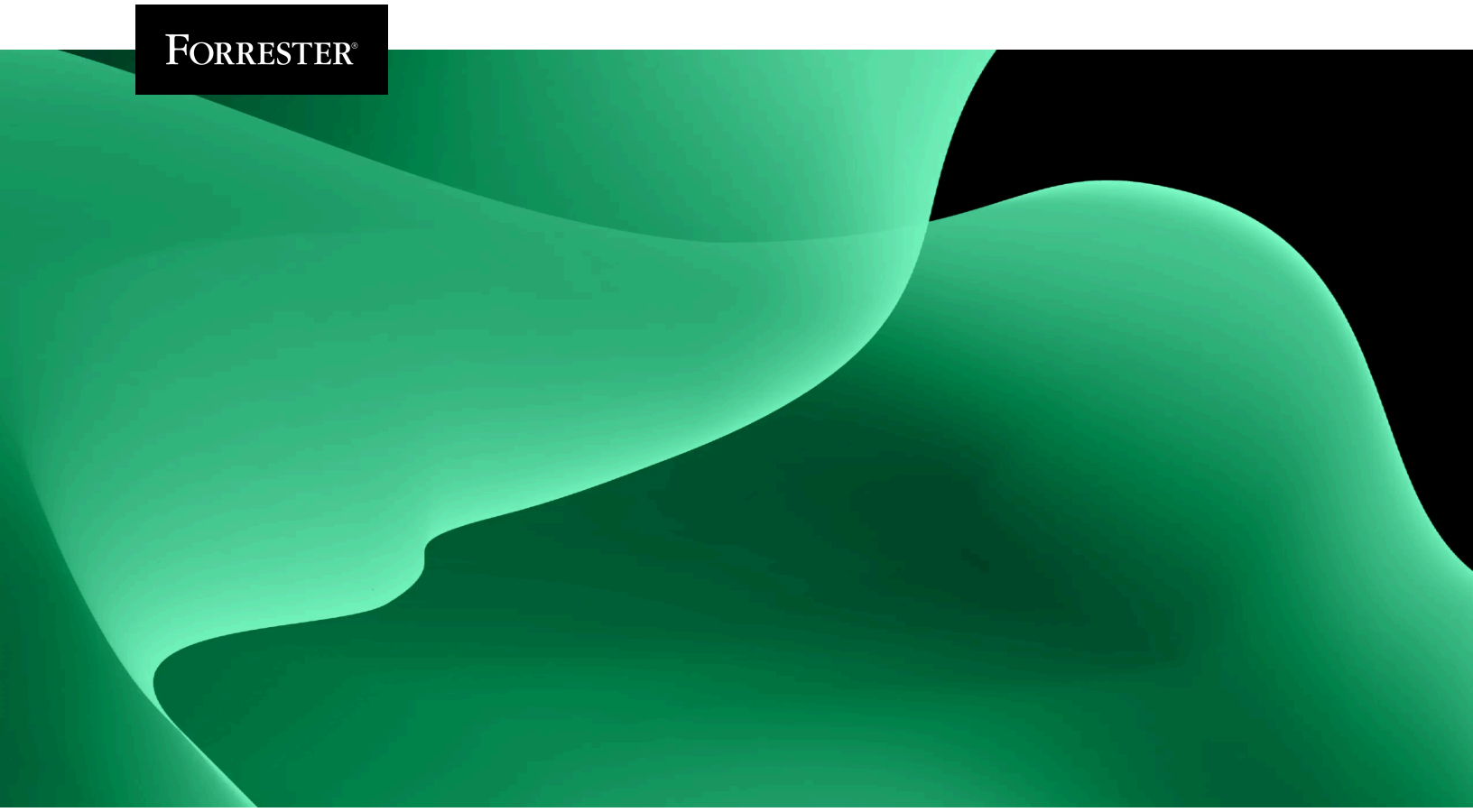
Total Economic Impact

The Total Economic Impact™ Of Hitachi Vantara Virtual Storage Platform One

Cost Savings And Business Benefits Enabled By VSP One

A FORRESTER TOTAL ECONOMIC IMPACT STUDY COMMISSIONED BY HITACHI VANTARA, JULY 2025



Executive Summary

Organizations across industries are facing increasing demands for performance, scalability, and simplicity in their data infrastructure, especially as workloads grow more complex and data volumes surge. Many are seeking solutions that not only meet current operational needs but also provide headroom for future growth, improved efficiency, and seamless integration with evolving IT environments. This study explores how forward-looking enterprises are addressing these challenges by adopting modern storage architectures that deliver measurable gains in performance, usability, and long-term flexibility.

VSP One Block is a unified, all-flash storage platform engineered to deliver high performance, simplified operations, and seamless scalability for mission-critical workloads. Built on nonvolatile memory express (NVMe) technology, it supports hybrid cloud environments, automates data management with AI-enhanced tools, and guarantees 100% data availability while reducing operational complexity. With built-in sustainability features like intelligent power optimization and carbon impact reporting, it empowers organizations to meet performance, efficiency, and environmental goals with a single solution.

Hitachi Vantara commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying VSP One.[1] The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of VSP One on their organizations.

285%

Return on investment (ROI)

$1.1M

Net present value (NPV)

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed six decision-makers with experience using VSP One. For the purposes of this study, Forrester aggregated the experiences of the interviewees and combined the results into a single composite organization to reflect common challenges, goals, and outcomes.

Interviewees shared that before implementing VSP One, their organizations often relied on aging or fragmented storage systems that lacked the performance, scalability, and simplicity needed to support evolving business demands. Previous efforts to modernize storage infrastructure were hindered by complexity, inconsistent performance, and limited flexibility, resulting in operational inefficiencies, difficulty meeting service-level expectations, and constrained support for digital transformation initiatives.

Following the investment in VSP One, interviewees reported a shift to a more unified, high-performance storage environment that simplified management and improved responsiveness. Key outcomes included enhanced data availability, improved performance for mission-critical workloads, streamlined administration, and greater readiness to support hybrid cloud strategies and future growth.

Key Findings

Quantified benefits. Three-year, risk-adjusted present value (PV) quantified benefits for the composite organization include:

- **Gained operational efficiencies from storage modernization, worth $915,000 over three years.** VSP One reduces operational complexity at the composite by 35%, enabling IT teams to reallocate two-thirds of storage architects' time to higher-value initiatives. Simplified management and automation features also cut troubleshooting time by 40%, saving hundreds of hours annually. These improvements help the composite organization avoid additional headcount growth while accelerating responsiveness to internal IT requests.

- **Decreased cost from increased storage efficiency due to compression and deduplication capabilities of VSP One, worth $373,000 over three years.** The composite organization benefits from VSP One's built-in data reduction technologies, which enable significant storage efficiency gains. These efficiencies allow the organization to delay storage expansion, avoid hardware purchases, and reduce storage-related capital expenditures — and maintain performance and scalability without increasing its physical storage footprint.
- **Increased time savings from optimized workloads and faster provisioning due to AI/ML capabilities, worth $241,000 over three years.** These efficiencies enable faster sprint cycles, reduce IT/developer coordination, and free up staff for strategic projects at the composite organization. This agility empowers teams to deliver updates more frequently and support evolving business demands with less overhead.

Unquantified benefits. Benefits that provide value for the composite organization but are not quantified for this study include:

- **A smoother procurement process due to trust in the vendor.** Several interviewees noted that Hitachi Vantara's reputation for reliability and support made it easier to get internal approval for the purchase. This trust helped reduce friction during procurement and planning. It also gave teams more confidence in the long-term viability of the solution, reducing the need for extensive vendor evaluations.
- **A better experience for IT staff.** Interviewees' teams found the system easier to use day to day, with a more intuitive interface and fewer manual tasks. This allowed staff to spend less time troubleshooting and more time on higher-priority work. Junior team members were also able to contribute more quickly, reducing the learning curve for new staff.
- **Support for modernization goals.** VSP One helped the interviewees' organizations move away from outdated infrastructure and better support newer workloads like AI and hybrid cloud. It was seen as a step toward broader IT modernization efforts. In some cases, it enabled projects that had previously been delayed due to infrastructure limitations.
- **Improved security and compliance capabilities.** Interviewees said built-in features like encryption and immutable snapshots gave their teams more tools to protect data and meet compliance requirements. Some interviewees said these features helped them respond more confidently to security incidents. These capabilities were especially important for those handling sensitive or regulated data.
- **Operational simplicity and reduced complexity.** Interviewees told us the platform reduced the amount of time and effort needed to manage storage, which was especially helpful for teams with limited staff. Some interviewees mentioned that tasks that used to take hours could now be done in minutes. This helped reduce burnout and allowed teams to focus on more strategic or cross-functional responsibilities.
- **The ability to scale without disruption.** Interviewees appreciated being able to expand storage gradually without downtime or major reconfiguration, which made it easier to keep up with growing data needs without interrupting operations. It also allowed for more flexible budgeting and planning, as upgrades could be done incrementally.

Costs. Three-year, risk-adjusted PV costs for the composite organization include:

- **Initial setup and implementation costs.** The composite organization incurs a one-time implementation cost of $32,000, which includes internal labor, professional services, and training. It completes deployment with approximately 100 hours of internal effort, 40 hours of external support, and training for three IT staff. It incurs these costs only during the initial rollout; they are not repeated in subsequent years.
- **VSP One Block system cost.** The composite organization incurs a fee of $269,000 for the VSP One Block system in year 0.
- **Standard-tier hardware support.** The composite organization is charged 10% of the VSP One Block fees for standard-tier hardware support each year; this equates to a risk-adjusted $29,920 annually or $74,407 over three years.
- **Ongoing management costs.** The composite organization spends a modest $21,000 over three years on internal management of the VSP One platform. This includes routine administrative tasks performed by IT staff, based on an

estimated 104 hours per year. The platform's simplified operations help keep these costs relatively low compared with legacy systems.

The financial analysis that is based on the interviews found that a composite organization experiences benefits of $1.5 million over three years versus costs of $397,000, adding up to a net present value (NPV) of $1.1 million and an ROI of 285%.

$915K

Three-year risk-adjusted savings from simplified management, reduced troubleshooting, and the reallocation of IT staff to higher-value work

> *"VSP One gave us the flexibility to modernize without disruption. We were able to scale gradually and support new workloads without rearchitecting everything."*
>
> **Lead infrastructure architect, higher education**

Key Statistics

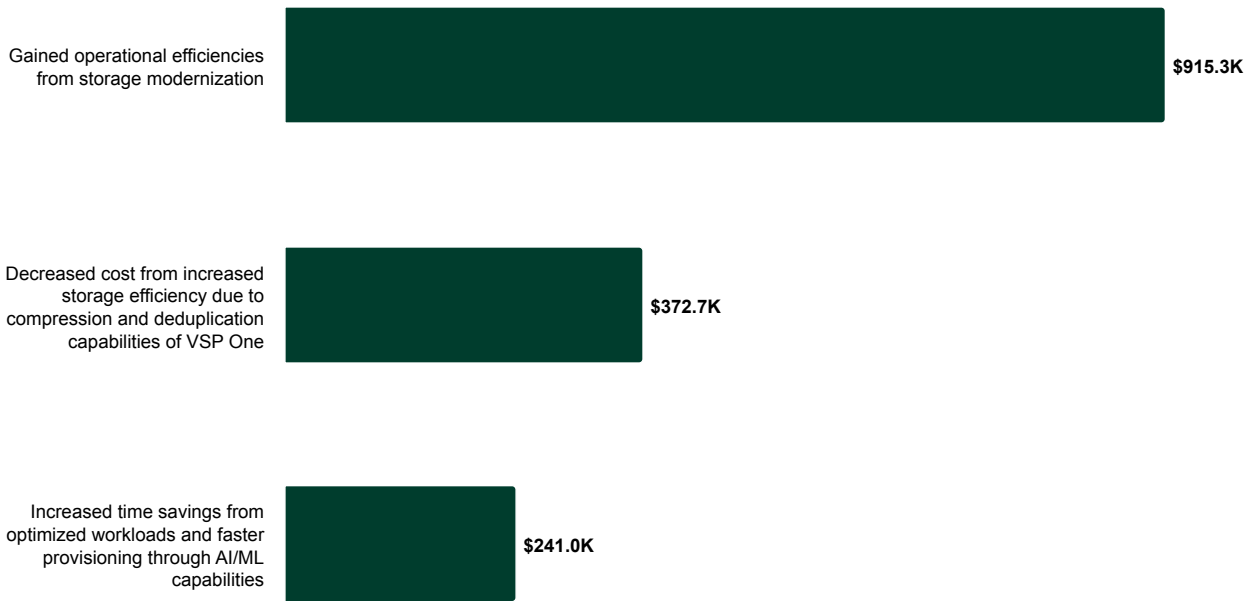
285%
Return on investment (ROI)

$1.5M
Benefits PV

$1.1M
Net present value (NPV)

7 months
Payback

Benefits (Three-Year)



The Hitachi Vantara VSP One Customer Journey

Drivers leading to the VSP One investment

Interviews					
Role	**Industry**	**Headquarters**	**Geographic Focus**	**Revenues**	**Employees**
System network administrator	Investment management	Israel	Middle East	Not disclosed	300
Senior information technology specialist	Government finance	Indonesia	Asia	Not disclosed	6,000
Senior storage architect	Legal services	United States	United States	$2 billion	1,500
Head of IT infrastructure	Education (K-12)	Singapore	Asia	$40 million	1,100
Lead infrastructure architect	Higher education	Denmark	Europe	Not disclosed	4,600
Chief technology officer	Information services	United States	United States	$90 million	900

Key Challenges

Before adopting VSP One, interviewees said their organizations typically relied on fragmented, aging storage systems that struggled to keep pace with growing performance demands and evolving business needs. These environments often included a mix of legacy spinning disk arrays and underpowered flash systems, resulting in inefficiencies, complexity, and limited support for modern workloads.

Interviewees noted how their organizations struggled with common challenges, including the following:

- **Performance limitations hindered critical workloads.** Interviewees said their organizations experienced sluggish response times, particularly for file services, databases, and virtualized environments. Legacy systems lacked the throughput and latency performance needed to support modern applications and user expectations.
- **Scaling storage was inefficient and restrictive.** Existing solutions often lacked the flexibility to scale incrementally or integrate with hybrid environments. Some interviewees noted that their organizations were locked into proprietary ecosystems, making it difficult to expand capacity or support cloud strategies without costly overhauls.
- **Storage management was complex and time-consuming.** IT teams had the burden of managing multiple platforms with inconsistent interfaces and manual processes. This complexity increased administrative overhead, especially for lean teams supporting large infrastructures.
- **Data efficiency capabilities were limited.** Several interviewees noted that their organizations lacked built-in deduplication and compression, leading to inefficient storage utilization and higher costs for capacity expansion.
- **Legacy systems lacked support for modern workloads.** Emerging needs like AI, machine learning (ML), and real-time analytics were poorly supported by older infrastructure, limiting innovation and digital transformation efforts.
- **Security and compliance gaps increased risk exposure.** Interviewees at organizations handling sensitive or regulated data said they struggled to meet compliance requirements. Legacy systems often lacked features like immutable snapshots, integrated encryption, or robust audit capabilities.

> *"Managing multiple platforms with inconsistent workflows and manual processes increased the burden on our already lean team."*
>
> **Senior information technology specialist, government finance**

> *"Legacy systems weren't optimized for AI or analytics. We couldn't support modern workloads or scale efficiently."*
>
> **Lead infrastructure architect, higher education**

> *"We lacked deduplication and compression, so storage was inefficient and costly to expand."*
>
> **Head of IT infrastructure, education (K-12)**

Solution Requirements

The interviewees searched for a solution that could:

- **Modernize legacy infrastructure with future-ready capabilities.** Interviewees' organizations needed a platform that supported NVMe, deduplication, compression, and scalable architecture to replace outdated systems.
- **Improve performance and ensure high availability.** Reducing latency and increasing responsiveness for mission-critical applications was a top priority.
- **Simplify operations and reduce administrative burden.** Teams sought intuitive management tools, automation, and a unified platform to streamline day-to-day tasks.
- **Enhance scalability and hybrid cloud readiness.** The ability to scale incrementally and support hybrid environments without disruption was essential.
- **Strengthen data protection and compliance.** Interviewees' organizations prioritized features like immutable snapshots, encryption, and integrated backup to meet regulatory and security requirements.
- **Optimize cost efficiency.** Reducing the total cost of ownership through better data reduction, lower support costs, and the elimination of legacy systems was a consistent goal.

After a request for proposal (RFP) and business case process evaluating multiple vendors, the interviewees' organizations chose VSP One and began deployment.

- Several organizations selected VSP One after evaluating multiple vendors for performance, simplicity, and long-term scalability.
- Most interviewees reported taking a phased approach to deployment, starting with mission-critical workloads and expanding over time.
- The organizations initially deployed VSP One to a subset of environments, such as virtualized infrastructure or file services, before broadening adoption.
- Some customers replaced multiple legacy systems during deployment, consolidating storage under a single VSP One platform.
- A few of the organizations integrated VSP One with complementary Hitachi solutions, including hybrid cloud connectors and AI-ready file platforms.

> *"We needed a platform that could scale with our data growth and support hybrid environments without vendor lock-in."*
>
> **Senior storage architect, legal services**

> *"Our goal was to modernize outdated infrastructure with NVMe, deduplication, and compression to support evolving needs."*
>
> **Chief technology officer, information services**

> *"We wanted to simplify operations and reduce administrative overhead with intuitive tools and automation."*
>
> **System network administrator, investment management**

Composite Organization

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an ROI analysis that illustrates the areas financially affected. The composite organization is representative of the interviewees' organizations, and it is used to present the aggregate financial analysis in the next section. The composite organization has the following characteristics:

- **Description of composite.** The composite organization is a midsize, globally distributed enterprise with operations across North America, Europe, and Asia. It employs 2,400 people and generates $575 million in annual revenue. The organization operates in a highly regulated environment and strongly emphasizes data security, compliance, and digital transformation. It supports a mix of mission-critical workloads — including financial systems, research platforms, and customer-facing applications — and is actively modernizing its infrastructure to support hybrid cloud and AI-driven initiatives.
- **Deployment characteristics.** The organization begins deploying VSP One in Year 1 following a brief implementation period. Initial deployment focuses on replacing legacy storage systems that support virtualized environments and file services. Over time, the rollout expands to include broader workloads across multiple regions. The organization adopts a phased approach, integrating VSP One with complementary solutions, such as hybrid cloud connectors and AI-ready file platforms, to support its long-term scalability and modernization goals.

KEY ASSUMPTIONS

- $575 million in annual revenue
- 2,400 global employees
- Hybrid IT environment with mission-critical workloads
- High compliance and data protection requirements

Analysis Of Benefits

Quantified benefit data as applied to the composite

Total Benefits						
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
Atr	Operational efficiencies gained from storage modernization	$368,042	$368,042	$368,042	$1,104,127	$915,267
Btr	Decreased cost from increased storage efficiency due to VSP One's compression and deduplication capabilities	$149,850	$149,850	$149,850	$449,550	$372,655
Ctr	Increased time savings from optimized workloads and faster provisioning due to VSP One's AI/ML capabilities	$96,902	$96,902	$96,902	$290,706	$240,981
	Total benefits (risk-adjusted)	$614,794	$614,794	$614,794	$1,844,382	$1,528,903

Operational Efficiencies Gained From Storage Modernization

Evidence and data. While some of their organizations were in the early stages of their adoption of VSP One, all the interviewees shared examples of how the platform simplified storage management and improved operational efficiency. The following points reflect their firsthand experiences and expectations for long-term value.

- Interviewees consistently reported that VSP One simplified day-to-day storage management tasks. The head of IT infrastructure at an education organization noted: "My team used to spend 1 to 2 hours troubleshooting storage issues weekly. Now, they just log in, check the health, and move on — it takes minutes."
- Several interviewees highlighted the ease of adoption and minimal training required. The senior storage architect at a legal services firm told Forrester, "[VSP One] was simple to use — from login to moving data, it took under an hour."
- The senior information technology specialist at a government finance organization reported a 33% reduction in storage administration labor, going from three to two dedicated FTEs after implementation.
- Interviewees said their organizations appreciated the unified management interface and automation features. The CTO at an information services company added, "Having a unified storage ecosystem that's tightly integrated at the application layer reduces the operational complexity between IT and developers."
- The head of IT infrastructure at an education organization also emphasized the intuitive GUI and ease of expanding storage, which improved responsiveness to internal requests. They noted: "In the past, I had to ask teams to wait while we freed up space. Now, I can expand storage immediately."

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization spends $100,000 per year on managing and maintaining its previous storage solution. VSP One's simplified operations and reduced administrative overhead mean it reduces the cost of managing and maintaining storage by 35% annually.
- Storage administrators reduce the amount of time they spend troubleshooting issues by 40% — freeing up hundreds of hours annually that would otherwise be spent resolving storage-related problems.
- The organization avoids approximately $14,000 per year in troubleshooting-related labor costs by reducing the time spent on issue resolution.
- Two-thirds of storage architects' time is reallocated to higher-value activities, such as strategic planning, cybersecurity, or modernization initiatives, rather than routine storage management. This reallocation represents a productivity gain equivalent to $360,000 annually, as highly skilled staff focus on more impactful work.

- These operational efficiencies are consistent across the three-year analysis period, reflecting sustained value from the storage modernization initiative.

Risks. The value of this benefit can vary across organizations due to the following:

- **Environments that are already modernized will have less room for improvement.** Organizations that have already invested in modern, automated storage systems may experience smaller efficiency gains, as their baseline operational complexity is already low.
- **Smaller teams may see less measurable impact.** Organizations with fewer dedicated storage personnel or simpler infrastructure may not realize significant cost savings or productivity reallocation, limiting the overall value of the benefit.
- **Integration challenges may reduce efficiency gains.** Environments with complex or siloed IT systems may take longer to realize the full benefits of VSP One or require additional effort to integrate it with existing workflows and tools.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $915,000.

35%

Reduction in operational complexity annually after implementing VSP One, leading to lower storage management costs, fewer hours spent troubleshooting, and the ability to reallocate storage architects to higher-value work

> *"We used to spend 1 to 2 hours troubleshooting storage issues weekly. Now, it takes just minutes to check the system and move on."*
>
> **Head of IT infrastructure, education organization**

Operational Efficiencies Gained From Storage Modernization					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
A1	Cost of managing and maintaining the previous storage solutions	Composite	$100,000	$100,000	$100,000
A2	Reduction in operational complexity with VSP One	Interviews	35%	35%	35%
A3	Cost of managing and maintaining storage with VSP One	A1*(1-A2)	$65,000	$65,000	$65,000
A4	**Subtotal: Reduction in costs of managing and maintaining storage**	**A1-A3**	**$35,000**	**$35,000**	**$35,000**
A5	Time spent troubleshooting issues per storage admin prior to VSP One (hours)	Composite	260	260	260
A6	Storage admin FTEs spending time troubleshooting	Composite	2	2	2
A7	Total time spent troubleshooting issues prior to VSP One (hours)	A5*A6	520	520	520
A8	Reduction in troubleshooting effort with VSP One	Interviews	40%	40%	40%
A9	Time spent troubleshooting issues after VSP One (hours)	A7*(1-A8)	312	312	312
A10	Reduction in effort spent by storage admins troubleshooting issues (hours)	A7-A9	208	208	208
A11	Fully burdened hourly rate for a storage administrator FTE	Research data	$67	$67	$67
A12	**Subtotal: Avoided cost of troubleshooting effort for a storage administrator**	**A10*A11**	**$13,936**	**$13,936**	**$13,936**
A13	Storage architects required prior to VSP One	Composite	3	3	3
A14	Reallocation of storage architect time to more value-added activities with VSP One	TEI methodology	67%	67%	67%
A15	Reallocation of storage architects to more value-added activities since VSP One	A13*A14	2	2	2
A16	Fully burdened annual salary of a storage architect FTE	Research data	$180,000	$180,000	$180,000
A17	**Subtotal: Reallocation of storage architects to more value added activities**	**A15*A16**	**$360,000**	**$360,000**	**$360,000**
At	Operational efficiencies gained from storage modernization	A4+A12+A17	$408,936	$408,936	$408,936
	Risk adjustment	↓10%			
Atr	Operational efficiencies gained from storage modernization (risk-adjusted)		$368,042	$368,042	$368,042
	Three-year total: $1,104,127		**Three-year present value: $915,267**		

Decreased Cost From Increased Storage Efficiency Due To VSP One's Compression And Deduplication Capabilities

Evidence and data. Interviewees shared that VSP One's built-in compression and deduplication capabilities significantly improved storage efficiency, enabling them to delay or avoid additional hardware purchases and reduce operational overhead. These benefits were especially impactful for organizations managing rapid data growth or transitioning from legacy systems without data reduction features.

- The senior information technology specialist at a government finance organization reported that deduplication and compression allowed the organization to delay storage expansion, reducing short-term capital expenditure. They said, "We don't really need to expand [capacity] in the short term because we are using that technology from Hitachi, and that's really a cost-saving benefit."
- The head of IT infrastructure at an education organization noted that their previous storage had no compression or deduplication and that VSP One's capabilities significantly reduced the need for additional hardware: "With a higher compression ratio, I can actually require a smaller storage capacity … like a double cost saving."
- The senior storage architect at a legal services firm shared that VSP One's deduplication and compression features were delivering a 6:1 ratio in their enterprise arrays and similar results on VSP One. They said, "I don't think we're

going to have to add storage to [our VSP One arrays] at all as they grow."

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization benefits from an average 6:1 data reduction ratio through VSP One's compression and deduplication capabilities.
- This efficiency enables the organization to delay or avoid purchasing additional storage capacity over the three-year analysis period.
- The composite avoids the need for at least one additional storage expansion cycle, which would otherwise be required to accommodate data growth.
- These efficiencies also reduce the burden on IT staff, contributing to improved productivity and helping avoid the need for additional headcount.

Risks. The value of this benefit can vary across organizations due to the following:

- **Limited incremental gains for already optimized environments.** Organizations with existing storage systems that already leverage high-efficiency compression and deduplication may see smaller cost savings from transitioning to VSP One.
- **Variations in data reduction based on workload type.** Organizations with less-compressible data types (e.g., encrypted files, media content) may achieve lower ratios and thus lower cost savings.
- **Mismatches between modeled and actual storage needs.** Organizations with fluctuating or lower data volumes may not realize the same level of cost avoidance from reduced physical storage requirements.
- **Underutilization of storage policies and tiering.** Organizations that do not actively manage data tiering or enforce deduplication policies may not fully benefit from VSP One's efficiency features, limiting the realized savings.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $373,000.

> *"Whenever there's a request for more space, I just expand it. With the high deduplication and compression, I don't worry about capacity."*
>
> **Head of IT infrastructure, education organization**

Decreased Cost From Increased Storage Efficiency Due To VSP One's Compression And Deduplication Capabilities					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
B1	Usable data before VSP One (TB)	Composite	400	400	400
B2	Deduplication ratio (6:1)	Composite	1/6	1/6	1/6
B3	Effective physical storage with VSP One at 6:1 deduplication ratio (TB)	B1*B2	67	67	67
B4	Storage saved per year (TB)	B1-B3	333	333	333
B5	Storage cost per TB	Composite	$500	$500	$500
B6	Storage cost before VSP One	B1*B5	$200,000	$200,000	$200,000
B7	Effective cost after VSP One	B3*B5	$33,500	$33,500	$33,500
Bt	Decreased cost from increased storage efficiency due to VSP One's compression and deduplication capabilities	B6-B7	$166,500	$166,500	$166,500
	Risk adjustment	↓10%			
Btr	Decreased cost from increased storage efficiency due to VSP One's compression and deduplication capabilities (risk-adjusted)		$149,850	$149,850	$149,850
	Three-year total: $449,550			**Three-year present value: $372,655**	

Increased Time Savings From Optimized Workloads And Faster Provisioning Due To VSP One's AI/ML Capabilities

Evidence and data. Interviewees described how VSP One's AI/ML-driven automation and integration capabilities helped streamline provisioning, reduce manual effort, and accelerate workload deployment. These efficiencies translated into measurable time savings for IT teams and improved responsiveness to business needs.

- The senior infrastructure architect at a legal services firm reported that tasks like adding new hosts or carving out logical unit numbers (LUNs), which previously took 30 to 40 minutes, now take 5 to 10 minutes with VSP One. They said, "That's a decent metric."
- The CTO at an information services company shared that VSP One's integration with application-layer tools enabled faster provisioning and reduced IT/developer coordination. "We measured roughly about 30% to 35% reduction in operational complexity … that translates into a headcount at $200,000 to $250,000 a pop."
- The same CTO noted that sprint cycles accelerated from monthly to weekly, enabled in part by the storage platform's ability to support faster, more frequent updates without adding IT overhead.
- The head of IT infrastructure at an education organization noted that daily storage health checks, which previously took 1 to 2 hours per week per engineer, now take only minutes. They shared, "They just have to go in and see it's fine … then move on to the next task."

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization performs approximately 100 data-intensive and compute-heavy tasks per week, such as AI/ML model training, analytics, and large-scale data processing.
- VSP One's AI/ML-driven optimization capabilities reduce the time required for these tasks by 30%, resulting in annual time savings of 1,560 hours.
- The fully burdened hourly rate for a storage administrator is $67, translating to $104,520 in annual time savings from workload optimization alone.
- In addition, the composite performs an average of two provisioning tasks per week. VSP One's automation reduces the time required for each by 45%, saving an additional 47 hours annually — or $3,149 per year.

- In total, the composite realizes $107,669 in annual time savings from optimized workloads and faster provisioning, enabling IT staff to focus on higher-value initiatives and avoid additional headcount.

Risks. The value of this benefit can vary across organizations due to the following:

- **Variations in workload intensity and frequency.** Organizations with fewer AI/ML or data-intensive tasks may realize lower absolute time savings.
- **Underutilization of automation features.** Organizations that do not fully adopt VSP One's AI/ML-driven provisioning and optimization capabilities may not achieve the modeled efficiencies.
- **Differences in labor costs and staffing models.** Organizations with lower fully burdened rates for FTEs or different staffing structures may see a reduced financial impact from time savings.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $241,000.

30%

Reduction in time spent on data-intensive and compute-heavy tasks

Increased Time Savings From Optimized Workloads And Faster Provisioning Due To VSP One's AI/ML Capabilities					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
C1	Data-intensive and compute-heavy tasks per week	Composite	100	100	100
C2	Time saved (hours per week)	C1*0.3	30	30	30
C3	Time saved (hours per year)	C2*52	1,560	1,560	1,560
C4	Fully burdened hourly rate for a storage administrator FTE	A11	$67	$67	$67
C5	**Subtotal: Time savings for data-intensive and compute-heavy tasks due to VSP One**	**C3*C4**	**$104,520**	**$1104,520**	**$104,520**
C6	Provisioning tasks per week	Composite	2	2	2
C7	Time saved (hours per week)	C6*0.45	0.90	0.90	0.90
C8	Time saved (hours per year)	C7*52	47	47	47
C9	Fully burdened hourly salary rate for a storage administrator FTE	A11	$67	$67	$67
C10	**Subtotal: Time savings from faster provisioning due to VSP One**	**C8*C9**	**$3,149**	**$3,149**	**$3,149**
Ct	Increased time savings from optimized workloads and faster provisioning due to VSP One's AI/ML capabilities	C5+C10	$107,669	$107,669	$107,669
	Risk adjustment	↓10%			
Ctr	Increased time savings from optimized workloads and faster provisioning due to VSP One's AI/ML capabilities (risk-adjusted)		$96,902	$96,902	$96,902
		Three-year total: $290,706		**Three-year present value: $240,981**	

Unquantified Benefits

Interviewees mentioned the following additional benefits that their organizations experienced but were not able to quantify:

- **A smoother procurement process due to trust in the vendor.** Organizations consistently cited Hitachi Vantara's long-standing reputation, reliability, and support as key reasons for selection. This trust helped streamline procurement and gain internal buy-in. The senior storage architect at a legal services firm noted that internal

approvals were smoother due to high confidence in Hitachi, while the head of IT infrastructure at an educational organization praised the responsiveness and knowledge of the Hitachi support team.

- **A better experience for IT staff.** IT teams reported improved day-to-day experiences due to simplified interfaces and intuitive management tools. The system network administrator at an investment management firm highlighted the simplicity of the GUI as a key reason for selecting VSP One. Junior staff at a legal services firm found the new interface easier to use, while the head of IT infrastructure at an educational organization noted that reduced troubleshooting time allowed staff to focus on more strategic tasks.
- **Support for modernization goals.** Interviewees said VSP One was seen as a strategic enabler for modernization, including AI, hybrid cloud, and scalable architecture. The lead infrastructure architect at a higher education institution described how they replaced outdated 2015-era infrastructure to support AI and research workloads, while the CTO at an information services firm emphasized that VSP One enabled a more disciplined, scalable architecture for future growth.
- **Improved security and compliance capabilities.** Interviewees' organizations valued features like immutable snapshots, encryption, and unified policy enforcement for mitigating ransomware risk and supporting compliance. The senior IT specialist at a government finance organization praised VSP One's protection during a ransomware incident, while the head of IT infrastructure at an educational organization highlighted the potential to enhance data immunity through hardware-level features.
- **Operational simplicity and reduced complexity.** The unified platform helped interviewees reduce the administrative burden, especially for lean IT teams. According to the system network administrator at an investment management firm: "It's very simple. This is why I selected this product — because I love a product that is simple. … All the menus in the new GUI … it's really simple."
- **The ability to scale without disruption.** Interviewees' organizations appreciated the ability to scale incrementally — such as adding one disk at a time — without downtime or reconfiguration. The lead infrastructure architect at a higher education institution noted that this avoided large RAID group costs, while the senior IT specialist at a government finance agency emphasized the ease of expansion to meet growing data needs.

> *"The response from my account manager, from the tech support is all tremendous. … They respond back to me in the next few hours. I would say it's great."*
>
> **Head of IT infrastructure, education**

Flexibility

The value of flexibility is unique to each customer. There are multiple scenarios in which a customer might implement VSP One and later realize additional uses and business opportunities, including:

- **Enabling long-term strategic alignment with AI and automation roadmaps.** Several of the interviewees, including those at a government finance agency, shared plans to integrate VSP One with AI-driven platforms and automation tools over the next three years. They expect these future integrations to enhance data intelligence, reduce manual intervention, and support evolving IT strategies.
- **Positioning it as a foundational platform for broader IT transformation.** The lead infrastructure architect at a higher education institution described VSP One as a "launchpad" for modernizing its research infrastructure, enabling the university to support high-performance computing and data-intensive workloads that were previously out of reach.
- **Supporting seamless expansion into complementary Hitachi solutions.** Multiple interviewees expressed their intent to adopt additional Hitachi offerings, such as Hitachi Content Software for File (HCSF) and hybrid cloud connectors; they want to build on the VSP One investment to create a more integrated, future-ready storage ecosystem.

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Total Economic Impact Approach).

> *"We're integrating VSP One [Block] with Hitachi's AI-focused file platform. It's not just a storage upgrade — it's foundational to our future IT strategy."*
>
> **Lead infrastructure architect, higher education**

> *"We plan to expand our VSP One deployment to support broader workloads. It's a long-term investment that aligns with our modernization roadmap."*
>
> **Senior information technology specialist, government finance**

Analysis Of Costs

Quantified cost data as applied to the composite

Total Costs							
Ref.	**Cost**	**Initial**	**Year 1**	**Year 2**	**Year 3**	**Total**	**Present Value**
Dtr	Initial setup and implementation	$31,900	$0	$0	$0	$31,900	$31,900
Etr	VSP One Block system cost	$269,280	$0	$0	$0	$269,280	$269,280
Ftr	Standard-tier hardware support	$0	$29,920	$29,920	$29,920	$89,760	$74,407
Gtr	Ongoing management	$0	$8,580	$8,580	$8,580	$25,740	$21,337
	Total costs (risk-adjusted)	$301,180	$38,500	$38,500	$38,500	$416,680	$396,924

Initial Setup And Implementation

Evidence and data. Interviewees described a range of implementation experiences, with most reporting relatively smooth deployments supported by Hitachi Vantara or its partners. They shared the following insights:

- The lead infrastructure architect at a higher education organization estimated that it took approximately 100 hours of internal effort across storage, networking, and virtualization teams to complete the implementation and migration. Based on average fully burdened rates, Forrester believes this equates to approximately $6,500 in internal labor costs.
- The CTO at an information services company reported engaging Hitachi Vantara for approximately 40 hours of professional services at a cost of $12,500 to support data migration and configuration.
- The same organization invested $10,000 in training and certification for three IT staff members during the initial deployment; it later expanded to six certified users to ensure continuity and coverage.

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization incurs a one-time implementation cost of $29,000, which includes internal labor, professional services from Hitachi Vantara, and training for IT staff.
- These costs are incurred during the initial deployment period and are not repeated in subsequent years.

Risks. The value of this cost can vary across organizations due to the following:

- **Variations in deployment complexity.** Organizations with more complex legacy environments or hybrid cloud integrations may require more time and services to complete the migration.
- **Differences in internal expertise.** Organizations with limited in-house storage expertise may rely more heavily on professional services or require additional training.
- **The scope of the initial deployment.** Organizations deploying VSP One across multiple sites or integrating with other Hitachi solutions may incur higher upfront costs.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $32,000.

Initial Setup And Implementation						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
D1	Internal labor hours cost	Composite	$6,500			
D2	Professional services from Hitachi Vantara cost	Composite	$12,500			
D3	Training cost	Composite	$10,000			
Dt	Initial setup and implementation	D1+D2+D3	$29,000	$0	$0	$0
	Risk adjustment	↑10%				
Dtr	Initial setup and implementation (risk-adjusted)		$31,900	$0	$0	$0
	Three-year total: $31,900			**Three-year present value: $31,900**		

VSP One Block System Cost

Evidence and data. Hitachi Vantara provided guidance on the VSP One Block system cost. This fee typically covers setup, configuration, and onboarding support.

- One interviewee noted, “The upfront cost was significant, but it included everything we needed to get started — training, integration, and dedicated support.”
- Another interviewee mentioned that they didn’t incur additional implementation fees in subsequent years.
- Pricing may vary. Contact Hitachi Vantara for additional details.

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization incurs a one-time VSP One Block system cost of $244,800 in Year 0.
- This cost includes all necessary services to launch VSP One Block, such as technical setup, user training, and initial support.
- The model assumes no recurring implementation costs in Years 1 through 3.
- The implementation is considered complete and fully operational by the end of Year 0.

Risks. The value of this cost can vary across organizations due to the following:

- **Custom integration requirements could increase costs.** If an organization requires integration with nonstandard systems or third-party platforms, this could result in additional development time and vendor support fees.
- **Internal resource constraints may delay deployment.** The limited availability of internal IT or project management staff could extend the implementation timeline, potentially increasing the costs related to vendor support or lost productivity.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $269,000.

VSP One Block System Cost						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
E1	VSP One Block system cost	Composite	$244,800			
Et	VSP One Block system cost	E1	$244,800	$0	$0	$0
	Risk adjustment	↑10%				
Etr	VSP One Block system cost (risk-adjusted)		$269,280	$0	$0	$0
	Three-year total: $269,280			**Three-year present value: $269,280**		

Standard-Tier Hardware Support

Evidence and data. Interviewees reported an annual cost of $27,200 for standard-tier hardware support, beginning in Year 1. According to Hitachi Vantara, this support cost typically represents approximately 10% of the total implementation and support investment, providing a predictable and stable expense for ongoing hardware reliability. Pricing may vary. Contact Hitachi Vantara for additional details.

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization subscribes to standard-tier hardware support at an annual cost of $27,200, beginning in Year 1.
- This support includes routine maintenance, hardware replacement, and access to technical assistance.
- The standard-tier hardware support cost remains constant over the three-year period.
- No additional support tiers or upgrades are included.

Risks. The value of this cost can vary across organizations due to the following:

- **Support needs may exceed standard-tier coverage.** If an organization experiences more hardware failures than expected or requires faster response times, it may need to upgrade to a more expensive support tier.
- **Hardware inventory growth could increase support costs.** As an organization scales its infrastructure, the number of supported devices may grow, leading to higher annual fees.
- **Vendor pricing changes could impact future costs.** Although interviewees reported stable pricing, future adjustments by the vendor could increase the cost of standard support.

Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $74,000.

Standard-Tier Hardware Support						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
F1	Standard-tier hardware support	Composite		$27,200	$27,200	$27,200
Ft	Standard-tier hardware support	F1	$0	$27,200	$27,200	$27,200
	Risk adjustment	↑10%				
Ftr	Standard-tier hardware support (risk-adjusted)		$0	$29,920	$29,920	$29,920
	Three-year total: $89,760			**Three-year present value: $74,407**		

Ongoing Management

Evidence and data. Interviewees reported that the ongoing management of VSP One required minimal administrative effort compared with their legacy systems. Routine tasks, such as monitoring system health, managing capacity, and performing updates, were streamlined through the platform's intuitive interface and automation features.

Modeling and assumptions. Based on customer interviews, Forrester assumes the composite organization spends approximately 104 hours annually on administrative tasks related to VSP One. This time investment remains consistent over the three-year analysis period and reflects the platform's simplified operations and ease of use.

Risks. The value of this cost can vary across organizations due to the following:

- **Variations in contract terms.** Organizations may negotiate different support levels or pricing structures based on their deployment size or service-level agreements.
- **Changes in the deployment scope.** Expanding the VSP One footprint or integrating additional Hitachi solutions may increase annual licensing costs.
- **Differences in regional pricing.** Licensing fees may vary by geography due to local pricing models, taxes, or currency fluctuations.

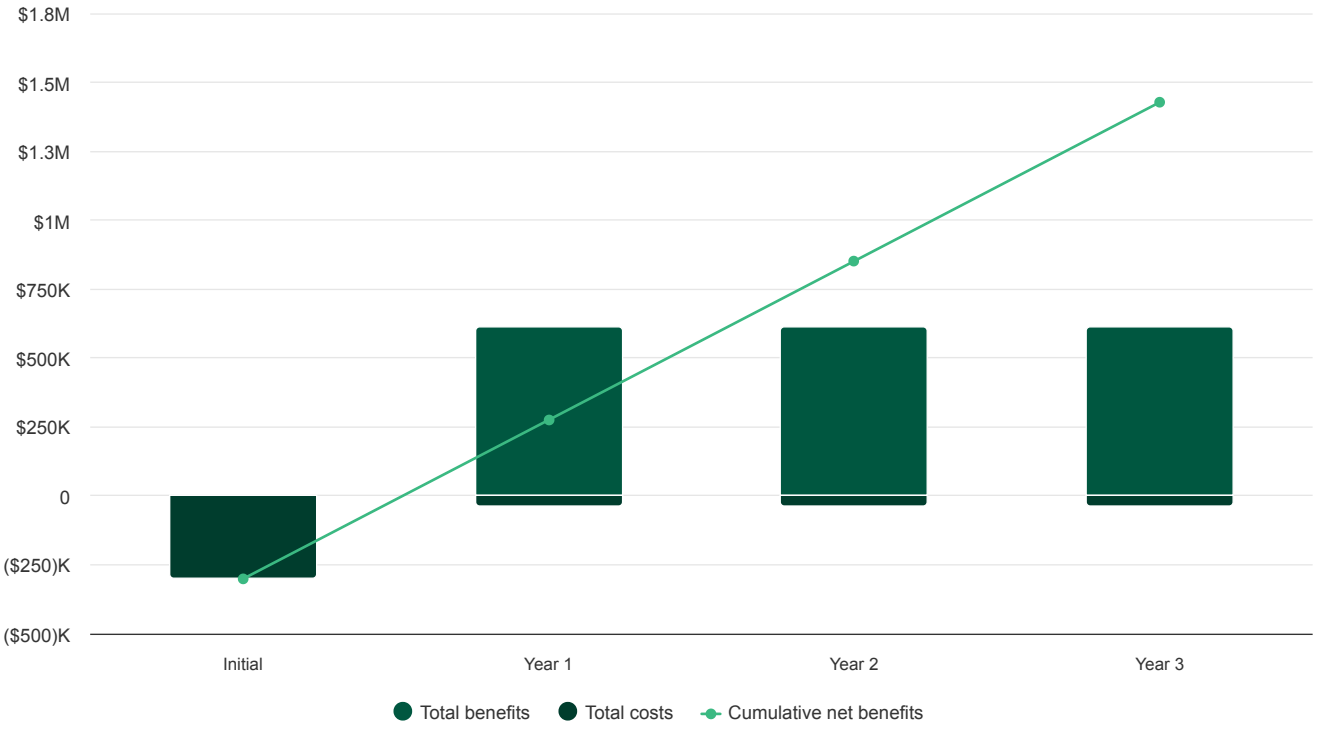
Results. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $21,000.

Ongoing Management						
Ref.	**Metric**	**Source**	**Initial**	**Year 1**	**Year 2**	**Year 3**
G1	Annual time to manage the VSP One system (hours)	Composite		104	104	104
G2	Fully burdened hourly rate of a director in charge of storage	Research data		$75	$75	$75
Gt	Ongoing management	G1*G2	$0	$7,800	$7,800	$7,800
	Risk adjustment	↑10%				
Gtr	Ongoing management (risk-adjusted)		$0	$8,580	$8,580	$8,580
	Three-year total: $25,740			**Three-year present value: $21,337**		

Financial Summary

Consolidated Three-Year, Risk-Adjusted Metrics

Cash Flow Chart (Risk-Adjusted)



Cash Flow Analysis (Risk-Adjusted)						
	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	($301,180)	($38,500)	($38,500)	($38,500)	($416,680)	($396,924)
Total benefits	$0	$614,794	$614,794	$614,794	$1,844,382	$1,528,903
Net benefits	($301,180)	$576,294	$576,294	$576,294	$1,427,702	$1,131,979
ROI						285%
Payback						7 months

Please Note

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

These risk-adjusted ROI, NPV, and payback period values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1 that are not discounted. All other cash flows are discounted using the discount rate at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value calculations of the Total Benefits, Total Costs, and Cash Flow tables may not exactly add up, as some rounding may occur.

TEI Framework And Methodology

From the information provided in the interviews, Forrester constructed a Total Economic Impact™ framework for those organizations considering an investment in VSP One.

The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact that VSP One can have on an organization.

Due Diligence

Interviewed Hitachi Vantara stakeholders and Forrester analysts to gather data relative to VSP One.

Interviews

Interviewed six decision-makers at organizations using VSP One to obtain data about costs, benefits, and risks.

Composite Organization

Designed a composite organization based on characteristics of the interviewees' organizations.

Financial Model Framework

Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewees.

Case Study

Employed four fundamental elements of TEI in modeling the investment impact: benefits, costs, flexibility, and risks. Given the increasing sophistication of ROI analyses related to IT investments, Forrester's TEI methodology provides a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

Glossary

Total Economic Impact Approach

Benefits

Benefits represent the value the solution delivers to the business. The TEI methodology places equal weight on the measure of benefits and costs, allowing for a full examination of the solution's effect on the entire organization.

Costs

Costs comprise all expenses necessary to deliver the proposed value, or benefits, of the solution. The methodology captures implementation and ongoing costs associated with the solution.

Flexibility

Flexibility represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. The ability to capture that benefit has a PV that can be estimated.

Risks

Risks measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on "triangular distribution."

Financial Terminology

Present value (PV)

The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.

Net present value (NPV)

The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made unless other projects have higher NPVs.

Return on investment (ROI)

A project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits less costs) by costs.

Discount rate

The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.

Payback

The breakeven point for an investment. This is the point in time at which net benefits (benefits minus costs) equal initial investment or cost.

Appendixes

APPENDIX A

Total Economic Impact

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists solution providers in communicating their value proposition to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of business and technology initiatives to both senior management and other key stakeholders.

APPENDIX B

Endnotes

[1] Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists solution providers in communicating their value proposition to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of business and technology initiatives to both senior management and other key stakeholders.

Disclosures

Readers should be aware of the following:

This study is commissioned by Hitachi Vantara and delivered by Forrester Consulting. It is not meant to be used as 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 study to determine the appropriateness of an investment in VSP One. For any interactive functionality, the intent is for the questions to solicit inputs specific to a prospect's business. Forrester believes that this analysis is representative of what companies may achieve with VSP One based on the inputs provided and any assumptions made. Forrester does not endorse Hitachi Vantara or its offerings. Although great care has been taken to ensure the accuracy and completeness of this model, Hitachi Vantara and Forrester Research are unable to accept any legal responsibility for any actions taken on the basis of the information contained herein. The interactive tool is provided 'AS IS,' and Forrester and Hitachi Vantara make no warranties of any kind.

Hitachi Vantara reviewed and provided feedback to Forrester, but 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.

Hitachi Vantara provided the customer names for the interviews but did not participate in the interviews.

Consulting Team:
Roger Nauth

PUBLISHED
July 2025