



# The New Era of Enterprise Storage

## How OpEx is Replacing CapEx Storage

*Nelson Nahum*  
*CEO and co-Founder, Zadara Storage*



## What is the Problem Statement?

✓ **I like what my storage array does for me:**

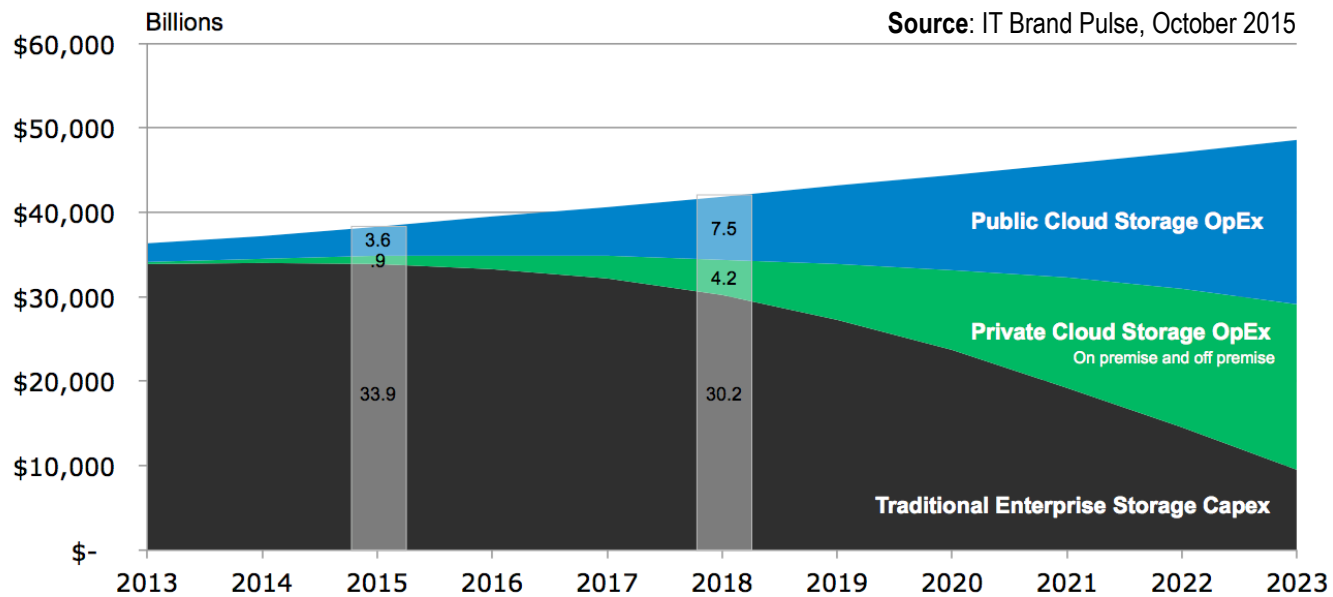
- It's reliable, fast, compatible, configurable

✗ **I don't like what I have to do for it:**

- Big capital expenditures (CapEx)
- Multi-year planning cycles
- Over-purchasing to improve cost and scalability
- Day-to-day maintenance
- Disruptive updates, hot-fixes, and upgrades
- Painful migrations every few years



# 10 Year Storage Revenue Forecast

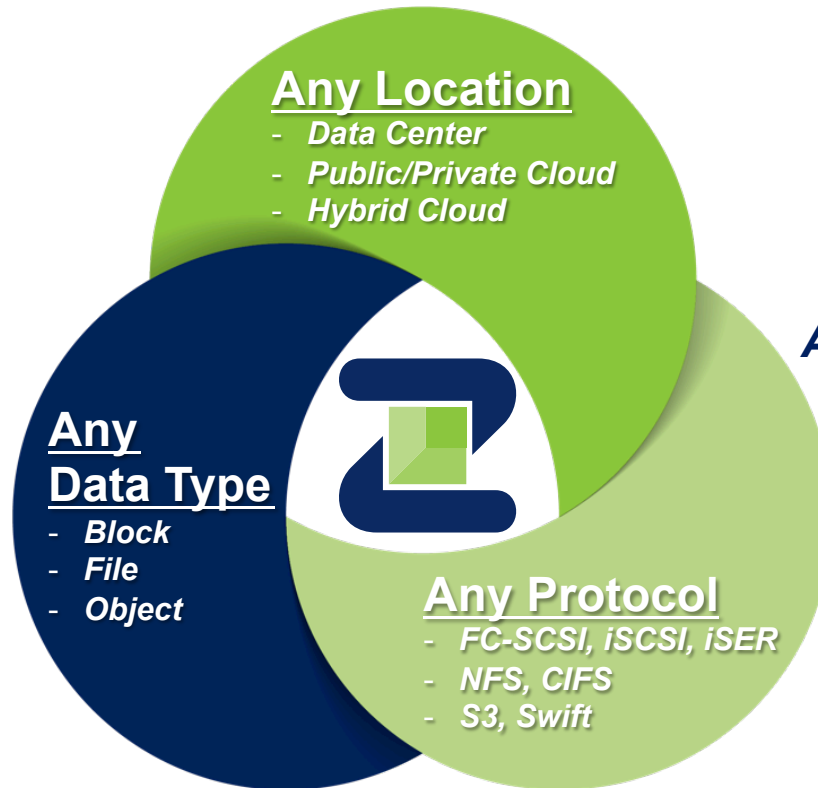


By 2023, 80% of storage spending will be OpEx.



# Universal Storage that Evolves with you

**One Common  
Product**



**A Complete  
Storage Solution**



# Enterprise Storage... *as a Service*



- **You get to define:**

- Controller performance
- Cache amount
- Drive types
- RAID types
- I/Os for databases
- Low latency for OLTP apps

- **With support for:**

- Block, file and Object Storage
- High Availability, BC, DR
- Clusters

- **With the benefits of:**

- 100% OpEx
- Elastic in all directions
- Easily modified
- Multi-tenant environment, Single-tenant experience
- Performance isolation
- No up-front costs
- **Short Commitments:**
  - 1 hour Cloud / Co-lo
  - 6 month On-premise

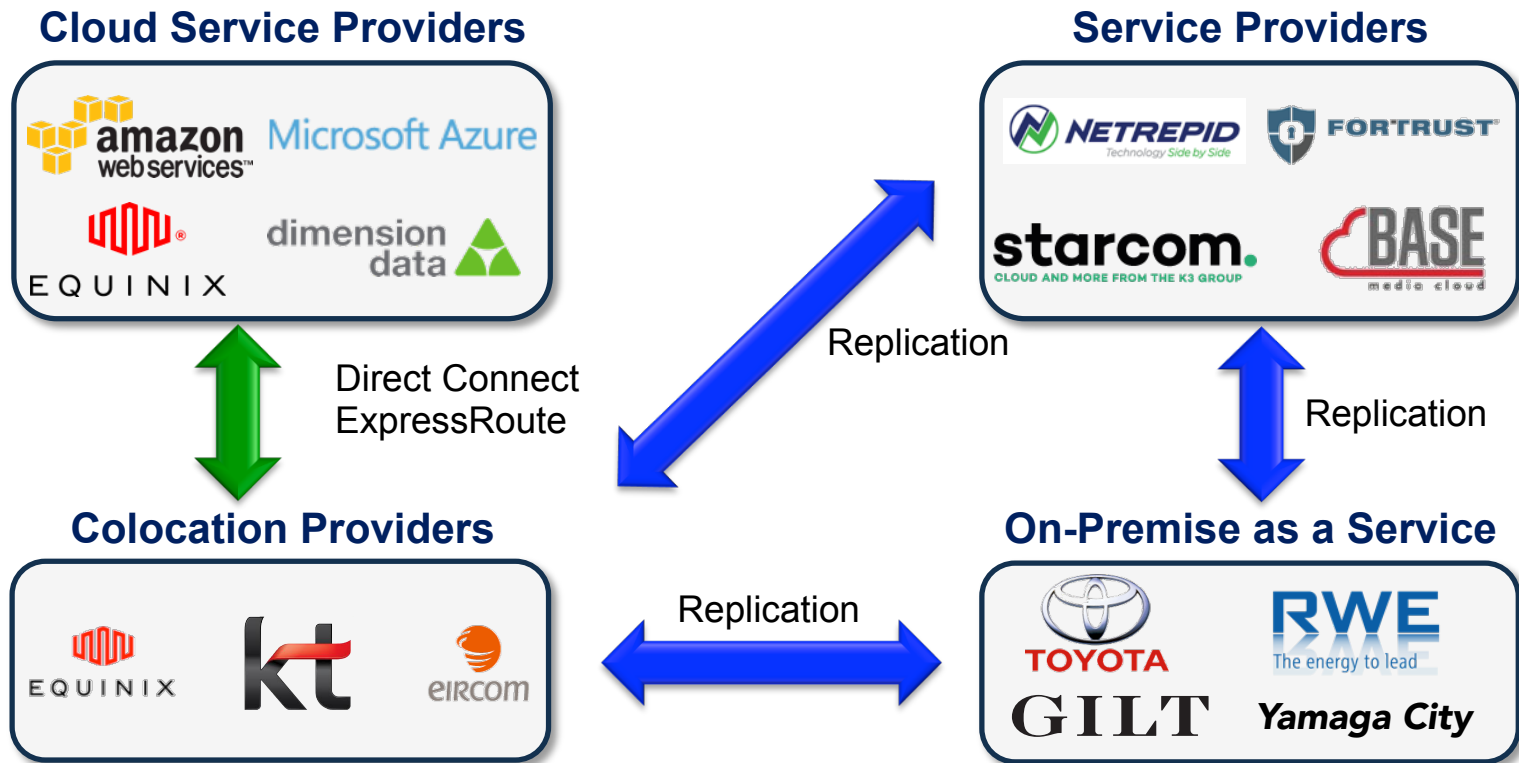




## Market-Leading Enterprise Storage Features

- ✓ File, Block, Object storage
- ✓ NFS, CIFS (Active Directory), Fibre Channel, iSCSI, iSER, S3, Swift
- ✓ Snapshots, Replication, Mirroring, Online Volume Migration
- ✓ Large Volume Sizes (100TB)
- ✓ At-Rest and In-Flight Data Encryption (user owns keys)
- ✓ Cluster Support
- ✓ Thin provisioned volumes
- ✓ Large SSD cache options
- ✓ Non-Disruptive Upgrades
- ✓ 100% RESTful API coverage

# Zadara Storage Cloud – Any Location





# VPSA Provisioning

Select your Public Cloud / Colo Provider

Create New VPSA Storage Array

VPSA Name

VPSA Description

Select Cloud Provider

<input checked="" type="radio"/>	<input type="radio"/> Microsoft Azure
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>

Per hour costs calculated based on configuration choices

Select Region  
AWS US East (N. Virginia) 2

Protection Zone  
zone\_0

Select Zadara IO Engine  
200 - 2 CPUs, 4GB RAM (Max. 5 drives) (\$0.49/hr)

Select Zadara Container Services (ZCS) Engine  
None

Select Drive Quantities

<input type="text" value="4"/>	6000GB SATA Repository Storage (\$0.20/hr)
<input type="text" value="0"/>	800GB SSD (\$0.25/hr)
<input type="text" value="0"/>	600GB SAS 10K RPM (\$0.15/hr)

NEW! Backup to Amazon S3 (B2S3) included as an optional feature

- \$0.02 per GB protected, per month
- \$0.02 per GB transferred to object storage

Submit Cancel

VPSA ENGINE  
200

VPSA COST  
\$1.29/hr

Select your Dedicated Drives





# Success Story – Gilt (Online Retailer)

- **Challenge** – Store online images
- **Solution** – Zadara Hybrid Storage
- **Results**
  - Reduced storage costs by 85%
  - Accelerated new capacity deployment from days to minutes
  - Able to redeploy people from mundane storage management to strategic, high value activities

**GILT** RETAIL  
CUSTOMER SUCCESS STORY

Leading Online Shopping Destination Leverages Zadara Storage to Address Scalability, Management and Total Cost of Ownership Challenges

**The Ultimate Dress Shop**

"Our fundamental problem was aligning our IT infrastructure with our company growth. We moved from a storage solution that was *hindering* growth, to one that is *enabling* growth."

Anders Holm, Senior Systems Engineer at Gilt

**Company Profile:**  
Gilt is an innovative online shopping destination offering its members special access to the most inspiring merchandise and experiences every day at insider prices.

**Challenge:**

- Storing the growing number of product images created scalability and management challenges
- Storage infrastructure was cumbersome and expensive to run and maintain
- IT was not responsive to the departmental needs

**Solution:**

- Gilt replaced existing SAN with Zadara's Virtual Private Storage Array (VPSA) connecting to AWS

**Results:**

- Reduced storage costs by 85%
- Accelerated new capacity deployment from days to minutes
- Able to redeploy people from mundane storage management to strategic, high value activities

**Gilt Reduces Storage Costs by 85% with Zadara™ VPSA™ Enterprise Storage-as-a-Service (STaaS)**

An online shopping destination for the savvy consumer, Gilt continually searches the world for the most coveted brands and products, including fashion for women, men, and children; home decor; and unique activities in select cities and destinations. Gilt releases new products to their website on a daily basis with discounts of up to 70% off retail. The growing business created scalability and management challenges for their entire IT infrastructure. Gilt made the decision to move their compute infrastructure to Amazon Web Services (AWS) over managing their own data centers to gain the flexibility and cost advantages of cloud-computing.

When the time came to look at their storage infrastructure, they wanted the same level of scalability, elasticity and cost advantages. As Anders Holm, Senior Systems Engineer at Gilt in Dublin, put it, "One of the benefits of AWS is that they manage our compute resource for us. We essentially push the headaches to them so that we can focus on our business." Gilt wanted that same level of "as-a-service" solution for their storage. However, they also wanted the enterprise features that they were lacking in their prior storage solution. Holm continued, "Really no other solution on the market was able to meet our needs. The Zadara VPSA was clearly the best solution for us."

**ZADARA STORAGE**



# Success Story – Lawter (Manufacturer)

- **Challenge** – CapEx to OpEx
- **Solution** – Zadara OPaaS Storage
- **Results**
  - Tripled performance
  - Addressed scalability concerns and simplified management
  - Moved from a CapEx model to a pure pay-as-you-go OpEx model

**LAWTER™** MANUFACTURING  
**CUSTOMER SUCCESS STORY**

Lawter Replaces IBM storage with Zadara Virtual Private Storage Array (VPSA) to Triple their Data Storage Performance



*"As part of our infrastructure upgrade, we set an initial goal to double our performance. With Zadara Storage, we tripled our performance. This was far beyond our expectations."*  
Antony Poppe, Global Network and Virtualization Manager, Lawter

**Customer Profile:**  
Lawter serves the graphic arts, adhesives, specialty coatings, aroma chemicals and the synthetic rubber industries. They are a global business operating in over 20 countries with 11 manufacturing and technology centers.

**Challenge:**

- Replace older IBM storage
- Improve scalability, performance, security and simplify management
- Move from CapEx to OpEx model

**Solution:**

- Replaced IBM with Zadara Virtual Private Storage Array (VPSA)

**Results:**

- Tripled performance - from 11K IOPS to 30K IOPS
- Addressed scalability concerns and simplified management
- Moved from a CapEx model to a pure pay-as-you-go OpEx model

**Zadara helps Lawter address performance, scalability, security and cost concerns**

Lawter is a company strong in pine chemicals and built on products developed using pine chemical resources. Lawter serves the graphic arts, adhesives, specialty coatings, aroma chemicals and the synthetic rubber industries. Lawter, has a long history and is a result of many highly successful businesses coming together over more than 60 years. Today, they are a global business operating in over 20 countries with 11 manufacturing and technology centers. Their strength is built on formulating technology, strategic raw material sourcing and their global network of manufacturing capabilities.

SAP applications worldwide. The goal was to replace their older IBM storage with a more scalable, higher performing and easier to manage solution. Additionally, they set a goal to move from a capital-expenditure (CapEx) to an operational-expenditure (OpEx) model.

With business critical SAP applications hosted by Dimension Data in both Amsterdam and London, Lawter was looking to leverage the scalability and flexibility of cloud-based, as-a-service solutions. Their SAP application ran on SQL Server in a High-Availability (HA) cluster.

The company recently embarked on an IT initiative to upgrade their storage infrastructure that was supporting their





# Success Story – Moonami (Education)

- **Challenge** – Replace CapEx Storage
- **Solution** – Zadara AWS Cloud, B2S3
- **Results**
  - Management time reduced by 50%
  - Storage costs reduced by 45%
  - Improved both RPO and RTO delivering a heightened level of service to their customers

**EDUCATION**

**moonami** LEARNING SOLUTIONS

**CUSTOMER SUCCESS STORY**

Moonami Learning Systems Saves 50% of Time and 45% of Cost by Replacing Gluster FS Storage with Zadara Virtual Private Storage Array (VPSA)

**"Once we discovered the elasticity and scalability that Zadara offers, our entire IT infrastructure was easier to manage – an advantage that translates directly into even better service to our customers."**

John Porten, President of Moonami LMS

**Customer Profile:**  
Moonami provides hosting and support services for Moodle learning management software and other leading open-source applications.

**Challenge:**

- Existing GlusterFS storage became expensive and time consuming to manage.
- Required backup/recovery solution to provide rapid recovery of data.
- Looking for agile, flexible storage to support company growth.

**Solution:**

- Replaced GlusterFS with Zadara Virtual Private Storage Array and Backup to S3 (B2S3) option.

**Results:**

- Management time reduced by 50%.
- Storage costs reduced by 45%.
- Improved both recovery point objective (RPO) and recovery time objective (RTO) delivering a heightened level of service to their customers.

**Moonami Learning Systems uses Zadara VPSA to reduce costs and increase overall customer service**

Moonami provides hosting and support services for the Moodle learning management software and other leading open-source applications. The firm provides a full range of services including cloud-based hosting, implementation consulting, migration, customization, integration and multi-tier support.

After reviewing their options, Moonami decided to eliminate their GlusterFS storage and replace it with Zadara's enterprise-grade Virtual Private Storage Array, attaching to their Amazon Web Services (AWS) compute resources. Moonami is now saving approximately 20 hours of IT time each week – nearly half of their full-time administrator's role – from the daily headaches of managing the storage resource. This is extra time that Moonami's small, but savvy IT team is now allocating to more business-impactful activities. The move also lowered Moonami's total storage costs by 45%.

As their business grew, they found themselves at a crossroads and needed to make important decisions about their storage infrastructure. The existing GlusterFS storage had become expensive and time consuming to maintain. It no longer provided the level of agility and features needed to support the Moonami customers.



# Success Story – Netrepid (IT Services)

- **Challenge – Agility and Scalability**
- **Solution – Zadara OPaaS Storage**
- **Results**
  - Pure OpEx pay-as-you-go solution
  - Resource isolation enables predictable performance and greater security
  - Able to deploy storage nodes in minutes rather than weeks
  - Reduced hardware footprint by 81%
  - Improved performance by 80%

Flash Memory Summit 2016  
Santa Clara, CA

**IT SERVICES**  
**CUSTOMER SUCCESS STORY**

Netrepid improves performance by 80% by replacing older CapEx-based storage with OpEx-based Zadara On-Premise-as-a-Service VPSA Storage Arrays

**"Simply amazing! Overall, we are seeing 80% better performance with the Zadara Storage VPSA solution than with our prior storage solution."**  
Chris Jones, Infrastructure Architect, Netrepid

**Customer Profile:**  
Netrepid provides colocation, infrastructure and application hosting services that work side by side with a large variety of industries including healthcare, financial, education, transportation and government to accelerate their technology evolution from the ground to the cloud.

**Challenge:**

- Eliminate CapEx limitations imposed by existing storage
- Improve deployment agility, client responsiveness and overall system performance

**Solution:**

- Zadara Storage VPSA Storage Array - On-Premise-as-a-Service

**Results:**

- Pure OpEx pay-as-you-go solution
- Resource isolation to clients enables predictable performance and greater security
- Able to deploy storage nodes in minutes rather than weeks
- Reduced hardware footprint by 81%
- Improved performance by 80%

**Netrepid eliminates CapEx agility challenges, while reducing cost and improving performance**

Netrepid, founded in 2004 in Central Pennsylvania, is a leading provider of colocation, infrastructure and application hosting services. The Netrepid Data Center is a carrier grade, Tier-3 data center providing redundant Internet, cooling, power, and security. The facility maintains an annual SSAE-18 audit as well as HIPAA and PCI audits to ensure all current security measures are met. This facility provides colocation as well as hosting, virtual and cloud services.

To support both their internal and external storage needs, Netrepid had standardized on Dell EqualLogic storage. As the company grew, the limitations of Capital Expenditure (CapEx) storage became apparent. As Chris Jones, Infrastructure Architect at Netrepid described, "we were confined to the storage we had purchased. To expand our capacity, we needed to invest a lot of capital and there was significant delay while waiting for additional EqualLogic storage to arrive and be installed. We were not able to be responsive to our clients, both internal and external."

To address the challenge, Netrepid turned to other enterprise storage providers and were investigating several solutions from traditional SAN and Flash Arrays. However, they worried that while they may solve their agility issues, they may create a CapEx financial hurdle that could impact company scalability.

**ZADARA STORAGE**



THANK YOU



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