PURESTORAGE®

Powering Data-driven Innovation in Life Sciences

Challenges Facing Life Sciences Organizations

Rapid growth of data

- Healthcare data has grown 15x since 2013—from 153 to 2,314 exabytes.

- Legacy infrastructure can't keep up with growth.

- Groundbreaking discoveries depend on quick access to clinical and research data.

Need for rapid analytics and AI

- Key to mining meaningful insights.

- Legacy storage and compute infrastructure is a major obstacle.
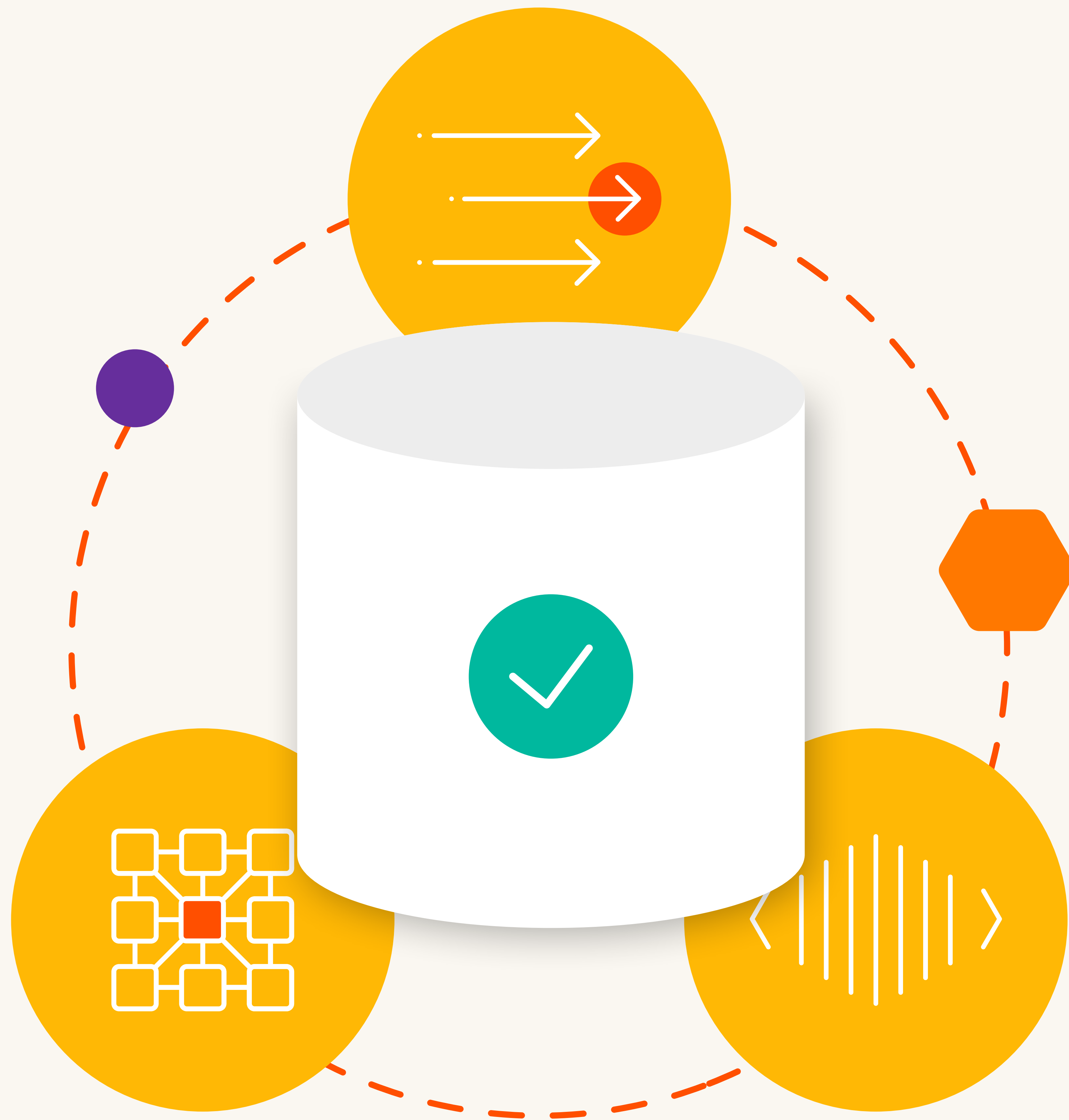
Focus on data protection

- Growth of large-scale data breaches.

- Meeting national and international regulatory standards for clinical data.

- Reputational risks and lawsuits.

Benefits of Life Sciences Analytics

Assess effectiveness in clinical trials

Drive commercial initiatives

Enable personalized medicine

Support Health Economics and Outcomes Research programs

Enhance R&D efficiencies

The Pure Storage Life Sciences Solution – Speed, Scale, Agility

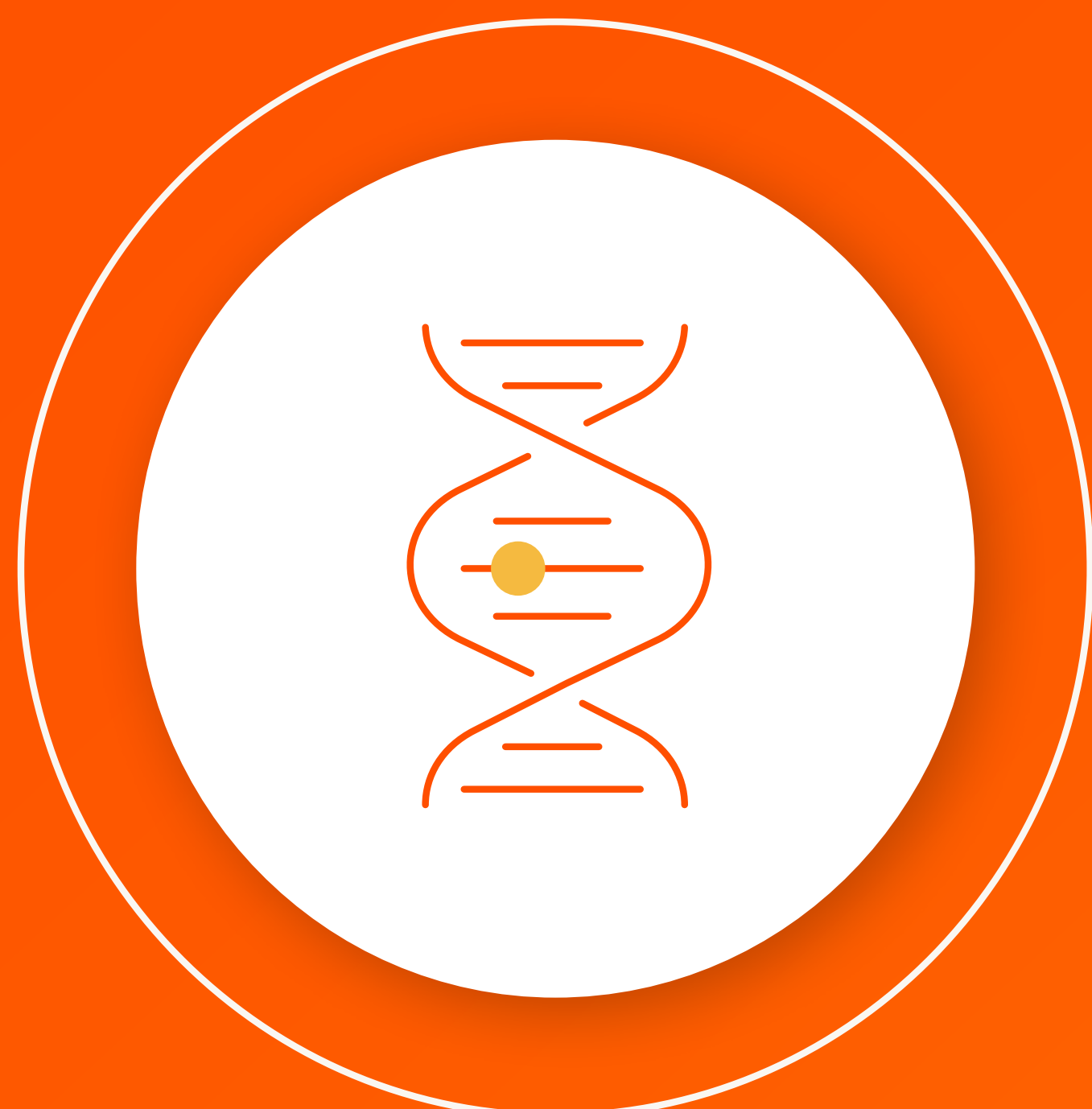## Fast, seamless data flow to support time-sensitive research

- **Fast:** Measurably improves bandwidth and I/O speeds.

- **Efficient:** Eliminates silos by bringing applications to a single hub with FlashBlade® unified fast file and object storage platform.

- **Effortless:** High performance in any workload condition with 99.999% uptime with FlashArray highly available architecture.

- **Evergreen Storage™:** Enables non-disruptive upgrades without downtime or data migrations.

How Pure Propels Life Sciences

Drug and Vaccine Discovery

- Power AI-driven modeling to identify targets.

- Experience massively parallel, all-flash performance of FlashBlade and AIRI—full stack AI-ready infrastructure.

- Leverage cloud-like simplicity and agility with consistent high performance and control.

Genomics Sequencing

- Enable faster insights with storage that boosts analytics speeds across the genomics workflow.

- Leverage cloud-native applications with Portworx, a complete Kubernetes data-services platform.

- Minimize downtime and disruption with snapshots, non-disruptive scaling, predictive support, and ransomware protection.

Genomics Sequencing

- Scale to support exponential data increases without limits.

- Support scientific imaging's rigorous data-processing requirements.

- Run training algorithms faster while ensuring your data platform keeps pace.

The Pure Storage Life Sciences Solution – Speed, Scale, Agility

Safeguard data against loss, corruption, or security threats

- Comprehensive business continuity and disaster recovery with Purity Agile Data Services.

- Geo-distance Resiliency with ActiveDR™.

- Fully symmetric active bidirectional replication with ActiveDR™.

- Automated DR with VMware Site Recovery Manager (SRM).

- Expanded backup options to the cloud.

- Simple backup and restore.

Proof of Concept

Genomics

McArthur Lab – McMaster University's research laboratory associated with superbugs and other health threats.

Pure provides large, rapid, and nimble data storage capacity that can scale as gene sequencing technology advances. It's twice as fast at one third of the cost.

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Andrew G. McArthur
McMaster University

Results:

- Speeds drug discovery by analyzing select data sets up to 24X faster.
- Allows teams to monitor global health threats more closely.
- Scales to support additional research and clinical partnerships.
- Handles data more efficiently as DNA sequencing technology evolves.
- Speeds access to biomedical data to advance global health research.
- Generates results in three hours or less for insights that saves lives.

Drug Discovery

Folding@home – Supercomputing powerhouse helping scientists develop new therapeutics for a variety of diseases.

By separating our capacity from compute, we're able to get more out of our compute resources, which gives us the ability to ask questions at an unprecedented scale. It's as if FlashBlade was purpose built for the Folding@home mission.

"

Greg Bowman
Director
Folding@home

Results:

- Massively scales storage capacity.

- Provides scientists with additional resources needed to find vaccines.

- Quickly reassembles a multitude of tiny files from more than 4 million devices worldwide.

- Helps identify patterns and test potential treatments.

Imaging

PAIGE.AI – Global leader in digital imaging diagnostics.

Data is the fuel driving the AI revolution.

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Dr. Thomas Fuchs
Founder & Chief Science Officer
PAIGE.AI

Results:

- Leverages Pure FlashBlade to transform the pathology and diagnostics industry.

- Moves from highly qualitative to rigorous quantitative discipline.

PURESTORAGE®

References

- *Projected growth in global healthcare data volume 2020*, by Conor Stewart, Statista, September 24, 2020

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