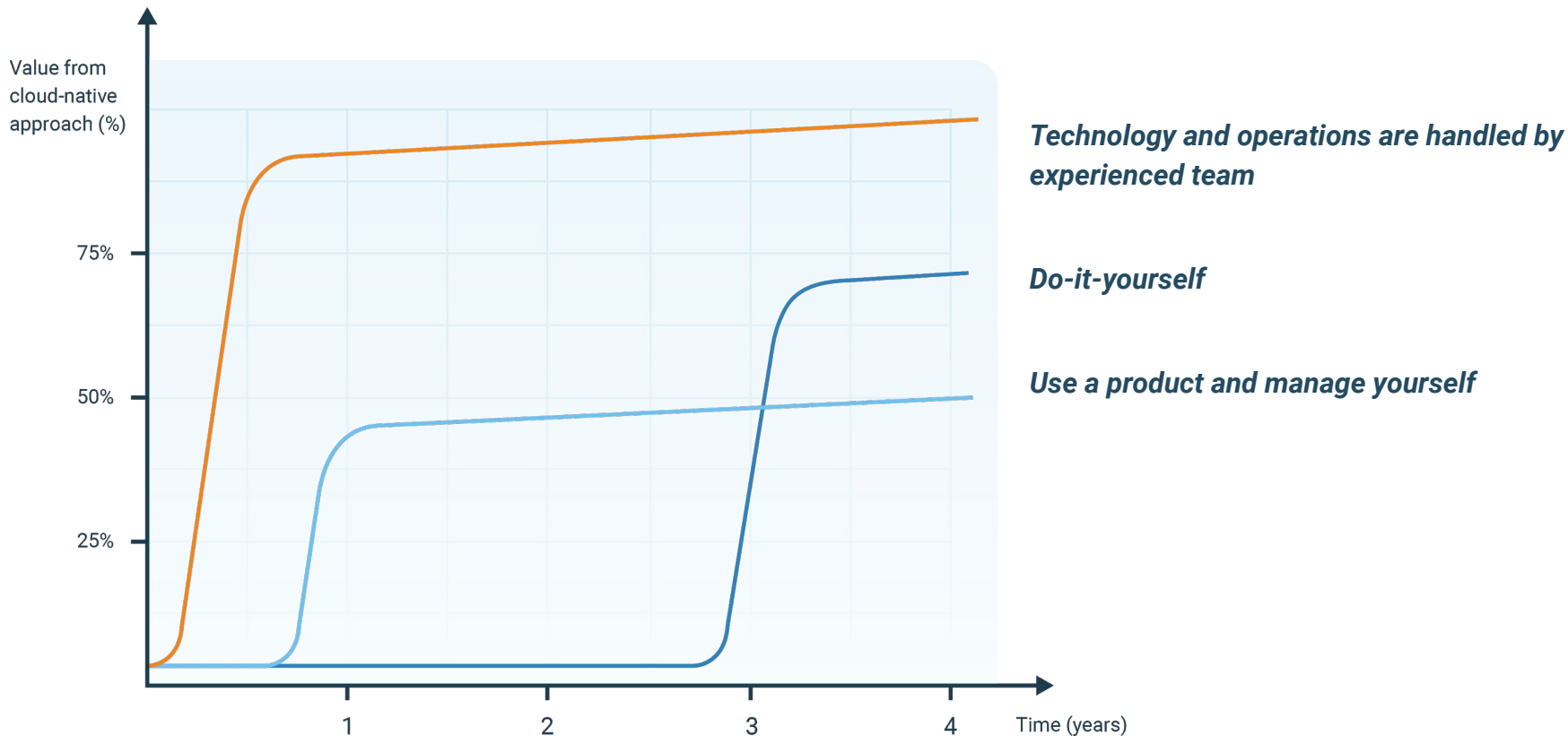
What are Key Challenges for Platform Teams

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1) **Teams don't benefit from initial automation development**

Scale with multiple clusters for stages / projects / regions

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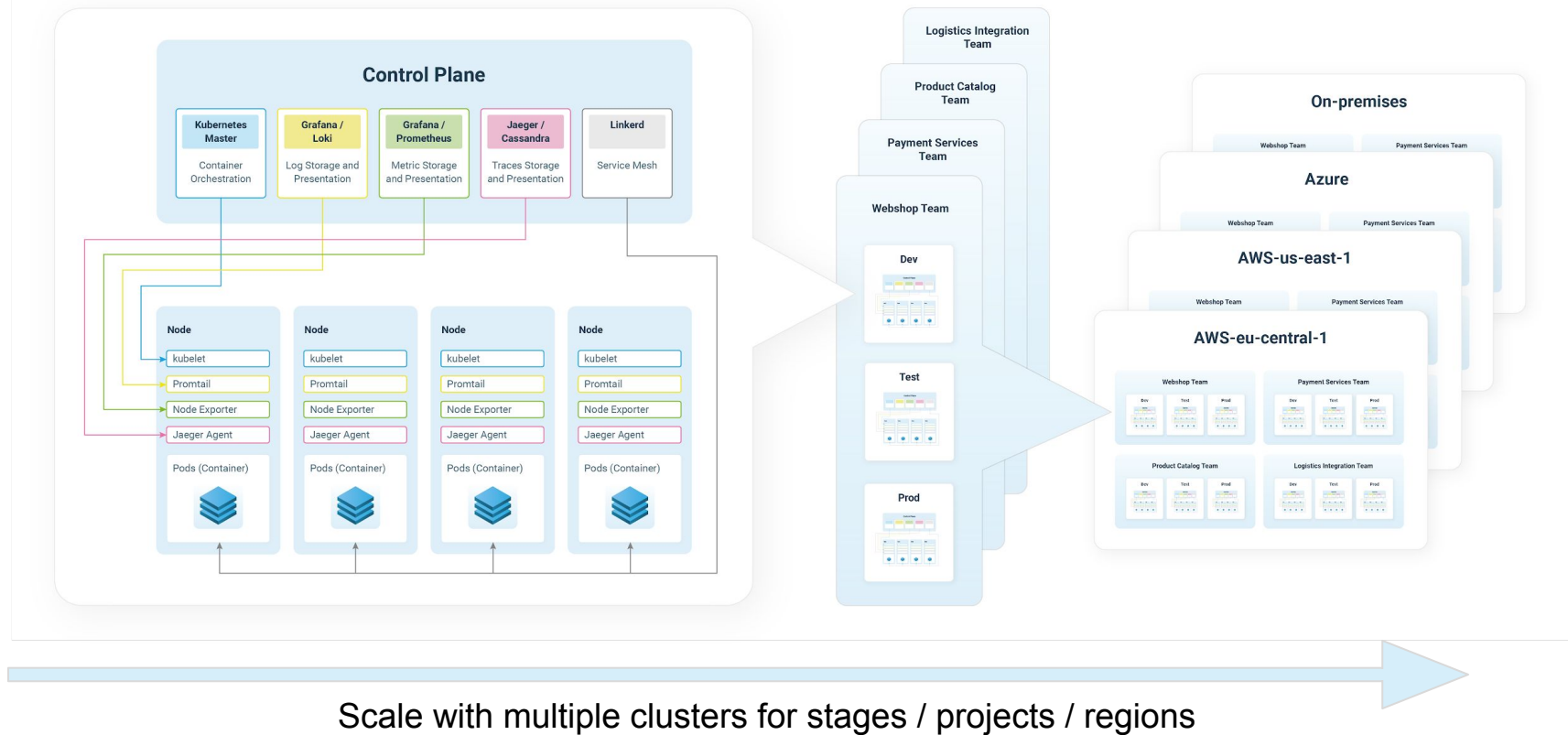
2) No project backing (no power, no budget, no timeline)

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3) Unrealistic expectations
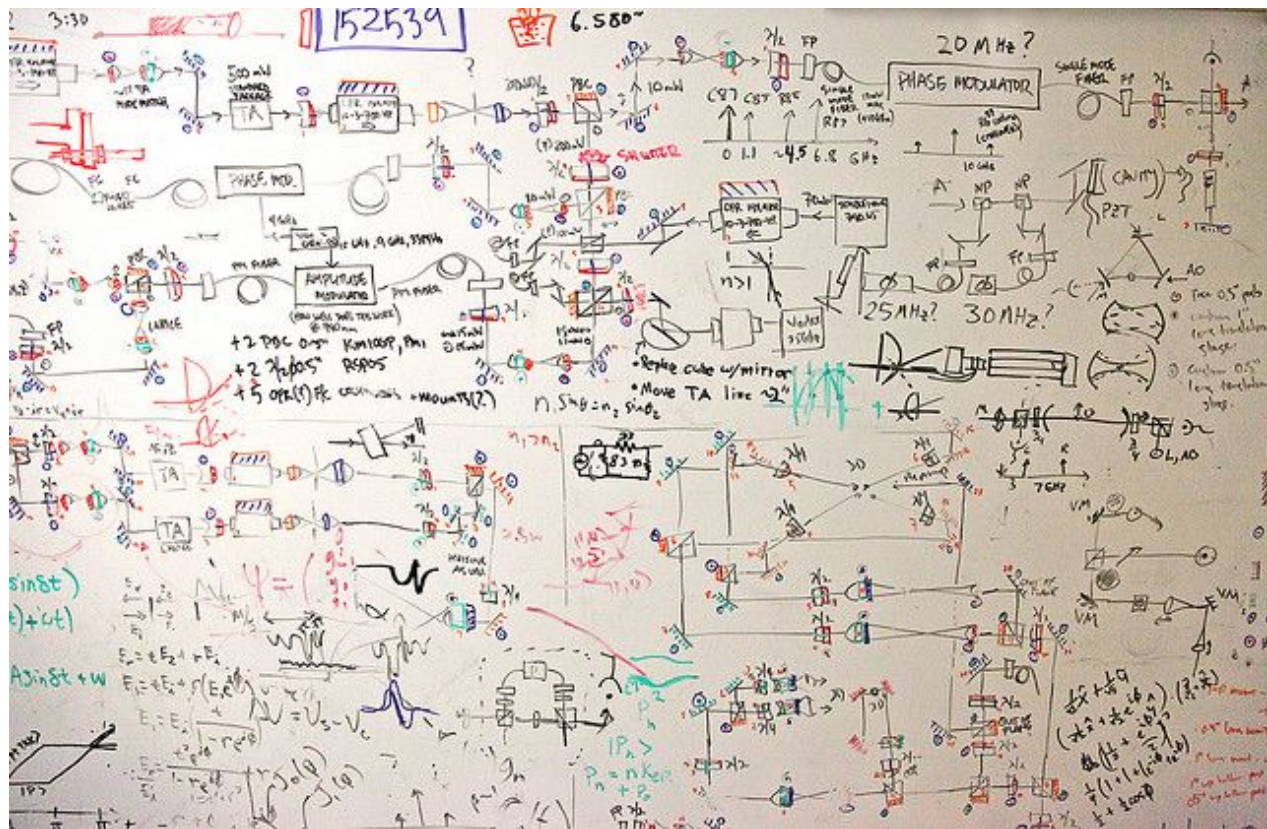
4) Meeting every customer request

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5) The IKEA Effect
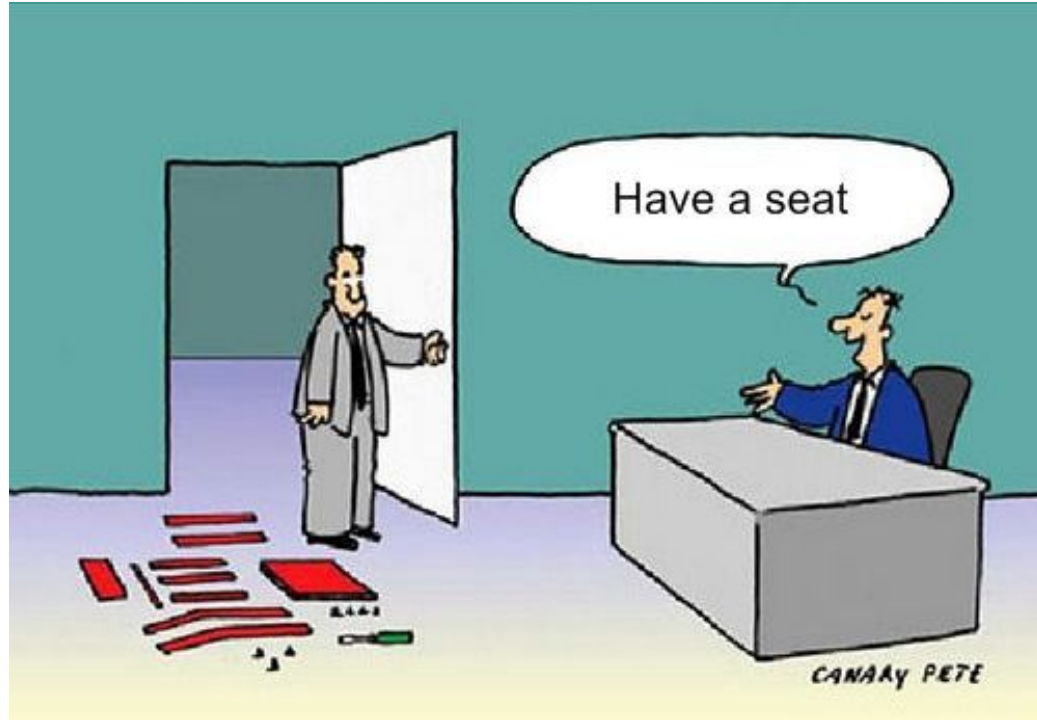
What Platform Teams Should Focus On

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What platform teams should be doing

- Security Clearance and Enforcement
  Develop security concepts with Security Experts, automate security, fix CVEs, upgrade strategy,...

- CI/CD
  Improve developer experience automating CI/CD, testing, Progressive Deployments, scalability, …

- Observability
  Establish standard set and configuration across all clusters for monitoring, tracing, alerting, …

- Simplify
  Train, educate, assist, review, recommend to help build better cloud-native applications, ...

- Evolve
  Design the future platform in respect to provisioning, cost optimization, functionality, shared services...

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Maximize value from Cloud-Native Development

Technology

Managed cloud-native
stack with Kubernetes

Operations

24x7 management,
alerting, fixing, upgrading

Evolution

DevOps tooling, training,
automation, evaluation, ...

Increasing value provided to DevOps teams

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