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Salesforce’s journey of more than a billion messages: Innovating with AWS

Yang You
Senior Director
Product Management
Salesforce

Omar Jaber
Principal Architec
Software Engineering
Salesforce

Rafet Ducic
Sr. Solutions Architect
AWS

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Yang You

Senior Director, Product Management

Omar Jaber

Principal Architect, Software Engineering

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Updated: September 28, 2022

AWS + Salesforce Partnership Extends Our Platform



Customer Success

Salesforce, a leading CRM, partnered with AWS, the world's most broadly adopted cloud platform, to unlock differentiated customer value for everyone.



Pace of Innovation

Like Salesforce, AWS is recognized as one of the world’s most innovative companies.

Our complementary cloud technologies help us deliver new capabilities faster.



Trusted Infrastructure

AWS is a strategic partner and Salesforce’s cloud workloads run on AWS.

Companies Are Accelerating Digital Transformation

Need one, secure, connected ecosystem



We're Facing a New World

85% of brands are concerned about the impact of **inflation** on **business performance**

Real-Time Expectations

Tighter Budgets

Cookieless Future

Headcount Shortages



Company



Customer

90% of marketers say recent **data privacy changes** have impacted how they have to track **performance**

Salesforce Marketing Intelligence 2022
Merkle Digital Marketing 2022

Customer Expectations Are Rising



Then

- Broadcast
- Mass Emails
- Brick + Mortar
- Internet Ads

Now

- Personalized Offers
- eCommerce
- Omnichannel
- 24/7 Service
- Digital-First
- AI

73%

of customers expect companies to understand their unique needs and expectations

Salesforce State of the Connected Customer 2022

We're More Disconnected Than Ever





Companies

Real-Time Customers

The average company has **976** different applications

1 in 3

customers will switch from brands they love after one bad experience

56% of customers say companies treat them as a number

Salesforce Customer 360 Powered by Genie

The world's first real-time CRM



Real-Time	Streams	Segments	Activations
Intelligent	Personalization	Bots	Predictions
Automated	Workflow	RPA	Integration
Hyperforce	Compliance	Data Residency	Privacy

Marketing Cloud Engagement

Connect every cross-channel moment at scale with automation

31% increase in customer engagement

Deliver real-time journeys

Automate intelligent customer experiences

Automate engagement with email and mobile

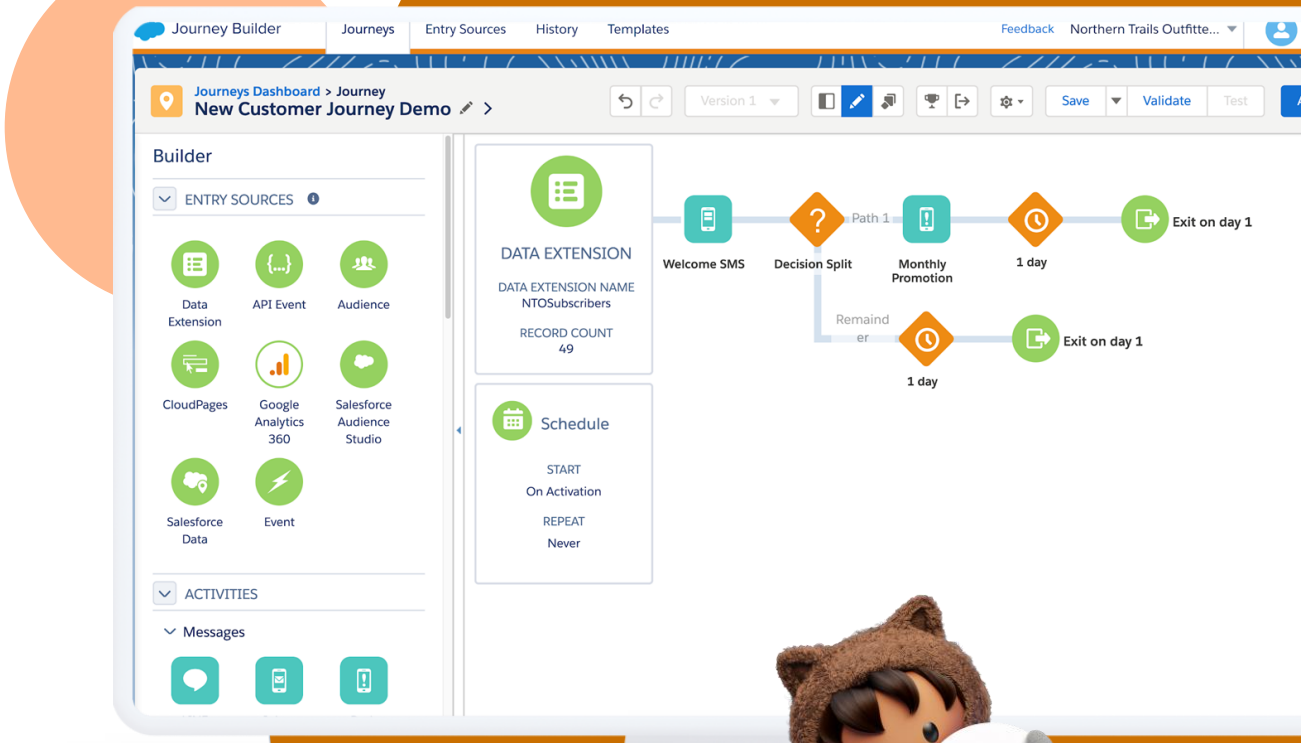
Orchestrate conversational messaging with scalable content

Improve ROI with intelligent performance

Increase conversion with embedded AI and analytics

Reduce costs with targeted advertising

Gain key insights to create efficiencies and maximize ROI





ORVIS | ROCKET Companies

Source: [FY23 Customer Success Metrics Study]

Trust | Scale | Availability

Marketing Cloud Cyber Week (2021) in First-Party Data Centers

33.4B

Emails Sent

Multiple days > 6B

Dozen+ customers sending more than 500M for week

+25%

Year-over-Year in Email Volume

7.2B

SMS & Push Notifications

+94%

Year-over-Year in Mobile Message Volume

148B

Journey Activities

244B

Journey Analytics Events

140B+

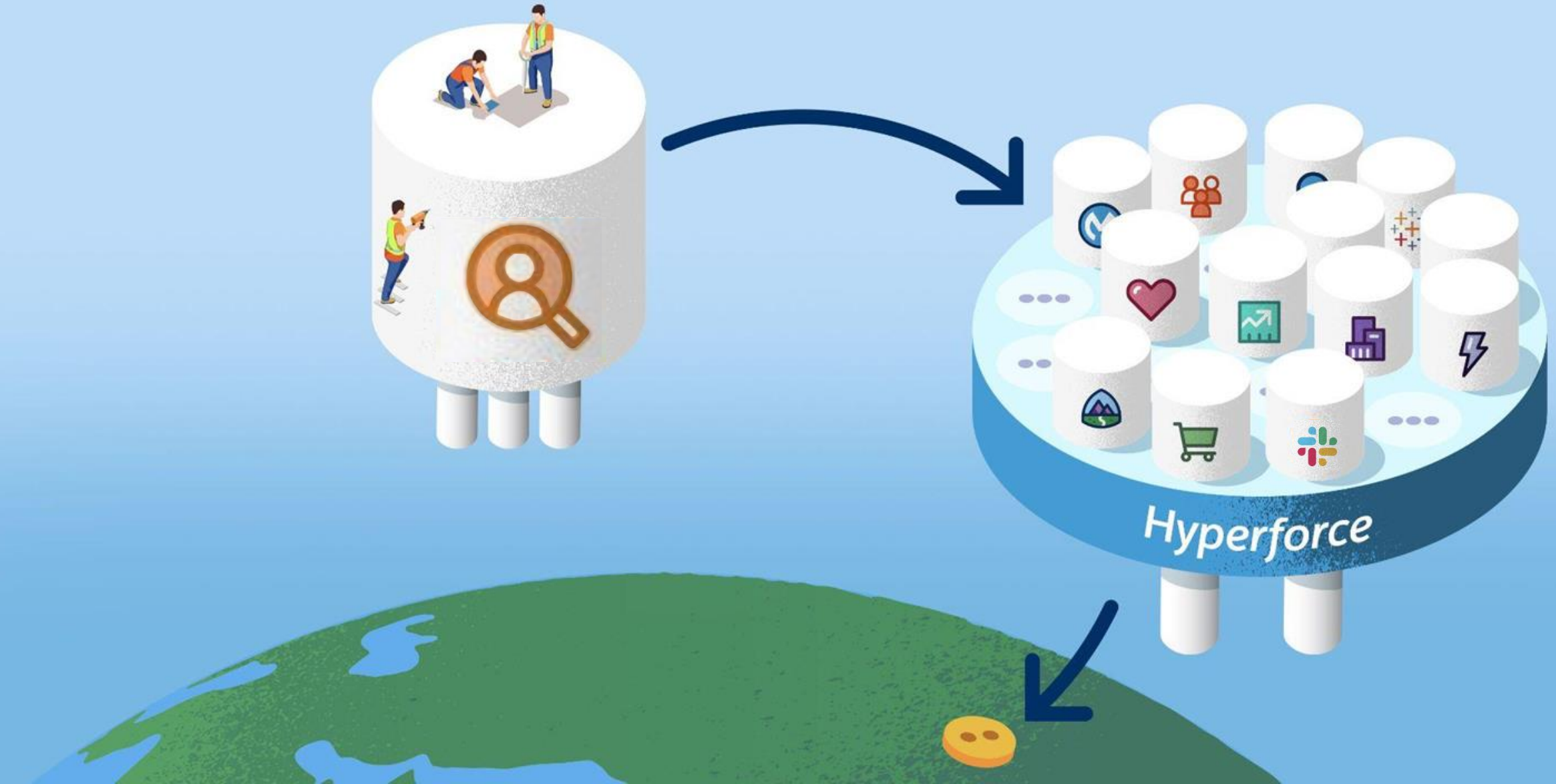
Daily AI Predictions

99.99%

Uptime & No Incidents

Surpassed 1 **TRILLION** annual messages in 2021

Marketing Cloud Engagement on Hyperforce



Salesforce Hyperforce

The trusted cloud platform. Loved by developers, trusted by CIOs

Data Residency



Choice and control for residency and compliance

Scalability



Architect with flexibility to scale reliably

Security



Build with next generation security

Privacy



Transparency and control of your data

Agility



Extensive Interoperability with AWS

Investing in Hyperforce

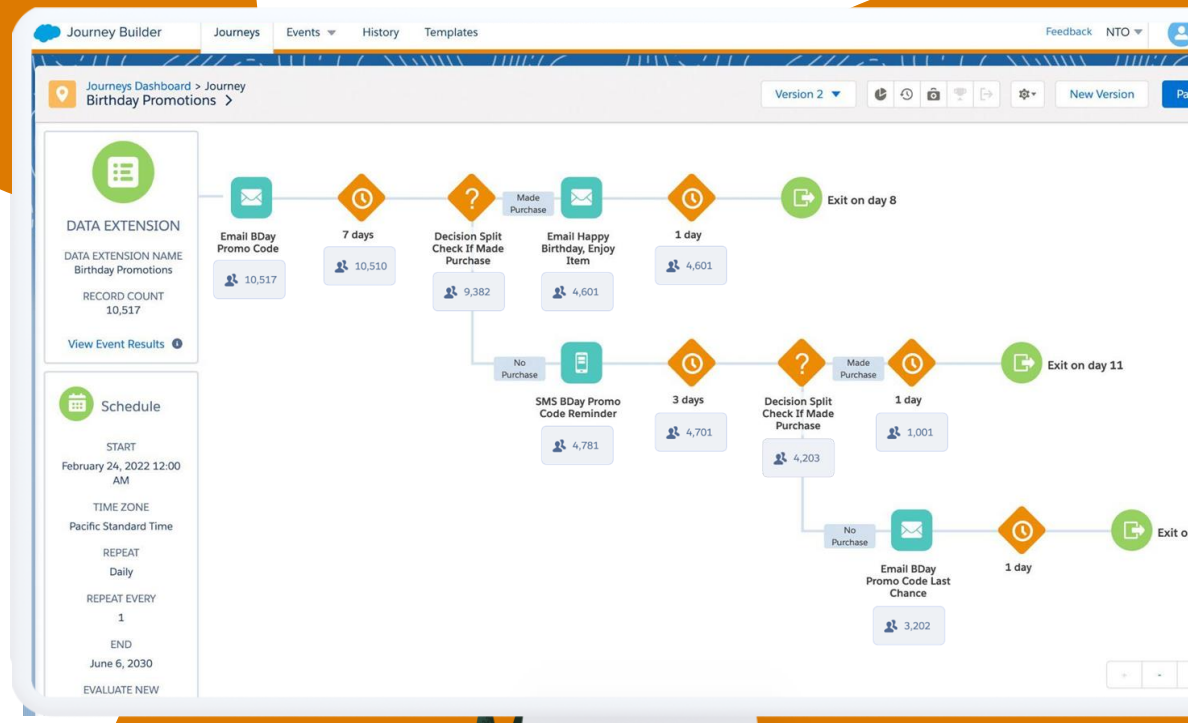
ROADMAP

Trust, Security & Compliance

Protect sensitive data with built-in controls and end-to-end encryption

Expanded Support for Data Residency

Choose where your data will be stored to comply with regulations specific to your company, region, or industry



Marketing Cloud Engagement

Pilot Available in India
(new markets coming soon)

Architectural Principles

Hyperforce was built from the ground up, with these in mind



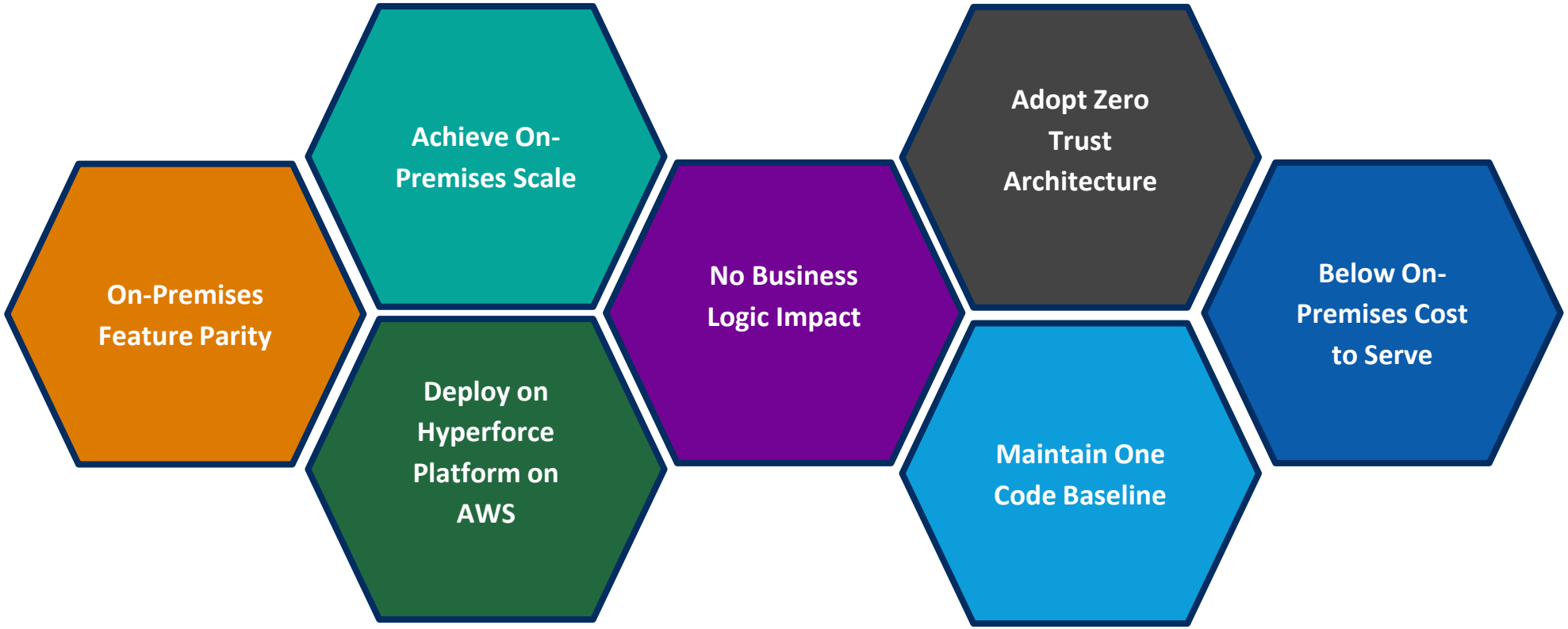
Marketing Cloud's Global Presence



Transformation Goals

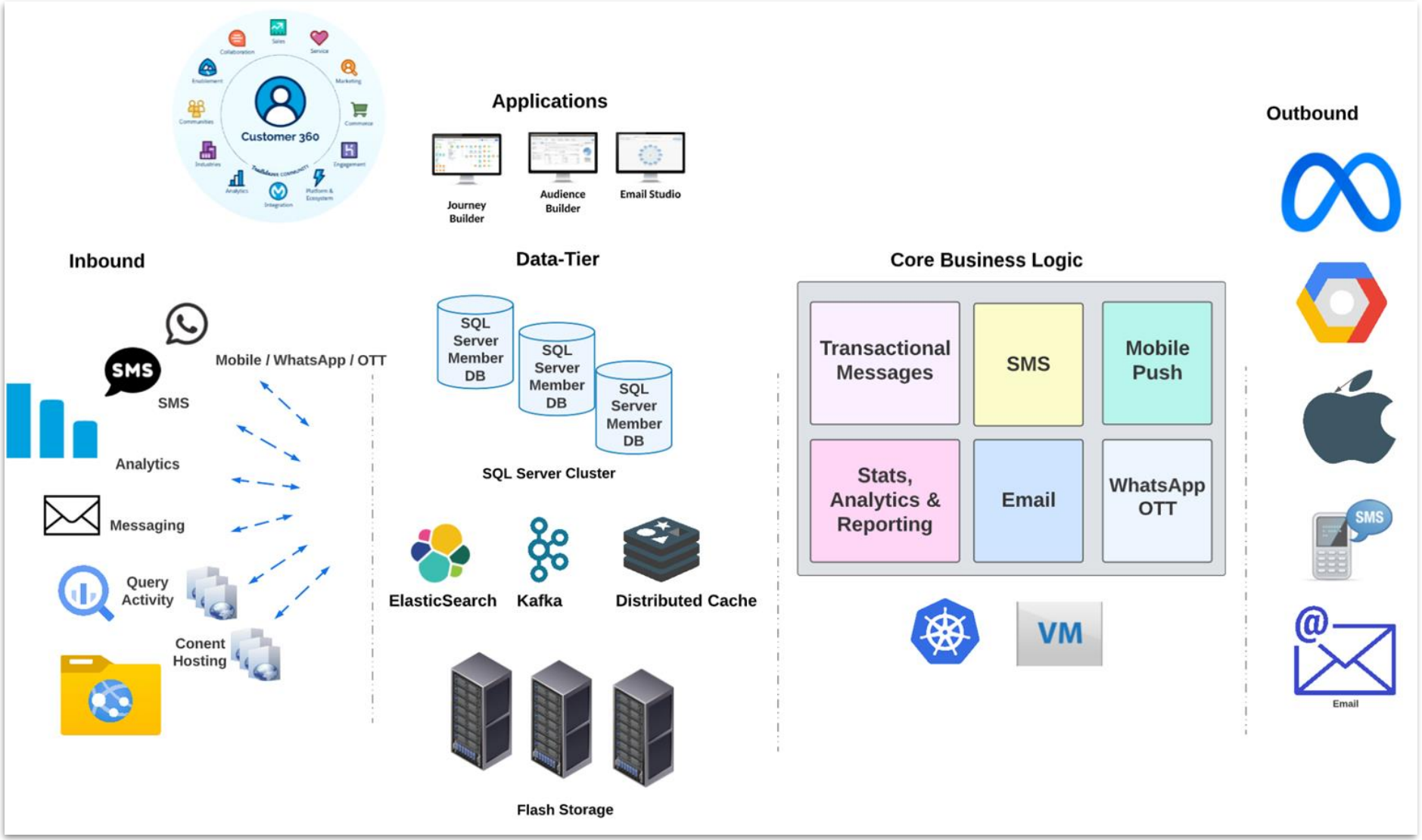
Set your transformation goals early and around key challenges

Challenge: Deployment to production in 12 months



Architecture Overview

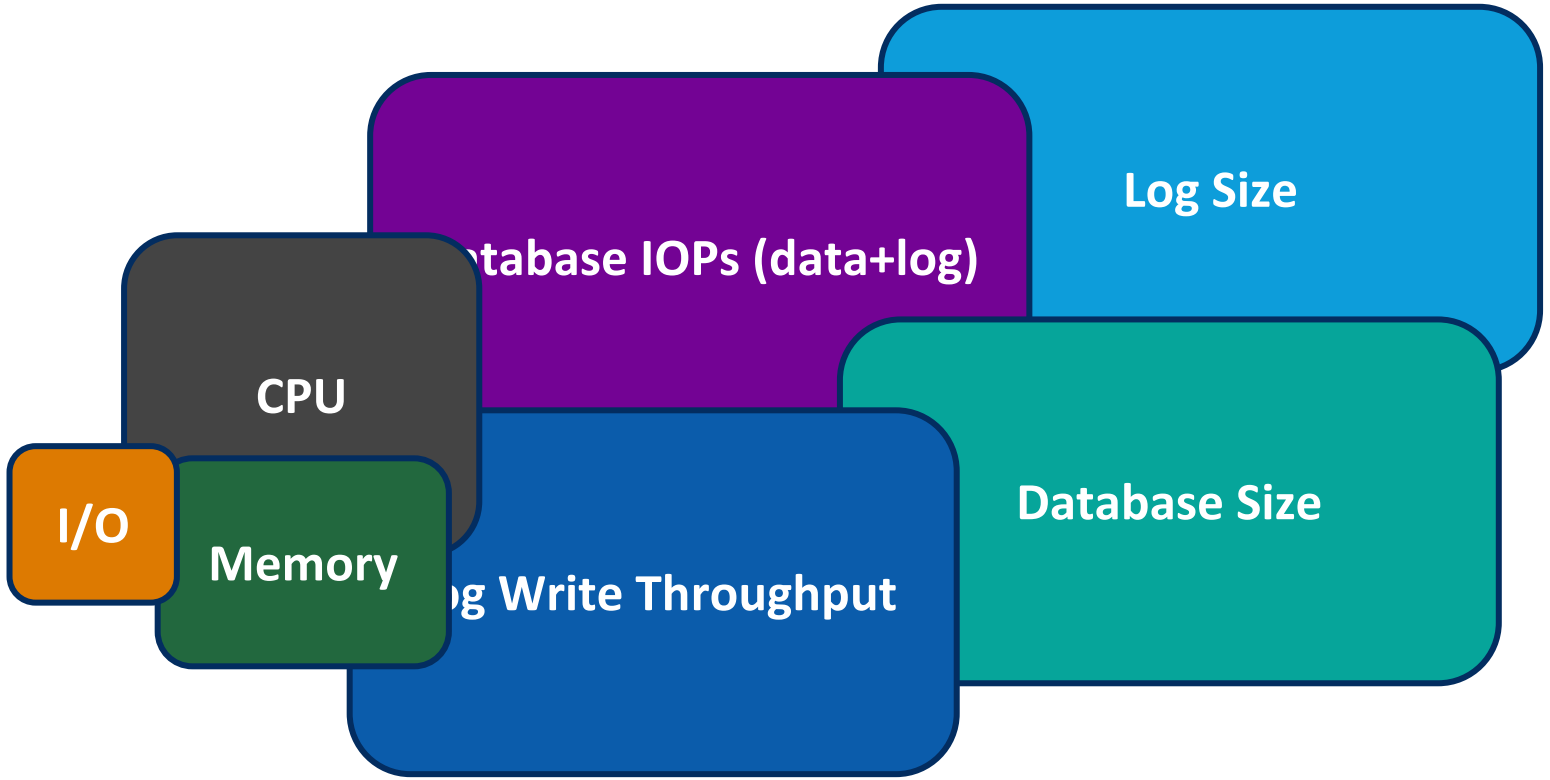
Distributed data-intensive platform designed for engagement at scale



Database Scale Factors

Identify and analyze your most critical services

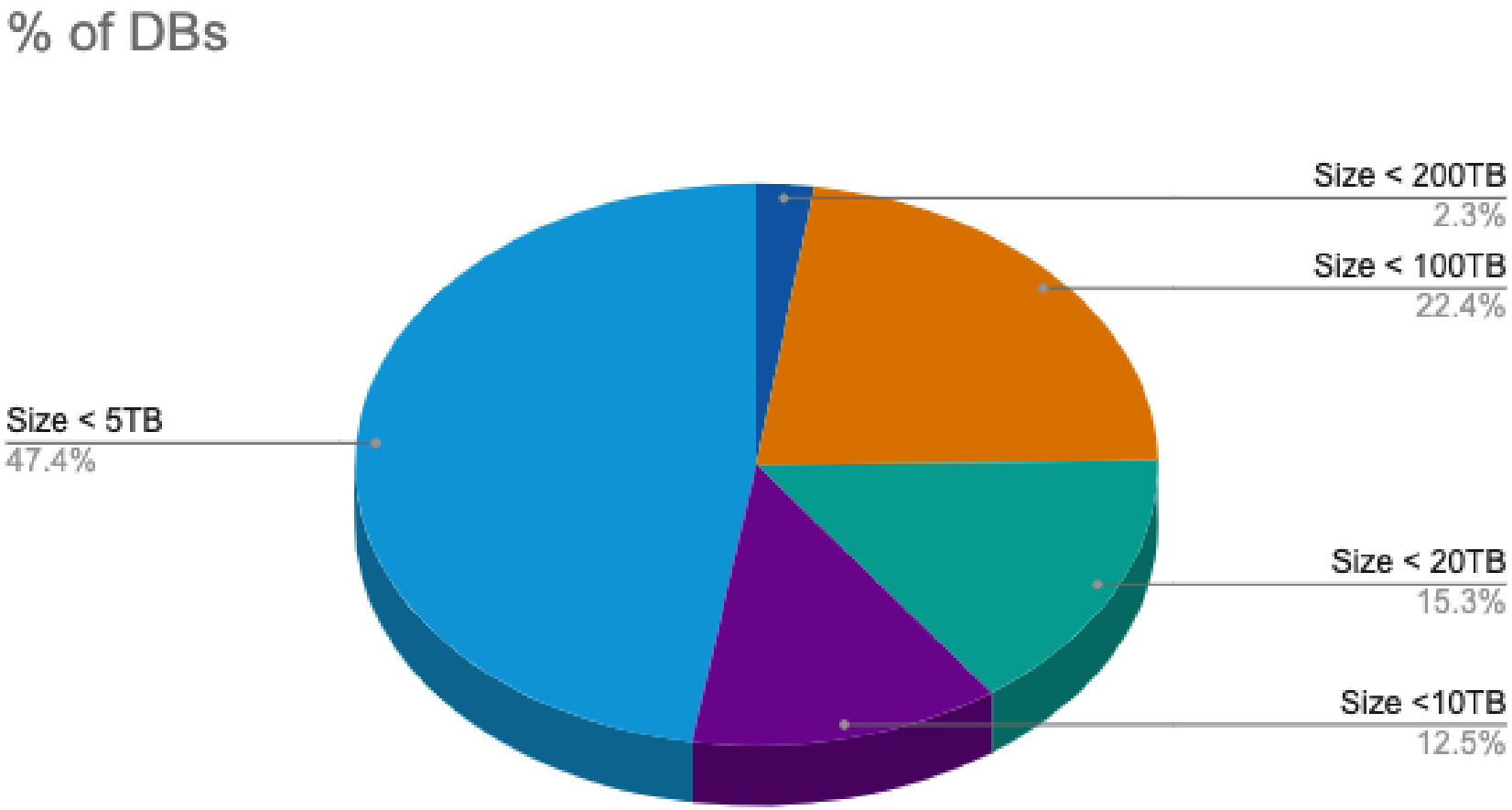
- Our database data-tier is our primary and most critical service
- Second largest SQL Server deployment in the world
- 3+ trillion transactions executed during cyber week periods
- Hundreds of PB of relational data supporting thousands of customers



Key Concern: Could we run our SQL workload on AWS?

Scale Factor #1: Database Size

Understand databases' size and growth and the impact on your design

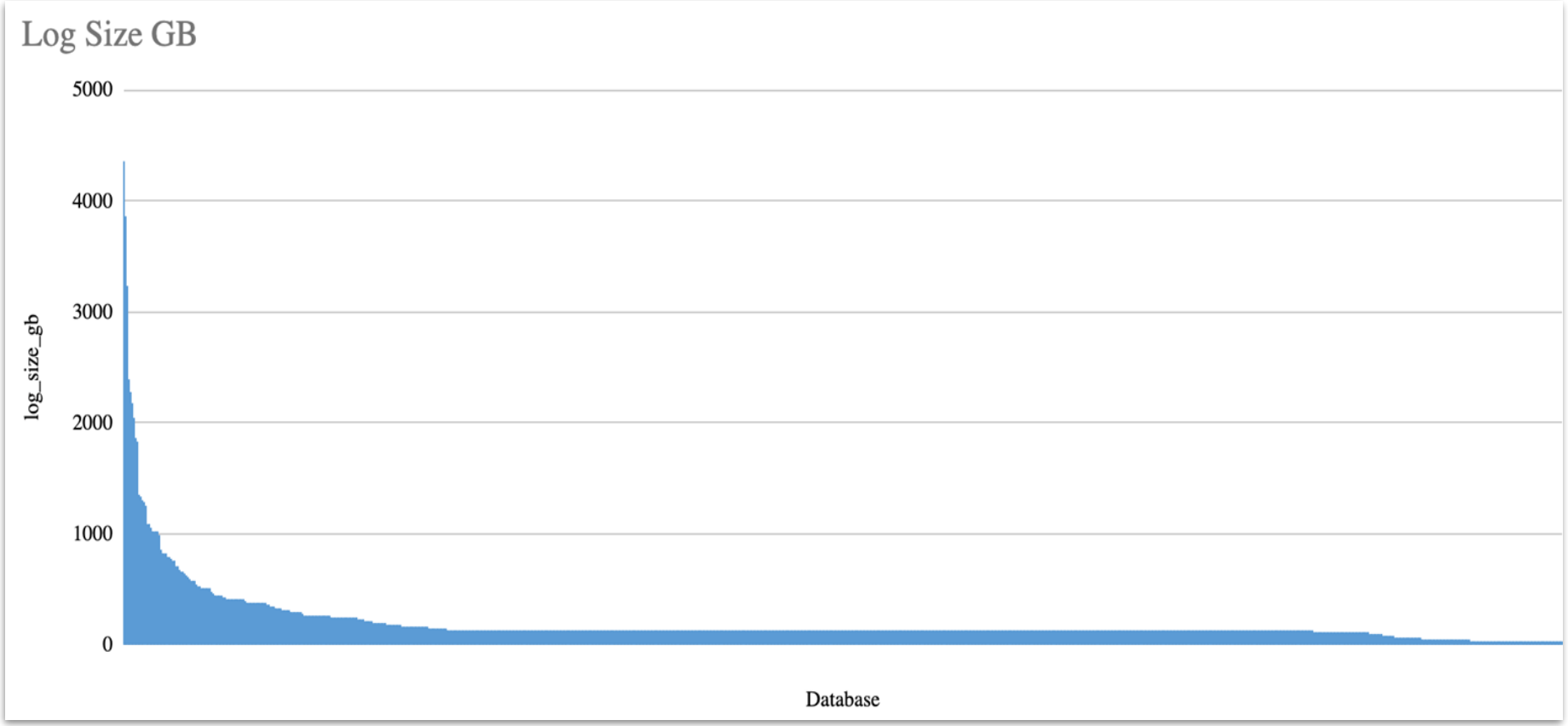


Database data files size and growth

- Database maximum growth and size distribution
- Database organic growth rate
- Database data files sharding and growth

Scale Factor #2: Log Size

Evaluate how transaction log size can impact solution scale and reliability

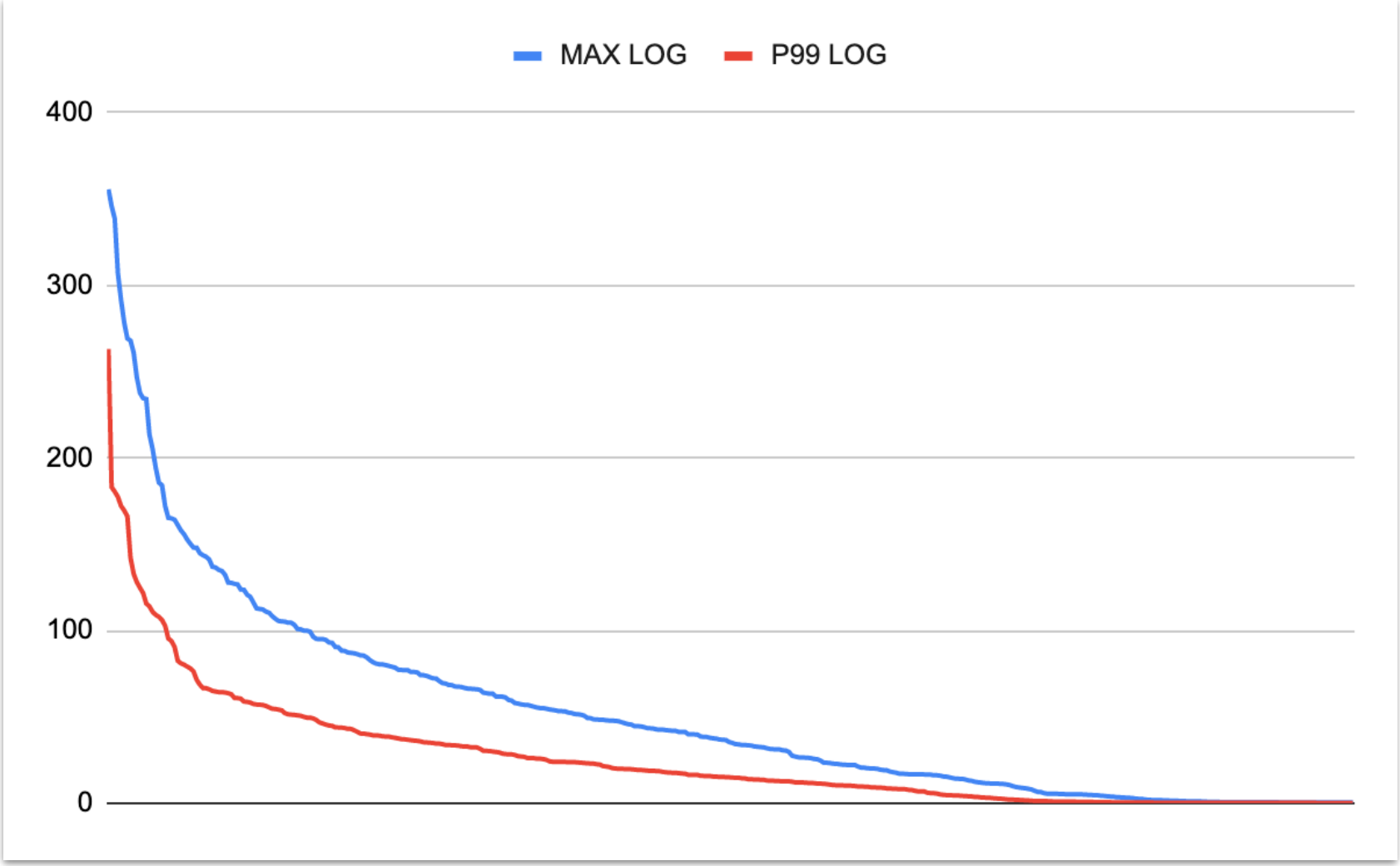


SQL server transaction log file size

- Log Size KPI
- Peak vs. Sustained load
- How did we use it?

Scale Factor #3: Log Write Throughput MB/s

Determine the log size overhead to maintain your scale

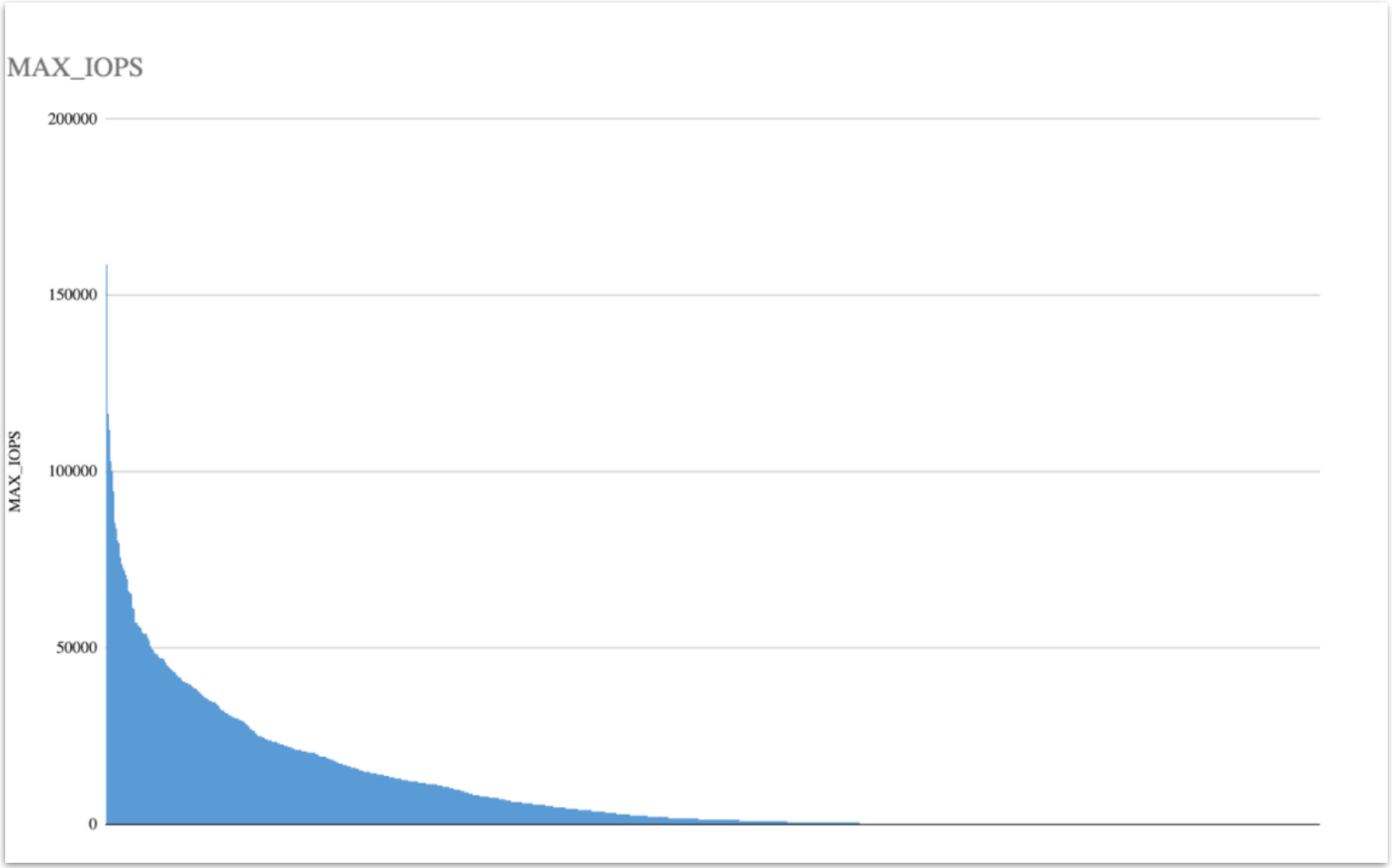


Transactional log write throughput in MB/s to achieve transaction rate

- Log Write Throughput KPI
- Peak vs Sustained load
- How did we use it?
- Why optimize for log write?

Scale Factor #4: Database IOPs (data+log)

Finding you IOPs scale to mitigate early risks and opportunities for transformation

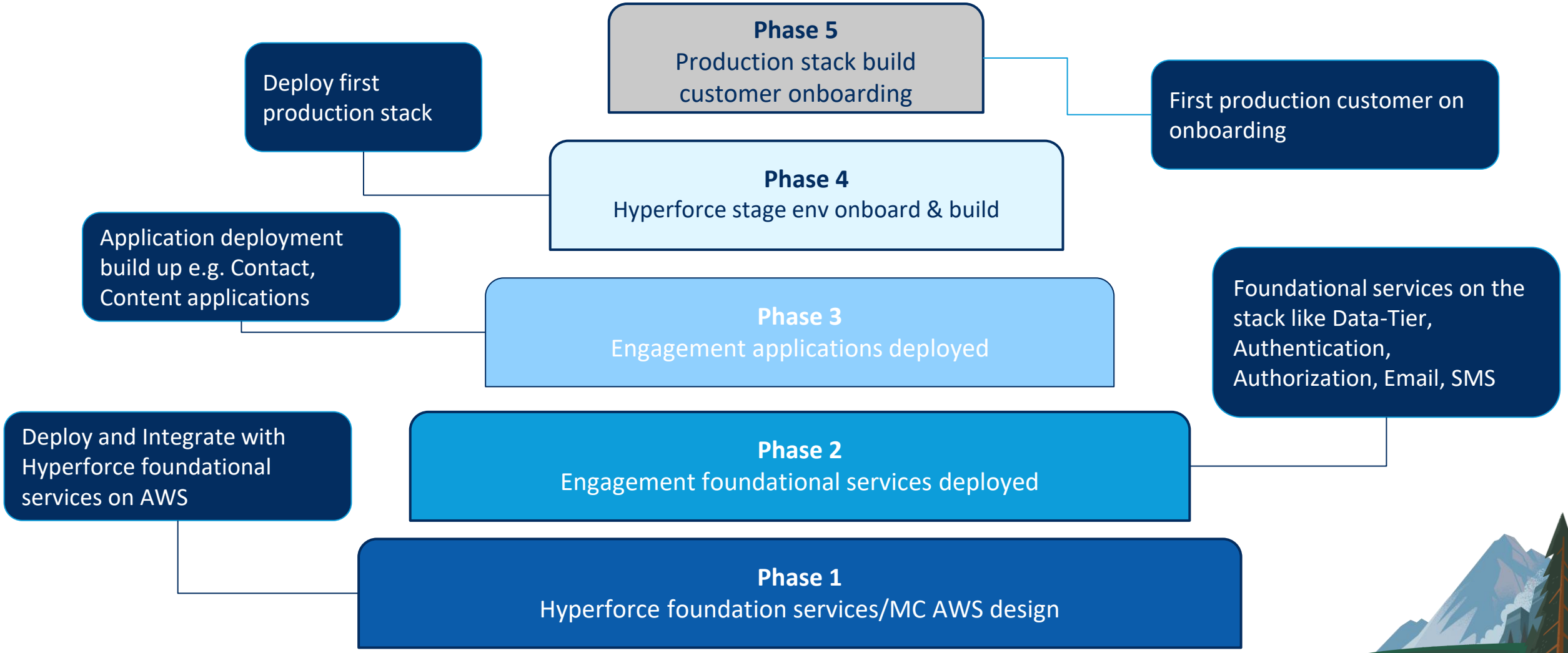


Data read and write operation/sec

- SQL Server IOPs
- Peak vs. Sustained load
- How did we use it?
- Why optimize IOPs?

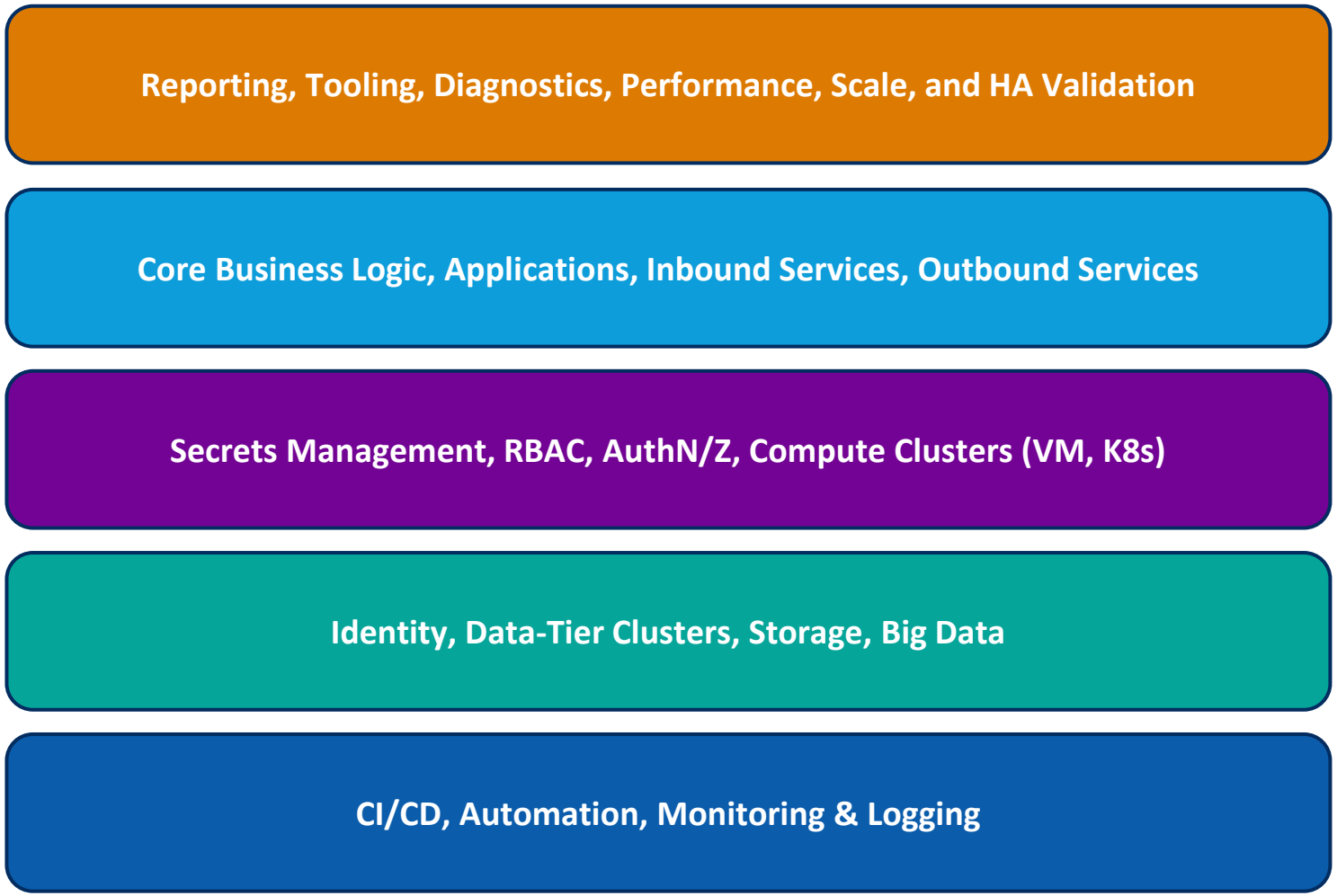
Structuring Project Phases

Build a layered approach so phase provides a solid foundation for the next



Services Layering

Layer your services to guide development and deployments



Pro Tips:

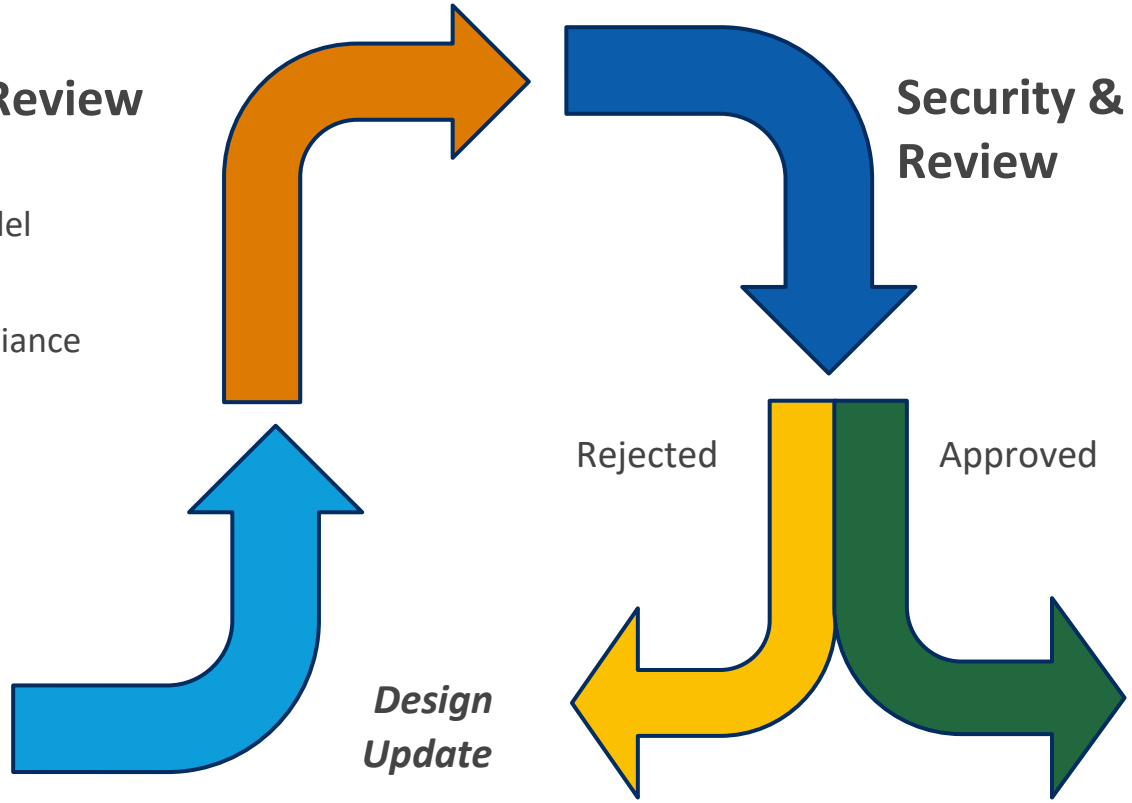
- Layer your services so you don’t have to migrate everything at once
- Start with fundamental services and build the next level
- Every layer provides services to the one above
- Focusing on a single layer reduces dependencies consideration
- Great opportunity to model your services deployment at scale

Development Cycle

Define a development and security review life cycle

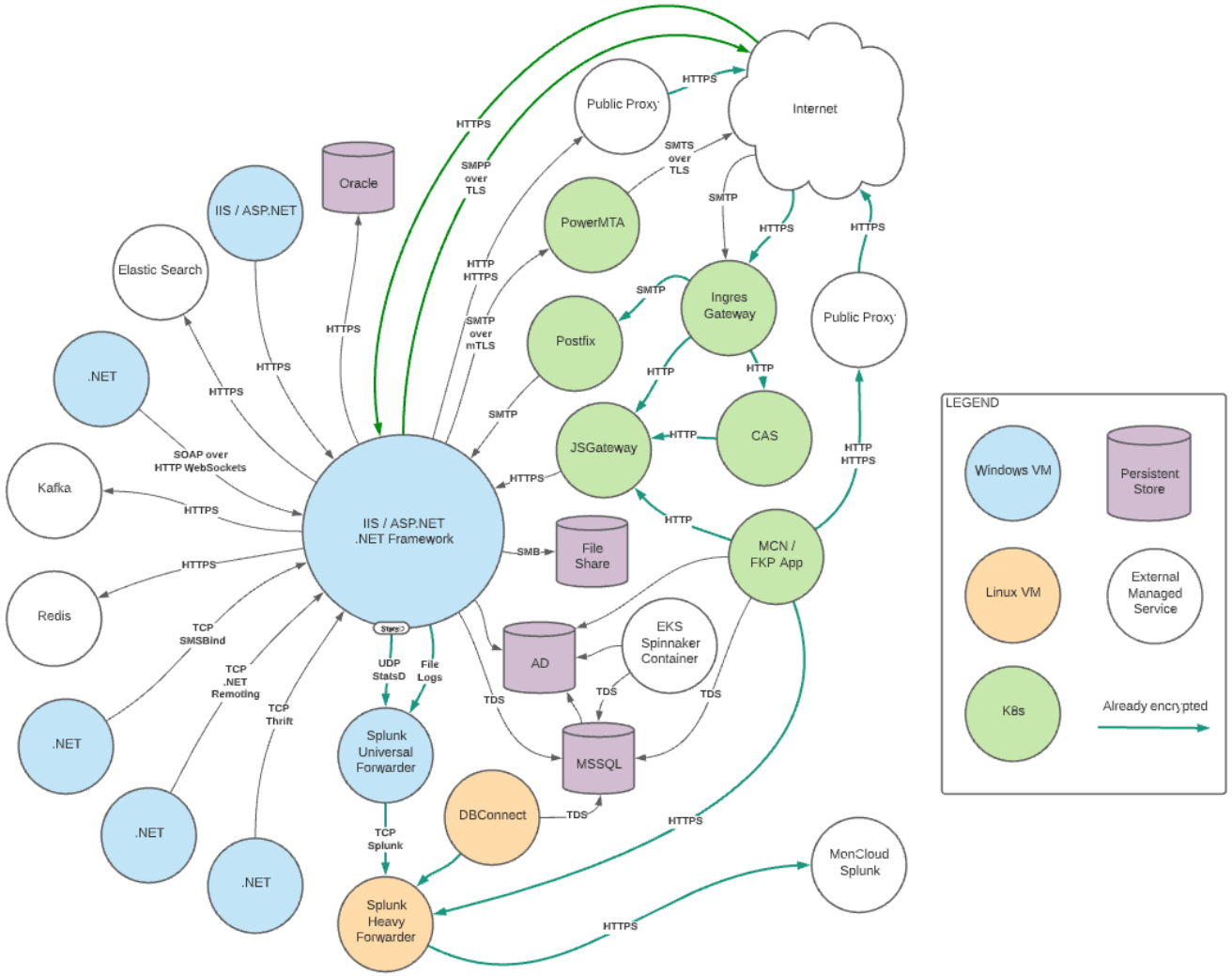
Internal Design Review

- One code base
- Cost to serve model
- Threat model
- Hyperforce compliance

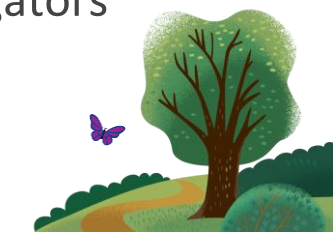


Zero Trust Architecture

Establish basic rules to secure and protect architecture and platform services



- **mLTS** between all services in **Hyperforce Domain**
- Data-Tier encrypted at REST and In Transit
- Data-Tier **RBAC** Control/AD group
- All Secure Settings in Hyperforce Vault
- All Auth Keys in Hyperforce KMS
- Connect Email w/mTLS to providers
- Connect SMS w/mTLS to aggregators



Transforming on AWS

Establish strong partnership

- Deep Technical Expertise
- Customer Focused Support
- Scalable & Reliable Services
- Access/ Influence New Services
- Diverse Managed Services
- Professional Services



Marketing Cloud Engagement on Hyperforce

Transformation Journey

14 Months
Concept to Production

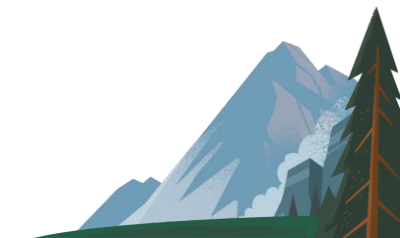
160+
Hyperforce Services

150+
Transformation Designs

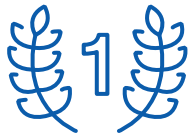
100+
Security Assessments

2 Production Stacks

- Fully automated deployment end to end
- Cut stack deployment time by over 80%
- Powered our first MC presence in India



Why Salesforce + AWS?



Best-in-Class Solutions

Leading cloud infrastructure platform

Leading business app platform



Speed in Innovation

Co-developed products

Connected ecosystems

Unified teams



Full Stack Trust & Scale

Digital HQ

Intelligent Apps

Customer 360

Hyperforce

We’re Just Getting Started Together



Visit us in the Venetian Content Hub

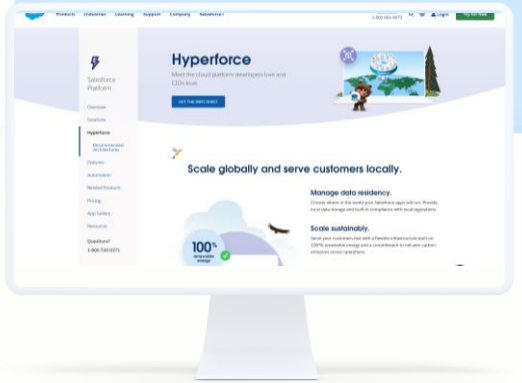
Level 2 – Ballrooms E & F



Start Learning on Trailhead

Get to know Salesforce Genie, the First Real-Time Platform for Customer Magic, built on Hyperforce

https://sfdc.co/GetToKnowGenie



Learn More About Hyperforce

salesforce.com/hyperforce

sfdc.co/HyperforceFAQExternal

Thank you



Thank you!



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