Enterprise Storage Strategies
Distributed, Software-defined Storage Solutions

Enterprise Storage Challenges

Digital transformation

54% of large organizations with 1,000+ employees archive ▸ **500+TB** of data ▸ **>50%** **spend** between $250K and $999K on their archiving solutions annually | average spend **$1.9M**

New privacy legislation: GDPR

General Data Protection Regulation (EU GDPR): Requirements must be met for every European Union citizen, regardless of the geographic location of the company holding this information. **Potential penalties are severe — up to €20 million (US$28 million) or 4% of annual turnover.**

Security breaches increasing

1,579 U.S. **data breaches** tracked in 2017, up ▲**44.7%** from 2016
source: Identity Theft Resource Centre, 2016

In 2017, the **average global cost** for a data breach is **$3.6M** USD or **$141** per data record
source: Ponemon Institute LLC, 2017

Risk of unauthorized access to data in transit or at rest:

Encryption, masking, and obscuring data ensures only authenticated and authorized users have access to the data.

Cloud-native applications

15% of new enterprise applications were **cloud native** in 2017, **growing** to **32%** by 2020
Source: Capgemini, 2017

Storage Priorities

✔ Ensure data retention and compliance
✔ Reduce storage-related costs
✔ Improve storage performance
✔ Security and data protection
✔ Disaster recovery and backup
✔ Storage modernization/storage refresh

New Storage Approaches and Technologies

To address the ever-growing need for capacity, the cost and skill requirements of on-premise storage, and the need for data security and compliance, organizations are deploying

Hybrid cloud on the rise

On-premise archiving environments are expected to decrease **10%** in the next two to five years | **87%** of **cloud users** in NA have multiple clouds | **89%** work with more than one cloud provider

Software-defined storage (SDS)

Enterprises adopting SDS in 2016

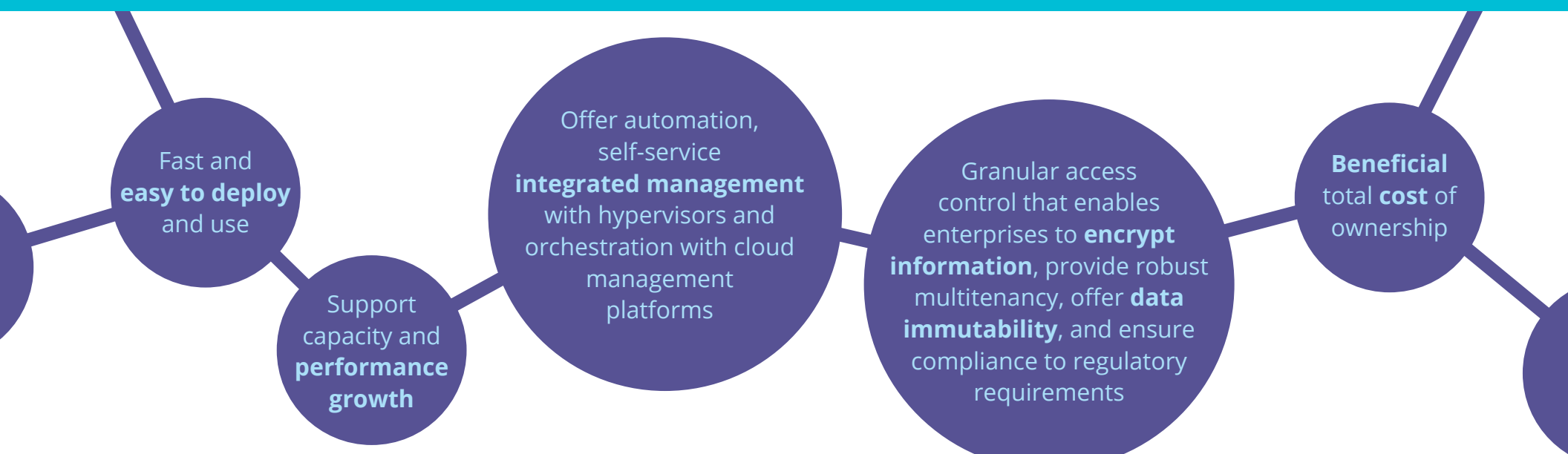**15%** USING | **23%** TESTING | **34%** EVALUATING | **14%** PLANNING

SDS deployments met or **exceeded expected benefits**, including **capex and opex savings.**

Data security

43% of **global organizations** now have a **consistent, enterprisewide encryption strategy**
source: Ponemon Institute, 2018

+ Security Enhancements ▸ Tokenization | Masking | Shred & Spread

Blockchain

Worldwide spending on blockchain for regulatory compliance was over **$65M** USD in 2017, and this is predicted to increase by a five-year compound annual growth rate of almost 80% between 2016 and 2021

Software-defined Storage Requirements

- Fast and **easy to deploy** and use
- Support capacity and **performance growth**
- Offer automation, self-service **integrated management** with hypervisors and orchestration with cloud management platforms
- Granular access control that enables enterprises to **encrypt information**, provide robust multitenancy, offer **data immutability**, and ensure compliance to regulatory requirements
- **Beneficial** total **cost** of ownership

Few organizations have the skill required to deploy new storage technologies

Lack of skills & resources is the **#1 roadblock** to SDS deployment

Securing enterprise data is complex and always evolving

Awareness of blockchain is growing but low beyond a few leading industries

Work with technology-agnostic vendors that provide flexible and easy-to-use software-defined storage solutions that

Offer embedded, enhanced data security

Use hybrid cloud deployments for cost savings

Meet evolving compliance requirements

For more information go to **www.leonovus.com**