

Innovative Cloud Solution for Advanced Image Analysis



Presenter:

Gopal Joshi: gopalj@circulants.com

Sanjay Koshatwar: sanjay@circulants.com



Solutions

Platforms

Services

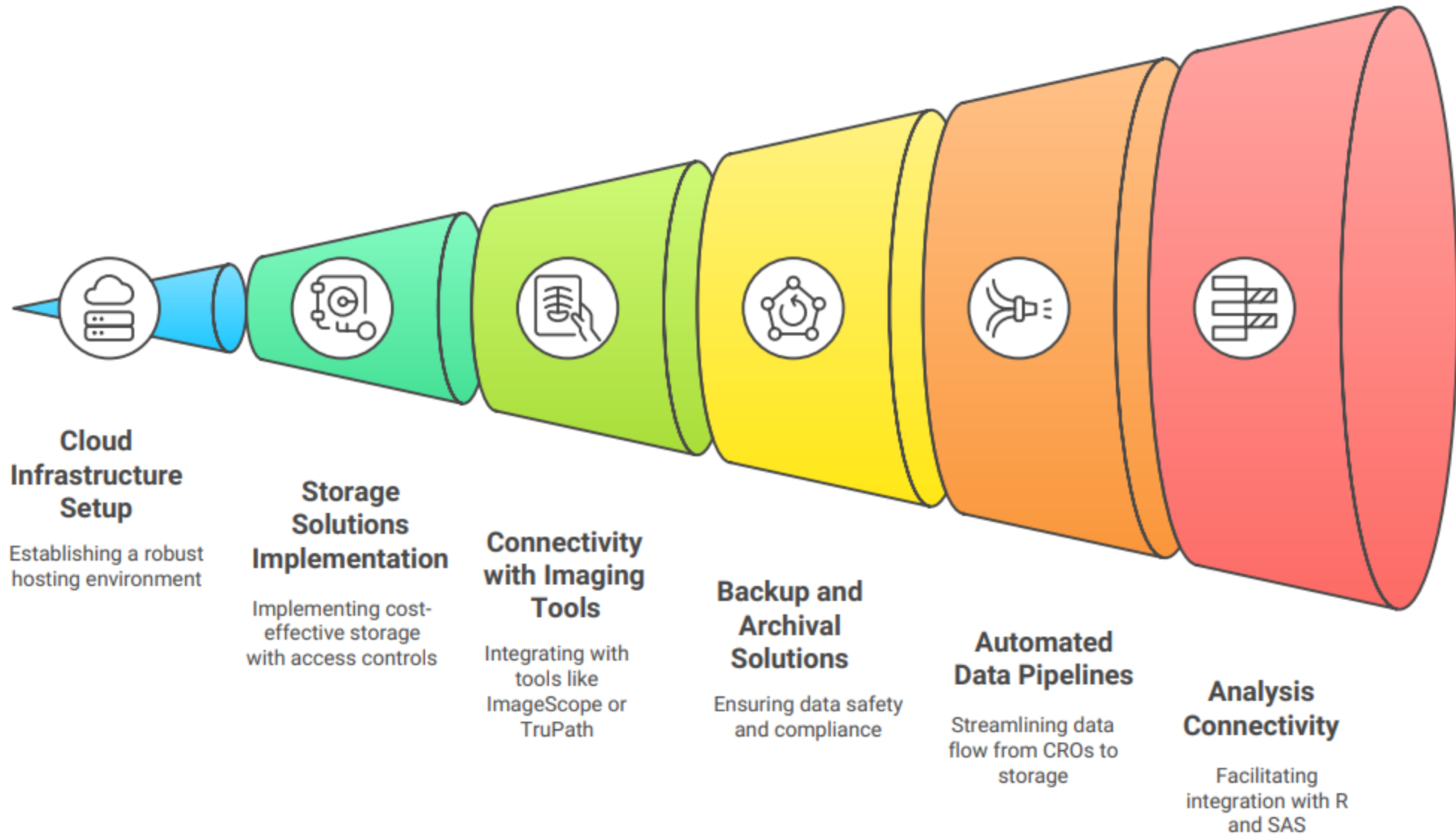
ISO-27001 BSI Certified

Agenda



- 1 About Circulants, **New Age Specialist Technology Company**
- 2 Business Needs of Organization
- 3 Case Study
- 4 Infrastructure Options and Benefits
- 5 Questions

Business Need



Case Study:

Data Management & Analytics Implementation

Background

A Bay Area-based emerging pharmaceutical company faced a challenge with high costs associated with hosting and managing imaging data. Clients struggled to maintain a single source of truth for their incoming data sources, leading to numerous manual interventions and an unqualified system.



Objectives

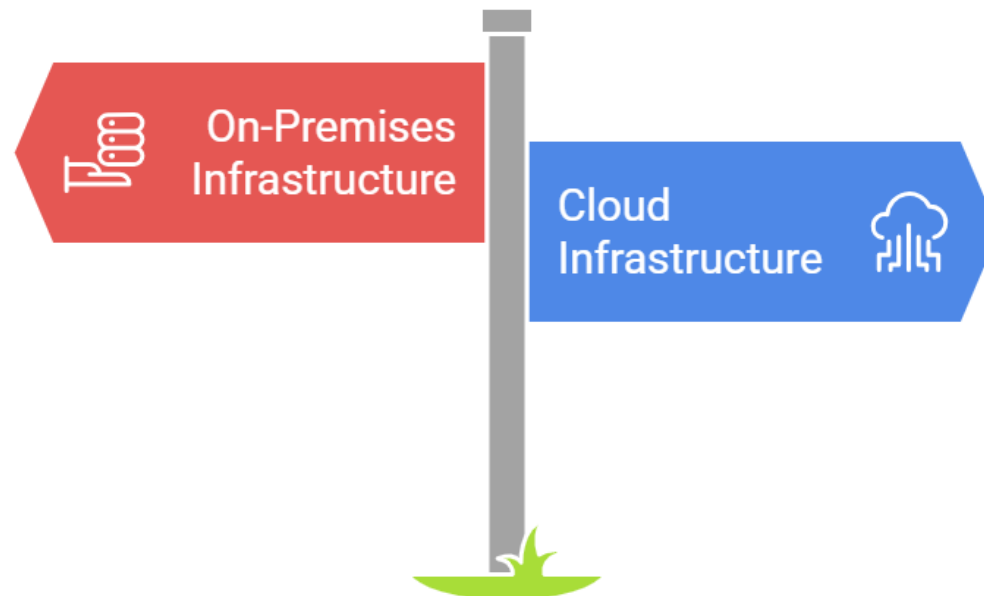
Solution:

- Proposed Validated Cloud Architecture for Hosting the Imaging Data with comparatively lower costs.
- Proposed proper Backup and Archival Policies for historical data.
- Build Automated Pipelines for Continuous Ingestion of data without Manual Intervention.
- Helped maintaining a single source of Truth for all their systems which can host all types of Data.
- SeamLess Integration with all the tools with granular access controls.

Infrastructure Options



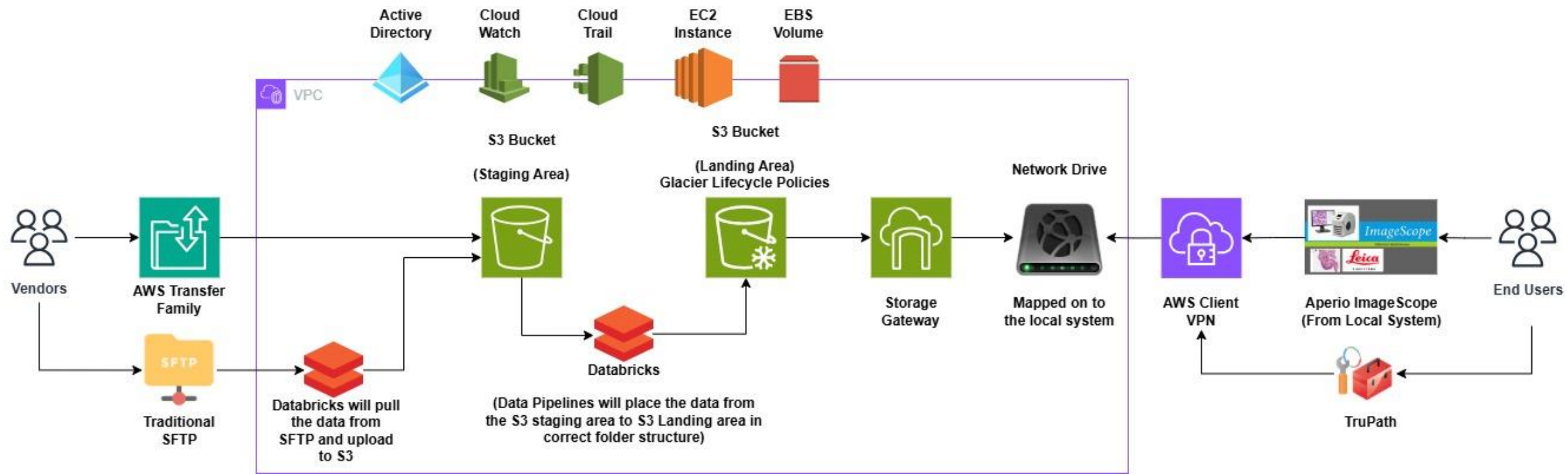
Which infrastructure type should we choose for our organization?



Benefits of Cloud Infrastructure over On Premise

Factor	On-Premises Infrastructure	Cloud Infrastructure
Initial Cost	High (hardware, setup, licensing)	Low (pay-as-you-go model)
Scalability	Limited (requires new hardware purchases)	Highly scalable (resources on demand)
Maintenance	Requires dedicated IT staff and regular upgrades	Managed by cloud provider
Security	Full control over security measures	Provider ensures security compliance
Performance	Consistent (depends on in-house hardware)	Can be optimized based on needs
Accessibility	Limited to on-site or VPN access	Accessible from anywhere via the internet
Disaster Recovery	Requires in-house backup solutions	Built-in redundancy and failover
Compliance	Fully customizable to meet compliance needs	Meets most regulatory standards
Upfront Investment	High (one-time capital expenditure)	Low (operational expenditure)
Flexibility	Limited by hardware capabilities	Highly flexible and adaptable

Cloud Architecture



Benefits of Proposed Architecture



Cost Benefits

1. Pay as you go Model of cost
2. Hot and Cold Storage Solution

Advanced Analytics

1. Integration with various Analytical tools like Zen , Halo and many more

Automation and Alerts

1. Automated Data Transfer from source to destination.
2. Infrastructure Alert Monitoring

Migration

1. Data Integrity Validation
2. Performance Optimization

Data Integration

1. It can collect Data from multiple source locations to single destination

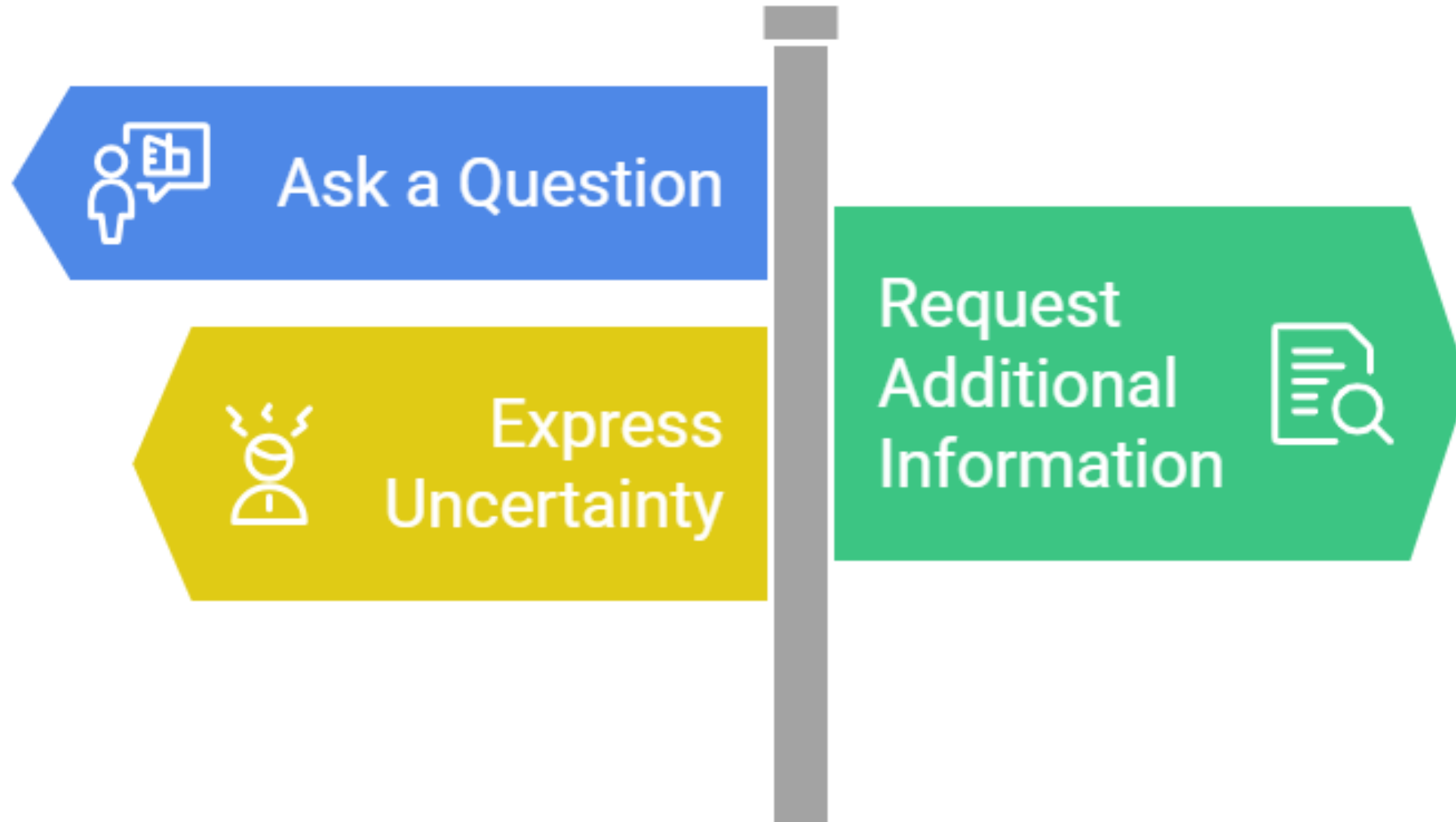
Data Governance

1. Role-Based Permissions
2. Data Management & Security

Environment Deployment

1. Deployment using IaC Principles
2. Validated Environment





Thank You

Pleasanton, CA | Bridgewater, NJ | Jaipur, India | Pune, India