

A Forrester Total Economic Impact™ Study  
Commissioned By Veritas Technologies  
June 2020

# The Total Economic Impact™ Of Veritas InfoScale

Cost Savings And Business Benefits  
Enabled By High Availability With  
InfoScale

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## ABOUT FORRESTER CONSULTING

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# Executive Summary

Veritas Technologies provides infrastructure virtualization software that helps its customers solve a variety of challenges, including expensive unplanned downtime, cumbersome scaling of physical storage, and inflexible data placement across storage environments. Veritas commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying InfoScale, specifically for high availability (HA) use cases. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of InfoScale on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed a single customer with multiple years of experience using InfoScale. With InfoScale, Veritas provides an automated HA solution that helps organizations maintain always-on availability for their mission-critical applications. InfoScale works by constantly monitoring an entire application stack and responding when the application goes down or fails to meet performance metrics by automatically and transparently taking remedial action, such as failing over to alternate servers.

Prior to using InfoScale, the interviewed customer experienced relatively poor critical application uptime and high costs related to disaster recovery. When an application went down, recovery would take hours using a labor-intensive recovery process that involved identifying the specific cause of the outage and then going from site to site to remediate the failure. During this time, the mission-critical application would remain down, preventing the accrual of revenue and keeping employees from accomplishing their work.

After implementing InfoScale, the customer reported increased application availability and a much smoother recovery process. As the customer put it: "With InfoScale, we're at as close to zero downtime as possible with our architecture. Recovery used to take a lot longer, involving a highly manual process to be able to go from one site to another, with a number of teams involved. Now it's as simple as one command to bring the application back online."

## Key Findings

**Quantified benefits.** The interviewed organization experienced the following risk-adjusted present value (PV) quantified benefits:

- › **Additional productivity from avoided downtime worth \$12.6 million.** The deployment of Veritas InfoScale decreased application downtime from an average of 1 hour of downtime per event to an average of 5 minutes per event. Over the course of a year, this additional uptime saved the organization a total of more than 320,000 person-hours.
- › **Increased profit from avoided revenue-generating application downtime worth \$6.3 million.** Similarly, InfoScale decreased revenue-generating application downtime from an average of 4 hours per downtime event to 5 minutes per event. Over the course of a year, this additional uptime generated several millions of dollars in additional revenue from the application, resulting in nearly \$3 million of additional profit annually.

## Benefits And Costs



Additional productivity from avoided downtime:

**\$12,612,070**



Increased profit from avoided revenue-generating application downtime:

**\$6,317,002**



Total license cost including one-time and three-year subscription cost:

**\$10,803,174**



**ROI**  
**72%**



**Benefits PV**  
**\$19.0 million**



**NPV**  
**\$7.9 million**



**Payback**  
**15 months**

- › **Avoided IT costs from high availability worth \$41,764.** Because InfoScale's recovery process is automated, it saves IT staff time previously spent on manual recovery processes.

**Unquantified benefits.** The interviewed organization experienced the following benefits, which are not quantified for this study:

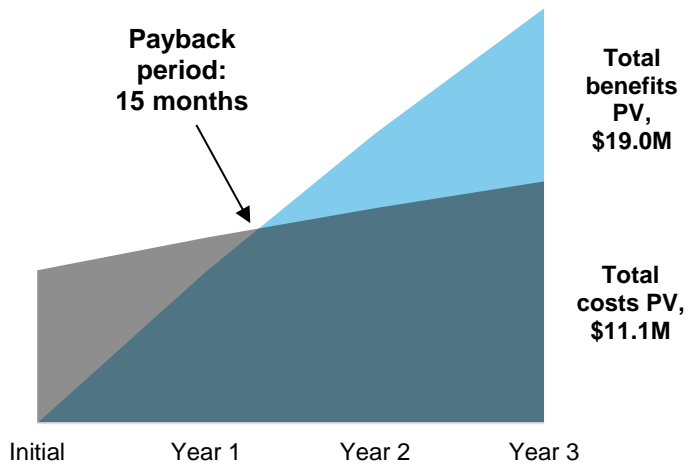
- › **Consolidated databases.** InfoScale facilitates the consolidation of databases onto less servers without application performance trade-offs. This has the potential to save on hardware and licensing costs associated with server proliferation.
- › **Improved brand reputation.** InfoScale positively impacts brand reputation by limiting application downtime that customers experience. Customer fallout associated with downtime can result in negatively impacted revenues and decreased customer lifetime value.

**Costs.** The interviewed organization experienced the following risk-adjusted PV costs:

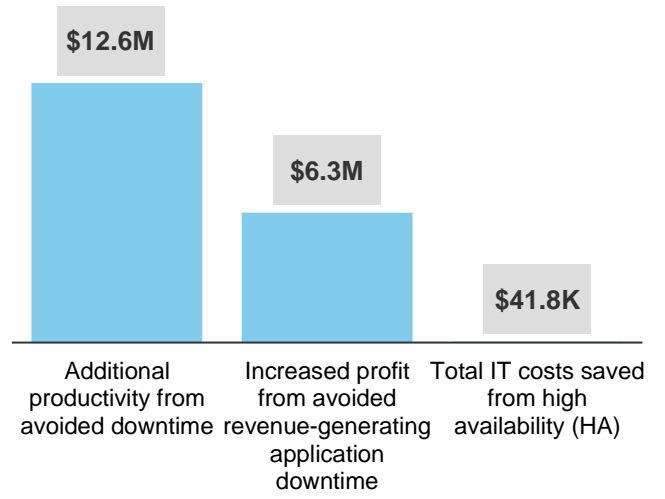
- › **Total license cost measured on a by-core basis.** Veritas charges license fees on a per-core basis. The total fees involved in an InfoScale investment include a one-time fee for a perpetual license in addition to maintenance fees, charged in varying amounts on an annual, three-year, or five-year basis.
- › **Time cost of training.** Training is recommended for parties involved in the ongoing management of InfoScale. Veritas provides regular five-day training courses for InfoScale.
- › **Cost of implementation using professional services.** Customers may choose to implement InfoScale either on their own or with the help of professional services, depending on the complexity of the application or applications to be protected. In either instance, there are costs associated with the implementation of InfoScale.
- › **Cost of ongoing management.** Additionally, there are costs associated with the ongoing management of InfoScale. Veritas typically trains a subset of employees to handle this management.

Forrester's interview with an existing customer and subsequent financial analysis found that the interviewed organization experienced benefits of \$18,970,836 over three years versus costs of \$11,058,273, adding up to a net present value (NPV) of \$7,912,563 and an ROI of 72%.

## Financial Summary



## Benefits (Three-Year)



The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

## TEI Framework And Methodology

From the information provided in the interview, Forrester has constructed a Total Economic Impact™ (TEI) framework for those organizations considering implementing Veritas InfoScale.

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 Veritas InfoScale can have on an organization:



### **DUE DILIGENCE**

Interviewed Veritas stakeholders and Forrester analysts to gather data relative to InfoScale.



### **CUSTOMER INTERVIEW**

Interviewed one organization using InfoScale to obtain data with respect to costs, benefits, and risks.



### **FINANCIAL MODEL FRAMEWORK**

Constructed a financial model representative of the interview using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewed organization.



### **CASE STUDY**

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

## DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Veritas Technologies 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 report to determine the appropriateness of an investment in Veritas InfoScale.

Veritas Technologies 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.

Veritas Technologies provided the customer names for the interviews but did not participate in the interviews.

# The InfoScale Customer Journey

## BEFORE AND AFTER THE INFOSCALE INVESTMENT

### Interviewed Organization

For this study, Forrester interviewed a Veritas InfoScale customer:

- › That operates in the financial services sector.
- › With 200,000 full-time employees.
- › With \$50 billion in annual revenue.
- › That protects applications across approximately 5,000 systems using InfoScale.

### Key Challenges

The interviewed organization shared the following key challenges:

- › **Unsatisfactory number and length of application downtime events.** Before investing in InfoScale, the customer experienced a high number of lengthy downtime events relative to their post-investment environment. The excessive length of these events not only drove inefficiencies for the IT teams tasked with solving them, but it also negatively impacted the productivity of employees across the firm who would suddenly find themselves without the necessary software to complete their work. Lastly, these outages had a direct, negative impact on business value by preventing the accrual of revenue associated with any downed application.
- › **Laborious recovery process in response to application downtime events.** The customer's pre-InfoScale environment also suffered from a complicated, manual process associated with recovery when any mission-critical application went down. IT staff would have to diagnose the cause of downtime, potentially travel to the associated server site, and use massive runbooks, all to remedy the failure. The customer said: "With automatic failover, the application staff does not need to be involved. You can just fix the DR site, the passive site of a cluster."

### Key Results

The interview revealed that key results from the InfoScale investment include:

- › **Increased speed of recovery from application downtime event.** After implementing InfoScale, the customer saw a substantial increase in recovery speed and, therefore, an equally substantial decrease to downtime for its business-critical applications. Total annual downtime decreased 12 times for downtime events affecting employee productivity and 48 times for events affecting revenue. This increased recovery time directly impacted business value, decreasing costs associated with lost productivity and increasing profit associated with revenue-generating applications.

"Our investment in InfoScale was largely driven by its stability and ability to provide the shortest return-to-operations time. It's a product that's been there for years. If you want a product that is secure, stable, and easy to use, then InfoScale is it."

*Manager, Veritas products, financial services*



"In our previous environment, recovery would take hours and hours. Now it takes about five minutes with little to no involvement from our IT operations."

*Manager, Veritas products, financial services*



- › **Operational efficiency and ease of use.** The customer reported that automated failover and the software interface of InfoScale benefited the organization's operational efficiency. When a failure happens now, fewer staff members are required to shift their attention to remedying the failure, as the application and its associated scripts are automatically spun up on backup servers. As the customer mentioned: "The server now automatically fails over. You don't need as much staff involved, because they only need to focus on the failed server rather than doing break-fix and running a manual failover process." Additionally, recovery with InfoScale is run through a simple GUI. According to the customer: "InfoScale's GUI is very intuitive. You can perform complex things like application recovery with a simple one-line command or a simple click of a button."

"If we have a problem with one of our servers, we can do end-site failover automatically. We can then actually fix our original servers without causing a massive outage."

*Manager, Veritas products,  
financial services*



# Analysis Of Benefits

## QUANTIFIED BENEFIT DATA

Total Benefits						
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
Atr	Additional productivity from avoided downtime	\$5,071,500	\$5,071,500	\$5,071,500	\$15,214,500	\$12,612,070
Btr	Increased profit from avoided revenue-generating application downtime	\$2,540,160	\$2,540,160	\$2,540,160	\$7,620,480	\$6,317,002
Ctr	Total IT costs saved from high availability	\$16,794	\$16,794	\$16,794	\$50,382	\$41,764
	<b>Total benefits (risk-adjusted)</b>	<b>\$7,628,454</b>	<b>\$7,628,454</b>	<b>\$7,628,454</b>	<b>\$22,885,362</b>	<b>\$18,970,836</b>

## Additional Productivity From Avoided Downtime

InfoScale uses automated failover to decrease the amount of application downtime that business-critical applications experience. When InfoScale detects a failure anywhere in the applications stack, it will automatically spin that application back up on dedicated servers. Automated failover happens in just minutes compared to manual failover processes that the interviewed customer said can take “hours and hours.” When it comes to employee applications, the cost of downtime typically comes in the form of lost productivity. Therefore, increased uptime results in cost savings associated with increased productivity.

For the interviewed organization, automated failover gave back an additional 9 hours and 12 minutes of productivity to each affected employee each year. In total, this amounts to more than 320,000 added productivity hours across the organization. Based on the customer interview, Forrester estimates:

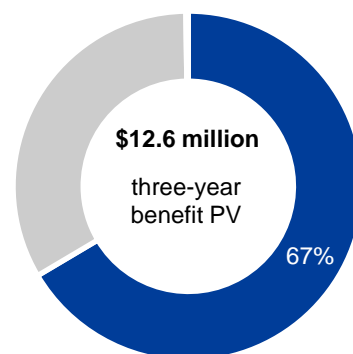
- › One hour of downtime per employee application downtime event before InfoScale.
- › Ten annual downtime events effecting employee productivity.
- › An average of 15% of employees affected by each downtime event.
- › An average fully burdened hourly rate of \$35 for affected employees.
- › A productivity recapture rate of 50%.

The actual reduction in costs associated with legacy network hardware may vary based on:

- › The amount of downtime and number of downtime events affecting employee applications.
- › The number of employees affected by downtime events and their fully burdened hourly rate.
- › The amount of productivity actually recaptured with increased uptime.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$12.6 million.

The table above shows the total of all benefits across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the interviewed organization expects risk-adjusted total benefits to be a PV of \$19.0 million.



**Additional productivity from avoided downtime: 67% of total benefits**

Impact risk is the risk that the business or technology needs of the organization may not be met by the investment, resulting in lower overall total benefits. The greater the uncertainty, the wider the potential range of outcomes for benefit estimates.

### Additional Productivity From Avoided Downtime: Calculation Table

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
A1	Hours per employee application downtime event		1	1	1
A2	Hours per employee application downtime event with InfoScale	5 minutes	0.08	0.08	0.08
A3	Downtime events per year affecting employee productivity		10	10	10
A4	Number of employees impacted	~15%	35,000	35,000	35,000
A5	Average fully burdened hourly wage	Forrester	\$35	\$35	\$35
A6	Productivity recapture rate		50%	50%	50%
At	Additional productivity from avoided downtime	$(A1 - A2) * A3 * A4 * A5 * A6$	\$5,635,000	\$5,635,000	\$5,635,000
	Risk adjustment	↓10%			
Atr	Additional productivity from avoided downtime (risk-adjusted)		\$5,071,500	\$5,071,500	\$5,071,500

## Increased Profit From Avoided Revenue-Generating Application Downtime

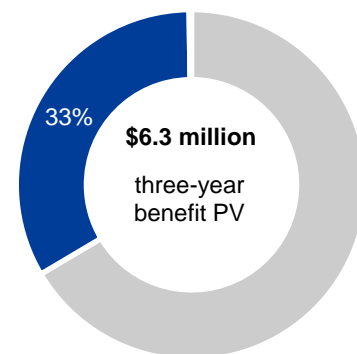
Like the business-critical employee productivity applications described above, revenue-generating applications also become more resilient thanks to the high availability that InfoScale provides. Similarly, revenue-generating applications that InfoScale protects experience downtime of just minutes, versus the hours of downtime that unprotected applications experience. The core difference is that these applications' downtimes can be measured directly in unaccrued revenue. Put simply, increased uptime equals more money. For the customer organization, automated failover gives back an additional \$6 million of revenue per downtime event for a total of \$12 million added revenue annually. In total, this amounts to 322,000 added productivity hours across the organization. For this organization, Forrester assumes:

- › Four hours of downtime per revenue-generating application downtime event before InfoScale.
- › Two such events occur annually.
- › The application generates an average of \$1.5 million in hourly revenue.
- › There's a net profit margin of 24%.

The increase in profit will vary with:

- › The length and number of downtime events affecting revenue-generating applications.
- › The average hourly revenue the application generates.
- › The net profit margin.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$6.3 million.



Increased profit from avoided revenue-generating application downtime: 33% of total benefits

## Increased Profit From Avoided Revenue-Generating Application Downtime: Calculation Table

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
B1	Hours of revenue-generating application downtime per event		4	4	4
B2	Hours of revenue-generating application downtime per event with InfoScale	A2	0.08	0.08	0.08
B3	Downtime events per year affecting revenue	Assumption	2	2	2
B4	Average revenue per hour from application		\$1,500,000	\$1,500,000	\$1,500,000
B5	Net profit margin	24%	24%	24%	24%
Bt	Increased profit from avoided revenue-generating application downtime	$(B1 - B2) * B3 * B4 * B5$	\$2,822,400	\$2,822,400	\$2,822,400
	Risk adjustment	↓10%			
Btr	Increased profit from avoided revenue-generating application downtime (risk-adjusted)		\$2,540,160	\$2,540,160	\$2,540,160

## Total IT Costs Saved From High Availability

By automating failover, InfoScale allows IT staff previously tasked with laborious and manual failover processes to reorient their efforts towards other important strategic workloads. Like general employees, IT professionals receive back an additional 9 hours and 12 minutes of time from automatically recovered employee applications that can now be focused elsewhere. Additionally, IT professionals receive back 7 hours and 50 minutes from automatically recovered revenue-generating applications. Combined, this amounts to 17 hours and 2 minutes per IT professional added thanks to InfoScale, or a total of nearly 246 hours of IT person-hours annually across the organization.

Although the savings may appear low in dollar terms, the true benefit of freeing up IT professionals would be more accurately measured by including whatever positive financial impact accrues from the other important strategic initiatives these professionals are now able to pursue with the additional 246 hours.

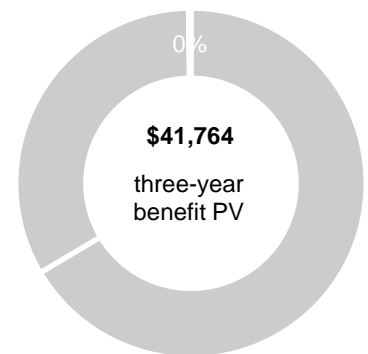
Based on the customer interview, Forrester estimates for the organization:

- › Ten IT professionals are tasked with solving employee application downtime events.
- › Twenty IT professionals are tasked with solving revenue-generating application downtime events.
- › The fully burdened hourly rate for IT professionals is \$75.

The actual reduction in costs associated with legacy network hardware may vary based on:

- › The annual hours saved per downtime event with InfoScale.
- › The number of IT professionals tasked with solving downtime events.
- › The fully burdened hourly rate of IT professionals.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$41,764.



Total IT costs saved from high availability: 0.2% of total benefits

"With automatic failover, the staff does not really need to be involved. They can focus on fixing the DR side, the passive side of a cluster."

Manager, Veritas products, Financial services



## Total IT Costs Saved From High Availability (“HA”): Calculation Table

Ref.	Metric	Calculation	Year 1	Year 2	Year 3
C1	Annual hours saved per employee application downtime event	(A1-A2)*A3	9.2	9.2	9.2
C2	IT professionals tasked with solving employee application downtime event		10	10	10
C3	Total person-hours saved by automated HA for employee application downtime event	C1*C2	92	92	92
C4	Annual hours saved per revenue-generating application downtime event	(B1-B2)*B3	7.84	7.84	7.84
C5	IT professionals tasked with solving revenue-related downtime event		20	20	20
C6	Total person-hours saved by automated HA for revenue-related downtime event	C4*C5	156.8	156.8	156.8
C7	IT professional fully burdened hourly rate		\$75	\$75	\$75
Ct	Total IT costs saved from high availability	(C3+C6)*C7	\$18,660	\$18,660	\$18,660
	Risk adjustment	↓10%			
Ctr	Total IT costs saved from high availability (risk-adjusted)		\$16,794	\$16,794	\$16,794

## Unquantified Benefits

The interviewed organization noted seeing several benefits from implementing Veritas InfoScale that were not quantifiable. These could potentially be quantified in a financial analysis if given the appropriate data and metrics. They are:

- › **Database consolidation.** InfoScale facilitates the centralization of multiple databases and instances in order to allow for the sharing of resources without a loss in performance or failure to meet service-level agreements. Sharing resources results in decreased costs associated with decentralized databases such as hardware costs and licensing fees. The interviewee said: “We are taking advantage of consolidated database clusters with InfoScale. Instead of using as many servers as we used to, we now have multiple databases loaded onto each server.” Unfortunately, Forrester could not gather enough data regarding the customer’s experienced database consolidation in order to quantify this benefit.
- › **Improved brand reputation.** InfoScale also has the potential to raise brand reputation by mitigating the number of application outages that an organization’s customers experience. Such outages can reduce customer lifetime value. Some of these outages are consequential enough to be newsworthy and negatively impact brand reputation among not just current customers but among potential customers as well. This can cause a loss in future revenues. The interviewed customer said: “One potentially obvious benefit would be reputational. You look a bit silly if you’re having outages all the time. This negative reputation could even lead to negative revenue consequences.”

“With consolidated databases, InfoScale can still do recovery of any particular subsection of that server. It’s much cheaper.”

*Manager, Veritas products, Financial services*



Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could be turned into business benefit for a future additional investment. This provides an organization with the “right” or the ability to engage in future initiatives but not the obligation to do so.

## Flexibility

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

including:

- › **Platform upgrades.** InfoScale helps IT teams to perform platform upgrades without running the risk of causing a failure to business-critical applications during the upgrade. The interviewed customer said: “[An organization migrating to the cloud or a hybrid environment] wouldn’t have to have an outage or have any drop of its server whatsoever. It doesn’t actually matter what type of storage. As long as you can mirror, you can actually completely change your storage without an outage.”

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix A).

# Analysis Of Costs

## QUANTIFIED COST DATA

Total Costs							
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Dtr	Total license cost measured on a by-core basis	\$6,864,000	\$1,584,000	\$1,584,000	\$1,584,000	\$11,616,000	\$10,803,174
Etr	Time cost of training	\$99,000	\$0	\$0	\$0	\$99,000	\$99,000
Ftr	Cost of implementation using professional services	\$33,000	\$0	\$0	\$0	\$33,000	\$33,000
Gtr	Cost of ongoing management	\$0	\$49,500	\$49,500	\$49,500	\$148,500	\$123,099
	Total costs (risk-adjusted)	\$6,996,000	\$1,633,500	\$1,633,500	\$1,633,500	\$11,896,500	\$11,058,273

## Total License Cost Measured On A By-Core Basis

Veritas Technologies offers a variety of licensing tiers based on the deployment environment of the mission-critical applications that InfoScale will protect. Each tier includes a one-time perpetual license fee as well as an ongoing maintenance fee that customers can pay annually or in three-year and five-year increments. Veritas charges these fees on a by-core basis. For UNIX deployments, there is an option to choose a separate fee schedule charged on a by-server basis.

Forrester estimates for the organization include:

- › There are perpetual license and associated maintenance fees for an Enterprise bundle on the Linux platform. Forrester discounted these fees in recognition of the fact that Veritas regularly discounts InfoScale in accordance with deal size.
- › InfoScale protects an average of eight cores per system.

Total licensing fees will vary based on the platform on which the application is deployed as well as the total number of cores required by the application. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year risk-adjusted total PV of \$10,803,174.

The table above shows the total of all costs across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the interviewed organization expects risk-adjusted total costs to be a PV of more than \$11 million.

Implementation risk is the risk that a proposed investment may deviate from the original or expected requirements, resulting in higher costs than anticipated. The greater the uncertainty, the wider the potential range of outcomes for cost estimates.

### Total License Cost Measured On A By-Core Basis: Calculation Table

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
D1	Perpetual license cost per core		\$156			
D2	Maintenance fee per core			\$36	\$36	\$36
D3	Number of systems protected		5,000			
D4	Average number of cores per system		8			
D5	Total number of cores		40,000	40,000	40,000	40,000
Dt	Total license cost measured on a by-core basis	$D1 \times D5, D2 \times D5$	\$6,240,000	\$1,440,000	\$1,440,000	\$1,440,000
	Risk adjustment	↑10%				
Dtr	Total license cost measured on a by-core basis (risk-adjusted)		\$6,864,000	\$1,584,000	\$1,584,000	\$1,584,000

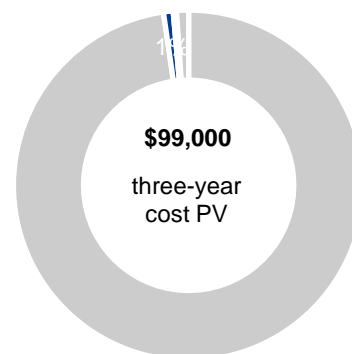
### Time Cost Of Training

Veritas recommends that InfoScale users undergo training in the use of the solution. The licensing fees typically cover the direct cost of this training. However, there is a time cost associated with having IT professionals undergo training. For InfoScale, Veritas offers a five-day training course.

Forrester estimates for the organization include:

- › Thirty IT professionals need to be trained.
- › These professionals have a fully burdened hourly rate of \$75.

The actual time cost of training will vary with the number of IT professionals needing to be trained and their average fully burdened hourly rate. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year risk-adjusted total PV of \$99,000.



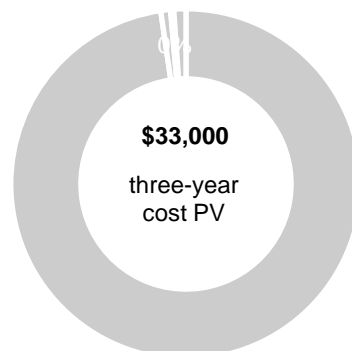
Time cost of training: 1% of total costs

### Time Cost Of Training: Calculation Table

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
E1	Number of IT professionals trained		30			
E2	Days of training required		5			
E3	IT professional fully burdened hourly rate	C7	\$75			
Et	Time cost of training	$E1 \times E2 \times E3$	\$90,000	\$0	\$0	\$0
	Risk adjustment	↑10%				
Etr	Time cost of training (risk-adjusted)		\$99,000	\$0	\$0	\$0

### Cost Of Implementation Using Professional Services

Customers can deploy Veritas InfoScale either with an internal IT team or by leveraging a third party's professional services. Best practices for implementation are determined by the environment in which the protected application operates. For example, an internal team can typically deploy InfoScale if the application runs on a number of individual servers or if it runs on a group of two-node clusters. Professional services are recommended when the application runs on



high-node count (20 or more) clusters. For this model, Forrester assumed the use of professional services.

Other estimates for the organization include:

- › The weekly cost of professional services is \$15,000.
- › There's a two-week implementation period.

The actual cost of implementation will vary based on whether the customer uses an internal team or third-party professional services. There will also be variation regarding weekly cost and time to implement. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year risk-adjusted total PV of \$33,000.

#### Cost Of Implementation Using Professional Services: Calculation Table

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
F1	Weekly cost of professional services		\$15,000			
F2	Weeks to implement		2			
Ft	Cost of implementation using professional services	$F1 * F2$	\$30,000	\$0	\$0	\$0
	Risk adjustment	↑10%				
Ftr	Cost of implementation using professional services (risk-adjusted)		\$33,000	\$0	\$0	\$0

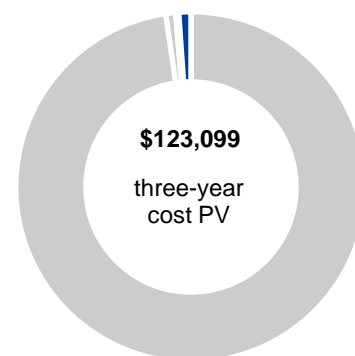
#### Cost Of Ongoing Management

The interviewed customer reported some costs associated with the ongoing management of Veritas InfoScale.

Forrester estimates for the customer organization include:

- › Ten IT professionals are tasked with managing InfoScale.
- › They spend 5 hours managing InfoScale per month.
- › Their fully burdened hourly rate is \$75.

The total cost of ongoing management will vary based on the number of IT professionals tasked with ongoing management, the time they spend managing InfoScale, and their average fully burdened hourly rates of pay. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year risk-adjusted total PV of \$123,099.



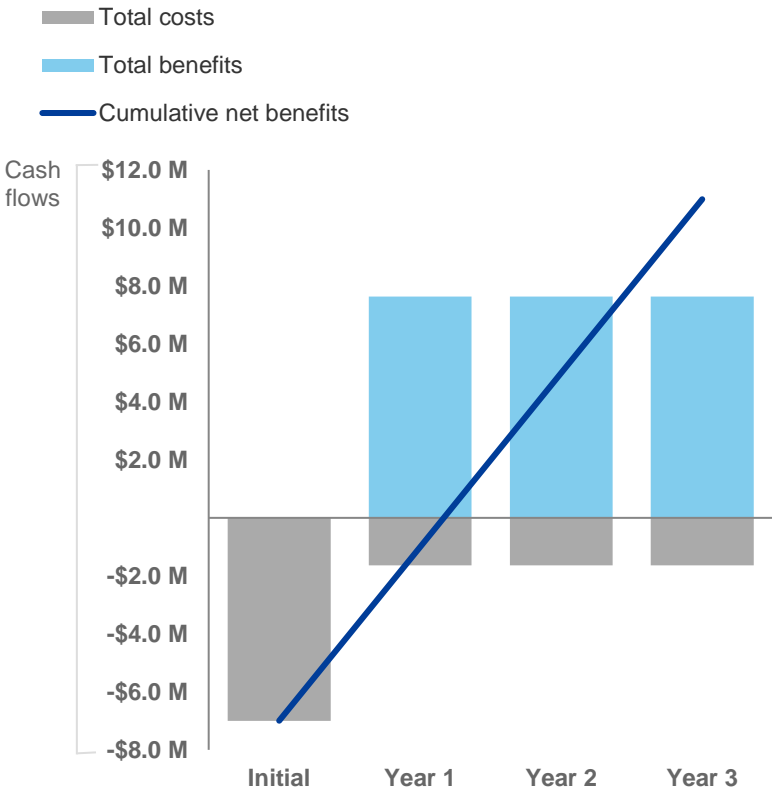
#### Cost Of Ongoing Management: Calculation Table

Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
G1	Number of professionals required			10	10	10
G2	Hours managing InfoScale per month			5	5	5
G3	IT professional fully burdened hourly rate	C7		\$75	\$75	\$75
Gt	Cost of ongoing management	$G1 * G2 * 12 * G3$	\$0	\$45,000	\$45,000	\$45,000
	Risk adjustment	↑10%				
Gtr	Cost of ongoing management (risk-adjusted)		\$0	\$49,500	\$49,500	\$49,500

# Financial Summary

## CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

### Cash Flow Chart (Risk-Adjusted)



The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the interviewed 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.

### Cash Flow Analysis (risk-adjusted estimates)

	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	(\$6,996,000)	(\$1,633,500)	(\$1,633,500)	(\$1,633,500)	(\$11,896,500)	(\$11,058,273)
Total benefits	\$0	\$7,628,454	\$7,628,454	\$7,628,454	\$22,885,362	\$18,970,836
Net benefits	(\$6,996,000)	\$5,994,954	\$5,994,954	\$5,994,954	\$10,988,862	\$7,912,563
ROI						72%
Payback period (months)						15.0

# Veritas InfoScale: Overview

The following information is provided by Veritas Technologies. Forrester has not validated any claims and does not endorse Veritas or its offerings.

Veritas InfoScale is a software-defined solution that abstracts applications from their underlying hardware and software resources. That abstraction enables enterprise-grade optimizations of mission-critical applications around business continuity, performance, and infrastructure agility across physical, virtual, and cloud environments.

InfoScale operates between applications and their underlying infrastructures (i.e., at the operating system and file system level) (see Figure 1). InfoScale’s “view” (and access to) the entire infrastructure opens up a whole host of opportunities for new capabilities (e.g., a high availability scale-out file system) or improve existing functionality (e.g., SSD-based latency optimization of cloud accesses).

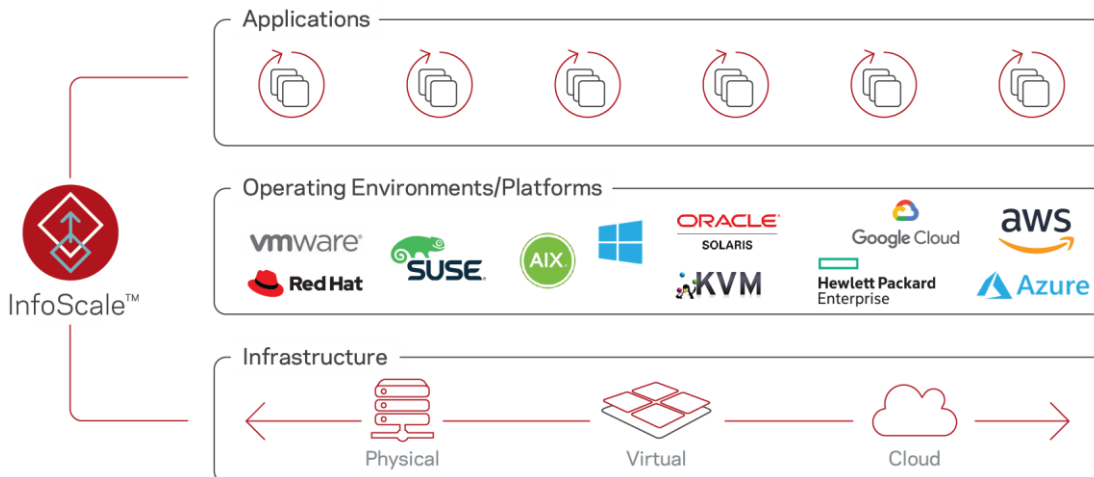


Figure 1. InfoScale is an OS and file system-level, software-defined infrastructure virtualization solution.

Because of its “middleware” location in the solution stack, applications are insulated from the specifics of the underlying infrastructure and can operate across heterogeneous server and storage environments. That means that applications need not worry about what kind of hardware lies “beneath” them — nor which operating systems are in use, nor which cloud vendors might be part of the overall solution. An underlying infrastructure can be replaced/modified/updated without wholesale replacement of critical applications. Indeed, often migration to new infrastructure technology can take place without disrupting application availability at all.

Veritas maintains support for many different physical (bare metal) servers and storage arrays, virtualization products (e.g., VMware), and public/private clouds. For additional information on what’s supported, refer to the Hardware Compatibility List (HCL) and the Software Compatibility List (SCL) in Veritas SORT.

# 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 vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

## Total Economic Impact Approach



**Benefits** represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization.



**Costs** consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for ongoing costs associated with the solution.



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



**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."

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.



### 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 period

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