Forrester Consulting conducted a Total Economic Impact™ (TEI) study to provide readers with a framework to evaluate the potential financial impact of Isilon on their organizations. To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four customers with experience using Isilon. This summary is based on a full TEI study, which can be downloaded [here](#).

Through these customer interviews and data aggregation, Forrester concluded that Isilon has the following three-year financial impact:

- **Benefits**: $31.3 million (USD) versus costs of $8.9 million, resulting in a net present value (NPV) of $22.4 million and an ROI of 250%.

**Quantified benefits.** The following risk-adjusted quantified benefits are representative of those experienced by the companies interviewed:

- **Isilon storage tiers and scalability enable cost optimization.** Storage efficiency and scaling as needed reduce overprovisioning and keep utilization of Isilon high, with an average of 85% utilization compared with 60% before. This cost efficiency creates over $18 million in cost savings in three years compared with traditional storage.

- **Interviewees achieve storage management efficiency with Isilon, freeing up time for higher-value work.** Prior to using Isilon, each administrator managed 500 TB of storage. With Isilon, each administrator can manage 10 PB of data. Isilon nodes take minutes to install, and the data lake is easy to manage with the automation of Isilon software.

- **Elastic Cloud Storage (ECS) with CloudPools further optimizes storage costs.** Using ECS provides additional cost efficiencies compared with public cloud options, and tiering “cold” data to the cloud frees up Isilon nodes for more active data, saving data center space. This benefit, in addition to the efficiency benefits of Isilon nodes, helps to reduce data center space requirements for the same amount of capacity by 65%.

- **Isilon is viewed as a critical enabler of business growth.** All interviewees mentioned the importance of cost-effective, scalable, high-performance NAS storage to enabling business growth. The limitations of traditional storage affected the pace of business growth and customer satisfaction.

**Unquantified benefits.** The interviewed organizations experienced the following benefits that are not quantified for this study:

- **Future plans to run big data analytics on the Isilon data lake could yield key benefits.** Benefits include surfacing new insights that could create significant business impact, avoiding infrastructure costs, and improving the efficiency of these projects.
The Isilon Customer Journey

For this study, Forrester conducted four interviews with Isilon customers. Interviewed customers include the following:

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>REGION</th>
<th>EMPLOYEES</th>
<th>CURRENT ISILON CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software, video services</td>
<td>Headquartered in the United States</td>
<td>400 employees</td>
<td>12 PB data, six years using Isilon</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>Headquartered in Europe</td>
<td>15,000 employees</td>
<td>9 PB data, four years using Isilon</td>
</tr>
<tr>
<td>Managed IT services provider</td>
<td>Headquartered in the United States</td>
<td>Three customers use Isilon</td>
<td>50 to 200 TB data per customer, three years using Isilon</td>
</tr>
<tr>
<td>Visual media organization</td>
<td>Headquartered in Europe</td>
<td>Several thousand employees</td>
<td>6 PB data, 10 years using Isilon</td>
</tr>
</tbody>
</table>

Key Investment Drivers And Results

The interviewed organizations shared the following investment drivers:

- **Many interviewees were using multiple traditional storage systems to manage unstructured data in silos.** This resulted in growing management inefficiencies as capacity needs grew, as well as cost inefficiencies and low utilization.

- **Traditional storage systems had a number of limitations.** Interviewees had to overprovision capacity in order to scale the storage environment, creating higher capex and opex costs than needed based on the capacity being utilized. Additionally, interviewees noted that the data being stored did not compress or dedupe, and with long data retention policies, costly backup system capacity was being used quickly.

- **Ultimately, traditional storage challenges affected business growth.** Issues with performance and downtime hurt customer satisfaction. Combined with difficulty scaling cost effectively, interviewees viewed storage as a limitation to growth, not an enabler.

The interviewed organizations achieved key investment results:

- **All interviewees realize both capital and operational cost efficiency with Isilon.** Interviewees use SmartPools and CloudPools to automatically allocate workloads to the most cost-effective Isilon tier. They scale as capacity needs increase to reduce overprovisioning and maintain high utilization of Isilon infrastructure. Isilon’s single file system and automation allow organizations to spend minimal time on management.

- **Isilon better supports business growth.** Data storage scalability is viewed as pivotal to supporting current and future services, and performance and availability are also critical to customer satisfaction. With Isilon, challenges with the prior storage solution are resolved.

- **Interviewees view Isilon as a key partner and benefit from Isilon support.** Several interviewees highlighted the benefit of having Isilon as a key storage partner. Isilon teams have deep domain and industry knowledge, and the Isilon support team reduces organizations’ storage management burden.

Composite Organization

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an ROI analysis that illustrates the areas financially affected.

**Description of composite:** It is a global organization with $2.5 billion in annual revenue and 6,000 employees. It uses Isilon for video and image files, metadata, and general unstructured file data. The organization previously used siloed traditional storage solutions to manage this data and has rapid growth in data capacity needs.
Deployment characteristics: In order to manage this data, the organization uses Isilon X410 nodes for production workloads in its primary data center and uses SmartPools and CloudPools to tier data to ECS after six months. It uses Isilon NL410 nodes in its disaster recovery data center and uses SyncIQ to efficiently replicate data.

Isilon Helps Organizations Cost Effectively Manage Rapid Data Growth

With Isilon, organizations have a platform that can easily scale to accommodate rapidly growing unstructured data capacity. Isilon’s heterogeneous clusters can support a variety of storage needs, with different tiers of storage appliances and a cloud storage tier. Aligning data with the best-fit tier creates cost efficiencies, and higher utilization from reduced silos and overprovisioning helps to lower costs. Isilon provides significant management efficiencies due to automated tiering with Isilon SmartPools and CloudPools software and efficient data replication with Isilon SyncIQ. Interviewees all noted that managing clusters with several PBs of data required less than one full-time equivalent (FTE). Additionally, the performance and resiliency of Isilon clusters help organizations support fast business growth and drastically reduce downtime.

The benefit impact experienced by the composite organization is based on the experiences of the four interviewees. Over three years, the composite organization expects risk-adjusted total benefits to be a present value (PV) of $31.3 million.

Total Benefits

<table>
<thead>
<tr>
<th>REF.</th>
<th>BENEFIT</th>
<th>INITIAL</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>TOTAL</th>
<th>PRESENT VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atr</td>
<td>Storage cost optimization</td>
<td>$5,165,625</td>
<td>$6,056,250</td>
<td>$9,084,375</td>
<td>$12,112,500</td>
<td>$32,418,750</td>
<td>$27,279,355</td>
</tr>
<tr>
<td>Btr</td>
<td>Storage management efficiencies</td>
<td>$0</td>
<td>$256,500</td>
<td>$532,000</td>
<td>$902,500</td>
<td>$1,691,000</td>
<td>$1,350,913</td>
</tr>
<tr>
<td>Ctr</td>
<td>Data center space savings</td>
<td>$7,125</td>
<td>$35,625</td>
<td>$78,375</td>
<td>$135,375</td>
<td>$256,500</td>
<td>$205,993</td>
</tr>
<tr>
<td>Dtr</td>
<td>CloudPools savings</td>
<td>$0</td>
<td>$167,310</td>
<td>$354,510</td>
<td>$599,040</td>
<td>$1,120,860</td>
<td>$895,151</td>
</tr>
<tr>
<td>Etr</td>
<td>Business value added</td>
<td>$0</td>
<td>$425,000</td>
<td>$637,500</td>
<td>$850,000</td>
<td>$1,912,500</td>
<td>$1,551,841</td>
</tr>
<tr>
<td></td>
<td>Total benefits (risk-adjusted)</td>
<td>$5,172,750</td>
<td>$6,940,685</td>
<td>$10,686,760</td>
<td>$14,599,415</td>
<td>$37,399,610</td>
<td>$31,283,253</td>
</tr>
</tbody>
</table>

- **Optimize costs by replacing traditional storage with Isilon.** This benefit includes the costs needed to support the same capacity growth in the prior storage environment. The costs to support this capacity with Isilon are on the cost side of the model. The composite requires 500 TB of capacity initially, increasing to 5 PB of capacity by the end of Year 3. With Isilon, the composite has an average utilization rate of 85% and can also scale in smaller increments, reducing overprovisioning. In the prior environment, the average utilization rate was 60%.

- **With Isilon, storage management complexity doesn’t grow with added capacity.** The composite consolidates multiple silos of storage and automates many management tasks using tools like SmartPools. Adding new nodes to an existing cluster takes minutes, and then OneFS automatically redistributes data across all nodes in the cluster. Isilon is also highly resilient; for some, it eliminates downtime completely. In the prior environment, each admin could manage 500 TB of data. With Isilon, each admin can manage 10 PB of data.

"Without the scalability of Isilon, our growth wouldn’t be possible. Storage is critical to what we do."

— Senior director of SaaS engineering, software company

"Isilon certainly has contributed to our customer satisfaction. The downtime on Isilon for our services in the total time we have used it is zero. We continuously do necessary upgrades through the platform and scale capacity without disturbing our customers."

— Senior service manager, telecommunications
Isilon frees up data center space. Interviewees found that the improved storage utilization, density, and cloud capability of Isilon all contribute to reduced data center space requirements compared with traditional storage, given the same storage capacity. Isilon takes up an average of 50% less space compared with the prior solution, and with CloudPools, the total space savings grows to 65%.

Choosing ECS for its cloud tier creates additional cost savings. With ECS, the organization achieves added cloud cost effectiveness, principally because ECS has no egress costs. The composite has less than 5% data retrieval each month, but ECS still provides 40% cost savings per gigabyte per month compared with public cloud.

The high performance, scalability, and availability of Isilon directly enable business growth. Some interviewees are able to quantify this impact, which ranges from several hundred thousand dollars of benefit per year to several million in incremental revenue. Forrester concluded that the composite generates $500,000 in incremental revenue in Year 1, increasing to $1 million per year by Year 3.

Costs Include Isilon Storage Costs And Management

The composite organization experienced two categories of cost associated with the Isilon investment. Over three years, the composite organization expects risk-adjusted total costs to be a present value (PV) of $8.9 million.

### Total Costs

<table>
<thead>
<tr>
<th>REF.</th>
<th>COST</th>
<th>INITIAL</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>TOTAL</th>
<th>PRESENT VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ftr</td>
<td>Isilon costs</td>
<td>$1,161,238</td>
<td>$2,346,261</td>
<td>$2,728,987</td>
<td>$4,404,685</td>
<td>$10,641,171</td>
<td>$8,858,869</td>
</tr>
<tr>
<td>Gtr</td>
<td>Implementation time</td>
<td>$69,485</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$69,485</td>
<td>$69,485</td>
</tr>
<tr>
<td></td>
<td>Total costs (risk-adjusted)</td>
<td>$1,230,723</td>
<td>$2,346,261</td>
<td>$2,728,987</td>
<td>$4,404,685</td>
<td>$10,710,656</td>
<td>$8,928,353</td>
</tr>
</tbody>
</table>

The composite organization has two Isilon clusters. In the primary data center, the composite uses X410 appliances and tiers data older than six months to ECS. The composite replicates data to NL410 appliances in the disaster recovery data center. It uses SmartPools, CloudPools, SyncIQ, and InsightIQ software.

Minimal time is spent on upfront and ongoing management of Isilon. The composite spent a total of 1,300 hours designing the Isilon investment, ensuring network infrastructure could support Isilon, and migrating data to the first Isilon nodes. The composite spent minimal time on training, and 0.5 FTEs manage Isilon by Year 3.

An Isilon Investment Today Can Create Future Opportunities

The value of flexibility is unique to each customer, and the measure of its value varies from organization to organization. There are multiple scenarios in which a customer might choose to implement Isilon and later realize additional uses, including:

More cost-effective in-place analytics with the Isilon data lake. Potential benefits for future analytics efforts include avoided infrastructure costs, more efficient data analytics projects, and business impact from data insights.

Additional cost efficiency with Isilon SmartDedupe data deduplication software. SmartDedupe can help organizations achieve additional storage efficiency by reducing the amount of physical storage needed, avoiding unnecessary node purchases, and maximizing the use of data center space.

Average utilization rate
Before: 60%
With Isilon: 85%
Financial Summary

The financial results calculated in the Benefits and Costs sections can be used to determine the ROI and NPV for the composite organization’s investment in Isilon. Forrester assumes a yearly discount rate of 10%.

For more information, you can download the full Isilon TEI analysis here.

Disclosures

The reader should be aware of the following:

- The study is commissioned by Dell EMC and delivered by Forrester Consulting. It is not meant to be a competitive analysis.
- Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the report to determine the appropriateness of an investment in Dell EMC Isilon.
- Dell EMC reviewed and provided feedback to Forrester. Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester’s findings or obscure the meaning of the study.
- Dell EMC provided the customer names for the interviews but did not participate in the interviews.

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ABOUT TEI

Total Economic Impact™ (TEI) is a methodology developed by Forrester Research that enhances a company’s technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders. The TEI methodology consists of four components to evaluate investment value: benefits, costs, risks, and flexibility. https://go.forrester.com/consulting/