

Quantifying the Value of Nasuni Enterprise File Services

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Executive Summary

ESG was engaged by Nasuni to conduct a detailed Economic Value Validation (EVV) and develop a quantitative model that can be used to assess how Nasuni's Enterprise File Services better store and manage unstructured data over a three-year period. The analysis is designed to help IT organizations determine the fully burdened costs and benefits of Nasuni compared with a "present mode of operation" (PMO) that reflects how organizations typically manage their unstructured data today.

The model and the analysis show Nasuni offers the opportunity for organizations to significantly lower costs and improve efficiency and productivity. ESG's analysis of a

Nasuni Modeled Scenario Highlights of ESG Economic Value Validation:

- 73% Relative Savings and Benefits over Traditional NAS
- \$3.1M in Expected Savings and Benefits over Three Years
- 77% More Productive Employees
- \$4.54 Lower Cost/GB
- 183 Fewer Admin Hours/Week
- Shift Storage Costs from CapEx to OpEx

modeled use case for a typical 250TB Nasuni deployment resulted in \$3.1M in savings and benefits, a 60% savings over traditional NAS deployments over three years. Nasuni enables an organization to dramatically reduce upfront CapEx costs in favor of predictable OpEx spending spread out over time. Other benefits related to management, scalability, and productivity also add to the bottom line.

ESG's thorough analysis shows that organizations seeking to spend less on storing and protecting their growing volumes of unstructured data while making better and more efficient use of it would do well to consider Nasuni Enterprise File Services.

Challenges

Unstructured data volumes continue to grow every year. Organizations create and retain documents, as well as audio, video, and image files as they strive to improve business agility, worker mobility, and regulatory compliance. Traditional storage silos can make it difficult to deliver file data to the right locations and devices with the performance expected today. In addition, infrastructure silos for backup, archiving, and disaster recovery must be deployed and managed, adding to the burden.

Managing all this data and the infrastructure to support it can be complex and expensive, with costs rising as data volumes grow. And, despite much improvement in economic conditions over the past few years, reducing costs remains a perennial business objective. In ESG's 2016 IT Spending Intentions Survey, reducing costs was the second most-cited business initiative driving technology spending, second only to cybersecurity. When asked what strategies they used to reduce costs, respondents cited the increased use of cloud computing services more than any other (see Figure 1).²

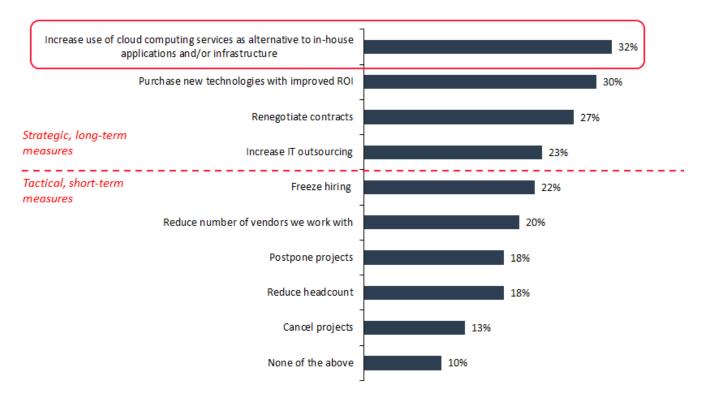
¹ Source: ESG Research Report, <u>2016 IT Spending Intentions Survey</u>, February 2016.

² ibid.



Figure 1. IT Cost Reduction/Containment Strategies

Which of the following measures – if any – is your organization taking to reduce or otherwise contain IT expenditures over the next 12 months? (Percent of respondents, N=633, multiple responses accepted)



Source: Enterprise Strategy Group, 2017

The Solution: Nasuni Enterprise File Services

Nasuni offers an integrated network-attached storage (NAS) service to store and synchronize files across multiple geographic locations. Nasuni combines cloud services with high-performance hardware appliances to meet the demands of unstructured data in the enterprise. It provides a stable, scalable file system that can be globally distributed. Nasuni increases an organization's operational efficiency by streamlining the infrastructure required to manage unstructured data at scale and across geographies. It gives an organization complete control of files regardless of geographic location, workload requirements, or mobile device type.

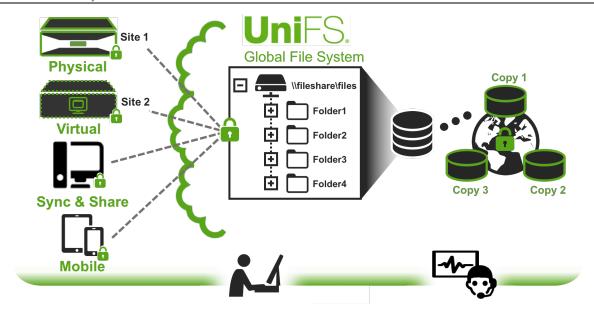
The solution uses on-premises Nasuni Edge Appliances that are back-ended by public cloud storage providers such as AWS and Microsoft Azure. Nasuni provides instant access to data from any location. Stringent access controls and security enable all locations to have read-write access where enabled, so distributed teams can work from the same shared data set. Changes made at one location quickly appear at others. Data security, automatic backup, and offsite replication are built in, and the cloud provides unlimited scalability to handle data growth. Nasuni offers a service level agreement based on its ability to treat the cloud as a component of its system. The company continuously monitors the system and cloud storage providers and can proactively address issues that arise. Customers purchase the hardware (or use included Virtual Edge appliances) and pay for services monthly, with Nasuni consolidating the billing from public cloud providers.

Figure 2 provides an architectural overview of a Nasuni deployment. On the left are the Nasuni Filer, sync and share, and mobile applications that provide access to the globally shared pool of data volumes. Data is presented to users with



industry-standard protocols³ that support both NAS and SAN workloads. This is different from other cloud solutions that extend their onsite file systems to the cloud and connect to their data using APIs. Data volumes are stored in the cloud-based UniFS file system, along with redundant copies of each file with its version history. Administrators can centrally manage the entire deployment (regardless of the number of locations) with the Nasuni Management Console. Individual Filers can also be managed using a role-based individual console, and the 24x7 Nasuni Network Operations Center provides monitoring, management, and proactive support.

Figure 2. Nasuni Enterprise File Services



Nasuni Management Console Nasuni Operations Center

Source: Enterprise Strategy Group, 2017

Nasuni benefits include:

- Multi-site access. The Nasuni architecture allows multiple Edge appliances at multiple locations to access the same live volume. A gold data copy with a single version history is stored in the cloud and can be shared by any Nasuni Edge appliance. Each Edge appliance accesses the same single version stream and can roll back to any point in time, regardless of where the data was created. All versions are saved as individual, unchangeable units that remain available and navigable for rollback, and all locations get local storage performance and immediate access.
- Centralized control. The Nasuni Management Console provides a single pane of glass for IT administrators to manage their globally distributed deployments, including appliance management, volume management, and system monitoring.
- **Security**. Data is encrypted on-premises with AES-256 encryption and remains encrypted in transit and at rest in the cloud. This military-grade encryption is the highest level of security available, and ensures that data is accessible and readable only by those with access privileges. Key creation and management reside with the enduser, so neither Nasuni nor the cloud provider can view data.

³ Nasuni supports the CIFS/SMB, NFS, FTP/SFTP, iSCSI, and HTTPS protocols.



- Infinite scalability. Nasuni provides true capacity on demand and unlimited scalability. When users request additional storage, Nasuni simply upgrades the license and more capacity is immediately available. This enables organizations to grow organically in step with business needs, keeping budgets on track and eliminating costly upfront provisioning.
- Data protection. Data protection is automatic and built into the Nasuni service. The Nasuni Edge appliance sends continuous versions to the cloud, eliminating the need for additional data protection stacks. No backup or replication software is needed, no duplicate servers or storage need to be purchased and managed, and no secondary corporate locations are required. File-level restores are instantaneous and can be done with simple navigation. All data is protected in the cloud, where it is automatically replicated with three copies in at least two geographically redundant locations. For disaster recovery, complete access to all files can be restored within 15 minutes, which is the time it takes to download a virtual appliance, configure access, and provide the license and encryption keys.
- **Desktop and mobile file synchronization**. Users can enable a folder on their desktops for local files that will be not only be synced back to the Nasuni service, but also available to that user's laptop and iOS/Android mobile devices.
- Global File Locking. Nasuni's Global File Locking is incorporated into the cloud-based service, eliminating the failures and bottlenecks that local hardware controllers can experience when running locking. It was designed to simplify and speed collaboration on files among distributed locations.
- Ease of deployment. Nasuni Edge appliance installation and volume creation are simple tasks. Shares can be connected to clients at other locations through the Nasuni Management Console.
- **Service level agreement**. Nasuni offers the most stringent SLAs in the industry, including 100% availability, accessibility, security, and immutability of data. Its guarantee includes penalties should Nasuni fail to deliver.

Economic Value Validation (EVV) Process

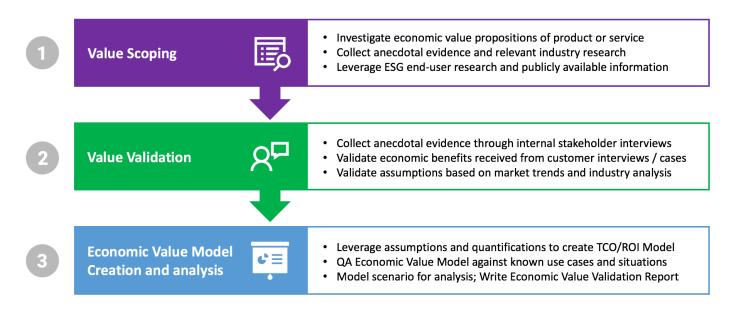
ESG's Economic Value Validation process is a proven method for understanding, validating, quantifying, and modeling the economic value propositions of a product or solution. The process leverages ESG's core competencies in market and industry analysis, forward-looking research, and technical/economic validation. The EVV process consists of four main phases: value scoping, validation, quantification, and model development.

In the value scoping phase, ESG works with a vendor's internal stakeholders to discuss the ways in which the product or solution can impact potential customers. These economic benefits may be in the form of costs savings (e.g., lower CapEx or OpEx), cost avoidance (e.g., reducing compliance risk or eliminating the need for professional services), increased revenue (e.g., faster task completion or the ability to handle more desktops), and other soft benefits (e.g., increased user productivity or higher customer satisfaction). In the value validation phase, ESG conducts in-depth interviews with endusers to better understand and quantify how these potential value propositions have impacted their organizations, particularly in comparison with previously deployed and/or experienced solutions.

In the final stages, ESG blends the quantified values revealed through the stakeholder and customer interviews with known industry values and additional research, resulting in a validated set of assumptions on which to build a scalable and dynamic TCO/ROI model. This Economic Value Model (EVM) accepts as inputs the answers to typical qualifying questions regarding a potential customer's IT environment and business needs. The model then returns a detailed report of expected savings, TCO, and ROI over a given time period, as compared with a relevant, defined present mode of operation. An overview of the ESG Economic Value Validation process is shown in Figure 3.



Figure 3. ESG EVV Methodology



Source: Enterprise Strategy Group, 2017

Economic Value Overview

ESG validated Nasuni Enterprise File Services' economic value propositions through customer inquiry and interviews, as well as audits of customer case studies. These organizations covered a range of industries including architectural, engineering, manufacturing, legal, healthcare, and education firms. Deployments ranged from several TB to multiple petabytes, many with file data distributed across hundreds of global locations and the need for multi-site access, file synchronization, and strict regulatory compliance.

These customers revealed how Nasuni Enterprise File Services had helped them reduce storage-related TCO in numerous ways, including the following.

Savings over Traditional Storage

- Significantly lower hardware and software acquisition costs, including onsite storage arrays, backup devices and media, and licenses for data protection, deduplication, replication.
- ☑ Lower maintenance and support costs based on reduced hardware.
- ☑ Lower infrastructure costs; less hardware means less power, cooling, and floor space, plus reduced need for data protection, add-on storage for growth, or servers to run software.
- ☑ Lower costs of staffing and professional services due to simpler, centralized, self-service administration.

One challenge Nasuni addressed for these customers was the ever-growing volume of file data, and the unrelenting cost of storing and protecting that data. Organizations mentioned:

"We can reduce the amount of hardware—storage at the edge, and file server sprawl—and we can get rid of third party offsite tape providers."

"We don't need to buy excess capacity for future growth—instead, we scale on demand and only pay for the storage we use."



"Is it really smart for us to put capital outlay toward storage technologies when our consumption just keeps growing? Spend \$1M on new gear, and when that goes end of life, spend another \$1M. Our initial investment with Nasuni was 100TB—but that eliminated the need for a \$1.2M capacity upgrade."

"We've replaced our entire file storage system at the same cost as we were paying for our backup before Nasuni."

"The more we use, the more money we save."

Customers also consistently mentioned that traditional data protection was too expensive and difficult to manage. Here Nasuni provided them with significant savings. Nasuni pushes less active data off expensive hardware into the cloud, eliminating expensive backup and DR systems. Customers commented:

"A fairly significant portion of our [IT] budget was spent not just on internal storage, but the backup of that storage – and then offsite backup. It was a no-win situation."

"We would have spent more than \$1M in the next three years just on backup storage. Instead we'll save 50% over the next three years on backup alone, and slashing MPLS traffic will generate additional savings. All while improving the user experience and reducing risk."

A third area of savings that customers mentioned was operational costs. Staffing costs to manage growing file data storage and protection were a common theme. Savings categories included:

Operational Savings

- ☑ Costs moved from upfront CapEx to more predictable, monthly OpEx with Nasuni and cloud subscriptions that include storage and data protection.
- ☑ Lower staffing costs for storage provisioning, setup and upgrades, project management, help desk, and managing backup, replication, and restore activities.
- ☑ Lower costs due to elimination of need for pre-installation and periodic professional services/consulting.
- ☑ Greater IT efficiency due to simple, self-service, centralized management.

For some, larger file sizes were the driver of larger operating costs. More TBs to manage translated into more staffing. One organization with 220 TB of storage knew that its capacity needs were going to at least double, and maybe triple, in coming years, but Nasuni reduced the IT complexity and administrative effort required. Organizations stated:

"We knew we'd be at least doubling our capacity, so if we continued with our storage array, we would need at least two additional FTEs. With Nasuni, we don't."

"Really, we're getting 20%-30% more out of our grant dollars [with Nasuni]."

"In addition to meeting all our technical requirements, the cost effectiveness and ease of expansion made Nasuni the right solution for us."

A global file share, and simple, centralized data management and data efficiency make the difference for many organizations. Customers stated:

"Creating a global file share and managing data from the center will lead to unprecedented production efficiency for IT and business operations."

"We've seen dramatic improvements in efficiency, particularly in our Revit/Facility business line. We have much less data sprawl across offices, and massive amounts of GIS data are centralized and deduplicated."



Another operational challenge that Nasuni solved for customers was to reduce the need for data migrations, whether for global access or for storage array upgrades. Customers mentioned large data migrations of more that 100 TB that required 6-12 months to complete. Some customers tried scale-out storage as a solution, but that required additional data center floor space and strained energy systems, driving up costs unexpectedly.

"It's much more cost effective for us, and a lot easier to manage. Migrations have become a thing of the past.

"Data migrations used to cause long interruptions. With Nasuni we have a predictable cost structure without ongoing sales negotiations."

Economic Benefits from Improved End-user Productivity

- ☑ Greater employee productivity due to less time spent dealing with help desk and support.
- Greater employee productivity due to fewer interruptions from planned or unplanned downtime, including backup, replication, server administration, and file data restore.
- ☑ Greater employee productivity due to global file availability, mobile access, and less application downtime and delay.

Although they are not always the easiest to identify, productivity improvements have a big impact on organizations. They keep IT employees more engaged in value-added activities rather than on managing infrastructure components, and they return valuable work time to all employees. The time users spend waiting for support, waiting for file restores, and being interrupted by application downtime for IT tasks such as server, storage, and backup administration reduce an organization's revenue-generating potential. Also, an improved ability to collaborate increases productivity. Some customers talked about their ability to work better together with Nasuni:

"We have increased our collaboration, and made our billable professionals much more productive."

"We collaborate so much better now – Nasuni makes it easy to scan, synchronize, and share data, and access it anywhere in real time."

... while others mentioned overall productivity improvements:

"This becomes a foundation that other platforms may build on, helping us to implement VDI, mobile data, and more manageable, reliable data protection."

"When we deployed Nasuni in one of our largest offices, with senior executives on-site, no one noticed. That's the perfect scenario—better storage and no change to end-users."

"We are at our most efficient when our manufacturing facilities are running—any downtime costs us money. Nasuni has increased productivity across the company by dramatically improving file access and replication across offices."

"When I'd receive a ticket for a lost file it would take approximately two hours to close. With Nasuni, start to finish, we're talking five to ten minutes. In some cases, two minutes."

The ability to scale fast and easily was mentioned many times by customers. Scaling traditional storage requires calling a storage vendor, getting a quote, presenting it to management, and then waiting months for the procurement process. Or it requires buying excess capacity up front that sits idle and wasted until it's needed. Nasuni eliminates all that.

"I can't tell you how much easier it makes my life, not having to upgrade drives, migrate data, figure out what disk trays will cost, and figure out our backup needs."



"As we need more we just press a button and watch it add more storage. We place the order and it's done – that leaves me to worry about other projects and make our IT department and infrastructure better than we see today."

Economic Modelling

ESG's Nasuni Enterprise File Services Economic Value Model

ESG leveraged the information collected through vendor-provided material, public and industry knowledge of economics and technologies, and the results of customer interviews to create a three-year TCO/ROI model that compares the costs and benefits of deploying Nasuni Enterprise File Services with a defined present mode of operation (PMO). The model considers the number of users, mobile users, remote offices, and data center locations, as well as the use of physical or virtual Nasuni Filers. It offers a comparison with entry-level, mid-range, or enterprise-scale NAS solutions.

The model considers how much file data is in use and the annual data growth rate, and for data protection, the frequency of full and incremental backups and the amount of data replicated remotely. It also considers the number of applications that access Nasuni services and the required level of collaboration. These requirements were used to size both the Nasuni and PMO configuration. The model calculates and reports the difference between the Nasuni and PMO configurations for storage TCO CapEx and OpEx (cost of acquisition, power/cooling/floor space, support/maintenance, and administration), as well as additional economic benefits derived from advantages resulting in improved user and IT productivity and faster time to value.

It should be noted that the data and conclusions presented in this report reflect the output of ESG's economic value analysis based on the specific use case and assumptions modeled for this report. ESG acknowledges that changes to these assumptions will lead to a different set of results, and therefore advises IT professionals to use this report as one validation point in a comprehensive financial analysis prior to making a purchase decision.

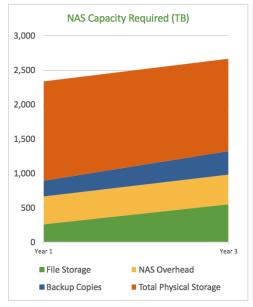
Pricing assumptions for Nasuni products were provided by Nasuni. Other IT equipment and labor cost assumptions were obtained from publicly available sources such as IT vendor websites and published price lists. ESG acknowledges that list prices, configuration details, or other data used as inputs may vary depending on information sources.

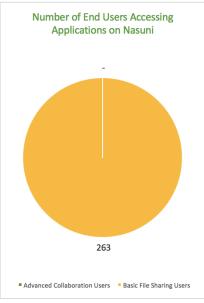
Example: Using the EVM to Predict Savings for a Modeled Organization

To illustrate the economic advantage of Nasuni Enterprise File Services over a traditional storage deployment, ESG ran a set of assumptions through the ESG Economic Value Model. One scenario modeled a mid-market organization such as a media and entertainment company, with 500 users (growing to 550 over three years), 400 mobile users, two corporate locations, eight remote offices, and two locations to be added over three years. This example company used 80% physical Nasuni Filers and 20% virtual. The workloads and assumptions are discussed in detail in the following paragraphs and summarized in Figure 4.



Figure 4. Summary of Workloads Modelled







Source: Enterprise Strategy Group, 2017

ESG assumed that this organization had 250 TB of file data with an annual growth rate of 30%. The modeled organization performed weekly full backups and daily incrementals for each file server, with 50 TB of backup data remotely replicated for protection, and 100 TB replicated to multiple locations for fast access. The media and entertainment application required only basic-level file sharing since most end-users simply view the files without modifying them. As Figure 4 shows, this would result in the PMO deploying more than 2.5 PB of total raw NAS capacity required across all sites over three years to account for file storage, backup copies, and NAS overhead.

Next, ESG added in conservative assumptions related to typical salaries; hardware, sync and share, and cloud costs; and product discounts. With all this information entered, the ESG EVM calculated that by deploying Nasuni File Services instead of a traditional mid-range, on-premises storage infrastructure, the modeled organization could expect total savings and benefits of more than \$3.1M over a three-year period (see Figure 5). ESG calculated a relative savings and benefits advantage of 73% (derived by dividing the sum of all expected savings and benefits by the expected total cost of ownership for a traditional infrastructure over a three-year period).

Figure 5. Summary of Potential Savings and Benefits Realized through Nasuni Deployment



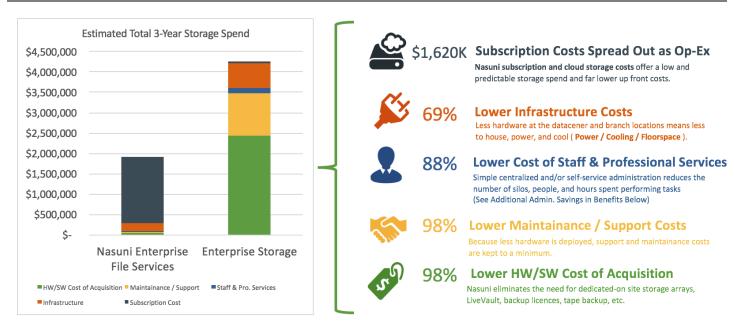
Source: Enterprise Strategy Group, 2017

Of the roughly \$3.1M in expected savings and benefits, about \$2.3M is expected as a result of traditional storage CapEx and OpEx savings, with more than \$750K in additional benefits related to the subscription-based Nasuni deployment.

Nasuni Subscription versus Traditional Storage TCO Savings

Figure 6 shows a breakdown of various savings categories. Because the Nasuni deployment leverages subscription-based, cloud storage, this model confirms \$1.6M in savings due to the significantly smaller upfront CapEx costs spread out as more predictable OpEx. Infrastructure costs would be 69% lower due to reduced power, cooling, and floor space costs, and staffing and professional service costs would be 88% lower because of the simpler, centralized administration of fewer infrastructure silos. ESG's economic model predicts 98% lower cost of acquisition and 98% lower cost of warranty and maintenance; it should be noted that acquisition and support savings would change along with the type of storage deployed.

Figure 6. Nasuni Subscription versus Traditional Enterprise Storage



Source: Enterprise Strategy Group, 2017



Operational Savings

The Nasuni solution can also significantly reduce operational expenses, and these results from our model are shown in Figure 7. These operational savings are the result of Nasuni reducing the time required by storage, networking, and server administrators, as well as IT decision makers and customer support engineers, when compared with managing a physical deployment across many sites. The modeled scenario improves operational efficiency by 78%, due to centralized management and automation, plus 98% savings from simpler data protection, with less time spent on backups, restores, and replication. Simpler scaling would yield 89% OpEx savings because there would be no need to deal with planning and executing strategies to address traditional storage growth. Another OpEx benefit would be 59% faster problem resolution since fewer storage-related issues would occur.

Additional Economic Benefits Expected with Nasuni Quicker Support Problem Resolution \$600,000 Operatinal savings due to less time spent on customer support issues through quicker identification and remediation of potential storage related issues. \$500,000 89% Simpler Capacity Scaling \$400,000 Operational savings due to less time spent dealing with growth of storage needs and planning future growth. \$300,000 98% Simpler Data Protection for IT Admins \$200,000 Operational svaings due to improved RPO/RTO and less time spent on data protection operations such as backups, restores, and replication. \$100,000 78% Improved IT Operations Efficiency \$-Operational savings due to general improvements in IT efficiency gained through centralized management, global namespace, Nasuni Enterprise File Services automation, etc. ■ Improved IT Operations Efficiency ■ Simplified Data Protection ■ Simplified Scaling Quicker Problem Resolution

Figure 7. Estimated Operational Savings

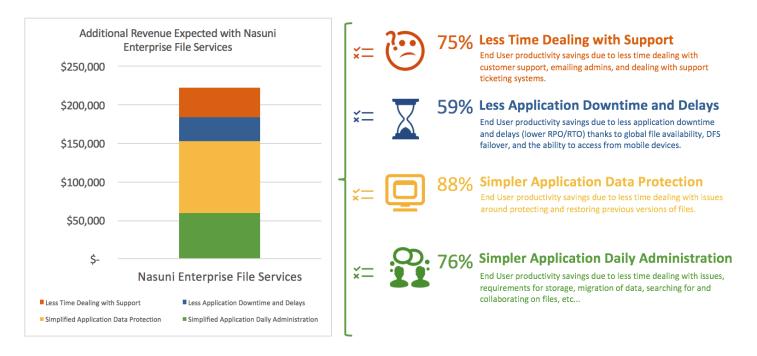
Source: Enterprise Strategy Group, 2017

Economic Benefits of Improved End-user Productivity

ESG's model predicted additional economic benefits that may not at first be apparent. These productivity savings are often difficult to accept until one realizes that simplifying a process acts as a force multiplier resulting in productivity improvements across many levels of the organization. The simplicity of the Nasuni solution enables end-users, administrators, decision makers, and support personnel to be more productive because they spend less time having to get and give support, leaving more time to work on revenue-generating activities. ESG's model estimates savings of 75% due to a decrease in time spent dealing with support. Global file availability means users have less application downtime and delays while waiting for file access. Simpler data protection and general administration of file services also result in better end-user productivity. The model predicted savings due to a 59% decrease in application downtime and delays, 88% due to simpler data protection, and 76% due to simpler daily administration. These results from the EVM are shown in Figure 8.



Figure 8. Estimated Savings from End-user Productivity Improvements

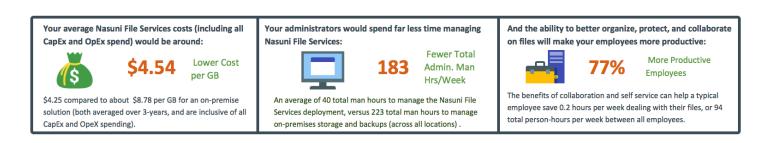


Source: Enterprise Strategy Group, 2017

Key Metrics Calculated from Modeled Analysis

Based on the results of the analysis, ESG's EVM calculated and reported some key purchasing metrics. While many organizations typically consider only the cost/GB provided by a storage solution, caution is advised. Cost/GB will fluctuate greatly depending on how capacity and cost are defined: for example, usable versus raw capacity, or cost of acquisition only versus all costs. ESG's model calculated the usable capacity cost/GB (as a function of all three-year CapEx- and OpExrelated costs) to be \$4.54 less per GB for the Nasuni solution than for the on-premises, mid-range storage solution. Another useful metric is the number of hours saved in administrative time: The Nasuni solution would require 183 fewer person-hours per week than the traditional deployment. The EVM also calculated that employees could be 77% more productive while accessing their data⁴ with the improved collaboration and self-service of the Nasuni solution. The key metrics summary for the modeled organization is shown in Figure 9.

Figure 9. ESG's Modeled Organization – Summary of Key Metrics Achieved with Nasuni



Source: Enterprise Strategy Group, 2017

⁴ Productivity increase would be applicable during periods of time previously spent dealing with files, not during all other tasks. Expected weekly hours saved per employee is shown in key metric details.



Additional Modeled Scenarios

There is much variability across distributed organizations when it comes to their unstructured data and workload requirements. To create a broader picture of potential Nasuni Enterprise File Services savings, ESG modeled two additional scenarios using assumptions for other typical Nasuni customers: one managing 100 TB of capacity, and one managing 500 TB of capacity. These scenarios use different assumptions in terms of users, locations, and PMO comparisons, but they provide insight into the savings available at different capacity levels. The table below provides a few highlights: total savings, storage-specific savings, reduced administrative hours/week, and the reduction in cost/GB.

	Total Three-year Savings and Benefits	Estimated Three-year Storage Savings	Fewer Admin Hours/Week	Lower Cost Per GB (\$/GB Savings)
100 TB	\$2.6M	\$1.4M	115	\$8.42
250 TB	\$3.1M	\$2.3M	183	\$4.54
500 TB	\$15.4M	\$13.9M	216	\$23.84

Note that in the 500TB example, the savings are drastically increased. This scenario modeled a much larger organization with many more data centers, remote sites, and users, and compared against enterprise-level storage arrays and backup solutions rather than mid-range storage arrays and backup solutions. This further illustrates the point that Nasuni subscription-based file services provide a more predictable and scalable cost structure as the organization grows.

Net-new versus Phased Deployment

It should be noted that the ESG model and results are based on a comparison between deploying a new Nasuni Edge appliance and cloud-subscription solution versus a new traditional, on-premises storage infrastructure in multiple data centers and remote offices. This comparison assumes that the organization must purchase (or upgrade) all existing storage across all sites. If customers instead phase out their traditional NAS infrastructure over time, the costs and savings will vary depending on how much and what type of hardware is in use, the age of this hardware and its expected replacement rate, licensing and support considerations, etc. In this case, spending may increase for a short period of time as customers deal with both traditional CapEx and Nasuni OpEx costs until data and workloads are completely migrated. Once the traditional infrastructure is phased out, the organization will be left with only subscription costs, and growth can be accommodated easily; in comparison, growth in the traditional infrastructure will require periodic additional capital expenses. It is essential that this tool be used as part of your own analysis, based on the realities of your situation.

The Bigger Truth

File data and its enormous growth continue to challenge organizations of all sizes. There are many drivers of this, and chief among them is the ability of today's mobile workforce to create and consume documents, design files, video, audio, images, etc. on multiple devices no matter where they are. Other key drivers include compliance requirements that demand more data copies and longer retention; increasingly large and complex files such as higher fidelity images; advancements in scanning and video technologies across multiple industries; DNA sequencing technologies; and IoT devices.

For many, the costs of storing, managing, and protecting all this data with traditional storage silos has become overwhelming. As organizations search for strategic, long-term solutions, they increasingly turn to cloud-based solutions,



which can often provide not only a better cost structure, but also improvements in functionality that make organizations more productive.

Nasuni Enterprise File Services were born in the cloud and built for cloud scale and economics. Leveraging high-performance Nasuni Edge appliances, a global file system, and cloud storage, Nasuni provides shared file access along with automatic data protection and built-in security. Cloud storage provides unlimited scalability to handle data growth that can be accommodated without the traditional procurement delays. Nasuni delivers the file access, performance, and protection organizations demand today, while dramatically reducing the amount of hardware, software, data protection, disaster recovery, administration, and support required. This results in significant costs savings, and with Nasuni, costs are spread out over time instead of paid up front. In addition, the ability to scale quickly and easily eliminates a common, expensive, and wasteful tactic: that is, buying more storage than you need to minimize future disruption when you grow.

ESG used its Economic Value Validation process to explore and validate the potential costs savings of Nasuni Enterprise File Services over a traditional storage infrastructure. At a high level, we validated significant savings and benefits related to:

- ☑ Storage, including hardware and software, data center infrastructure services, and management.
- ☑ Operations, including moving to subscription-based OpEx instead of upfront Capex; staffing; maintenance, support, and professional services; and the improved efficiency of centralized management.
- ✓ Improved productivity due to better data access and less disruption and downtime.

We modeled a typical media customer with 250 TB of data, and validated more than \$3.1M in overall savings and benefits over three years, a 60% improvement over a traditional mid-range NAS deployment. Nasuni Enterprise File Services delivered \$4.54 lower cost/GB, 183 fewer hours per week of administrative effort, and 77% more productive employees. While this modeled scenario is revealing, the importance of the ESG model is its ability to accommodate specific inputs that show customers very specific savings and benefits based on their current situations and future expectations.

Getting file data costs under control is critical for many organizations. Traditional storage and data protection silos are staggering under the weight of massive data growth, and there are likely much better ways to spend your organization's IT budget than on continuing to use these traditional methods when there are options like Nasuni that provide better data services at lower cost. ESG's Economic Value Validation process clearly demonstrates the significant savings and benefits available from leveraging cloud-based Nasuni Enterprise File Services. If you are tired of attempting to predict your distributed storage requirements, and are looking to leverage the agility and flexibility of the cloud to control both capital and operational costs, ESG strongly advises you to ask your Nasuni representative to enter your organization's requirements into the ESG Economic Value Model to see if Nasuni Enterprise File Services is the right solution for you.

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