Top 4 Considerations for Adopting Cloud Database Services

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Meet the Speakers
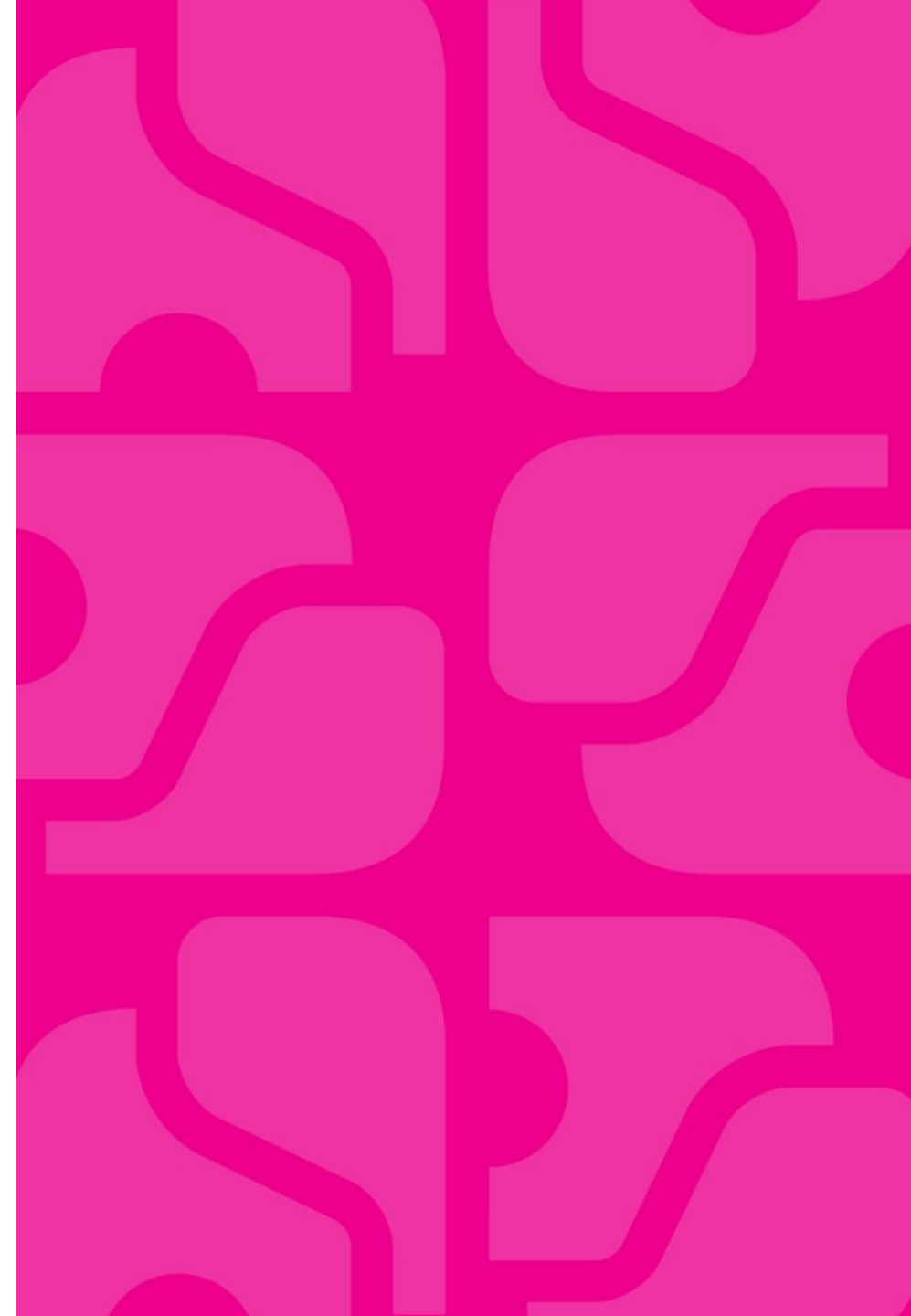
Valerio Del Sarto

Senior Cloud Engineer

Agenda

- Why is everyone moving data to the cloud?

- Strategy and top considerations

- Use cases and best practices

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Why is everyone moving to cloud?

"We've seen two years of digital transformation in two months."
- Microsoft CEO Satya Nadella, at the beginning of the COVID pandemic

Do more…

- scalability

- elasticity

- flexibility

- agility

- build and deploy apps quickly

…by doing less

- efficient use of resources

- consumption model = cost reduction

- automated maintenance and updates

- backup, recovery and disaster recovery

- reduce capital expenses

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A cloud-first strategy means....

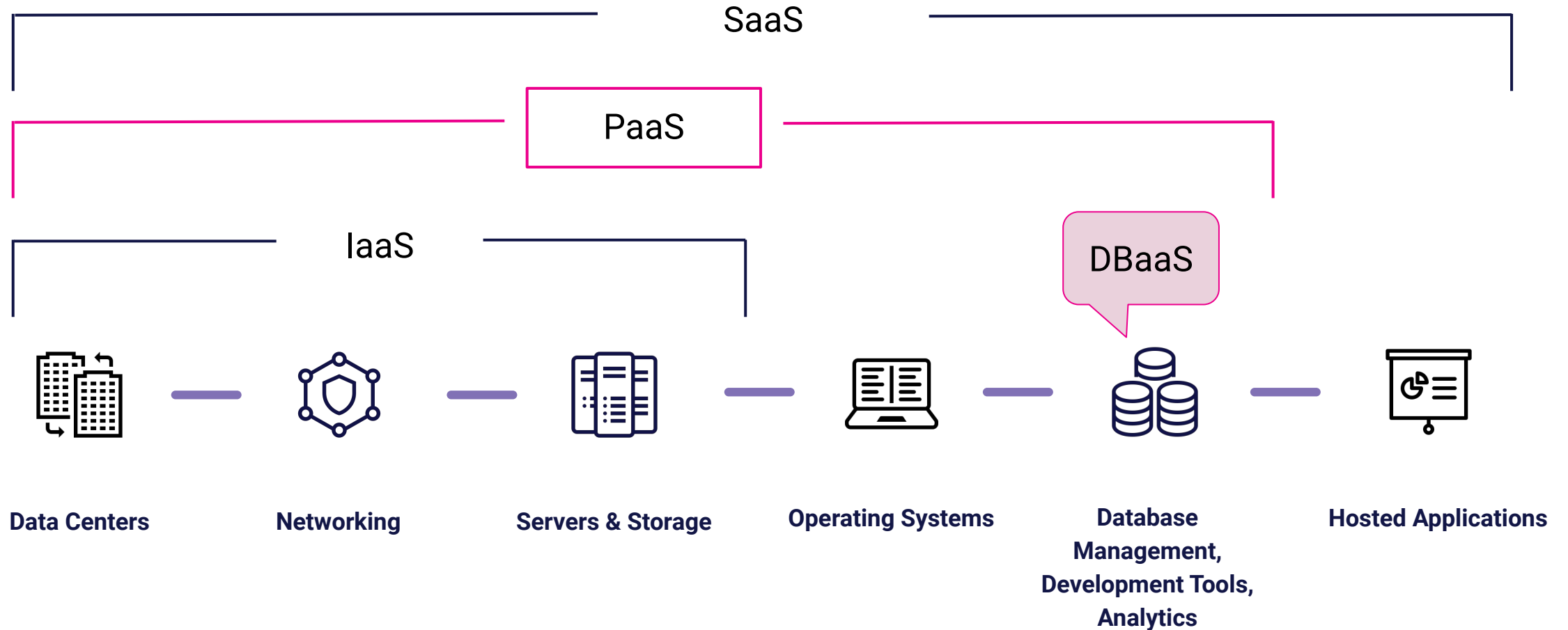Choosing your cloud environment

Private

Public

Hybrid

Multi

A cloud-first strategy means...

Choosing your level of automation and control

SaaS

PaaS

IaaS

DBaaS

Data Centers

Networking

Servers & Storage

Operating Systems

Database Management, Development Tools, Analytics

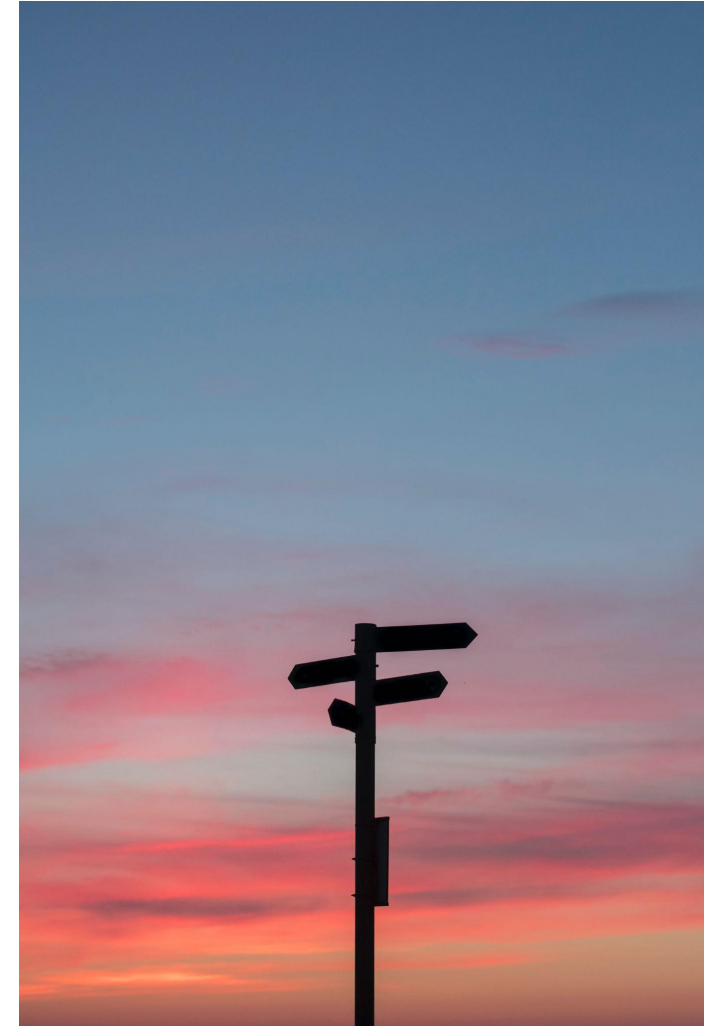**Hosted Applications**

PostgreSQL is a top choice for cloud

- Familiarity
- Trust
- High performance
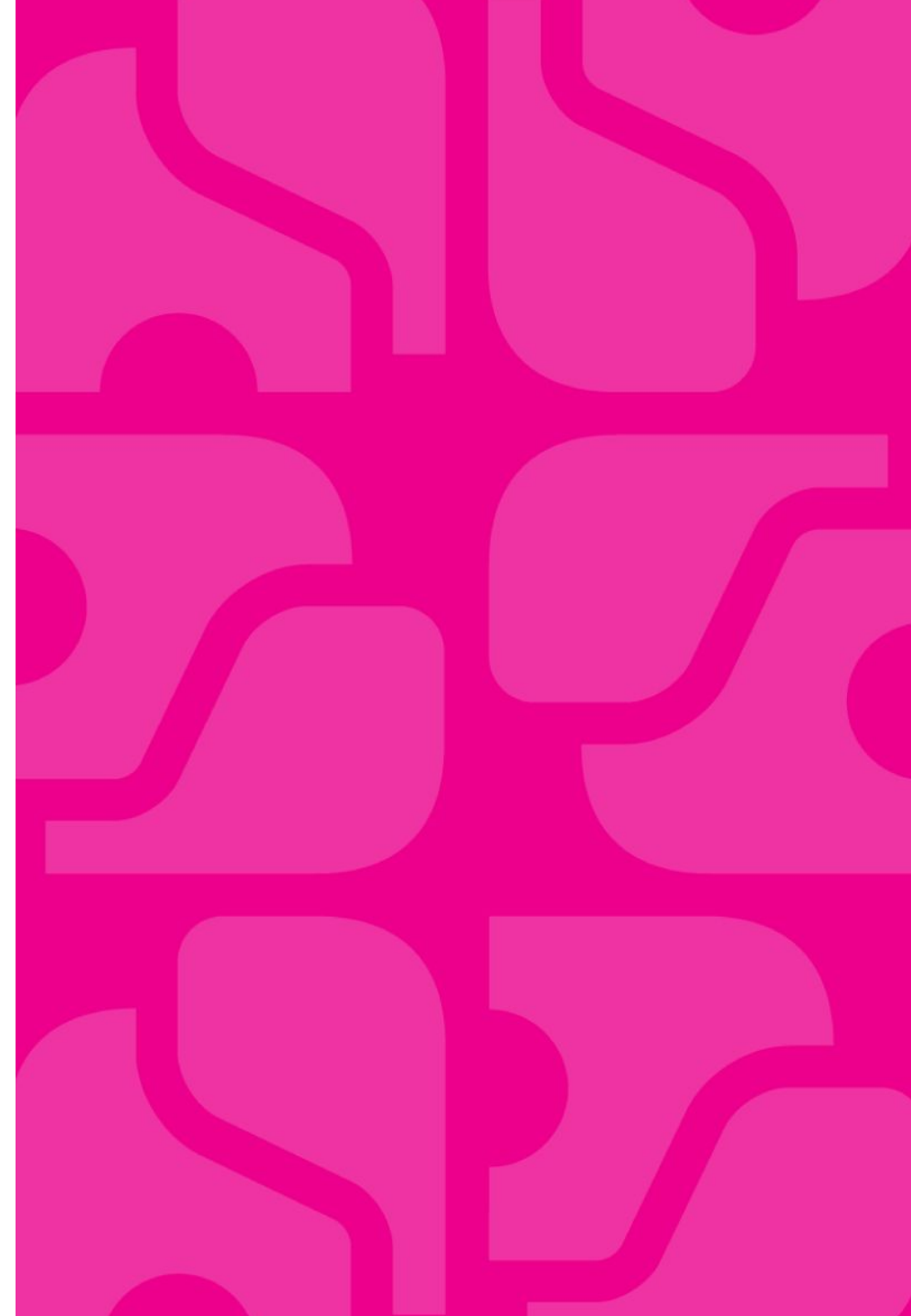- Versatility
- and more...

The future runs on PostgreSQL....in the cloud
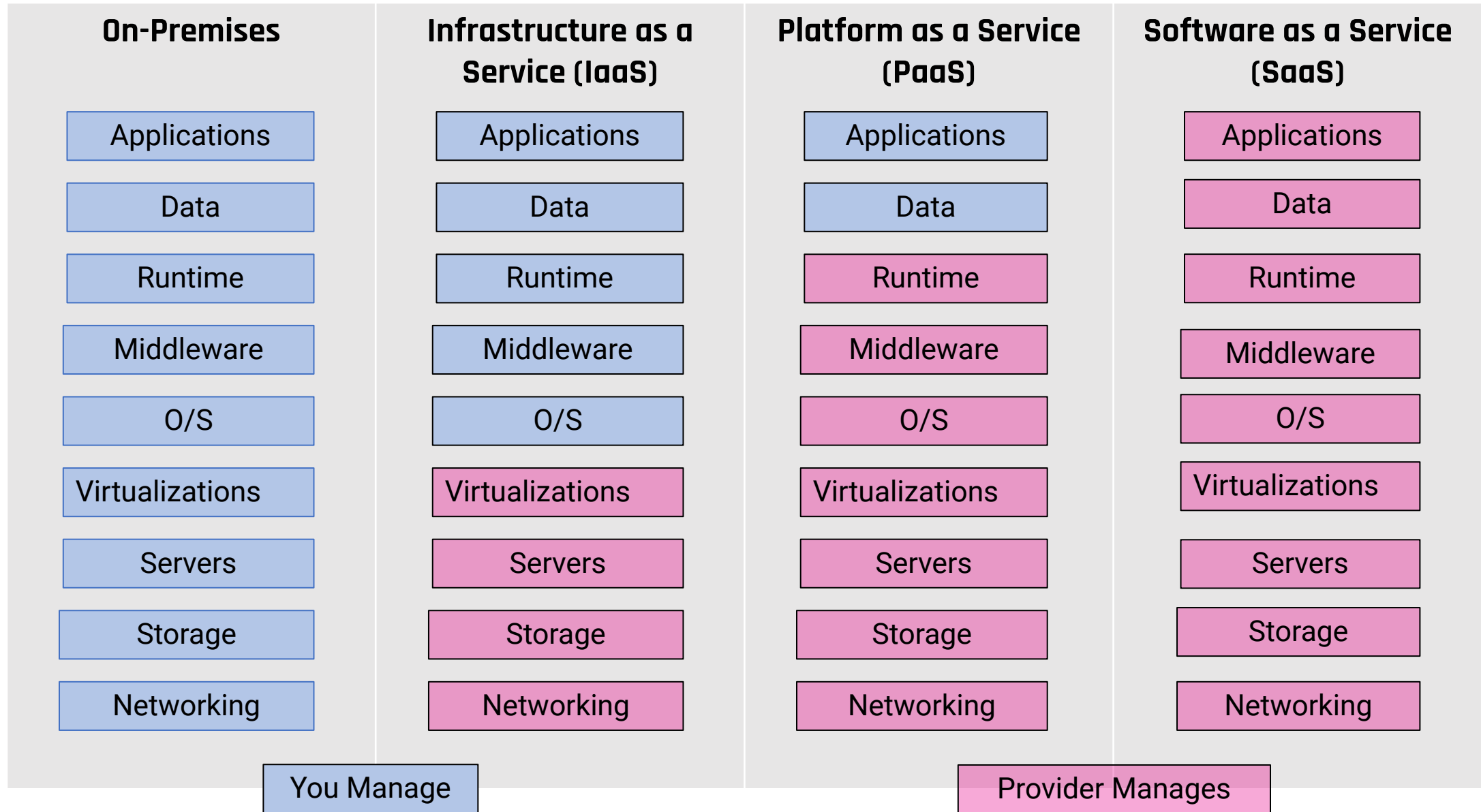
4 important considerations

- Level of support, expertise
- Overhead (maintenance, operations, etc...)
- Control over database configuration
- Continuity between on-premises and cloud - technical and business

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Let's dive in...

Shared Service Responsibility Model

On-Premises	Infrastructure as a Service (IaaS)	Platform as a Service (PaaS)	Software as a Service (SaaS)
Applications	Applications	Applications	Applications
Data	Data	Data	Data
Runtime	Runtime	Runtime	Runtime
Middleware	Middleware	Middleware	Middleware
O/S	O/S	O/S	O/S
Virtualizations	Virtualizations	Virtualizations	Virtualizations
Servers	Servers	Servers	Servers
Storage	Storage	Storage	Storage
Networking	Networking	Networking	Networking

You Manage   Provider Manages

Data categories and common use cases

Relational	Key-Value	Document	In-memory	Graph	Search	Time-series	Ledger
Referential integrity, ACID transactions, schema - on - write	Low latency, key lookups with high throughout and fast ingestion of data	Indexing and storing documents with support for query on any attribute	Microseconds latency, key-based queries and specialized data structures	Creating and navigating data relations easily and quickly	Indexing and searching semi structured logs and data	Collect, store and process data sequenced by time	Complete, immutable, and verifiable history of all changes to application data
Lift and shift, EMR, CRM, finance	Real-time bidding, shopping cart, social	Content management, personalization, mobile	Leaderboards, real-time analytics, caching	Fraud detection, social networking, recommendation engine	Product catalog, help, and FAQs, full text	IoT applications, event tracking	Systems of record, supply chain, health care, registrations, financial

How to narrow down your choices

Relational
SQL
Schema
Structured

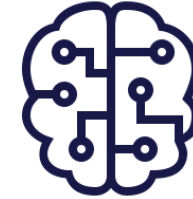| Non-Relational |
|:---:|
| NoSQL |
| Non-Schema |
| Unstructured |

Challenges with cloud PaaS offerings

UK based insurance provider

Needs: Higher performance, PostgreSQL expertise

- Upgrades cause downtime
- Database is getting too big & response time slowing down
- Data ingest into Aurora is too slow
- Indexing is taking too long
- Cloud provider lacks PostgreSQL skills

European Healthcare provider

Needs: A database that can grow with their business

- Scalability issue
- Limited instance options (SKU is 1 instances from max 24x.Large)
- Limited to Single Writer database, single point of failure
- 6 months until outgrowing database options
- Limited to 15 readers for standby

The future runs on PostgreSQL...in the cloud

With unsurpassed commitment to PostgreSQL, EDB is a better option

- Precisely configure your database for your applications
- Count on PostgreSQL experts for prompt updates, security, and bug fixes
- Gain freedom from database overhead operating activities
- One team, one partner to support your on-premises and cloud PostgreSQL

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Elevating PostgreSQL in the cloud
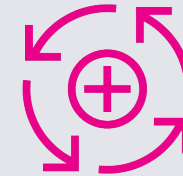
Your Postgres database is too important to leave to generalists

Postgres Expertise

EDB's expertise goes above the infrastructure; we help steer the database roadmap and patch its bugs

Oracle Compatibility

Leave Oracle and further your cloud journey with a fully managed Postgres service

Continuous Availability

High availability of your PostgreSQL clusters so you're always on, always available

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One example of a good fit for BigAnimal...

Non-profit organization that helps university collect and understand student data

- Looking for a 24x7 fully managed cloud solution

- PostgreSQL is critical to the business to store and access university data

- Solution must be able to scale via a phased rollout approach - from 40 in 2022 to 80 universities in 2023

- Supported by provider with deep PostgreSQL expertise

Thank you!

Sign up today to experience BigAnimal, FREE!

Log in, spin up a cluster in seconds.

https://portal.biganimal.com

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