Making the Case for Lease vs. Buy Storage

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Executive Summary

IDC forecasts that the Global DataSphere will **grow to 163 zettabytes by 2025.**

Growing investments in digital use cases and supporting emerging technologies are largely driving this growth. The sheer volume of data doesn’t give organizations any competitive advantage. What does make the difference is an organization’s ability to **unlock the value of data.**

IDC research shows, organizations that are able to harness the value of their data post stronger business results. These “Thriving” organizations recognize and invest in increased levels of modernized IT, including their storage infrastructure, relative to “Survivors”.

**Innovative payment solutions such as leasing or flexible consumption options remove the budget hurdles, enabling customers to modernize their IT infrastructures and improve operational efficiencies.**

- Thriving organizations understand that creative payment options aid in their digital transformation process.
- Enterprise IT departments continue to look for ways to shift more IT spend from maintenance to business innovation.
- Organizations that establish three-year life cycles and then systematically employ them realize lower average deployment and retirement costs.
Methodology & Definitions

To understand the steps that leading IT organizations take to adopt emerging data-centric technologies and the results their organizations can achieve through the use of these technologies, IDC conducted a survey of over 1,200 global organizations. This survey was designed to examine datacenter strategies, investments, and IT organizational approaches. The survey results revealed notable performance differences among organizations (e.g., Thrivers and Survivors) in both their level of adoption of emerging technologies and the benefits they realize from their use of those same technologies.

Classifications

**Thrivers:** Are leading IT organizations that adopt emerging data-centric technology and certain best practices to improve business success. These organizations have a datacenter strategy and vision to create business differentiation via emerging technology adoption.

**Survivors:** Have not made the same level of investment in emerging technologies due to budgetary or organizational constraints.

In addition, to understand current leasing behaviors, attitudes, and practices, IDC conducted a survey of 343 organizations, across the U.S. and UK. This study enabled IDC to quantify current financing adoption, drivers, and barriers. This study also informed IDC’s model with respect to current pricing and perceived benefits of buy vs. lease financing models.

IDC Definitions

**Financing:** A predictable model that lowers total cost of computing, facilitates a technology refresh strategy, and preserves capital with a fixed rate for the term of the agreement. At the end of the term, customers have the option to renew, return, or buy the equipment.

**Flexible consumption:** A model that provides capacity direct to customers with an agile structure, minimum capacity commitment, and option to increase or decrease capacity throughout the term.
Shipments of enterprise storage systems capacity will exceed 1 EXABYTE BY 2022

The world is becoming increasingly digital. The amount of digital data generated reaches multi-zettabyte levels every year, driven by investments in new emerging platforms like Digital Transformation, AI, IoT, and Big Data. The vast majority of this data is short-lived and isn’t stored, but even a small percentage of the generated data which is preserved for future use requires significant amounts of storage.

Data is a key asset for every organization. But just having volumes of data doesn’t give organizations any competitive advantage. What differentiates organizations is their ability to unlock the value of data.

Thrivers understand that unlocking the value of data requires investing in IT resources like storage to harness innovation.
To increase competitiveness and keep IT operations under control, organizations invest in emerging technologies, use cases, and in modernization of their IT infrastructures, including storage.

Continuous growth of digital data and adoption of tools to leverage this data for achieving a spectrum of business results puts pressure on enterprise IT infrastructure, processes, and budgets. Utilizing innovative payment solutions removes budget hurdles and improves business agility.

**Top Projects and Business Initiatives Driving IT Investments**

<table>
<thead>
<tr>
<th>IT Infrastructure</th>
<th>Emerging Technologies and Business Initiatives</th>
<th>IT Delivery Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security</td>
<td>Big Data and Analytics</td>
<td>Hybrid cloud</td>
</tr>
<tr>
<td>Data protection</td>
<td>Internet of Things</td>
<td>Private cloud</td>
</tr>
<tr>
<td>Data privacy</td>
<td>Artificial Intelligence/Machine Learning</td>
<td></td>
</tr>
<tr>
<td>Modernization of server and compute infrastructure</td>
<td>Digital Transformation</td>
<td></td>
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<tr>
<td>IT automation</td>
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</tbody>
</table>

These investments drive storage growth.
Organizations that invest more in their storage infrastructure have better business outcomes

Thriving organizations update storage infrastructure to harness the explosive growth of digital data and create business opportunity.

- Thrivers reduce operational costs by **2.7x more than Survivors**.
- **Thrivers are able to deliver new IT services 64% faster** because automated and data-driven delivery of IT services underpins innovation.
- Thrivers improve their customer service levels, resulting in higher customer satisfaction (up to 75%) and reduced churn.

However, budgetary and planning challenges remain a key obstacle for organizations at the head of the pack.

- **40% of Thrivers** have difficulty accurately planning for resource needs across domains of IT, network, and physical datacenter resources.
- **30% lack an effective process** for securing funding from a shared pool of digital transformation resources.

Source: IDC’s Global Emerging Technology Study, 2018, n=1,211
As organizations race to transform to meet ever-increasing customer expectations, how are these budgetary challenges being tackled?

Innovative payment solutions like financing and flexible consumption are critical enablers for customers that want to transform but are facing budget challenges. Both Thrivers and Survivors face these challenges and use these models to reduce capital outlay and diminish risk.

IT financing programs remain important capital and budget management tools used extensively by IT organizations to better align requirements and resources, enable technology life-cycle replacement programs, and facilitate compliant equipment decommissioning and recycling programs.

53% of storage customers use leasing and financing to improve their operational flexibility.

65% stated that over the past year, their business is more inclined to lease on-premises storage.

Source: Lease vs Buy 2018, IDC, November, 2018
Flexible IT consumption programs = lower operating costs

Flexible consumption allows customers to become more agile by paying for technology as it’s consumed; aligning usage with budgets while providing risk mitigation. This ensures that customers have the right capacity when needed.

Organizations that use financing or flexible consumption programs to establish three-year life cycles and then systematically employ them realized lower average deployment and retirement costs.

IDC research underscores that a well-formed IT life-cycle management policy that presents a repeatable and consistent framework for replacing and renewing IT assets will reduce IT operating costs. Both financing and flexible consumption are powerful tools to develop a strong IT life-cycle management policy.
Innovative payment solutions can simplify financing structures across all IT infrastructure, including software.

Financing is Gaining Momentum

77% of customers surveyed noted that the availability of leasing/financing impacts their choice of an on-premises storage system vendor.

Financing Models Reduce Risk

Avoid end-of-life challenges and improve environmental impact.

- 31% buy storage equipment at end of lease: FMVs lease buy-out option gives customers additional choice at end of term
- 27% return storage equipment to lessor
- 15% work with an IT Asset Disposal provider to recycle storage assets

Financing solutions provide multiple benefits for customers as they transform digitally

The main reasons organizations chose to finance storage equipment:

- **28%**
  - **Budget payment flexibility:** allows payments based on cash flow or budget requirements and provides more visibility into monthly costs

- **25%**
  - **Operational flexibility:** enables equipment depreciation over the term of the lease and takes advantage of the continually improving price/performance curve of refresh

- **21%**
  - **Upgrade flexibility:** provides the option to do equipment refresh within the lease term

- **13%**
  - **Conservation of capital:** saves capital to invest in the business versus using it on the infrastructure to run the business

Financing enables companies to track assets, establish upgrade plans, and remove older assets with minimal disruptions, and provides a level of automation, flexibility, and simplicity that customers use to reduce costs.

Source: Lease vs Buy 2018, IDC, November, 2018
**Flexible consumption provides simplicity, transparency, and agility**

Flexible consumption can be a critical enabler for businesses that are grappling with the desire to transform to new IT models, but are anchored by existing infrastructure investments.

IDC research shows that customers are actively embracing more flexible operating expense (OpEx) models instead of significant capital outlays (CapEx) to accelerate their transformations.

**What are the primary drivers in using or planning to use a Flexible Consumption Model**

(\% Respondents)

<table>
<thead>
<tr>
<th>Driver</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplify device management</td>
<td>56</td>
</tr>
<tr>
<td>Reduces IT and procurement workload</td>
<td>48</td>
</tr>
<tr>
<td>Refresh devices at a faster cadence</td>
<td>48</td>
</tr>
<tr>
<td>Safe and secure disposal</td>
<td>46</td>
</tr>
<tr>
<td>Predictable cost model</td>
<td>43</td>
</tr>
</tbody>
</table>

Source: IT Procurement Trends & Consumption Models - 2018, IDC, August, 2018; N=300
Over a 6-year period, financing is **26% LESS EXPENSIVE** than purchasing equipment.

Comparison of Average Cumulative Storage Costs per Terabyte

*One 6-Year Ownership Model vs. Two 3-Year Renewable Lease Models*

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>One 6-Year Ownership Model</td>
<td>$7,779</td>
<td>$7,264</td>
<td>$8,029</td>
<td>$10,029</td>
<td>$12,278</td>
</tr>
<tr>
<td>Two 3-Year Renewable Lease Models</td>
<td>$7,495</td>
<td>$7,396</td>
<td>$8,182</td>
<td>$7,511</td>
<td>$7,412</td>
</tr>
</tbody>
</table>

The cost of ownership escalates in Year 4.
Over a 6-year period, financing will cost approximately $2,638 less per year for one terabyte of storage

For those that purchase, support costs increase substantially in Years 4-6

### Scenario #1
One Terabyte for six years (support costs)

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>De-install</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td>Support Costs</td>
<td>$6,887</td>
<td>$7,172</td>
<td>$7,937</td>
<td>$9,921</td>
<td>$12,170</td>
<td>$16,516</td>
</tr>
<tr>
<td>Maintenance Feed</td>
<td>$92</td>
<td>$92</td>
<td>$92</td>
<td>$108</td>
<td>$108</td>
<td>$133</td>
</tr>
<tr>
<td>Install and Config</td>
<td>$384</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
<tr>
<td>Acquire (Purchase)</td>
<td>$416</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
</tr>
</tbody>
</table>

**Total: $62,048**

**Per Year: $10,341**

### Scenario #2
Two Terabytes - each three years (support costs)

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
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<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
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<tbody>
<tr>
<td>De-install</td>
<td>$-</td>
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<td>$-</td>
<td>$384</td>
<td>$-</td>
</tr>
<tr>
<td>Acquire (Purchase)</td>
<td>$132</td>
<td>$132</td>
<td>$132</td>
<td>$132</td>
<td>$132</td>
<td>$132</td>
</tr>
</tbody>
</table>

**Total: $46,219**

**Per Year: $7,703**
Definitions

**Acquire (Purchase)**
Includes cost per terabyte of storage.

**Install and Config**
Includes the cost of IT staff’s time dedicated to deploying/installing/configuring.

**Maintenance**
Includes the cost of break/fix services, proactive preventative care, upkeep of IT assets (hardware/software), and software licensing fees.

**Support**
Includes costs associated IT staff’s time dedicated to IT system management, upgrades, patching, and data migration.

**De-install**
Includes the cost of retiring / decommissioning.

*Warranties are not included in any of these definitions*
Data Sources and Methodology

**Acquisition-Related Costs**

- Acquire (Purchase)
  - End user purchase costs were weighted by number of TBs sold by technology - All Flash Array (AFA), Hybrid Flash Array (HFA), All Hard Disk Drive (HDD).
  - Per TB - Source - IDC Worldwide External Enterprise Storage Systems by Storage Array Type, 2016-2018Y
  - Lease vs Buy 2018, IDC, November, 2018

- Maintenance Fees
  - The industry standard percentage of acquisition cost which varies by year (Year 1-22%, 22%, 22%, 26%, 26%, Year 6 - 32%).

- De-install
  - 5% of acquisition cost

**IT Staff-Related Costs**

- Install and config per TB
  - The time required for IT staff to configure, test, and deploy new equipment in latest deployment divided by the number of TBs deployed.

- Support Costs per TB
  - The number of IT staff required annually for storage management divided by the number of TBs managed.

- IT Staff time is multiplied by a $100,000 annual weighted salary.

- The data set was sorted by frequency of upgrades/replacement 1-7 years.

Source - Lease vs Buy 2018, IDC, November, 2018
In this age of digital transformation, customers need flexibility to invest in IT infrastructure that support their digital use cases, emerging technologies, and IT initiatives.

To modernize storage in support of digital initiatives and emerging technologies, Thriving organizations have made more significant investments in their datacenters.

Innovative payment models, like financing and flexible consumption models, are an important way to support your organization’s digital transformation because they deliver the operational flexibility and budget transparency that informs IT decisions.

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IDC research underscores that a well-formed IT life-cycle management policy, enabled by a prudently aligned financial strategy that presents a repeatable and consistent framework for replacing and renewing IT assets, will reduce IT operating costs and improve the agility of IT organizations.