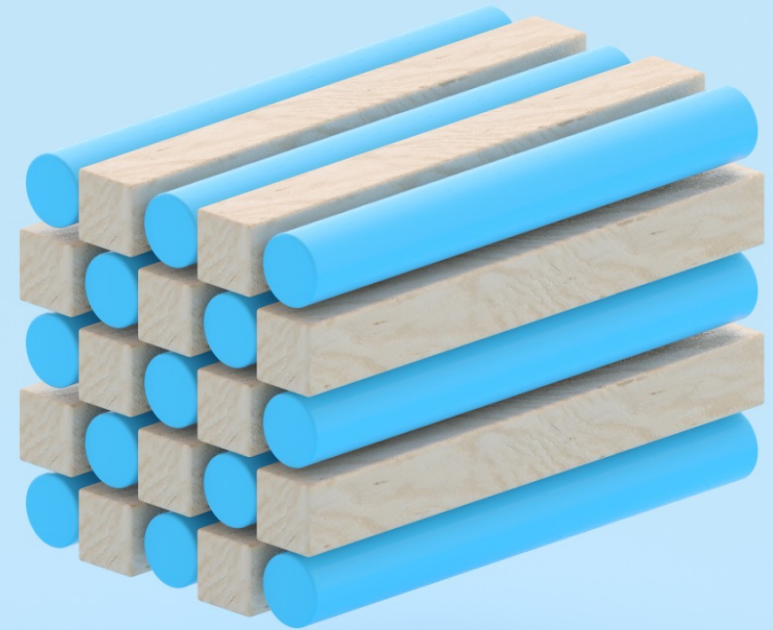


# Innovating storage and data services

Harv Bhela  
Executive Vice President and Chief Product Officer  
March 22, 2022



# OPPORTUNITY

We are in the “Age of Data”...

## Why I joined NetApp

## Why I joined NetApp

### OPPORTUNITY

We are in the “Age of Data”...

### GROWTH

NetApp is uniquely positioned to win  
in this age of data

## Why I joined NetApp

### OPPORTUNITY

We are in the “Age of Data”...

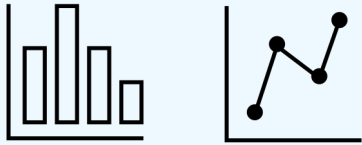
### GROWTH

NetApp is uniquely positioned to win  
in this age of data

### VALUES

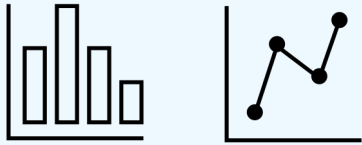
We have a great team and a  
customer-obsessed culture

# This is the “Age of Data”

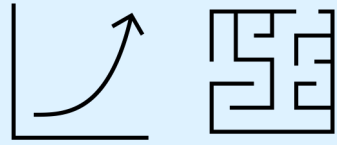


Next generation  
of businesses are  
all **data-driven**,  
digital businesses

# This is the “Age of Data”



Next generation  
of businesses are  
all **data-driven**,  
digital businesses

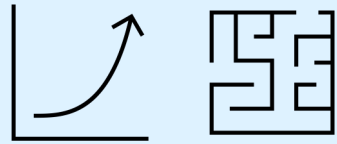


That data is  
**ever-growing**,  
increasingly **diverse**,  
**ever-harder** to manage  
resource

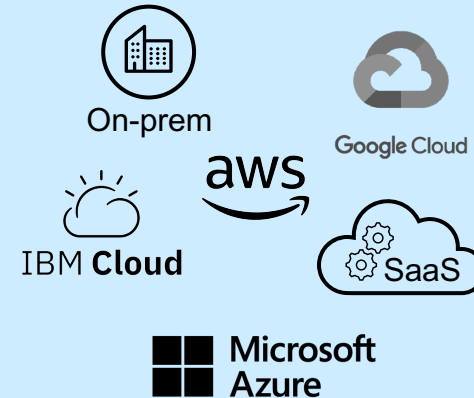
# This is the “Age of Data”



Next generation of businesses are all **data-driven**, digital businesses

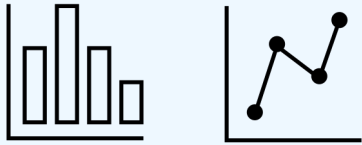


That data is **ever-growing**, increasingly **diverse**, **ever-harder** to manage resource

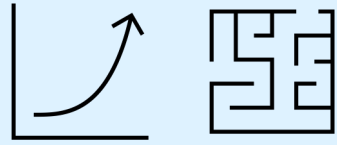


Data is also highly fragmented across **on-premises** and **hybrid multi-cloud** environments

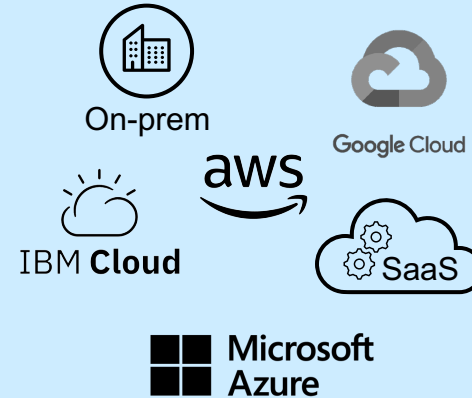
# This is the “Age of Data”



Next generation of businesses are all **data-driven**, digital businesses



That data is **ever-growing**, increasingly **diverse**, **ever-harder** to manage resource



Data is also highly fragmented across **on-premises** and **hybrid multi-cloud** environments



Businesses must worry about **cost**, **outage**, **performance**, **ransomware**, **regulations**

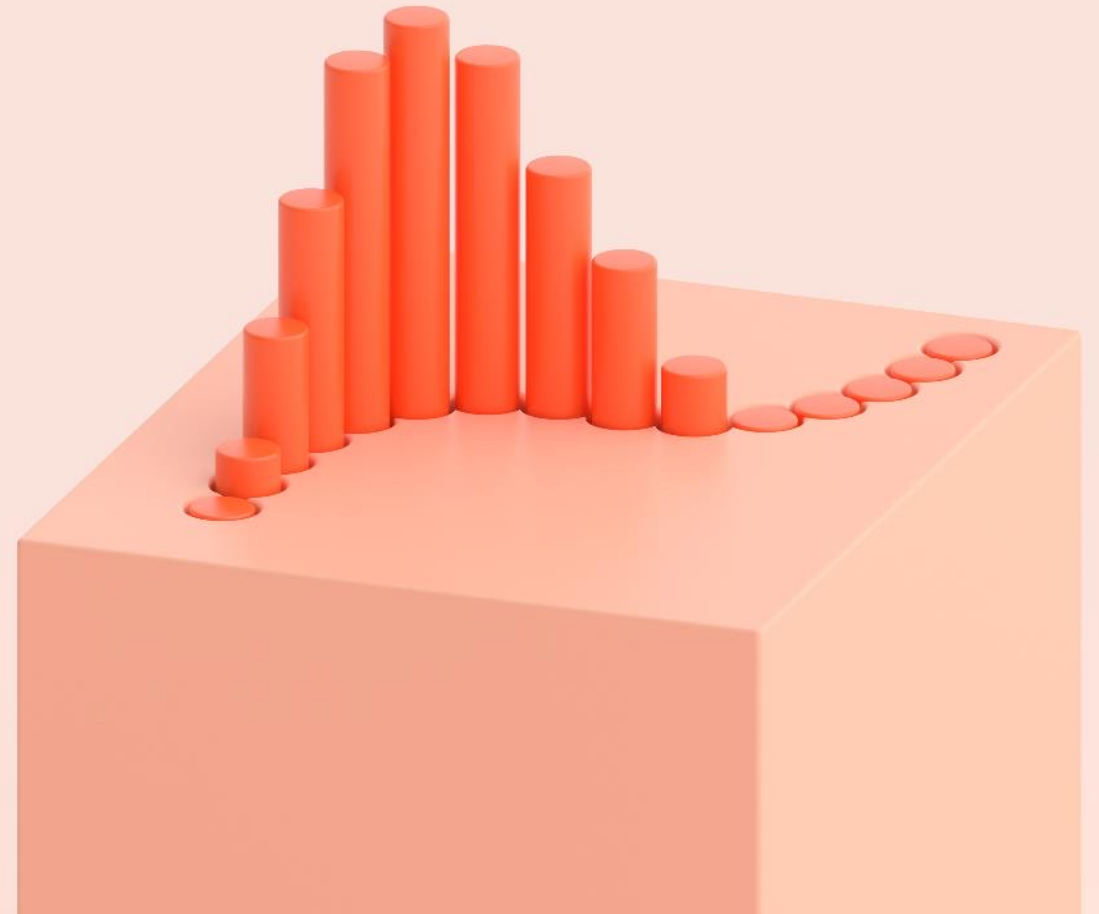


# 57%

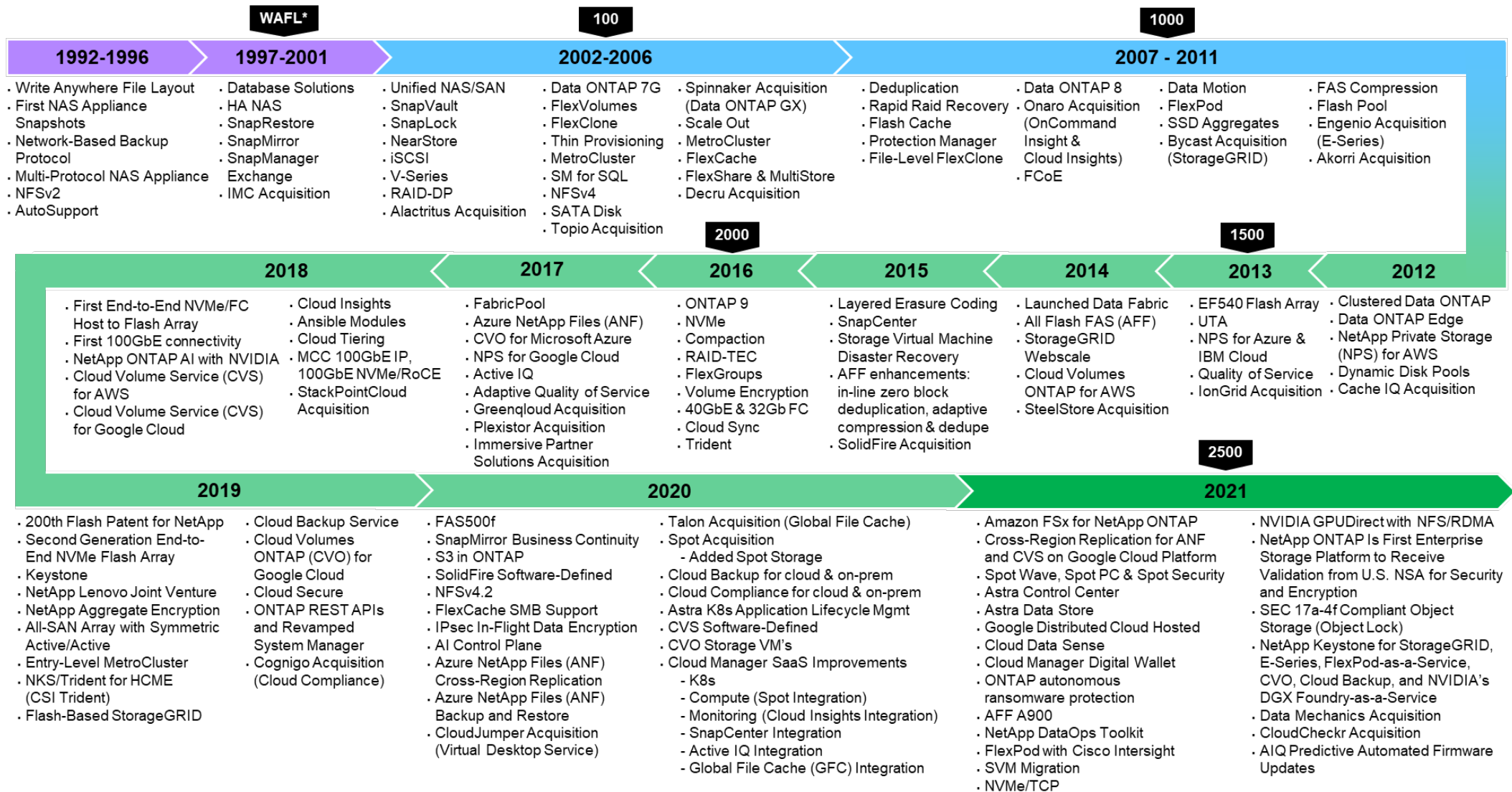
... of Fortune 1000 businesses have now  
appointed a Chief Data Officer

Data is becoming  
a board-level priority  
for all businesses

**NetApp is uniquely positioned  
to help customers in this age  
of data**



# We have 30 years of customer-focused and accelerating innovation



**Industry analysts  
recognize NetApp as  
an innovation leader**

**Gartner**<sup>®</sup>

A Leader in 2021 Gartner Magic  
Quadrant for Primary Storage

**GIGAOM**

#1 in three data storage Radars for  
the hybrid multicloud era and  
“NetApp data fabric is unmatched”

Sources:

Gartner Magic Quadrant for Primary Storage, 11 October 2021

Jeff Vogel, Roger W. Cox, Joseph Unsworth, Santhosh Rao

GigaOm, Data Storage for the Hybrid Multicloud Era, January 25, 2022

# Our products are category leaders and valued by customers

## Flash

23% YoY revenue growth\*

## Cloud

98% YoY ARR growth\*



\*Q1-Q3 FY22 vs Q1-Q3 FY21  
Public Cloud annualized revenue run-rate (ARR) is calculated as the annualized value of all Public Cloud customer commitments, with the assumption that any commitment expiring during the next 12 months will be renewed with its existing term.

We help customers **unlock**  
the enormous business value  
across their **data estate**

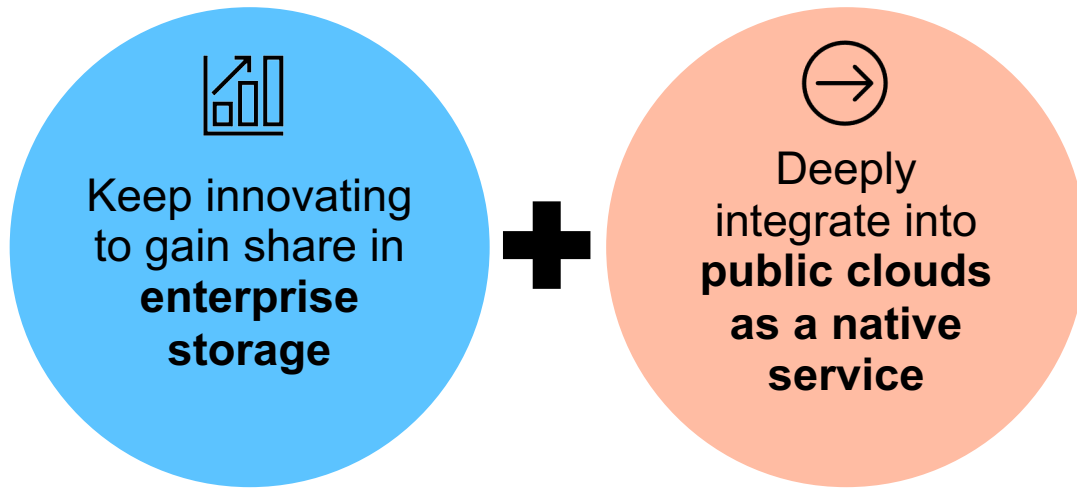


# Our growth thesis...



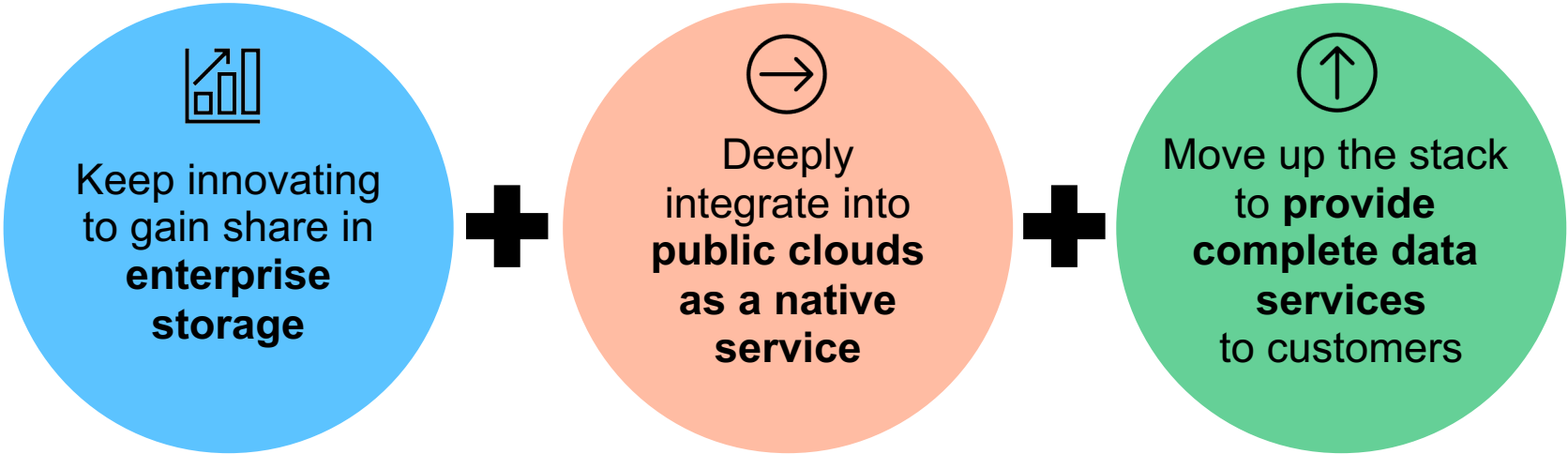
Keep innovating  
to gain share in  
**enterprise  
storage**

# Our growth thesis...

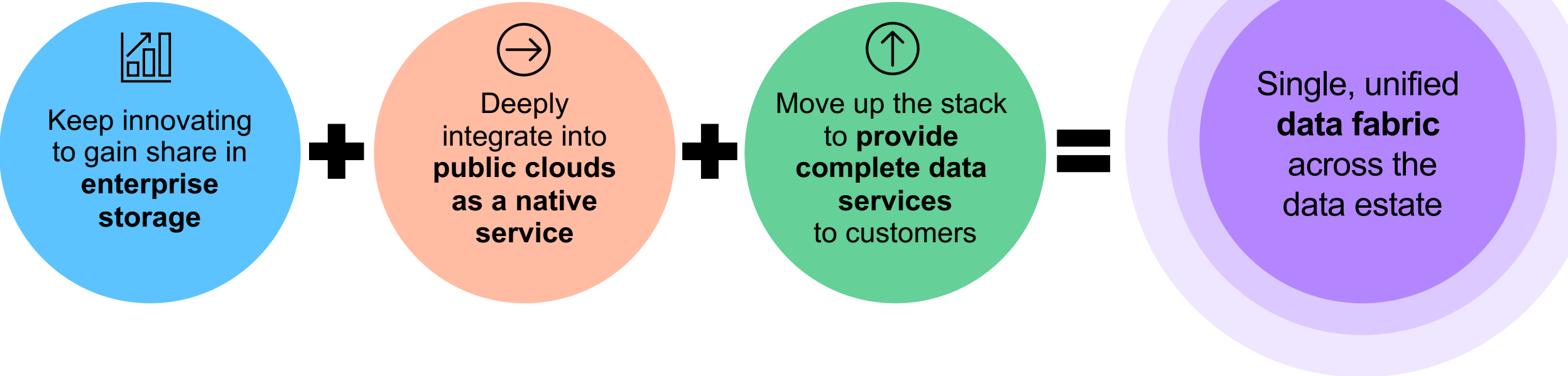




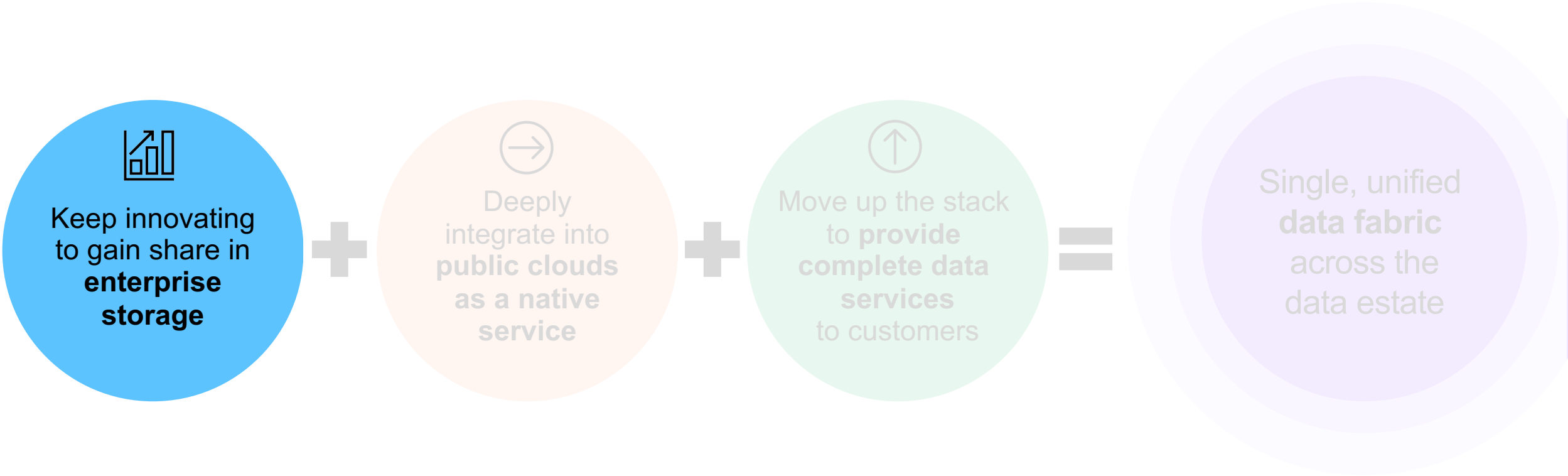
# Our growth thesis...



# Our growth thesis...



# Our growth thesis...



# Continued innovation to gain share in enterprise storage

## Best-in-class software

Easily support demanding workloads across on-prem and cloud

- Unified across platforms, multiple protocols, data types and hybrid multi-cloud
- Cloud-integrated to seamlessly tier/backup; also helps achieve sustainability goals
- Built-in AI/ML capabilities that remove bottlenecks at edge, core, and cloud

# Continued innovation to gain share in enterprise storage

<b>Best-in-class software</b>	Easily support demanding workloads across on-prem and cloud	<ul style="list-style-type: none"><li>• Unified across platforms, multiple protocols, data types and hybrid multi-cloud</li><li>• Cloud-integrated to seamlessly tier/backup; also helps achieve sustainability goals</li><li>• Built-in AI/ML capabilities that remove bottlenecks at edge, core, and cloud</li></ul>
<b>Open innovation ecosystem</b>	Allows us to win market transitions	<ul style="list-style-type: none"><li>• Trusted relationships and deep integration with leading silicon and systems innovators like Samsung, Cisco, NVIDIA and hyperscaler silicon roadmaps</li><li>• First-to-market with support for the latest hardware innovations in the industry</li></ul>

# Continued innovation to gain share in enterprise storage

<p><b>Best-in-class software</b></p>	<p>Easily support demanding workloads across on-prem and cloud</p>	<ul style="list-style-type: none"> <li>• Unified across platforms, multiple protocols, data types and hybrid multi-cloud</li> <li>• Cloud-integrated to seamlessly tier/backup; also helps achieve sustainability goals</li> <li>• Built-in AI/ML capabilities that remove bottlenecks at edge, core, and cloud</li> </ul>
<p><b>Open innovation ecosystem</b></p>	<p>Allows us to win market transitions</p>	<ul style="list-style-type: none"> <li>• Trusted relationships and deep integration with leading silicon and systems innovators like Samsung, Cisco, NVIDIA and hyperscaler silicon roadmaps</li> <li>• First-to-market with support for the latest hardware innovations in the industry</li> </ul>
<p><b>Security</b></p>	<p>Peace of mind for your most valuable asset</p>	<ul style="list-style-type: none"> <li>• Automatic, AI-based ransomware protection with full set of remediation actions</li> <li>• First to receive certification from NSA and DOD</li> <li>• AI-based governance for privacy, including support for GDPR and CCPA</li> </ul>

# Continued innovation to gain share in enterprise storage

<b>Best-in-class software</b>	Easily support demanding workloads across on-prem and cloud	<ul style="list-style-type: none"><li>• Unified across platforms, multiple protocols, data types and hybrid multi-cloud</li><li>• Cloud-integrated to seamlessly tier/backup; also helps achieve sustainability goals</li><li>• Built-in AI/ML capabilities that remove bottlenecks at edge, core, and cloud</li></ul>
<b>Open innovation ecosystem</b>	Allows us to win market transitions	<ul style="list-style-type: none"><li>• Trusted relationships and deep integration with leading silicon and systems innovators like Samsung, Cisco, NVIDIA and hyperscaler silicon roadmaps</li><li>• First-to-market with support for the latest hardware innovations in the industry</li></ul>
<b>Security</b>	Peace of mind for your most valuable asset	<ul style="list-style-type: none"><li>• Automatic, AI-based ransomware protection with full set of remediation actions</li><li>• First to receive certification from NSA and DOD</li><li>• AI-based governance for privacy, including support for GDPR and CCPA</li></ul>
<b>Cloud-native apps</b>	Enterprise-class data services made simple for cloud-native apps across on-prem and cloud	<ul style="list-style-type: none"><li>• Simplified storage and data protection for stateful Kubernetes workloads</li><li>• Fully application aware to eliminate downtime and risk</li><li>• Kubernetes native for seamless experience and scale</li></ul>

# Continued innovation to gain share in enterprise storage

<b>Best-in-class software</b>	Easily support demanding workloads across on-prem and cloud	<ul style="list-style-type: none"><li>• Unified across platforms, multiple protocols, data types and hybrid multi-cloud</li><li>• Cloud-integrated to seamlessly tier/backup; also helps achieve sustainability goals</li><li>• Built-in AI/ML capabilities that remove bottlenecks at edge, core, and cloud</li></ul>
<b>Open innovation ecosystem</b>	Allows us to win market transitions	<ul style="list-style-type: none"><li>• Trusted relationships and deep integration with leading silicon and systems innovators like Samsung, Cisco, NVIDIA and hyperscaler silicon roadmaps</li><li>• First-to-market with support for the latest hardware innovations in the industry</li></ul>
<b>Security</b>	Peace of mind for your most valuable asset	<ul style="list-style-type: none"><li>• Automatic, AI-based ransomware protection with full set of remediation actions</li><li>• First to receive certification from NSA and DOD</li><li>• AI-based governance for privacy, including support for GDPR and CCPA</li></ul>
<b>Cloud-native apps</b>	Enterprise-class data services made simple for cloud-native apps across on-prem and cloud	<ul style="list-style-type: none"><li>• Simplified storage and data protection for stateful Kubernetes workloads</li><li>• Fully application aware to eliminate downtime and risk</li><li>• Kubernetes native for seamless experience and scale</li></ul>
<b>Modern lifecycle experience</b>	For ease of acquisition and operational simplicity	<ul style="list-style-type: none"><li>• Purchase upfront or as-a-Service</li><li>• AIOps driven insights and automated actions to maintain health and performance</li><li>• Predictive, digital, advisory support</li></ul>



# Continued innovation to gain share in enterprise storage

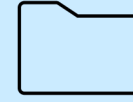
<b>Best-in-class software</b>	<p>Easily support demanding workloads across on-prem and cloud</p>	<ul style="list-style-type: none"> <li>• Unified across platforms, multiple protocols, data types and hybrid multi-cloud</li> <li>• Cloud-integrated to seamlessly tier/backup; also helps achieve sustainability goals</li> <li>• Built-in AI/ML capabilities that remove bottlenecks at edge, core, and cloud</li> </ul>
<b>Open innovation ecosystem</b>	<p>Allows us to win market transitions</p>	<ul style="list-style-type: none"> <li>• Trusted relationships and deep integration with leading silicon and systems innovators like Samsung, Cisco, NVIDIA and hyperscaler silicon roadmaps</li> <li>• First-to-market with support for the latest hardware innovations in the industry</li> </ul>
<b>Security</b>	<p>Peace of mind for your most valuable asset</p>	<ul style="list-style-type: none"> <li>• Automatic, AI-based ransomware protection with full set of remediation actions</li> <li>• First to receive certification from NSA and DOD</li> <li>• AI-based governance for privacy, including support for GDPR and CCPA</li> </ul>
<b>Cloud-native apps</b>	<p>Enterprise-class data services made simple for cloud-native apps across on-prem and cloud</p>	<ul style="list-style-type: none"> <li>• Simplified storage and data protection for stateful Kubernetes workloads</li> <li>• Fully application aware to eliminate downtime and risk</li> <li>• Kubernetes native for seamless experience and scale</li> </ul>
<b>Modern lifecycle experience</b>	<p>For ease of acquisition and operational simplicity</p>	<ul style="list-style-type: none"> <li>• Purchase upfront or as-a-Service</li> <li>• AIOps driven insights and automated actions to maintain health and performance</li> <li>• Predictive, digital, advisory support</li> </ul>



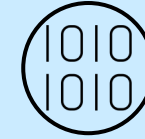
Keep innovating  
to gain share in  
**enterprise  
storage**



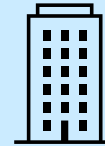
Flash



File



Object



On-prem



Google Cloud

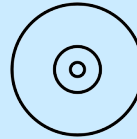
**A large financial institution** picked NetApp  
to implement an **all-Flash** on-prem **File and Object**  
**unified** solution with **hybrid cloud** connectivity to extend  
to Azure and GCP



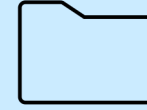
Keep innovating  
to gain share in  
**enterprise  
storage**



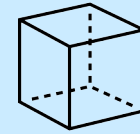
Flash



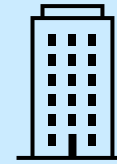
Hybrid



File



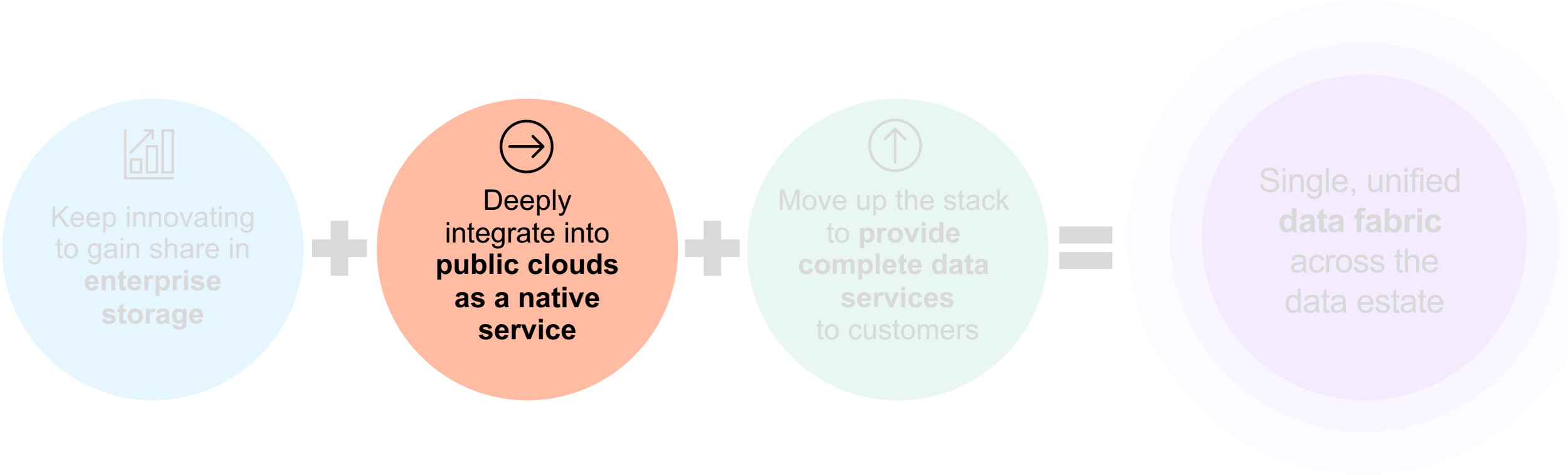
Block



On-prem

**A large online retailer** picked NetApp and removed a major SAN competitor because we offered a unified, **multi-protocol** solution for both their file and block storage needs

# Our growth thesis...



We are deeply integrating our solution into **all the major public clouds.**

Customers really appreciate having one data fabric across on-prem and cloud.



IBM **Cloud**



Google Cloud



## **We are the only native multi-cloud solution**

The hyperscalers value the deep integration, co-development and award-winning innovation we are delivering.



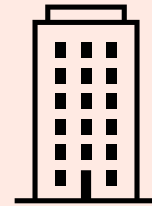
**2021 AWS ISV  
Design Partner  
of the Year**



**2021 Microsoft  
Global Customer  
Experience and US  
Partner Award for SAP**



Deeply  
integrate into  
**public clouds**  
as a native  
service



On-prem

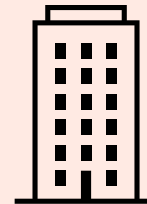


Google Cloud

We won a **global financial institution**  
from a competitor because they wanted  
a **unified plane** across Flash/Hybrid,  
and across on-prem and Google Cloud workloads



Deeply  
integrate into  
**public clouds**  
as a native  
**service**



On-prem



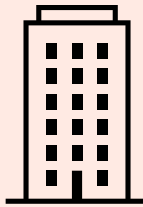
We have seen rapid growth in Azure  
enabling customers like **Italgas** to get the same  
performance from public cloud that they are  
getting **on-prem**





Deeply  
integrate into  
**public clouds**  
as a native  
service

Blackboard<sup>®</sup>



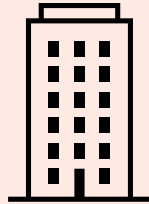
On-prem



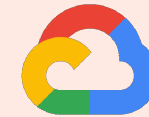
**Blackboard** was able to keep up with 45x demand  
during pandemic by building on top of  
NetApp's **AWS services**



Deeply  
integrate into  
**public clouds**  
as a native  
service



On-prem



Google Cloud



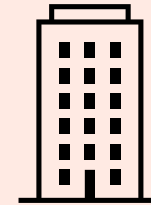
IBM **Cloud**



Many customers like **AstraZeneca** have their data estate spanning multiple clouds. They appreciate the simplicity of our **multi-cloud data fabric**



Deeply  
integrate into  
**public clouds**  
as a native  
**service**

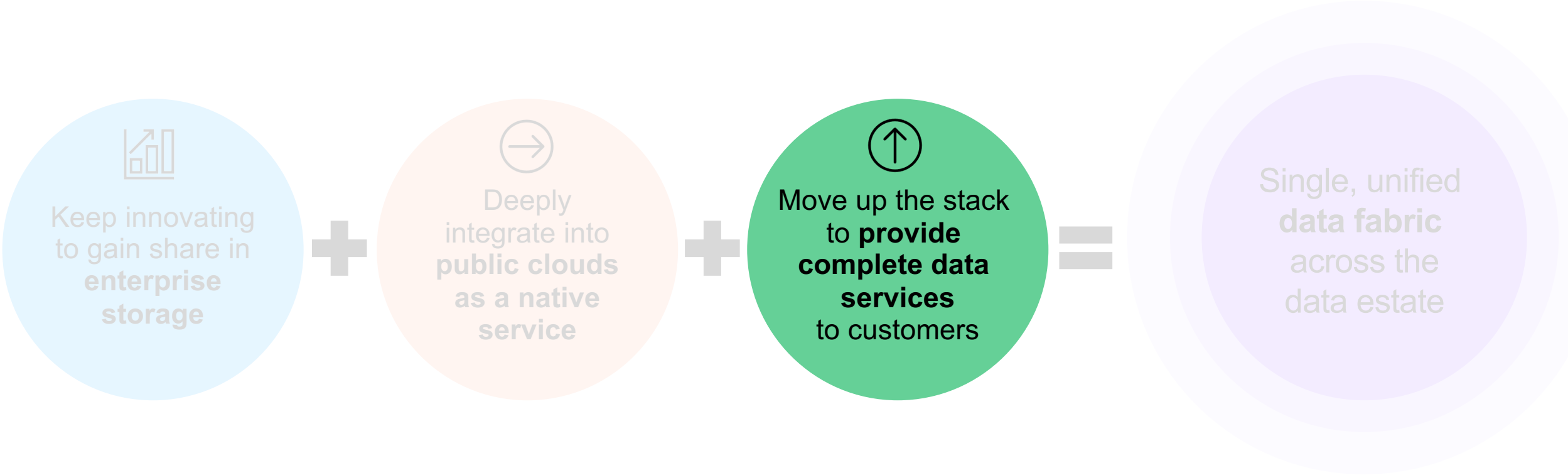


On-prem

A large **Grocer** first use of NetApp was SAP Storage on Azure.  
Valued the performance, reliability, ease of use.

That in turn convinced them to switch to our cloud-connected,  
**Flash storage system** to get the same performance and flexibility  
benefits on-prem.

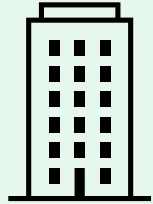
# Our growth thesis...



↑  
Move up the stack  
to **provide complete data services**  
to customers



AI / ML



Google Cloud



IBM **Cloud**



A **large nonprofit healthcare provider** is using **AI workloads** to treat diseases like Parkinson's, improve patient outcomes, develop AI-based radiology

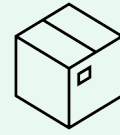
↑  
Move up the stack  
to **provide complete data services**  
to customers



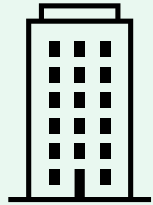
AI / ML



Backup / Archive



Containers



On-prem



Google Cloud



IBM **Cloud**



A **large communications tech company**  
extended their use of NetApp solutions for  
application-aware protection and disaster recovery  
of **cloud-native Kubernetes** workloads

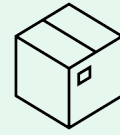
↑  
Move up the stack  
to **provide complete data services**  
to customers



AI / ML



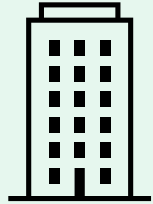
Backup / Archive



Containers



Protection



On-prem



Google Cloud



IBM **Cloud**



Customers like a **non-profit hospital**  
and a **professional soccer club** use  
our add-ons for protection against  
**ransomware** – on-prem and in the cloud

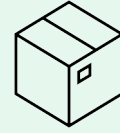
↑  
Move up the stack  
to **provide complete data services**  
to customers



AI / ML



Backup / Archive



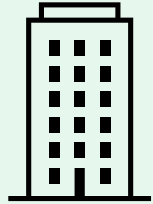
Containers



Protection



Compliance



On-prem



Google Cloud



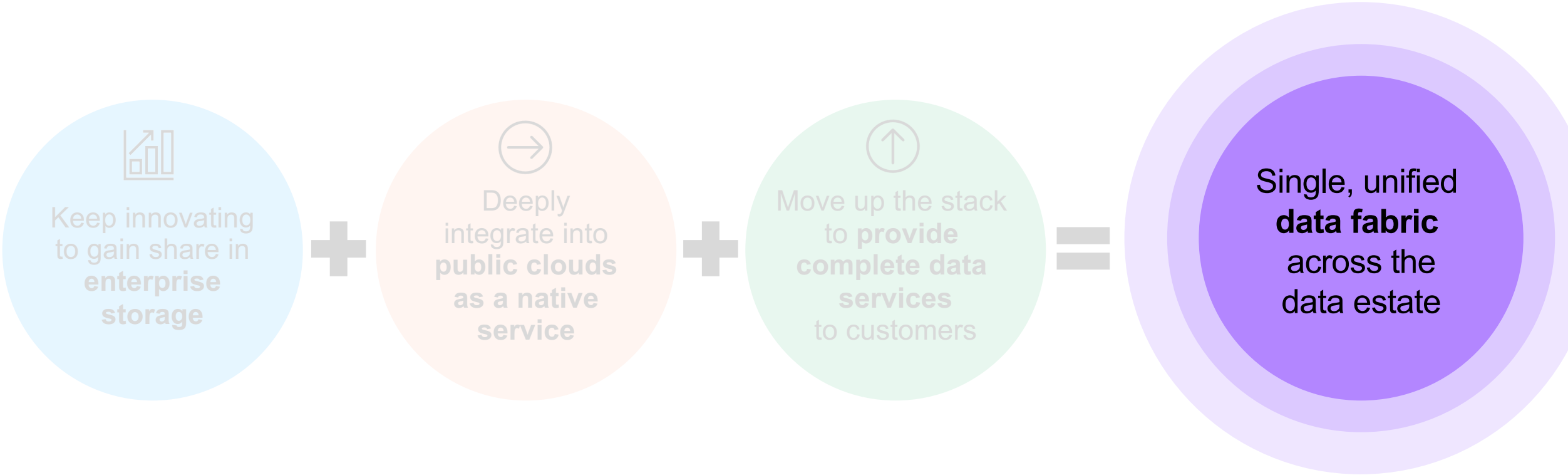
IBM Cloud



The first **WalkMe** purchase from NetApp was our **compliance solution** to help address their CCPA and GDPR reporting requirements



# Our growth thesis...



# See and act on all your data across on-prem and all public clouds in one view

The screenshot displays the NetApp Cloud Manager interface. The top navigation bar includes 'Account Demo\_SIM', 'Workspace odedb', and 'Connector OCCMSaaS Demo'. Below this, a secondary navigation bar lists various services: Canvas, Timeline, Backup & Restore, Sync, Tiering, Replication, K8s, Data Sense, and All Services (+9). The main area is titled 'Canvas' and features a large diagram of a multi-cloud environment enclosed in a red dashed circle. This diagram shows several components: 'cvs-store' (Cloud Volumes Service, 2 Volumes, 12 TiB Capacity), 'fsxo1-prod' (FSx for ONTAP, 0 Volumes, 0 B Capacity), 'Amazon S3' (39 Buckets, 1 Region), 'cvo2' (Cloud Volumes ONTAP, 68.46 TiB Capacity), 'cvo1' (Cloud Volumes ONTAP, 48.83 TiB Capacity), 'anf-store1' (Azure NetApp Files, 4 Volumes, 20.88 TiB Capacity), and 'aff-HpB5' (On-Premises ONTAP, 301 GiB Capacity). A 'Reset' button with minus and plus icons is located at the bottom right of the diagram. On the right side, a 'Working Environments' panel lists the following:

Icon	Environment Name	Capacity
Cloud	1 Cloud Volumes ONTAP	48.83 TiB Allocated Capacity
FSx	1 FSx for ONTAP (High-Availability)	0 B Allocated Capacity
Cloud	1 Cloud Volumes ONTAP (High-Availability)	68.46 TiB Allocated Capacity
Storage	1 On-Premises ONTAP	301 GiB Allocated Capacity
Lightbulb	1 Cloud Volumes Service (GCP)	12 TiB Allocated Capacity
Table	1 Azure NetApp Files	20.88 TiB Allocated Capacity
Trash	1 Amazon S3	0 Buckets

# Discover, purchase, on-board and use all our data services from the same console

The screenshot displays the NetApp Cloud Manager interface. At the top, a navigation bar includes 'Canvas', 'Timeline', 'Backup & Restore', 'Sync', 'Tiering', 'Replication', 'K8s', 'Data Sense', and 'All Services (9+)'. A red dashed box highlights this navigation bar. Below it, the main area shows a network diagram of various data services connected to a central 'Amazon S3' node. The services include:

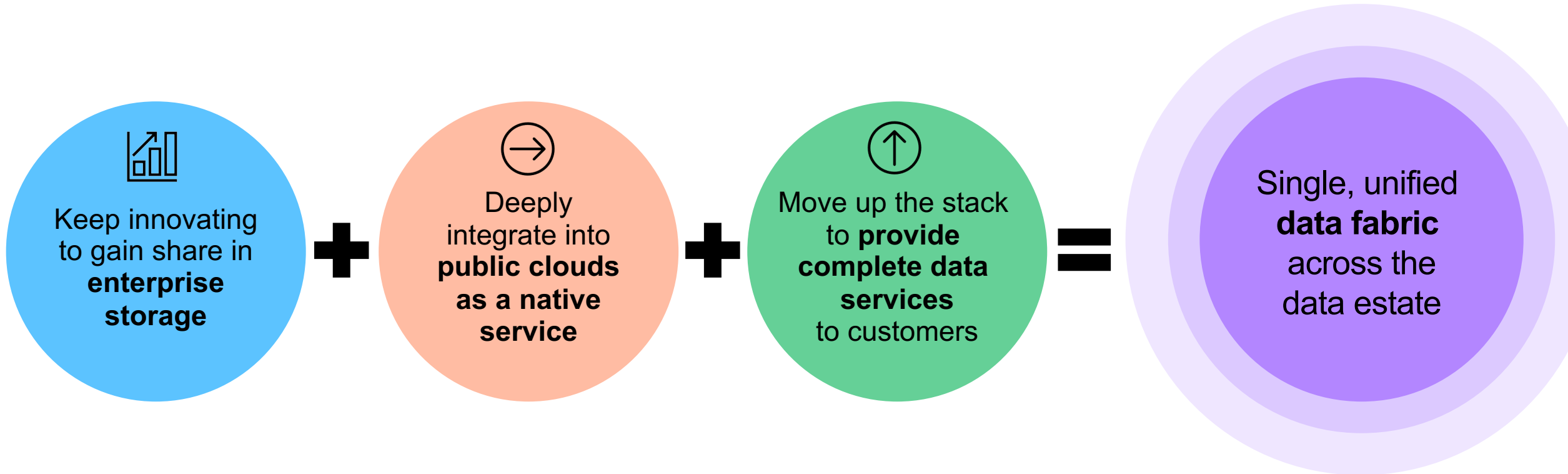
- cvs-store (Cloud Volumes Service, 2 Volumes, 12 TiB Capacity, HA)
- fsxo1-prod (FSx for ONTAP, 0 B Capacity, HA)
- Amazon S3 (39 Buckets, 1 Region)
- aff-HpB5 (On-Premises ONTAP, 301 GiB Capacity)
- anf-store1 (Azure NetApp Files, 4 Volumes, 20.88 TiB Capacity, HA)
- cvo2 (Cloud Volumes ONTAP, 68.46 TiB Capacity, HA)
- cvo1 (Cloud Volumes ONTAP, 48.83 TiB Capacity, SINGLE)

On the right side, a 'Working Environments' panel lists the following:

- 1 Cloud Volumes ONTAP (48.83 TiB Allocated Capacity)
- 1 FSx for ONTAP (High-Availability) (0 B Allocated Capacity)
- 1 Cloud Volumes ONTAP (High-Availability) (68.46 TiB Allocated Capacity)
- 1 On-Premises ONTAP (301 GiB Allocated Capacity)
- 1 Cloud Volumes Service (GCP) (12 TiB Allocated Capacity)
- 1 Azure NetApp Files (20.88 TiB Allocated Capacity)
- 1 Amazon S3 (0 Buckets)

# We are the only ones who do this—and we're just getting started!

We plan to continue to rapidly expanding our solutions and our addressable market



## Strategy for driving sustainable growth to deliver shareholder value

- Pulling farther ahead of on-premises competitors with **data fabric strategy**
- Addressing **high-growth workloads** and market segments
- Well positioned at the **intersection** of cloud, AI, software, and data
- Expanding opportunity with **more data services** to increase wallet share and customer stickiness
- Delivering **improved economics** with high-software, high-margin products